

The Impact of Employing Journal Writing on Enhancing the Jordanian Student Teachers' Attitudes Towards Journal Writing

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Abstract

This study aimed to investigate the impact of employing journal writing on improving the attitudes of the students of the Faculty of Educational Sciences and Arts\ UNRWA (FESA) towards using that method. Moreover, and how it is affected by student' gender and study level. This study was carried out during the second semester of the academic year 2015/2016. The population of the study consisted of all the students of the faculty of Educational Sciences and Arts/UNRWA (FESA). On the other hand, the sample of the study was purposively selected and included all the students studying the Natural Sciences and the Methods of Teaching Social Science courses. Moreover, the total number of the sample was 98 male and female students. For the purpose of achieving the goals of the study, the scale of the attitudes towards journal writing was used. It is worth mentioning that the scale was adopted from Ambusaidi (2014) and consisted of 29 items. To ensure the validity of that scale, a group of experts in the field of education were requested to determine its content validity. In addition, Cronbach's Alpha measurement was utilized to assess its reliability. Furthermore, a focus group discussion that included 7 student teachers (intern teachers) was employed in order to collect data about the student teachers' point of views towards journal writing. Moreover, the quasi-experimental method and the one group pretest -posttest design were used in this study. Finally, SPSS software was adopted to analyze the data adequately. Comparing the performance of the students involved in this study at the pre and post scales of the attitudes towards journal writing showed that there are differences of statistical significance at (0.05) level. This indicates that utilizing journal writing is effective in improving the students' attitudes towards it. Moreover, the results proved that there was no link between journal writing and the two variables, gender and the study level of the students. As a result, using journal writing is effective in improving the attitudes towards it in terms of both sexes and at all study levels. Furthermore, the students highlighted various advantages of journal writing and pointed out to some of the difficulties that faced them as they began to write journals. In this regard, the students denoted that they encountered a difficulty in writing the part concerned with reflection because they are unfamiliar with that method. Finally, the students stated some suggestions that may develop utilizing journal writing in the future.

Keywords: journal writing, FESA, attitudes towards journal writing.

1. Introduction

The literature on teacher education over the past decade abounds with the virtues of reflective practice and the processes of examining and evaluating one's own learning through a range of strategies all of which are intended to lead to improvements in teaching and learning (Boud, 2001; Maloney & Campbell-Evans, 2002). Hatton and Smith (1995) have written about the need to engage teachers in tasks that facilitate self-exploration through metacognitive and reflective processes, and emphasized the importance of self-monitoring and professional development through reflection for practicing teachers. So, pre-service teacher education courses should promote reflective practice as a highly valued teacher competency (Maloney & Campbell-Evans, 2002). However, developing reflective skills is both problematic and complex (Hatton & Smith, 1995).

2. Literature Review

Everyone knows how strong the bond is between writing and reflection as writing drives people to find out means to express and explain their thoughts and create good opportunities to learn and think. In this regard, Vygotsky (1962) suggests that written language plays an important enabling role for many higher cognitive functions. Britton (1972) has proposed that people understand and learn from events by giving them shape in language. Odell (1980) suggests that conscious exploration demanded by writing improves a person's understanding of the subject at hand. So writing forces people to think in ways that clarify and modify their ideas. In short, people learn from writing, and writing is a powerful learning tool; one uniquely suited for professional thought and reflection. Thus, writing is an important skill for teachers because it is not only a means of communication they should acquire, but also a means that helps develop themselves and enhance self-learning. One format that allows students to experience the benefits of writing is journal writing. Journals can be defined as tools that allow students to examine their beliefs, values, experiences, and assumptions about the subject



matter at hand (Dyment & O'Connell, 2011).

Although the recording of daily events, personal reflections, questions about the environment and reactions to experiences has been an enduring human practice. It was not until the early 1960s that researchers recognized the value of journal writing in educational settings. Since then, the use of journal writing as a learning exercise has flourished (Janesick, 1998; Raffan & Barrett, 1989). Instructors from a wide range of disciplines have used journal writing in various contexts. English and literature teachers often ask students to record their thoughts and feelings about stories or to deconstruct what the author is saying (Dyment & O'Connell, 2003).

In recent years journal writing has been used extensively in university courses as a means of reflection and a way for student teachers to monitor, analyze, critique and evaluate their own development and to improve their teaching.

Journals are written by students about their feelings and views in a free manner. Due to this fact, journals contribute to students problem-solving, critical-thinking and reflective learning skills. Through journals, students can enhance their learning by making connections between theory and practice. By asking questions, and by engaging in higher order ideas, Journals provide a vehicle for learners to reflect on action and practice, and also support teachers' instructional decision-making (Dyment & O'Connell, 2011).

The current understanding of the constructivist nature of knowledge and the need for teachers to engage in lifelong learning has encouraged teacher education programs to seek sources of knowledge that lead to self-directed growth. That goal underlies the rationale for incorporating reflection into teacher education (Bailes *et al.*, 2010). One critical tool for reflective practice in pre-service education is journal writing (Boud, 2001; Maloney & Campbell-Evans, 2002; Hume, 2009). Journal writing as a means of reflection is one of the popular techniques used by educators in many higher education contexts. The purpose of the journal is to make links between theory and practice and to reflect on practice for the purpose of professional development (Wagner, 1999).

Pre-service teachers were encouraged to use journal writing as one of several strategies aimed at developing reflection during their university experiences. Journal writing foster students' developing understanding of the relationship of theory and practice, and facilitate the construction of professional knowledge. Journals have the potential to allow student teachers and university teachers to work closely together within a supportive context which may be quite unlike traditional teacher education models. It is a device for working with events and experiences in order to extract meaning from them. This perspective views the various forms of journal writing as ways of making sense of the world and how we operate within it. Journal writing can be used to enhance what we do and how we do it. As a vehicle for learning, it can be used in formal courses, our professional practice, or any aspect of informal learning (Boud, 2001).

2.1 Statement of problem

Recently, journal writing has been extensively used and very popular in teacher training programs. Although it is claimed that this method is an effective tool for reflection and professional development in the future, the literature suggests that there are many difficulties concerned with adopting it. One of the most significant difficulties of using this method effectively is that students fail to utilize it efficiently since they rarely used this method before. Thus, the students need to receive enough training on how to use this method (Ambusaidi, 2014). In this regard Ambusaidi (2104) and Anderson (1993) stressed on the need to improve students' journal writing skills and encourages them to use journals.

It is worth to mention that the researchers have supervised the students enrolled in the Class Teacher Major during their field training course at the last semester of their university study. During that course, the students are required to use reflective journals so as to reflect on the educational experiences they acquire during that course. Accordingly, the researchers observed that the students failed to accomplish the journals, and complained of that requirement because they do not have the skills to write journals and use them as tools for reflection and professional development. In fact, this might be the outcome of the rare use of journal writing as a means of learning, reflecting, and improving university courses teaching in general. Moreover, the researchers believe that the students may face this difficulty because they are not trained enough and lack experience in journal writing.

In order to make journals a commonly used learning and reflecting tool, teachers themselves should be familiar with the use of journals for educational purposes, and pre-service teachers should be given an opportunity to improve their knowledge and attitudes about journals and experience about journal writing. In addition, there is a lack of research on pre-service teachers' attitudes towards journal writing and their experiences and viewpoints related to journals in Jordan . Yet, to the best of the researchers' knowledge, the number of the studies conducted on this subject is limited, and Ambusaidi (2014) and AL-Karasneh (2014) are examples of the few studies carried out. Therefore, it is hoped that the current study will fill this gap. For that purpose, the researchers utilized journal writing in teaching the natural sciences and the social science teaching methods courses, which are compulsory courses for Class Teacher Major, and examined its impact on improving the students' attitudes towards it. Moreover, the researchers explored the students' viewpoints regarding the advantages and disadvantages of journal writing as well as the difficulties that encountered them when they used



that method. Thus this study attempted to answer the following questions:

- 1. What is the impact of using journal writing on improving the attitudes of the FESA's students towards journal writing?
- 2. Is there any difference attributed to gender in the impact of using journal writing on improving the attitudes of the FESA's students towards journal writing?
- 3. Is there any difference attributed to the study level in the impact of using journal writing on improving the attitudes of the FESA's students towards journal writing?
- 4. What are the viewpoints of FESA's students regarding using journal writing in teaching?

2.2 Significance of the study

As the researchers were reviewing the literature written about the subject of this study, they noticed that few studies addressed journal writing as a tool for reflective thinking and professional development. In addition, they believed that few studies especially in the Arab World investigated this method's impact on improving the students' attitudes towards it. Further, to the best of the researchers' knowledge, there are only two studies conducted on this field namely; Ambusaidi (2014) and Al-Karasneh (2014). Thus, this study is in line with the calls for carrying out more studies to identify the effectiveness of using this method (Ambusaidi, 2014, Al-Karasneh 2014, Maloney & Campbell-Evans, 2002).

Accordingly, it is hoped that this study will contribute to exploring the impact of journal writing on improving the students' attitudes towards it. Moreover, it is hoped that the study will help develop education in the Jordanian universities as well as enhance the educational outcomes through:

- 1- Enabling university students to utilize journal writing as a tool for learning and reflection. Moreover, it might be used as a means for professional and personal development in the future.
- 2- Making university professors more convinced of this method's effectiveness which will encourage using it as an instrument for learning and reflection.
- 3- Explaining the viewpoints of the student teachers regarding:
 - * The advantages of journal writing as a means of reflection and constructive learning through experience
 - * The difficulties that hinder using journal writing
 - * The suggestions that may help increase that method's effectiveness
- 4- Paving the way for researchers to conduct studies that investigate journal writing and its impact on other variables such as the academic achievement and creative thinking.

2.4 Hypotheses of the study

- There is no statistically significant impact at(α = 0.05) level on improving the attitudes of the FESA's students towards journal writing attributed to utilizing journal writing
- There is no statistically significant impact at (α = 0.05) level on improving the attitudes of the FESA's students towards journal writing attributed to the interaction between journal writing and gender
- There is no statistically significant impact at(α = 0.05) level on improving the attitudes of the FESA's towards journal writing attributed to the interaction between journal writing and the study level

2.5 Definitions of Terms

Journal writing: a collection of essays that provide a partial record of the students' teaching experiences inside a classroom for a certain period of time. Moreover, it is procedurally defined as the method through which the students write summaries for the teaching experiences they are exposed to while studying the natural sciences and the social science teaching methods courses using graphic organizers, concept maps, and other aids. In addition, those summaries include special sections that are concerned with the reflection on those experiences and their relationships with the previous experiences and the questions that the students may raise about the topics of the journals.

Attitudes towards journal writing: an acquired willingness of an individual to respond negatively or positively to some situations related to utilizing journal writing. Furthermore, it is procedurally defined as the degree that a student get by responding to the items of the scale of the attitudes towards journal writing which expresses his/her feelings towards that method. It is worth mentioning that those feelings are formed by experiencing and dealing with that method. Thus, the scale is designed to drive the respondents to either agree or disagree with using the method. Finally, the attitudes were identified by finding the mean values of the items that measure the attitudes towards journal writing.

2.6 Limitations and limits of the study

This study is limited to the purposive sample that was selected from the students of the faculty of Educational Sciences and Arts\UNRWA (FESA) during the first semester of the year 2015/2016. The sample of the study



consisted of (98) male and female students. Furthermore, the results of the study are limited to the instrument used and to the reliability and validity of that instrument. Accordingly, the results cannot be generalized, and they are only limited to that instrument's characteristics.

3. Methodology and Design of the study

The researchers adopted the quasi-experimental method, and the one group pretest-posttest design to conduct this study. The study design can be represented as follows:

eG: O1 x O2

eG = the experimental group

O1= the pre application of the scale of the impact of using journal writing on improving the attitudes towards it X= the experimental treatment

O2 = the post application of the scale of the impact of the utilizing journal writing on improving the attitudes towards it

3.1 Population and sample of the study

The population of the study consisted of all the students enrolled in the Class Teacher Major at FESA. The total number of the population of the study is 773 male and female students (73 males and 700 females). (*The figures were gained from the admission and registration office of the Faculty of Educational Sciences and Arts/UNRWA 2015/2016*)

The sample of the study consisted of all the students studying the natural sciences and the methods of teaching social science courses during the first semester of the academic year 2015/2016. The total number of the sample was 98 male and female students. Table (1) below shows the distribution of the students as per the two variables gender and study level.

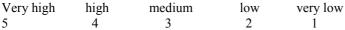
Table (1). The distribution of the sample of the study according to gender and study level

Variables	Categories	number	Percentage
Gender	Male	12.2	12%
	Female	87.8	87.7%
	Total	98	100%
University level	Second year	37	37.8%
	Third year	25	25.5%
	Fourth year	36	36.7%
	Total	98	100%

3.2 Instrument of the study

First: the scale of the impact of utilizing journal writing on improving the students' attitudes towards journal writing

To achieve the purpose of the study, the scale of the attitudes towards journal writing which was adopted by Ambusaidi (2014) was used. That scale consisted of 29 items, divided into 17 positive items and 12 negative items. The scale was presented before a panel of experts in teaching science at Sultan Qaboos University. The experts were requested to evaluate the items and judge its validity for this study. In this regard, some items were rephrased in accordance with the proposed suggestions. Moreover, the researchers used Cronbach's alpha to assess the reliability of the scale .The reliability value of the scale was 0.91, which showed that the scale was consistent and reliable for collecting data. Yet, the scale was translated into Arabic and minor language changes took place then the reliability and validity of the scale were assessed. In addition, the scale consisted of 29 items and the responses to both scales were based on the five-point Likert scale as shown below:



3.2.1 Reliability and Validity of the scale

Before administering the scale to the sample of the study, the reliability and validity of the scale were ensured. Validity of the instrument was assessed through presenting the scale before a panel of experts (trustees' validity) and Carrying out a pilot study (structure's validity). Validity of the instrument was firstly ensured by presenting the instrument of the study before a group of 9 professors working in Jordanian universities who have experience in education. The professors were asked to provide their comments, notes and recommendations on the appropriateness of the items of the scale and to what extent it measures the impact of journal writing on the attitudes towards it. In this regard, the researchers adhered to the suggestions and amendments as recommended by the professors. In order to assure the internal consistency of the instrument of the study, a pilot study was conducted on 30 male and female students who did not form part of the final sample. Then, internal validity coefficients were calculated by adopting Pearson Correlation Coefficient to each item of the scale. Table 2 below shows the results of the internal consistency coefficient.



Table 2. The results of the internal validity coefficients compared to the overall value of the scale

Number	coefficient	number	coefficient	number	coefficient	number	coefficient
1	**0.635	9	**0.677	17	**0.840	25	**0.780
2	**0.699	10	**0.660	18	**0.662	26	**0.824
3	**0.727	11	**0.822	19	**0.826	27	**0.729
4	**0.865	12	**0.713	20	**0.852	28	**0.747
5	**0.961	13	**0.655	21	**0.863	29	**0.769
6	**0.937	14	**0.695	22	**0.826		
7	**0.857	15	**0.660	23	**0.820		
8	**0.902	16	**0.758	24	**0.819		

^{**} Correlation coefficient is of statistical significance at ($\alpha < 0.05$)

Results in Table (2) above indicate that coefficients values for each item compared to the overall score of the scale are positive and statistically significant at 0.05 level. Accordingly, the results point out that the items are reliable to measure the impact of Journal Writing on the level of reflective thinking.

As soon as the validity of the instrument has been assured, Cronbach's Alpha was utilized to find the reliability coefficients. The overall score of Cronbach's Alpha was (0.868) which indicated that the items were reliable.

Second: Focus Groups Discussion

Focus group discussions are important instruments to collect data for research. They are considered types of interviews that include a collective interaction between group members to discuss the subject under investigation. During the focus group session, five questions were discussed among 7 pre-service teachers. The five questions were as follows:

- 1. What are the advantages of utilizing Journal Writing in teaching university courses?
- 2. What are the difficulties that faced the student teachers enrolled in the Class Teacher Major while writing their journals?
- 3. What are the suggestions of the student teachers enrolled in the Class Teacher Major for improving Journal writing use in teaching university courses?
- 4. Do you prefer employing Journal Writing in teaching various university courses?
- 5. Do you intend to use Journal Writing when you become a teacher?

The previous questions were prepared based on the literature provided about Journal Writing. The questions were presented before teaching and curricula experts to provide their comments and notes on the questions. Accordingly, their notes and comments were taken into consideration by the researchers who made amendments based on the experts' comments and notes. Furthermore, focus group discussions were held after finishing the courses so as to make sure that the student teachers realize the reasons behind adopting the instrument of the study in this course.

3.2.2 Statistical treatment

Statistical treatment of data was undertaken depending on the following:

1- The first question was concerned with the impact of utilizing Journal writing on improving the attitudes of the students towards journal writing. To answer that question, means and standard deviations scores for the students' grades at the pre and post applications of the scale were calculated. Moreover, the Paired Samples T-test was also used in order to find out the differences between students grades' means at the pre and post applications of the scale. In addition, Effect Size of the impact of utilizing Journal Writing on improving the students' attitudes towards journal writing at the post scale application was underlined by adopting Eta Square in accordance with the following Formula (Kiess, 1989)

Eta Square= N2=t2\t2+df

2-The second and the third questions are related to finding the differences in the impact of Journal Writing on improving the students' attitudes towards journal writing in terms of gender and the study level. To answer those questions, means and standard deviations to the students' grades at the pre and post measurements were calculated. In addition, the analysis of covariance (ANCOVA) was used to underline the differences between the students' grades means at the pre scale application. Moreover, ANCOVA was employed to discover the differences between the means of the students' grades at the post application of the scale in accordance with gender, study level, and the university course.

4. Results and conclusions of the study

Results of the study related to the first question "what is the impact of utilizing journal writing on improving the attitudes of the FESA's students of towards journal writing?"

To answer this question, means and standard deviations of the students' grades at the pre and post applications of the scale of the impact of utilizing journal writing on improving the students' attitudes towards journal writing



were calculated. Furthermore, the Paired Samples T-test was adopted so as to find the significance level of the differences between the means of the students' grades at the pre and post scale applications. Table (3) below shows the results of the Paired Samples T-test.

Table 3. Results of the Paired Samples T-test and Eta squared for the differences between the means of the students' grades at the pre and post applications of the scale

Scale application	Mean	standard deviation	Difference	T value	Degree of freedom	level	(N2) effect size
Pre	3.45	0.59		4.15-	97	0.001*	0.151
Post	3.78	0.52	0.33				great

*Statistically significant at (α =0.05) level

Table (3) above indicates that there is a difference between the students grades' means at the pre and post applications of the scale. The difference between the means of the pre and post scale applications was (0.33). Moreover, the results of using the Paired Samples T-test which is used to find the difference between the means, suggest that the difference between the pre and post applications of the scale was of statistical significance as the T value was (4.15-) which is significant at (0.05) level. This means that there is an impact of using journal writing on improving the attitudes of the FESA's students towards journal writing. Moreover, employing Eta square showed that the effect size was (0.151) which is a large value. This indicates that (15.1%) of the differences in the improvement of the students' attitudes is related to using journal writing. That conclusion is based on Cohen's interpretation of the effect of the independent variable on the dependent one. In this respect, Cohen suggests that an effect size of (1%) is a small effect and an effect size of (6%) is a medium effect while an effect size of 15% and over is a large effect (Al-sherbini ,1995).

According to the researchers, the above results might belong to the following reasons:

- -The training that the researchers provided to the students before conducting the study on journal writing and using it as a tool for learning and reflecting on the educational experiences and the professional development. The students interacted positively with this method during the training and became more familiar with it and more excited to adopt it. In this regard, the literature indicates to the need for providing sufficient training to students before they use journal writing since the limited training opportunities offered to students might be an obstacle of the effective use of journals (O'Connell & Dyment , 2003)
- The nature of the tasks assigned to the students as they were asked to write journals that include summaries for the courses subjects. As the students have been rarely exposed to such activities, they found journal writing difficult and an unclear task at the beginning. However, those difficulties started to vanish gradually as the students became more and more familiar with journal writing since they were requested to write journals about each course subjects. Accordingly, the students could distinguish the advantages of journal writing as they were doing the assignments and they noticed how they helped them study the course subjects day by day. Moreover, they recognized how journal writing drove them to study the newly learned topics and terms frequently. Yet, the students showed interest in using journal writing pointing out that it saves time and reduces exam stress. Furthermore, the students' summarizing skills, using and preparing concept maps and plans, and the reflective skills were improved which helped them develop positive attitudes towards journal writing.
- The feedback that the students received regarding their journals since the researchers were keen to provide them with a constructive feedback about their journals continually. Feedback is considered a very important element for effective use of journal writing and may contribute to improving the students' attitudes towards it. In this respect, Peyton & Reed (1990) maintain that the comments and the feedback that usually accompany journal writing are quite helpful in developing the language skills of the students from the primary school until the university. In addition, the literature adds that educators who want to capitalize on the potential of journal writing must be willing to spend the time and effort to offer students constructive and detailed feedback on the substance of their journal entries (Anderson, 1993). Feedback will also help students identify their own areas of strengths and weaknesses in journal writing.
- 20% of the overall course score was given to journal writing task. Thus, gaining high marks at the end of the course encouraged the students to work harder on writing journals which contributed to developing positive attitudes towards journal writing. In this regard, Dyment & O' Connel (2011) argue that the students' motivation to write journals is enhanced by the high marks they might get.

Yet, the means of the students' grades for each item of the scale of the impact of utilizing journal writing on improving the students' attitudes towards journal writing were found. Table (4) below shows the mean scores of the pre and post application of the scale.



Table 4. Mean scores of the pre and post applications of the scale

pre attitudes			Post attitudes	
Item number	mean	Item number	Mean	
1	3.35	1	3.74	
2	3.52	2	3.69	
3	3.52	3	3.78	
4	3.52	4	3.71	
5	3.47	5	3.80	
6	3.56	6	3.83	
7	3.56	7	3.80	
8	3.50	8	3.72	
9	3.23	9	3.53	
10	3.45	10	3.66	
11	3.71	11	3.74	
12	3.70	12	3.92	
13	3.48	13	3.76	
14	3.39	14	3.68	
15	3.36	15	3.70	
15	3.44	16	3.67	
17	3.57	17	3.89	
18	3.59	18	3.12	
19	3.55	19	3.96	
20	3.41	20	3.91	
21	3.49	21	3.88	
22	3.08	22	3.33	
23	3.24	23	3.72	
24	3.24	24	3.67	
25	3.47	25	4.00	
26	3.27	26	3.85	
27	3.35	27	3.84	
28	3.22	28	3.78	
29	3.47	29	3.90	
Pre scale	3.45	Post scale	3.78	

Results in Table (4) above show that item 18 (Journal writing helps improving learning process) has got the highest mean of value (4.12). This indicates that the students clearly identified the impact of utilizing journal writing on their learning as it paved the way for active participation in learning through writing down their notes regarding those experiences. In addition, it allowed them to merge their notes with their abstract concepts and theories. This denotes that writing helps the students to build their knowledge through allowing them to link between the information and the new knowledge and the previously acquired knowledge. It is noteworthy that the students indicated that during the focus group discussions and that result is in line with Fry & Klages (2013).

The second-highest mean value is number (25) "Journal writing develops students' higher order thinking skills such as analysis, synthesis, and evaluation. This pinpoints that the students realized this method provided them with different educational context which allowed them to use higher thinking skills such as analysis, synthesis, and evaluation. This result agrees with some studies such as Anderson (1993), Al-Karasneh (2014) and Boud (2001) as they maintain that Journal writing can improve students' writing, enhance critical thinking skills, encourage observational and creative skills. Journal writing helps students develop writing skills as they are encouraged to experiment with writing.

The third –highest mean value is item 19(I benefited from the feedback that was provided by the instructor to improve my journal). In fact, this indicates that the researchers were keen on providing continuous feedback during using journals because it helps develop the students' skills in journal writing since they are newly exposed to it. In this regard, the literature stresses on the role of feedback in improving the students' skills in journal writing (Anderson (1993), Peyton & Reed (1990)). Moreover, during the focus group discussions, the students indicated that they received constant positive enhancing feedback that helped them to do the assignments more competently.

With respect to item 12, it was the fourth-highest mean value (at the beginning of the course I found it difficult to write my journal). This might be related to the fact that the students are unfamiliar with journal writing as it is a newly adopted technique by them, so it took great efforts in thinking, analyzing, and reflecting.



Therefore, O'Connell & Dyment (2003) stressed on providing sufficient training before using this method. Furthermore, during the focus group discussion, the students suggested some difficulties of using journal writing. However, they indicated those difficulties started to vanish gradually as they kept using writing journals.

Yet, the lowest mean value is item 22 (Journal writing made me love the course). This might be explained by the fact that the natural sciences and the social science teaching methods courses are deemed difficult. Therefore, the teacher students enrolled in the Class Teacher Major exert great effort to study those courses. Thus, the students might have observed how journal writing helped them understand those courses well, but it did not contribute to changing their attitudes towards it.

Results of the second question" Is there any difference attributed to gender in the impact of utilizing journal writing on improving the attitudes of the FESA's students towards journal writing?

To answer this question, the scale of the impact of journal writing on improving the students' attitudes towards it with reference to gender (male/female) was used. Then, means and standard deviations of the students' grades at the pre and post application of the scale were found. Table (5) shows the mean and the standard deviations scores of the students' grades at the pre and post applications of the scale.

Table 5. Mean and standard deviations scores of the students' grades at the pre and post applications of the scale according to gender

according to general			
Gender	Descriptive statistics	Pre application of scale	Post application of scale
Male	Mean	3.64	3.93
	Standard deviation	0.46	0.53
Female	mean	3.42	3.76
	Standard deviation	0.61	0.51

Table (5) above shows that there is a difference between the mean scores of males and females' grades at the pre application of the scale. Statistically, that difference was identified by using ANCOVA. Moreover, the table above indicates that there is a difference between the mean scores of males and females' grades at the post application of the scale of the impact of using journal writing on improving the attitudes of the students towards journal writing. In this regard, the mean value of the males' grades was (3.93) and the standard deviation was (0.53). However, the female students' grades mean score was (3.76) while the standard deviation was (0.51). Thus, the results indicate that there is a difference (0.17) between male and female students mean scores at the post application of scale.

Yet, the researchers used ANCOVA for two main reasons:

- 1-Finding out if the difference in the mean values between $\,$ male and female students' grades $\,$ at the post application of the scale of the impact of utilizing journal writing on improving the students' attitudes towards journal writing is statistically significant at (0.05)level.
- 2- Statistically separating the difference between male and female grades at the pre application of the scale. In this regard, Table (6) below represents the results:

Table 6. ANCOVA results of the students grades at the post scale in accordance with gender

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Source	of	Total of square	Degree of	Average square	Value of F	Level	of
variance		value	freedom			significance	
Pre scale		0.021	1	0.021	0.080	0.778	
Gender		0.343	1	0.343	1.285	0.260	
Error		25.369	95	0.267			
Total		25 733	97				

Results in Table (6) above indicate that there is no statistically significant difference in the mean scores between males and females' grades at the post application of the scale of the impact of utilizing journal writing on improving the reflective thinking level. This result depends on the fact that the value of (F) stood at (1.285) which is not of statistical significance at (0.05) level. Hence, this means that the impact of using journal writing on improving the level of reflective thinking of the students of FESA is not influenced by gender. To recap, using journal writing contributes to enhancing the attitudes of the students of the FESA regardless of their gender. Such a result might be linked to the effectiveness of this method in involving the students in the educational and reflective processes regardless of their gender. In this regard, literature concerned with this topic argues that males and females perceive journal writing in different ways, they have different perceptions of journal writing; Females often are more open and receptive to the journal writing process, and some males may need additional training and frequent positive and constructive feedback to feel comfortable with journal writing as a reflective technique (Dyment & O'Connell, 2003). Therefore, the researchers were keen to achieve these requirements, Moreover, the researchers wanted to point out that the tasks assigned to the students had the same nature and features that match both sexes.

Results of the third question" Is there any difference attributed to the study level in the impact of using



journal writing on improving the attitudes of FESA's students towards journal writing?"

In order to answer this question, the researchers used the pre and post scales of the impact of utilizing journal writing on improving the students' attitudes towards journal writing. Then, means and standard deviations of the students' grades at the scales due to study level variable (second year, third year, and fourth year) were found. The results of the standard deviations and the means are shown in Table (7) below:

Table (7) Mean and standard deviations scores of the students' grades at the pre and post applications of the scale according to gender

The study level	Descriptive statistics	Pre scale	Post scale
Second year	Mean	3.37	3.71
	Standard deviation	0.66	0.46
Third year	Mean	3.56	3.85
	Standard deviation	0.52	0.56
Fourth year	Mean	3.45	3.80
	Standard deviation	0.56	0.54

As shown in Table (7) above there is a difference between the means of the students' grades at the pre scale according to the students' study level variable. That difference was identified by using ANCOVA. Moreover, the table above shows that there are differences between the mean scores of the students' study levels at the post application of the scale of the impact of utilizing journal writing on improving the attitudes towards journal writing. Hence, in order to find out if the differences between the means of the students' grades at the post scale application are of statistical significance due to the study level, ANCOVA was used. Moreover, ANCOVA was also employed to statistically separate the differences between the three students' categories at the pre scale application. The results are represented in Table (8) below

Table (8). Results of using ANCOVA for the students' grades at the post scale according to the students' study level

source of	Sum Squares	Degrees of	Average	F value	Level of
variance		freedom	squares		significance
Pre scale	0.021	1	0.021	0.079	0.779
The academic	0.313	2	0.157	0.579	0.562
level					
error	25.399	94	0.270		
total	25.733	97			

The results in Table (8) above indicate that there is no statistically significant difference between the students' grades mean values at the scale of the impact of utilizing journal writing on improving the students' attitudes towards journal writing according to the students' study level. In this regard, F value was (0.579) which is not statistically significant at (0.05) level. Accordingly, the impact of using journal writing on improving the students' attitudes towards it is not affected by the students' academic level. Thus, utilizing journal writing contributes to improving the attitudes of the students towards it regardless of their university levels. This might be an indication to the effectiveness of applying that method at all university levels which will pave the way to use it widely at universities to help reach the educational goals sought after.

Results of the fourth question "What are the viewpoints of FESA's students regarding using journal writing in teaching?"

Regarding the answers of the questions of the focus groups, the students suggested that they found journal writing interesting in spite of the difficulties that encountered them at the beginning. Yet, they indicated that the training they received about journal writing facilitated using it. Moreover, they maintained that summarizing and reflecting processes they adopted boosted their understanding in the courses subjects and saved the time needed for studying and preparing for the exams. Hence, they pointed out that their skills in writing summaries and writing in general were developed. Furthermore, they stated that other skills such as the higher-order thinking skills, especially the reflective thinking, developed as they had to write down a section that is concerned with reflection after each journal they wrote. Sometimes this encouraged them to do additional reading about the subjects of the courses in order to answer some questions raised by their reflections regarding the contents of the journals. Yet, the students added that this experience will assist them in using the reflective notes register which is one of the requirements for finishing the practical education stage.

Concerning the difficulties that faced the students while writing the journals, most of the students stated that they are unfamiliar with journal writing as they never used it before. Moreover, they indicated that writing journals took much time in the beginning and their journals were below the required level. In this regard, the literature suggests that educators who wish to give journal writing more value have to offer students enough time for writing and reflection. (Dyment O'Connell, 2011). Furthermore, the students suggested that the most challenging part in the experience was that of reflection. But, gradually they became more skillful as the needed



skills for writing journals were improved, so they could write journals competently. Additionally, the students indicated that the continuous positive feedback they received enhanced them to carry out the tasks appropriately. Yet, they argued that doing the assigned tasks sometimes overlapped with other assignments that are required as part of studying other courses and that made them feel unable to do the tasks. Yet, to improve using journal writing in teaching, the students proposed that providing sample journals previously prepared by other students might be used as a helpful guide to write journals. In fact, this suggestion came out because the majority of the students never wrote journals before. In addition, some students pointed out that keeping sample journals with their instructors may motivate them and encourage them to utilize that method frequently. In this respect, Dyment & O'Connell (2003) argue that educators should model good journal writing behaviors. If an educator is supportive of the journal writing process, keeps a daily journal, and helps to facilitate reflective activities, then students may have more positive experiences with journal writing. Hence, some students suggested doing such tasks in groups which may allow them to exchange information and finish the tasks effectively and in a short period of time. Moreover, some of them indicated that they had to write too many journals during the semester as the courses included various subjects, so it was difficult to finish the journals and submit them on time. Therefore, the students suggested reducing the number of the tasks required during the semester so as to be able to accomplish them perfectly and on time. It is worth mentioning that Anderson (1993) and Shor (1992) referred to that point in their studies.

Yet, when the students were asked if they want other instructors to use journal writing in other courses, they expressed their contentment with the effectiveness of that method in enhancing their understanding in different subjects. In addition, some students emphasized the advantages of journal writing that were previously mentioned while others were concerned that journal writing could be a burden if they were asked to write more than one journal at the same time.

5. Recommendations

Results of the study showed that utilizing journal writing in teaching contributes to improving the students' attitudes towards it. Moreover, the results revealed the advantages of using journal writing and the difficulties that may hinder its use from the perspectives of the student teachers. In addition, the students' suggestions for developing that method were put forth as well.

In the light of the results above, the researchers recommend what follows:

- Using journal writing extensively in teaching university courses because :
 - It has a positive influence on the students' learning.
 - It helps the students gain reflective and thinking skills and develop their language skills.
- Training the student teachers at the faculty of educational sciences and arts to use journal writing as a tool for learning, reflection, and professional development in the future.
- Conducting further studies on the impact of journal writing on other variables such as the academic achievement and the reflective and creative thinking.

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