IOSR Journal of Research & Method in Education (IOSR-JRME)
e-ISSN: 2320–7388, p- ISSN: 2320-737x Volume 11, Issue 1 Ser. V (Jan. – Feb. 2021), PP 55-61
www.iosrjournals.org

The Effectiveness of a Suggested Program to Develop Awareness of Bio – Ethical Issues for Science Students of the Faculty of Education at Islamic university

[1-] Hala Hamid Abu Amra

[1.] *Department of Curriculum and Teaching Methods / Faculty of Education / College of Education / Al-Aqsa University, Gaza-Palestine.*

Abstract

Background

The actual challenge, which always encounters us, is the entry into the field of advanced technology. This technology has become the crucial factor in the progression of peoples; in addition, its applications have included all spheres of life. Yet, science is neither rising nor progressing in the society unless its members would have appropriate awareness of it and its economic and social implications. Therefore, the educational system in our Palestinian society has been processing ongoing developments of the educational curricula, aiming at preparing the modern citizen who is familiar with the generated biological knowledge. Therefore, we find out that the science curricula have been keen to keeping up with the enrichment and development processes of the curricula. They also have not neglected the generated biological knowledge such as the human genome, genetic engineering and cloning, all of which require a modern biology teacher, who is well-informed, enlightened and critic of all modern biological knowledge, along with the values consistent with the culture of our Islamic society. In short, this study aims at recognizing the effectiveness of a suggested program to develop awareness of bio-ethical issues for Science students of the Faculty of Education at the Islamic University.

Materials and Methods:

To achieve the goal of the study and to verify its hypotheses, the researchers have implemented the empirical approach in the test and randomly measured a sample, which consists of 133 female students, studying Science at the Faculty of Education at the Islamic University of Gaza in 2012-2013. The study sample has been divided into two groups. The first one is an empirical group, including 42 female students, and the second one is a control group, including 42 female students. After then, the results have been collected and statistically analyzed with statistical tools: (T) test for the two independent samples, Blake coefficient for measuring the effectiveness of the program, and beta square for measuring the influence.

Results:

There are statistically significant differeances in the post test of the cognitive aspects of awareness in the bioethical issues, and there are statistically significant differences in the dimentional measure of the affective aspects of awareness of the bioethical issues. However, the rate of the average gain of the aspects among the participants after applying the program was low. This is due to the affective aspects, which fake for a long time to be amended and developed.

Conclusion:

The results of the pre-test have confirmed that the experimental and control study groups are equal. As a result, the researchers have attributed the differences in the results of the cognitive test to the impact of the proposed program and the use of effective technological patterns and methods, which have helped in enhancing the responses of the female students to develop the cognitive aspects of awareness of the bio-ethical issues; this comes in favor of the experimental group.

Key Word: *suggested program, develop awareness, bio-ethical issues, Science students*

Date of Submission: 22-01-2021 Date of acceptance: 07-02-2021

I. Introduction:

The development in the field of biotechnology has led to the emergence of several applications of it in different fields. These applications have become a major basis in the scientific development programs and different research, especially in the field of food, pharmaceutical and environmental industries. Thus, both advanced science and biotechnology, in recent decades, start proposing bio-ethical issues, which sound interesting and deserve attention. Therefore, some experts and specialists have got interested in discussing these

issues from the point of view of their concept, importance, factors, and how much they are associated with the ethics of science, in addition to increase awareness of them. Also, they assure the importance of having a clear and determined position of the religious scholars on these issues, along with establishing ethical standards and controls needed to be exercised and guided to the benefit of humanity. Nevertheless, the bioethical issues are considered controversial when relating them to biological sciences, biotechnology, medicine, politics, law, philosophy and environment, so that these issues are formulated consistently with each society's culture and customs, since the system of reviewing scientific ethics in Western countries could be inapplicable in Arab or other countries.

Based on the above, the researchers have identified the term bioethical issues as "A set of biological issues that have emerged in the society due to the development of biotechnology and its contemporary applications, about which many opinions and attitudes, in terms of acceptance and rejection, have been raised, and the controversy over their association with religious, ethical and legal values. Moreover, they determine in this study the following issues (human genome, genetic engineering, DNA fingerprint, premarital medical examination and cloning with its types- gene stem cell therapy and cloning research- synthetic fertilization along with its types). To achieve the desired objectives when teaching bio-ethical issues and increasing awareness among students in general and Science students at the Faculties of Education in particular, it is preferable to create suitable atmosphere and environment for discussing these topics. In addition, it has to be reinforced with images, videos and educational flashes to achieve an visual connection with the information, which helps to maintain the impact of learning for longer periods of time on students.

II. Material And Methods

This pilot study was conducted on female Science students in the Faculty of Education at the Islamic University of Gaza. This study was conducted in the first semester of the academic year (2012-2013) on a sample of (48) students.

Study Design: This study is based on the experimental curriculum, consisting of the two equal control and experimental groups and then collecting and analyzing the data.

Study Location: This study was conducted at the Islamic University and conducted on the Science students of the Faculty of Education.

Study Duration: In the first semester of the year (2012-2013).

Sample Size: (48) Science students, studying at the Faculty of Education.

Sample Size Calculation: The sample was randomly selected from the students of the Science Department at the Faculty of Education of the Islamic University; the original community included (133) students and the sample percentage was (60%). They were divided into two groups: the experimental group and the control group, with a sample size of 48 students.

Subjects & Selection Method: The study community was taken from the students of the Science Department at the Faculty of Education of the Islamic University according to the following distributions, group control (42) and experimental group (42).

Inclusion criteria:

1- Female Science or Biology students in the Faculties of Education.
2- Female students at the Islamic University.

Exclusion criteria

- Teachers working in the field.
- Teachers who are not specialized in Science or Biology.

Procedure methodology:

The two researchers have followed the experimental approach and this goes along with the nature of the study in order to examine theories or answer questions. One of the common types in such studies are those related to trends or opinions towards different issues, where the study community consists of female Science students in the Faculty of Education of the Islamic University in the first semester of the academic year (2012-2013). This study has been applied on the study sample, who form 60% of the indigenous community.

They are: -

Testing the cognitive aspects of awareness of the bioethical issues, and this test is used to provide an indication of the cognitive and cultural awareness of bioethical issues. Additionally, it measures the affective aspects of awareness of bioethical issues, which represents the effective aspects of awareness of bioethical issues. To prepare the test, the bioethical issues' list has been built through investigating the previous literature, and educational specialized surveys, concerned with bioethical issues' field. Moreover, an interview with a number of specialists has been conducted. After then, the issues, which will be investigated in this study, have

been determined. Furthermore, the test items have been written and formulated in a way so that they take into consideration the following: scientific and linguistic accuracy, unambiguity, content-orientation, consistency with the female students' level, and clarity of instructions.

In view of the foregoing, the test has been prepared in its preliminary form. For instance, it includes (46) items; each item has four alternatives, only one of which is correct. Furthermore, after writing the test items, they have been displayed in their preliminary form to a group of specialized arbitrators to calculate the validity and accuracy of the test content, and the arbitrators have indicated the need to modify some items. As a result, some appropriate modifications have been made, in terms of formulation and adjusting some choices so that they go along with the topic, according to the arbitrators' recommendations. It has been applied to an exploratory sample to calculate the validity of internal consistency by calculating the Pearson correlation coefficient between the degrees of each item of the dimension to the overall degree for the dimension. As a result, the correlation coefficient has been statistically significant in each item and in all fields. As all the test items are statistically functioning at the level of indication (0.01) (0.05) except for some items, so the researchers have deleted them; the test in its final form contains (40) items. Likewise, the correlation coefficients have also been calculated between the degree for each dimension of the test with the overall test degree. In short, all domains correlate with a statistically significant correlation at the level of indication (0.01), which assures that the indication possesses a high degree of internal consistency.

Then the results of the students' answers of the test questions have been analyzed in order to identify the difficulty factor and the coefficient of distinction for each item of the test. Then, it has been found that the ease coefficients range between (0.32 - 0.77) with a total average of (0.55); therefore, all items are acceptable. On the other hand, it has been found that the discrimination coefficients range between (0.27-0.73) with an average of (0.53). Accordingly, all the test items have been accepted and questions whose distinction coefficient is less than 20 and more than 80 have been approved. Accordingly, not a single item has been deleted, and the items are of acceptable distinction. The ease coefficients range between (18.52% to 59.26%), with an overall of (39%) and the reliability of the test was (85.71%). This indicates that the test is characterized by good degree of reliability that meets the requirements of the study. To sum up, the final version of the test consists of (40) items, distributed on the main issues: the human genome, genetic engineering, cloning, and synthetic fertilization. In addition, the stability coefficients have been calculated by the method of the Kuder-Richardson coefficient, all of which are statistically significant, and that the total stability factor is (0.895). In short, this indicates that the scale has a high degree of stability that reassures the researchers to apply the test.

The two researchers also prepared the second tool, which is measuring the effective aspects of awareness of bio-ethical issues. The aim of it is to measure the level of attitudes of the female Science students in the Faculty of Education towards bio-ethical issues. Moreover, the validity of the tool has been confirmed through the arbitrators' accuracy, since some items have been excluded and others have been modified. Also, the validity of the internal consistency of the questionnaire has been calculated, for the questionnaire has been applied to a survey sample consisting of (40) students, outside the study sample and from the study community. It measures the validity of the internal consistency of the Pearson correlation coefficient, where all the items are calculated statistically at the indication level (0.05, 0.01) except for some items. The researchers have deleted them and the scale in its final form contains (38) items. After then, the validity of the scale has been confirmed in an alpha- Kronbach method that the coefficients of Alpha Kronbach range between (0.561 - 0.867) and that the total reliability factor is (0.763). In short, this indicates that the measurement has an acceptable degree of reliability, which reassures the researchers of applying it on the study sample in its final form.

Statistical Analysis

1. There are statistically significant differences at the level of significance ($\alpha \leq 0.05$), between the female students grades' average of both the experimental group and the control group in the post-test of the cognitive aspects of bioethical issues as a result of the application of the proposed program, which has had a very significant impact on all issues (human genome, genetic engineering, cloning and artificial fertility).
2. There are statistically significant differences at the level of significance ($\alpha \leq 0.05$), between the female students grades' average of both the experimental group and the control group in the post scale of the affective aspects, towards awareness of bioethical issues, as a result of the application of the proposed program. This means that there is an impact of the program in the development of affective aspects, but this effect does not achieve an effective level according to the Blake coefficient. According to the researchers, it is difficult to change or modify attitudes in a short period of time, the application period of this study.

III. Result

To answer the question: are there any statistically significant differences between the female students grades' average of both the experimental group and the control group in the post test of the cognitive aspects of awareness of ethical issues? To verify the hypothesis, "There are no statistically significant differences at the

level of indication ($\alpha \leq 0.05$), between the average score of female students of both the experimental group and the control group in the post test of the cognitive aspects of awareness of bioethical issues. The (T) test independent sample has been used to calculate the differences of the female students grades' average of both the experimental group and the control group in the post test in the cognitive aspects as shown in the **table(1):**

Dimension	Group	Number	Average	Standard deviation	value "T"	Significance value	Indication level
The human genome	Experimental	42	9.500	2.412	4.862	0.000	Statistically significant at 0.01
	Control	42	7.310	1.645			
Genetic Engineering	Experimental	42	8.833	1.464	6.481	0.000	Statistically significant at 0.01
	control	42	6.738	1.499			
Reproduction	Experimental	42	7.405	1.308	6.769	0.000	Statistically significant at 0.01
	control	42	4.952	1.950			
Artificial fertilization	Experimental	42	4.833	0.986	2.788	0.007	Statistically significant at 0.01
	control	42	4.214	1.048			
Total	Experimental	42	30.571	3.365	9.029	0.000	Statistically significant at 0.01
	control	42	23.214	4.070			

The previous table shows that the indication level is equal to 0.000, which is less than 0.01, and the calculated (t) value for the total score on each of the test dimensions and the absolute is equal to (9.029), which is greater than the tabular (t) value, which is equal to (2.62). This means rejecting the null hypothesis and accepting the alternative hypothesis which states that "There are statistically significant differences at the level of indication ($\alpha \leq 0.05$), between the female students grades' average of the experimental group and the control group in the post test of the cognitive aspects of bioethical issues.

In order to ascertain the extent of the impact to figure out whether the differences are real and attributable to the use of the proposed program to develop awareness of the bioethical issues for the students of Science at the Islamic University- the extent of the impact is what confirms the impact more clearly- ETA box has been calculated as described in the **table (2):**

Skill	value" T"	value η^2	value d	Effect size
Human genome	18.971	0.898	5.93	Very big
Genetic Engineering	30.771	0.958	9.61	Very big
Reproduction	29.134	0.954	9.10	Very big
Artificial fertilization	24.125	0.934	7.54	Very big
Total degree	43.880	0.979	13.71	Very big

This means that the extent of the impact is very large, assuring that the proposed program has succeeded in influencing the pilot group as desired.

In response to the second question, are there any statistically significant differences between the female students grades' average of the experimental group and the control group in the post scale of the affective aspects of awareness of the bioethical issues? In order to verify the hypothesis which states that "There are no statistically significant differences at the level of indication ($\alpha \leq 0.05$), between the female students grades' average of both the experimental group and the control group in the dimensional scale in the affective aspects of awareness of bioethical issues.

The T. test independent sample has been used to calculate the differences the female students grades' average of both the experimental group and the control group in the dimensional scale in the affective aspects as shown in the **table(3):**

Dimension	Group	Number	Average	Standard deviation	value "T"	Significance value	Indication level
Personal acceptance of bioethical issues	Experimental	42	50.095	4.923	6.938	0.000	Statistically significant
	control	42	44.024	2.815			
Bioethical issues and Sharia	Experimental	42	28.905	2.545	2.883	0.005	Statistically significant
	control	42	27.071	3.241			
Bioethical and family issues	Experimental	42	22.119	5.288	4.334	0.000	Statistically significant
	control	42	17.381	4.716			
Bioethical and societal issues	Experimental	42	29.190	5.062	3.982	0.000	Statistically significant
	control	42	25.048	4.455			
Total degree	Experimental	42	130.310	12.898	6.984	0.000	Statistically significant
	control	42	113.524	8.732			

The previous table shows that the indication level is equal to 0.000 which is less than 0.01 and the absolute calculated (t) value is 6.984, which is greater than the tabular (t) value, which equals 2.62, indicating that the calculated value of (t) falls in the Rejection zone. This means rejecting the null hypothesis and accepting the alternative hypothesis which states that "There are statistically significant differences at the level of indication ($\alpha \leq 0.05$), between the female students grades' average of both the experimental group and the control group in the dimensional scale of the affective aspects of awareness of the bioethical issues.

In order to ascertain the extent of the impact to find out whether the differences are real and attributable to the use of the proposed program to develop awareness of the bioethical issues of the students of science at the Islamic University, the extent of the impact has been calculated as described in the **table (4):**

The value of "T", "η 2" and "d" to find out the extent of the impact of the proposed program on testing the cognitive aspect of awareness of bioethical issues

Skill	value" T"	value η^2	value d	Effect size
Personal acceptance of bioethical issues	7.141	0.554	2.23	Very big
Bioethical issues and Sharia	3.275	0.207	1.02	Very big
Bioethical and family issues	4.400	0.321	1.37	Very big
Bioethical and societal issues	3.810	0.262	1.19	Very big
Total degree	6.973	0.543	2.18	Very big

It is clear from the previous table that the extent of the impact is significant in all dimensions, and this indicates that the program has influenced the adjustment and development of the attitudes of the students, yet the extent of the impact has not achieved the required percentage.

In order to answer the third question: does the use of the proposed program achieve a level of effectiveness in developing awareness of its cognitive and affective aspects of some of the bioethical issues among the students of Science in the Faculty of Education at the Islamic University?

In order to verify the third hypothesis, stating that the use of the program does not achieve a higher level of effectiveness than (1.2), according to the Blake adjusted gain coefficient in the development of awareness of its cognitive and affective aspects of some bioethical among the students of Science in the Faculty of Education at the Islamic University. To ensure that, Blake coefficient has been used to calculate the adjusted gain rate after the application of the proposed testing and scale program by **table (5):**

The value of adjusted gain to test the cognitive aspects of awareness of the bioethical issues

Dimensions	Final score for each dimension	The pre- average	Post average	The difference between the two averages	Adjusted gain ratio
Human genome	12	1.810	9.500	7.69	1.396
Genetic Engineering	11	1.881	8.833	6.95	1.394
Reproduction	10	1.333	7.405	6.07	1.308

Artificial fertilization	7	0.738	4.833	4.10	1.239
Total degree	40	5.762	30.571	24.81	1.345

The previous table shows that the adjusted gain rate for testing the cognitive aspects of bioethical issues is (1.345), which is a high gain rate when compared to the minimum adjusted gain rate of Blake, which is 1.2, In short, this means that the program is effective in developing the cognitive aspects of awareness of the bioethical issues.

The Black Coefficient has been used to calculate the adjusted gain rate after the proposed program of the affective aspects of bioethical awareness has been applied by **table (6):**

Dimensions	Final score for each dimension	Pre average	Post average	The difference between the two averages	Adjusted gain rate
Personal acceptance of bioethical issues	65	43.024	50.095	7.08	0.431
Bioethical issues and Sharia	40	26.929	28.905	1.97	0.201
Bioethical and family issues	40	16.738	22.119	5.38	0.366
Bioethical and societal issues	45	24.833	29.190	4.36	0.313
Total degree	190	111.357	130.310	18.95	0.341

It is clear from the previous table that the adjusted gain rate of the effective aspects' measurement of awareness of the bioethical issues is (0.341), which is low when compared to the minimum adjusted gain rate of Blake, which is (1.2). This means that the program has not helped in developing the effective aspects of awareness of the bioethical issues, as in the cognitive aspects of awareness, with actual differences between pre and post-performance. To sum up, this indicates that the program has had an impact on the development of the effective aspects, but this effect has not achieved an effective level of gain by Blake

IV. Discussion

In view of the previous studies that have dealt with bioethical issues, it is crystal clear that these studies were carried out at different times and a few numbers of these studies were concerned with the development of awareness of the bioethical issues of Science students in the Faculty of Education. On the other hand, there are studies that have been concerned with measuring the level of awareness of bioethical issues, and a great interest in preparing Science teachers in Faculties of Education to keep up with the biological developments. As well as, there was a diversity in the use of tools such as testing, attitude measuring, an interview and a questionnaire.

In addition, it is found out that there is a variety of statistical methods used which fit Study procedures, as most studies have confirmed the low level of awareness and biological enlightenment in individuals. They have also recommended the need to develop programs to prepare Science teachers in Faculties of Education in accordance with scientific developments, where the progression of the community awareness has led to increased attempts by the groups of society to aware and understand the work of scientists. This has been also accompanied by criticisms directed at the roles of science and its responsibilities towards the service of society.

Moreover, these scientific innovations have raised many ethical issues, associated with their techniques, especially the ones related to the achievements of reproduction in human, which require legislation for their provisions and ethical controls. Since using these scientific applications in an unconscious manner, many crises have emerged at the international level. In short, this requires global, national and local decisions, based on ethical rules and principles (Evinson, 2003:128).

We find that there is a global interest in the search for minimum standards to be followed when judging ethical biological issues, emphasizing the importance of following up on recent developments in bioethics field, in addition to shedding the light at the importance of sharing information on ethical scientific issues and developing awareness of them.

The researchers also point out that one of the most important reasons for the effectiveness of the proposed program in achieving a high gain rate to test the cognitive aspects is the use of educational software with visual effects of written texts and the employment of colors, images, drawings, movements and diversification, and the choice of the appropriate design for those media, where attractiveness and simplicity are presented in the information. This shows that the use of interactive educational media helps in providing the appropriate educational environment for the development of the cognitive aspect, which would make the teaching process attractive and interesting, and this has been observed through the students of the experimental group when studying the proposed program.

On the other hand, the adjusted gain rate of the measure of the awareness of the effective aspects of bioethical issues was low when compared to the minimum adjusted gain rate of Blake, which is (1,2). This

indicates that the program did not help in developing the effective aspects of awareness of bioethical issues, as in the cognitive aspects of awareness. This is because the attitudes and values are difficult to change or modify in a short period of time as the period of application of this study. In addition, the attitudes need a long period to develop, and they also need the students to pass on diverse life experiences, so they would acquire highly effective tendencies and attitudes towards bioethical issues.

V. Conclusion

Needless to say, there is a vital need to shed the light on the scientific progress, resulting from the biological revolution and its applications in the field of medicine, biology and genetics, by holding workshops to discuss ethical, religious and legal issues and disseminating its results to university students; in addition, training the in-service teachers on the use of educational software in teaching and its impact on their teaching performance and their student achievement.

Foreign References

[1]. Al. Aqeel (2007). Islamic ethical framework for research into and prevention of genetic diseases, Department of Pediatrics, Riyadh Military Hospital and Department of Genetics, King Faisal Specialist Hospital and Research Center, Riyadh, Saudi Arabia.

[2]. Arthur Caplan(2012). Do bioethics really matter, thelancet Vol 379(1382-) www.thelancet.com

[3]. Abraham & Kyoko (2011). Bioethics in the 21st Century, Departments of Psychiatry and Philosophy and Faculty of Health Sciences,The University of Western Ontario Canada www.intechopen.com.

[4]. Evinson & Reiss (2003) . Key Issues in Bioethics Guide for Teachers . London Rutledge Falmer. http://books.google.ps/booksIssues+in+Bioethics&hl=

[5]. Hui & Chow (2012). Attitudes of university students in Hong Kong about the use of genomic science and technology, New Genetics and Society , Vol.31 , No. 4 , December 323-3411

[6]. Henderson, Eric & others (2012). What Research Ethics Should Learn from Genomics and Society Research: Lessons from the ELSI Congress of 2011. journal of law, medicine & ethics. Vol. 40 ,No. 4 , 1008-1024.

[7]. Iva Rincic and Robert Doricic(2011) nternational conference "Fritz Jahr and European Roots of Bioethics: Establishing an International Scholar's.

[8]. Inhorn MC .(2011) Globalization and gametes: reproductive 'tourism,' Islamic bioethics, and Middle Eastern modernity, Anthropol Med Department of Anthropology, Yale University, New Haven [PubMed – indexed for MEDLINE] http://www.ncbi.nlm.nih.gov/pubmed/20198519.

[9]. Kopelman LM. (2009).Bioethics as Public Discourse and Second-Order Discipline – Order Discipline, Brody School of Medicine, East Carolina University, Greenville, NC http://jmp.oxfordjournals.org/content/34/3/261

[10]. Larijani&, Zahedi .(2004) Islamic perspective on human Cloning and stem cell research, Endocrinology & Metabolism Research Center, Tehran University of Medical Sciences.http://www.ncbi.nlm.nih.gov/pubmed/20198519

[11]. Lisa S. Parker and Valerie B. Satkoske(2012)، Ethical Dimensions of Disparities in epression Research and Treatment in the harmacogenomic Era ، journal of law, medicine & ethics 886.

[12]. Michelle E. Mcclements, & Robert E. Maclaren, OXFORD, UNITED KINGDOM(2013), REVIEW ARTICLE Gene therapy for retinal disease, uffield Laboratory of Ophthalmology, Department of Clinical eurosciences, University Of Oxford, Oxford, United Kingdom; Oxford and oorfields Eye Hospitals and NIHR Biomedical Research Centers, Oxford, United Kingdom.

[13]. Park, Yan- Bok: Kim, Young- Shin: Chung, Wan- Ho.(2002): The effects of Decision Making Activities about Bioethical Issues on Students. Rational Decision. Making Ability in High School Biology. Journal of Korean. Association for Research in Science Education. Vol.22 , No. 1 , pp.54-63

[14]. Stan & others.(2013), Stem Cell Regenerative Potential Combined With Nanotechnology And Tissue Engineering For Myocardial Regeneration, Institute of Cellular Biology and Pathology "Nicolae Simionescu, [PubMed] Stem Cell Res Ther 23547964) http://www.ncbi.nlm.nih.gov/pubmed

[15]. Shabana A.(2013) Religious and cultural legitimacy of bioethics: lessons from Islamic bioethics,Med Health Care Philos. , Georgetown University's School of Foreign Service in Qatar, Education City http://www.ncbi.nlm.nih.gov/pubmed/23397216

[16]. Susan M. Wolf (2004). Violence Bioethics; From Values & law,. journal of law, medicine & ethics .Vol 32, pp 293 – 306. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1724753

[17]. TANG TANG, and H. KIRK HAMMOND (2013), REVIEW ARTICLE Gene transfer for congestive heart failure, From the Department of Medicine, University of California San Diego, and VA San Diego Healthcare System, San Diego, Calif.

Hala Hamid Abu Amra. " The Effectiveness of a Suggested Program to Develop Awareness of Bio – Ethical Issues for Science Students of the Faculty of Education at Islamic university." *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 11(1), (2021): pp. 55-61.