The Effect of Some Brain-Based Learning Strategies on Developing Journal Writing of English Majors in Basic Education at Faculty of Education

Dr. Mukhtar Abd El-Fattah Abd El-Maksoud
Assistant Professor of Curriculum and Methods of Teaching English

Abstract

The current study deals with K.W.L, debates and feedback as they have a role of tremendous importance in teaching journal writing to students. The aim of the study was to investigate the effect of some brain-based learning strategies on developing journal writing of Basic Education student teachers at Faculty of Education - Beni-Suef University. Questions of the study were: (1) What are the skills of journal writing that second year English majors should develop in Basic Education at Faculty of Education - Beni-Suef University? (2) What is the effect of K.W.L, debates and feedback on developing each skill of journal writing of second year English majors in Basic Education at Faculty of Education - Beni-Suef University? (3) What is the effect of K.W.L, debates and feedback on developing the overall skills of journal writing that are important to second year English majors in Basic Education at Faculty of Education - Beni-Suef University? (4) Which strategy has a great effect more than the other used strategies? Participants of the study were 43 English majors in second year Basic Education at Faculty of Education - Beni-Suef University. Procedures included administering the diagnostic test after achieving validity and reliability. According to the results of the diagnostic test which was the first question of the study, the researcher started designing a program to help students develop their skills of journal writing. Before administering the pre-test, the researcher determined validity as the test was submitted to juries, then reliability was achieved. Students’ scores were low in the diagnostic and the pre-post tests. Afterwards, the researcher started teaching the program after being designed. Students were given the instructional materials. The researcher used K.W.L, debates and feedback strategies. Results of the study were as the following: To answer question 2, which is: What is the effect of K.W.L, debates and feedback on developing each skill of journal writing of second
year English majors in Basic Education at Faculty of Education-Beni-Suef University?”, it is shown in table 4 where means were shown stating the differentiation between the pre test and post test in every skill. To answer question 3, which is: "What is the effect of K.W.L, debates and feedback on developing the overall skills of journal writing that are important to second year English majors in Basic Education at Faculty of Education-Beni-Suef University?”, it is shown in table 5 that T value is 24.549. Students at Faculty of Education made use of the program. To answer question 4, which is: "Which strategy has a great effect more than the other used strategies?”, it is clear in table 4 as the mean of Ideas& Content is 5.16, whereas, the mean in the pre-test is 2.07

It is concluded that the importance of K.W.L, debates and feedback strategies should be taken into account the importance of K.W.L, debates and feedback strategies in teaching and learning at Faculties of Education to develop the skills of journal writing.

Key Words: Brain-Based Learning - Strategy – Journal Writing - K.W.L - Debate Feedback

Introduction

Basic education is important as it is the first pillar on which the cycle of education is based. Students in basic education should be given due care because they will shoulder responsibilities of the young generation.

Caine, (2012), suggested that curricula should be developed around brain-based principles that require learning to be psychological and social, by using interactive curricula. The brain also searches for innate meaning in new content, but is only retained through repetition and pattern processing. Caine, also stated that the brain can only process information in segments and whole parts; but stating that new information can be learned simultaneously. Next, curriculum content should be meaningful, organized, and categorized in small chunks

This type of learning could be achieved "by adding visual or audio media to lesson plans, or by creating interactive role playing sessions that allow the students to teach back what has been learned”. (Duman, 2010) The brain remembers information better, if it is delivered in short, interactive segments; thus ensuring that the thought process is ongoing throughout the entire length of the course. It is important for the instructor to
realize that not every student will view the course or material in the same fashion. A classroom has to have multiple learning environments in one room, and the teacher is responsible for multi-tasking through each environment and learning experience (Bonk & Graham, 2006)

A teacher has many different roles, and therefore should avoid assembly-line education processes where they read directly from a textbook, give homework without feedback and deliver an earned grade without explanation. Kane, (2013).

Training Basic education students on journal writing may have great benefits as the following:

1. Self-Reflection: Writing can be so powerful. It crystallizes thoughts into written content, The most important fact to succeed reflecting is to get to the core and to stay honest.
2. In a personal journal, a person has a fantastic place to write down his goals.
3. He has to review his goals. He can review and set goals new just by creating a new goal-page in his journal. He can see the old goals that he achieved later and it also prevents him from changing goals too often.
4. It gives him something to hold himself responsible. If he writes something down it is a different level of commitment to himself. He can use this fact to his advantage.
5. He writes a book about himself. This is the typical idea of a diary: He writes what happens to him. He reflects a bit about it and adds his feelings and thoughts. It is really great to review his personal development over the time.
6. A great place to plan. Tasks are divided into personal and professional tasks, put into the areas of importance and then prioritized.

7. Idea-Journal: A person can jot down his ideas. Ideas may appear out of thoughts, of intuition, of talks with other people. He can also keep these ideas right in one place.

8. He exercises his writing skills. By writing a personal journal he gets into the habit of writing. By writing a personal journal writing will become a much more natural expression of himself. Thum, (2008:1-5)

Review of Literature

K.W.L. and Journal Writing.

Tannenbaum, (1996) provided examples of measures well suited for assessing English-as-a-Second-Language (ESL) students. Alternative assessment is particularly useful with ESL students because it asks students to show what they can integrate and produce, not simply recall and reproduce. Alternative assessment includes varied measures adaptable for different situations. Nonverbal assessment strategies include physical demonstrations and pictorial products expressing academic concepts or content knowledge without speech or writing. K-W-L (what I know/what I want to know/what I've learned) charts are used, both individually or as a class exercise, to begin and end a unit of study, particularly in Social Studies and Science. Before the unit, the strategy helps teachers understand students' background knowledge and interests; afterward, it helps assess content material learned. Oral performance-based assessments include such activities as interviews, oral reports, role-plays, describing, explaining, summarizing, retelling, and paraphrasing stories or text material. Other oral and written products useful for assessing ESL students' progress are content area thinking and learning logs, reading response logs, structured and creative writing assignments, dialogue journals,
and student-produced audio or video cassettes. Portfolios are used to collect samples of student work over time to track student development.

Elliott; Formhals; Wheat, (1999). In their study, they addressed vocabulary knowledge, which refers to the understanding of words, the overall ideas and concepts being communicated, and the ability to use those words in the appropriate context. The targeted population consisted of students in kindergarten, first grade, and fourth grade. An analysis of School Improvement Plans revealed a need for emphasis on vocabulary acquisition and development. In reviewing probable cause data, the researchers discovered classroom vocabulary instruction was inadequate, exposure to meaningful spoken language was insufficient, prior knowledge was limited, and achievement in reading was affected by the limited understanding of vocabulary. A thorough literature search resulted in the development of a variety of solution strategies which were implemented. These included increased reading time, the use of visual aids, multiple exposures to words, and the activation of prior knowledge. Post-intervention data collected from standardized and teacher-created assessments indicated an increase in expressive and receptive vocabulary, improved richness and complexity of responses over time, enhanced understanding of new vocabulary, and an increased use of theme-related words in writing and speaking.

Cantrell; Fusaro; Dougherty, (2000) Compared the effectiveness of incorporating two different types of reading comprehension strategies with journal writing to improve learning in social studies at the seventh-grade level. Findings showed that the group that structured their responses according to the K-W-L comprehension model learned more than the group that summarized what they had read.

Gammill, (2006) stated that elementary teachers can use writing to learn effectively and regularly in their classrooms, not only to strengthen students' writing skills but also to deepen reading comprehension and encourage active learning. Students
who use writing-to-learn strategies are more involved in their learning and perform better on assessments--but, more important, they develop critical thinking skills. Writing to learn provides students with safe writing opportunities, and it allows teachers to assess informally students' growth as writers and thinkers. Students who use writing-to-learn in elementary school have more opportunities to become comfortable with writing and to practice their skills before they reach secondary school, where these skills become increasingly important.

**Debates and Journal writing**

Shannon, (1994). This study showed that in the process-oriented approach, instructional practices emphasized the strategies that lead the writer to the processes underlying composing and discovery of meaning. The product orientation approach focuses on the end result of the composing process. Special attention was given to 1986 criticism of the process approach by Daniel Horowitz. It was concluded that at present the status of the debate was characterized by compromise and an integrated theory of writing that included both process and product.

Mlynarczyk, (2006) stated that more than ten years have passed since the widely publicized debate about personal and academic writing that played out in the 1990s between Peter Elbow and David Bartholomae. But the question of the relative merits of these two different types of writing for student writers continues to be an issue of concern for teachers of composition, especially teachers of basic writing. In this article, I take another look at this important question. Using the psycholinguistic theories of Jerome Bruner and James Britton as the basis for analysis of writing, the Elbow-Bartholomae debate is reconsidered. Then, using data from a qualitative study of reflective journal writing, all students--and especially basic writers--need to reflect on their reading using personal, expressive language in order to acquire genuine academic discourse.
Holley and Dobson, (2008) showed that some non-traditional students find the university environment alienating, impersonal and unsupportive. The "Quickstart" project combines traditional lectures and seminars with a sequence of carefully designed online tasks, aimed at lessening the impact of the start of year uncertainties for new students. One thousand students across two geographic locations participated in the programme. The project was evaluated by considering three sources of data: data generated by server statistics of 40,358 successful requests for pages in the first four weeks of teaching; student anonymous responses to an online end of course questionnaire as well as extracts from their reflective journals; and the student experience as viewed through the eyes of a researcher in the classroom. Findings offer insights into how the students blend classroom time with their own time; and student perceptions of their own learning experiences. The technology enhanced the discussion and participation in activities. The students sent each other SMS text messages. They bonded very quickly in the seminar groups, where weekly online tasks that had been prepared individually "outside" the classroom were the focus of group discussion and debate "inside the classroom". Their reflective writing showed very clearly how valuable the early "friendship" groups had been for them settling into university life.

Brown, (2012) stated that language teachers spend much of their time providing corrective feedback on students' writing in hope of helping them improve grammatical accuracy. Turning to research for guidance, however, can leave practitioners with few concrete answers as to the effectiveness of written corrective feedback (CF). Debate in the literature continues, reflecting dichotomies in language learning theory, inconsistent research methodology, and inherent challenges in designing controlled classroom research. As the debate evolves, few teachers are waiting for concrete empirical support and instead provide written CF based on intuition, experience, and student expectations. Second language and foreign language writing teachers, therefore, face the immediate challenges of assessing
their students' abilities, needs, goals, and preferences with respect to written accuracy and then designing feedback to fit teaching contexts in ways that are manageable and useful.

Humble and Sharp,(2012) stated that teaching qualitative research methods (QRM), particularly early on in one’s academic career, can be challenging. They described shared peer journaling as one way in which to cope with challenges such as complex debates in the field and student resistance to interpretive paradigms. Literature on teaching QRM and the pedagogical value of journaling for meta-cognition are reviewed. The two authors described key points about their teaching contexts and then demonstrated with journal excerpts how they developed (a) clarity, (b) confidence, and (c) connection through two years of co-creating their journal. The article concludes with recommendations for shared journal writing as well as ways to extend it.

Ali and Smith, 2014) presented a debate between two faculty members regarding the teaching of the legacy programming course (COBOL) in a Computer Science (CS) program. Among the two faculty members, one calls for the continuation of teaching this language and the other calls for replacing it with another modern language. Although CS programs are notorious for continuous updates (and hence debates over the updates) of their courses, but the teaching of COBOL programming language has sparked many debates that have been on-going for years. Each side of the debate provides evidences that support their position. This study, although, provides a debate over the same topic but it is different from ongoing debates because it balances the views expressed by both sides of the debates. This in turn shows the difficulty encountered by various departments when making a decision about COBOL. A thorough literature review regarding both sides of views is presented. We are also incorporating in this debate the lessons we learned from our long experience in this field. The goal from writing this study is two parts: first, to present opinions about each side of the position regarding the teaching of
COBOL, and, second, to reach a consensus regarding the continuation of teaching this programming language (or for this matter replacing it with another language).

Curry and Lillis, (2014) showed that in the past decade, academic evaluation systems worldwide have markedly increased the use of mechanisms that privilege the use of English in journal publishing. Findings are highlighted from more than 12 years of research on the experiences and perspectives of 50 multilingual European scholars with writing for publication, particularly in English. De Certeau's (1984) notions of "strategies" and "tactics"are drawn on to explore key ways in which scholars manage often-competing demands and interests in writing for publication. Scholars both adopt "strategies" that align with official publication policies and use "tactics" that support scholars' sometimes competing agendas. At different moments scholars embrace, accommodate, or resist the perceived dominance of English in knowledge production regimes and evaluation systems. It is concluded by summarizing the value of drawing on the notions of strategy and tactics in an era of increasing debates over evaluation systems.

Strasser and Wolfe, (2014) described their experience with integrating a semester-long economic analysis project Students work in teams of "economic advisors" to write a series of nested reports that analyze the current state of the economy, and propose and evaluate policies for a decision-maker. The project simulated real-world policy consulting with an emphasis on applying economic theory and models. The authors described the project setup and how to tailor its theme to current events, explain methods for keeping it manageable in larger classes, discuss student learning outcomes, and document course evaluation results. In addition to improving the learning experience, this project prepared economics students to contribute their own views to policy debates and buttress them with tight macro-economic reasoning.
Feedback and Journal writing

Esteban and Roca (2010) investigated how noticing is related to composing and subsequent feedback processing in individual and collaborative EFL writing. Participants were Spanish secondary school pupils at a low-intermediate proficiency level who completed a three-stage writing task that included writing a picture-based story (Stage 1), comparing their written texts with two native-speaker models (Stage 2), and attempting subsequent revisions (Stage 3). The results indicate that the students noticed mainly lexical problems at the writing stage but could only find a few solutions to those problems in the models provided. However, the comparison with the models allowed them, especially those who wrote collaboratively, to notice a large number of features related to the content of the pictures and the linguistic means used to express that content. They were also found to incorporate a reasonable number in subsequent revisions.

Storch, (2010) stated that the question posed here is: Are researchers and L2 writing teachers now any wiser about the efficacy of WCF? He began with a summary of early studies and some of their major shortcomings. He then examined more recent studies and concluded that, although many of the shortcomings of earlier research have been largely addressed, research findings were still inconclusive. Storch argued that currently, in the desire to conduct more robust research, the pendulum has swung too far towards experimental studies. Such studies tended to employ "one off" treatments, often provided on a very restricted range of errors, and ignored the learners' goals and attitudes to the feedback provided and to improvement in accuracy. He concluded by suggesting directions for a more meaningful and ecological valid research agenda on written corrective feedback.

Ware, (2011). Stated that a distinction must be made between "computer-generated scoring" and "computer-generated feedback". Computer-generated scoring referred to the provision of automated scores derived from mathematical
models built on organizational, syntactic, and mechanical aspects of writing. In contrast, computer-generated feedback, Ware referred to a focus on computer tools for writing assistance rather than for writing assessment and has piqued the curiosity of many in the writing community. Ware also discussed why computer-generated feedback was piquing curiosity. The author also discussed how computer-generated feedback helped students improve their writing and how it should be integrated into writing instructions.

Wigglesworth and Storch, (2012) stated that writing is generally thought of as an activity which is carried out individually, often with feedback then provided by a teacher or colleague. While the use of pair or small group work in the second language classroom in relation to oral work has been extensively studied, and its benefits well documented, there are only a few studies which have documented the advantages of collaboration in written work, and in dealing with written feedback. Mostly conducted within a socio-cultural framework, these studies suggest that collaborative writing provides learners with opportunities to learn through a discussion of the language they are using. The findings are explored from the studies which have examined the effect of learners working in pairs or small groups on writing tasks, and the extent to which working predominantly in pairs, and receiving feedback on their writing in pairs, can enhance the language learning opportunities for learners through their ability to scaffold each other's contributions. It is argued that learners working on writing activities in pairs can enhance learning by providing opportunities for the discussion of language. It is concluded with a discussion of possible research directions in relation to further exploring collaborative writing and collaborative processing of feedback which may prove valuable for second language learners.

Kaufman ; Codding ; Markus ; Tryon ; Kyse, (2013) stated that verbal and written performance feedback for improving preschool and kindergarten teachers' treatment integrity of
behavior plans was compared using a combined multiple-baseline and multiple-treatment design across teacher-student dyads with order counterbalanced as within-series conditions. Supplemental generalized least square regression analyses were included to evaluate significance. Maintenance of treatment integrity following termination of performance feedback was included and correspondence between treatment integrity and student behavior change was examined. Results suggested that both forms of feedback were effective for improving treatment integrity but that verbal performance feedback resulted in immediate and sustained improvements with moderate to strong correspondence with student behavior change.

Lap and Yen, (2013) showed that the nature of peer feedback and its impacts on writing in English has attracted much attention of researchers and educators. Recent studies have indicated various types of peer feedback and its positive effects on writing development. The results of an investigation into the nature of peer feedback and its effects on learners' writing argumentative essays in a Vietnamese context are presented. The study aimed to explore the types of feedback which competent and less competent learners employed when they reviewed their peers' argumentative paragraphs. The study also aimed to measure the effects of one's giving feedback on their ability to write argumentative paragraphs. The study followed a two-group experimental research design with the participation of twenty-four English learners at pre-intermediate level of English. Four instruments were used in the study: the worksheet for peer feedback to elicit learners' comments to peers' argumentative paragraphs, the writing tests to examine learners' ability to write argumentative paragraphs before and after the treatment, the feedback coding scheme to code learners' comments and the assessment scale to evaluate learners' argumentative paragraphs. The results showed that both competent and less competent learners generated different types of peer feedback when commenting on their peers' argumentative paragraphs. In addition, the extent to which competent and less competent learners used the types of
feedback was the same. Remarkably, giving feedback enhanced the mechanics component of learners' argumentative paragraphs.

Gan and Hattie, (2014) investigated the effects of prompting on secondary students' written peer feedback in chemistry investigation reports. In particular, students' feedback features were examined in relation to the use of criteria, feedback specificity, and feedback levels. A quasi-experimental pre-test post-test design was adopted. Reviewers in the prompted condition were provided with question prompts that asked them to pose written feedback to their peers on what they did or did not do well and suggestions for improvement, while reviewers in the unprompted condition gave written peer feedback without prompts. The findings showed that prompted peer feedback has a significant effect on the number of comments related to Knowledge of errors, Suggestions for improvement and Process level feedback. This study supports the view that prompting peer feedback in the use of criteria, feedback specificity and feedback levels opens up opportunity for reviewers to engage more meaningfully with peer feedback in report writing tasks.

Roach; Kurz and Elliott, (2015). Stated that opportunity to learn" refers to the extent to which teachers dedicate instructional time and content coverage to the intended curriculum using a range of cognitive processes, instructional practices, and grouping formats. The Instructional Learning Opportunities Guidance System, a research-based online teacher log that allows teachers to plan and keep track of their instruction related to content standards, review feedback reports that are based on their own instructional data, and communicate and collaborate with colleagues to promote students' opportunity to learn are described. A working example from an actual teacher's instructional data is used to illustrate My Instructional Learning Opportunities Guidance System and its potential to facilitate improved instruction for students with disabilities.
Schwegler and Altman, (2015). Showed that because feedback is a critical component of the continuous improvement cycle of the Quality Matters (QM) peer review process, the present research analyzed the feedback that peer reviewers provided to course developers after a voluntary, nonofficial QM peer review of online courses. Previous research revealed that the effects of feedback on performance were not consistently positive; however, findings were frequently ignored by those who assumed that all feedback improved performance. Feedback Intervention Theory (FIT) organized the wide variability in this body of research by outlining conditions when feedback could be expected to improve or impair performance. In the present research, peer review comments were analyzed in comparison to the QM guidelines for writing effective recommendations and FIT to evaluate the feedback from the peer review process. Results of this study are applied to inform future training and peer review implementation.

Commentary

Investigating the previous studies mentioned in the three dimensions, it is obvious that the present study is different as it investigates the effect of some brain-based learning strategies (K.W.L., debates and feedback) on developing journal writing skills of English majors in Basic Education at Faculty of Education, Beni-Suef University.

Context of the Problem

The researcher asked some students in second year of Basic Education about journal writing and some brain-based learning strategies after the last lecture that had been delivered by Dr. Amany Abu Elfadl at Faculty of Education at Beni-Suef. She came from Faculty of Arts, Beni-Suef University. The lecture was about some mistakes in translation and pronunciation in English. He had a look at students’ writing to investigate their writing. He asked students through interviews about problems that students face in journal writing in English. It was clear that students are weak in the journal writing skills. It was the idea of the current study.
To document the problem, a pilot study was conducted as follows to assess and know the important journal writing skills to students:

- To answer the first question of the present study which is:
  "What are the skills of journal writing that second year Basic Education students should develop at Faculty of Education-Beni-Suef University?", the following steps were followed:

Description of the Diagnostic Test:

The purpose of the test is to know the journal writing skills which are important to second year Basic Education students at Faculty of Education, Beni-Suef University. The test involved one question. The student was requested to write on the last lecture that had been delivered by Dr. Amany Abu Elfadl or Dr. Tahani Elgarhi. Students were given appropriate time to express and show their own ideas.

Table (1) Reliability of the diagnostic test

<table>
<thead>
<tr>
<th>Category</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening</td>
<td>0.82</td>
</tr>
<tr>
<td>Creativity</td>
<td>0.80</td>
</tr>
<tr>
<td>Conventions</td>
<td>0.85</td>
</tr>
<tr>
<td>Total</td>
<td>0.89</td>
</tr>
</tbody>
</table>

In table one, it is clear that reliability of the diagnostic test is .89

After determining reliability, the test was ready to be administered. The researcher chose students randomly from Second Year Basic Education at Faculty of Education, Beni-Suef University. A rubric was used to assess students' performances

Table (2) Means of the Raw Scores of the Diagnostic/Test

<table>
<thead>
<tr>
<th>Category</th>
<th>(1) Opening</th>
<th>(2) Creativity</th>
<th>(3) Conventions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.510638</td>
<td>1.085106</td>
<td>1.553191</td>
<td>4.106383</td>
</tr>
<tr>
<td>Mean %</td>
<td>37.765957</td>
<td>27.12766</td>
<td>38.82979</td>
<td>34.219858</td>
</tr>
</tbody>
</table>

Table (1) Reliability of the diagnostic test

Table (2) Means of the Raw Scores of the Diagnostic/Test
In table (2), percentage of the mean of the opening skill is 37.765957, whereas, in the creativity skill, the percentage is 27.12766, in conventions skill, the percentage is 38.82979, and in the total, the percentage is 34.219858

**Statement of the Problem**

The problem of the present research lies in the fact that second year Basic Education students are weak in some journal writing skills and the researcher attempts to make use of K.W.L., debates and feedback strategies and investigate their effect on developing some journal writing skills among second year Basic Education students.

**Questions of the Study**

The questions are as the following:

1. What are the skills of journal writing that second year Basic Education students should develop at Faculty of Education- Beni-Suef University?
2. What is the effect of K.W.L., debates and feedback on developing each skill of journal writing of second year Basic Education students at Faculty of Education- Beni-Suef University?
3. What is the effect of K.W.L., debates and feedback on developing the overall skills of journal writing that are important to second year Basic Education students at Faculty of Education- Beni-Suef University?
4. Which strategy has a great effect more than the other used strategies?

**Aims of the Study**

This study aims to achieve the following:

1. Investigating the effect of K.W.L., debates and feedback on developing some journal writing skills.
2. Using K.W.L., debates and feedback to develop the journal writing skills
3. Knowing more about activities to develop the sub-skills of journal writing.
Significance of the Study

1. This study may help to recognize the relationship between using K.W.L., debates and feedback and developing the journal writing skills
2. In addition to the previous point, it might help in developing students' journal writing of English majors
3. Moreover, it might give an idea about teaching and learning of the journal writing skills and how to make use of some brain-based learning strategies.

Method of the Study

It is hypothesized that the method in the current study will be quasi experimental

Definition of Terms

Brain-Based Learning refers to teaching methods, lesson designs, and programs, including such factors as cognitive development—how students learn differently as they age, grow, and mature socially, emotionally, and cognitively.

Brain-based learning is motivated by the general belief that learning can be accelerated and improved if educators base how and what they teach on the science of learning. Recent discoveries in cognitive science have revealed that the human brain physically changes when it learns, and that after practicing certain skills it becomes increasingly easier to continue learning and improving those skills. This finding—that learning effectively improves brain functioning, resiliency, and working intelligence—has potentially far-reaching implications.

Related terms such as brain-based education or brain-based teaching, like brain-based learning, refer to instructional techniques that are grounded in the neuroscience of learning—i.e., scientific findings are used to inform educational strategies and programs. The Glossary of Education Reform.(2014:1)

To define brain-based learning Jensen, showed the following:
Brain-Based Education is the purposeful engagement of strategies that apply to how our brain works in the context of education. Brain-based education is actually a “no-brainer.” Here’s a simple, but essential premise: the brain is intimately involved in, and connected with, everything educators and students do. Any disconnect is a recipe for frustration and potentially disaster. Brain-based education is best understood in three words: engagement, strategies and principles. You must engage your learners and do it with strategies that are based on real science. Jensen, E. (2016:1)

The operational definition will be Jensen's, (2016:1)

A strategy is perspective, position, plan, and pattern. Strategy is the bridge between policy or high-order goals on the one hand and tactics or concrete actions on the other. Strategy and tactics together straddle the gap between ends and means. In short, strategy is a term that refers to a complex web of thoughts, ideas, insights, experiences, goals, expertise, memories, perceptions, and expectations that provides general guidance for specific actions in pursuit of particular ends. Nickols,(2012:7).

A strategy is a plan or method for achieving a specific goal: The Free Dictionary,(2016:2).

The operational definition will be the definition of Nickols,(2012:7).

Journal writing is the process of recording personal insights, reflections and questions on assigned or personal topics. Journal projects assigned in class may include a student's thoughts about daily experiences, reading assignments, current events or science experiments. Journal entries are a form of reflective writing, in that a student can use them to consider and respond to something he has read or learned. However, journal entries should not merely summarize what a student has read, nor should they focus only on feelings. Instead, they should demonstrate the ability to conduct a critical inquiry. The term, critical inquiry, refers to the steps involved in collecting and analyzing ideas or information. Because journal writing
allows a student to examine different ideas and writing strategies, it's also a form of exploratory writing. I should be considered that a class journal is not the same thing as a private diary, in that the writing may be a little bit more formal, although not as formal as an essay. And while a personal diary is private, a teacher may have access to his class journal or require him to share portions with other students. Taylor, (2015:1).

**The definition of journal**. It is a diary you keep of daily events or of your thoughts or a publication dealing with a specific industry or field.

An example of a journal is a diary in which you write about what happens to you and what you are thinking.

An example of a journal is the New England Journal of Medicine, in which new studies are published that are relevant to doctors and medicine.

A journal is also defined as a collection of one's thoughts or observations, written over time as on a particular topic or as a creative exercise. Your Dictionary (2016:1-2)

**The operational definition** will be Taylor's definition as it is appropriate to the current study.

**KWL** is intended to be an exercise for a study group. It is composed of only three stages that reflect a worksheet of three columns with the three letters:

<table>
<thead>
<tr>
<th>What Ss. Know</th>
<th>what Ss. Want to know</th>
<th>what Ss. Learned</th>
</tr>
</thead>
</table>

**K stands for Know**: This advanced organizer provides with a background to the new material, building a scaffold to support it. Think of it as a pre-reading inventory.

Brainstorm! Before looking at the text, think of keywords, terms, or phrases about the topic, either in a study group. - Record these in the K column of chart. - Engage group in a discussion. - Organize the entries into general categories.
W stands for Will or Want

Preview the text’s table of contents, headings, pictures, charts. Discuss what is to be learnt. - List some thoughts on what is expected to be learnt. - Think in terms of what will be learnt. - Turn all sentences into questions before writing them down. - List the questions by importance.

L stands for Learned

The final stage is to answer your questions, as well as to list what new information you have learned. Either while reading or after you have finished. - List out what has been learnt - Check it against the W column, what was to be learnt. - Create symbols to indicate main ideas, surprising ideas, questionable ideas, and things that were not understood. - The Study Guides and Strategies (2016;1-2).

A KWL table, or KWL chart, is a graphical organizer designed to help in learning. The letters KWL mean what students, already know, want to know, and ultimately learn. It is a part of the constructivist teaching method where students move away from what are considered traditional methods of teaching and learning. In this particular methodology the students are given the space to learn by constructing their own learning pace and their own style of understanding a given topic or idea. The KWL chart or table is a form of instructional reading strategy that is used to guide students taking them through the idea and the text. A KWL table is typically divided into three columns titled Know, Want and Learned. Wikipedia, the free encyclopedia (2016: 1).

The operational definition will be the "Study Guides and Strategies' Definition (2016;1-2).

A debate is defined as a discussion between people in which they express different opinions about something Merriam-Webster's Learner's Dictionary (2016:1).

A debate is also defined as a formal discussion on a particular matter in a public meeting or legislative assembly, in which opposing arguments are put forward and which usually
ends with a vote: last night’s debate on the Education Bill. Oxford Dictionaries (2016:1)

**The operational definition will be** the first one

**Feedback** is one of the most powerful influences on learning and achievement, but this impact can be either positive or negative. The type of feedback and the way it is given can be differentially effective. A model of feedback is then proposed that identifies the particular properties and circumstances that make it effective, and some typically thorny issues are discussed, including the timing of feedback and the effects of positive and negative feedback. Finally, this analysis is used to suggest ways in which feedback can be used to enhance its effectiveness. Hattie; Timperley, (2016:1).

**Feedback** occurs when outputs of a system are routed back as inputs as part of a chain of cause-and-effect that forms a circuit or loop. The system can then be said to feed back into itself. The notion of cause-and-effect has to be handled carefully when applied to feedback systems: Wikipedia, the free encyclopedia (2016:1)

**The operational definition will be** Hattie; Timperley’s, (2016:1)

**Delimitations of the Study**

**The study is delimited to**

1. The sample in the diagnostic test consisted of 47 students enrolled in second year Basic Education at Faculty of Education, Beni-Suef University. In the pre/test, there were also 54 students.

2. Some journal writing skills including:
   (Reflection – Idea - Content – Organization - Mechanics )

**Participants of the study**

Fifty four students were randomly chosen from second year Basic Education at Faculty of Education, Beni-Suef University during the second semester of the academic year 2016. After the
post test, they were 43 students as some students were absent. Their numbers were 4, 11, 12, 25, 27, 36, 37, 42, 45, 46, and 53.

**Procedures of the Study**

**The Program and Pre/Post Test Design**

**Test Validity:**
A pre/post test was prepared and it was submitted to some Jury members to achieve validity to assess what the test is put for.

**Test Reliability:**

*Table (3) Reliability of the pre/post test*

<table>
<thead>
<tr>
<th></th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>K.W.L</td>
<td>0.80</td>
</tr>
<tr>
<td>Imp.of Debates</td>
<td>0.88</td>
</tr>
<tr>
<td>Imp.of Feedback</td>
<td>0.86</td>
</tr>
<tr>
<td>Reflection</td>
<td>0.80</td>
</tr>
<tr>
<td>Ideas &amp; Content</td>
<td>0.85</td>
</tr>
<tr>
<td>Organization &amp; Mechanics</td>
<td>0.87</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>0.90</strong></td>
</tr>
</tbody>
</table>

Reliability is ranged from **0.80** to **0.88**. The total is **0.90**. The pre/post test was administered. Inter-raters helped the researcher after administering the test to be away from bias.

The student’s Book that was prepared by the researcher was given to students in second year Basic Education at Faculty of Education, Beni-Suef University. There were guidelines of the program prepared by the researcher to help in the carrying out the program.

The researcher met students twice a week. He told them about the program. The researcher tried hard to develop the skills related to journal writing. More marks were given to the journal writing skills as they are the dependent variable. The researcher was helped by another researcher who was studying to obtain M.A at Faculty of Education, Beni-Suef University. The researcher did his best and was helpful while applying the program to students before administering the post test.
How to teach Journal Writing skills.

"There are “macro strategies” and “micro strategies.” The micro strategies are very situation specific. For example, giving directions, only give one a time, because the brain needs time to process the location, the action and the qualities of the action (finding teammates and waiting quietly at team stations.). Here, students focus on macro (the “big picture”) strategies. These are the “biggies” that reap huge rewards. Experiences are used to customize them for situation." Jensen. (2016:1)

Jensen (2016) also showed principles of ten strategies as the following:

"Principle to Strategy Number One

"It is confirmed: Physical education, recess and movement are critical to learning. Everyday behaviors, include exercise. Schools can and should influence these variables.

Practical school applications: Support more, not less physical activity, recess and classroom movement. For the first few weeks of school, expose students to a variety of physical activities.

Principle to Strategy Number Two

"It’s confirmed: Social conditions influence brain in multiple ways. School behaviors are highly social experiences, which become encoded through sense of reward, acceptance, pain, pleasure, coherence, affinity and stress. Practical school application: Do not allow random social groupings for more than 10-20 percent of the school day. Use targeted, planned, diverse social groupings with mentoring, teams and buddy systems.

Principle to Strategy Number Three

"The brain changes! All educators should know the brain can and does change every day. In fact every student's brain is changing as they attend school. Without understanding the “rules for how our brain changes,” educators can waste time, and students will fall through the cracks.
Practical school application: Give teachers a mandate of 30-90 minutes a day and 3-5 times per week to upgrade student skill sets. Teach attentional skills, memory skills and processing skills.

**Principle to Strategy Number Four**

"Chronic stress is a very real issue at schools for both staff and students. Recent studies suggest 30-50 percent of all students feel moderately or greatly stressed every day. This issue affects attendance, memory, social skills and cognition.

Practical school application: Teach students better coping skills, increase student perception of choice, build coping skills, strengthen arts, physical activity and mentoring. These activities increase sense of control over one’s life, which lowers stress.

**Principle to Strategy Number Five**

"Schools are pushing differentiation as a strategy to deal with the differences in learners.

Practical school application: Make differences the rule, not the exception at school. Validate differences. Never expect all students (fourth-graders, for instance) to be on the same page in the same book on the same day.

**Principle to Strategy Number Six**

"New evidence suggests the value of teaching content in even smaller chunk sizes. Why? The old thinking was that students could hold seven plus or minus chunks in the head as capacity for working memory. The new research says two to four chunks are more realistic.

Practical school application: Teachers should teach in small chunks, process the learning, and then rest the brain. Too much content taught in too small of a time span means the brain cannot process it.

**Principle to Strategy Number Seven**

"The role of the arts in schools continues to be under great scrutiny. But five neuroscience departments at five universities (Oregon, Harvard, Michigan, Dartmouth and Stanford) have recently completed projects studying the impact of arts on the
brain. The results suggest that arts are far better than earlier believed.

Practical school application: Make arts mandatory and give students the choice of several, and support with expert teachers

**Principle to Strategy Number Eight**

"Humans have the remarkable capacity to display many emotions, but only six of them are “hard wired,” or built in at birth. This is profound because it tells us that unless children get these emotional states taught to them early (ages 0-3), when they enter school, they’ll be emotionally narrow. Practical school application: Ask that children use the social structures that are advocated in cooperative learning programs every day. The better the social skills, the better the academics.

**Principle to Strategy Number Nine**

"The discovery that aggressive behavioral therapies, new drugs and revolutionary stem cell implantation can be used to influence, regulate and repair brain-based disorders has been amazing.

Practical school application: Make sure all teachers learn the latest in dealing with special education learning delay recovery. Most kids can be brought back into regular classes, but not with inclusion-only strategies.

**Principle to Strategy Number Ten**

"This is highly relevant for teachers and administrators who are responsible for student learning and classroom testing. Every time students review, they might change their memory (and often do). Yet, without review, they are less likely to recall their learning.

Practical school application: First, teachers should review the content halfway between the original learning and the test. If content is taught Monday and tested on Friday, then review should be on Wednesday." (Ibid::2-6)
Why Keep a Journal?

There are reasons for journaling as the following:

1. "Preserve memories. It's amazing how quickly people forget. For instance, try remembering in detail a day exactly one week ago. Can a student remember what he wore? What he ate for lunch? What he felt and thought about? Try an experiment. A student is requested to write down in detail everything that happened to him today. But if he tries to write about yesterday, he might have trouble filling up more than a couple of pages. And if he goes to the day before yesterday, he probably has even less. People are constantly losing pieces of their own lives. A journal is a way of keeping them.

2. Improve writing. Generally, the more a student writes, the better a writer he becomes. Writing regularly makes writing easier, and it helps a student develop his own writing voice. Even if his journal is just for himself and it doesn't matter how "good" it is, journaling builds muscles that a student can use for other kinds of writing. It makes his journal an ideal laboratory for experimenting with new styles, techniques, and subject matter, increasing his range as a writer. His journal is also a place to collect ideas and material for creative writing. All of the sights, sounds, tastes, and feelings he records, the overheard pieces of conversation, the people he was watching in the street -- all of these can be recycled in stories and poems. These observed details will give his creative writing the texture of reality.

3. Sharpen senses. Writing about experience can make a student a better observer. When a student knows he is going to write about something, he pays a different kind of attention to it. Keeping a journal gets a student in the habit of noticing the details of his daily life. The result is like a heightening of the senses, as a student observes the world with greater richness and complexity.
Of course, another reason for journaling is simply for the love of doing it. A student may take sensual pleasure in the velvety looping of ink across the creamy surface of a page, or in the private time with his thoughts at the end of a hectic day. He may find it comforting or therapeutic to pour out his emotions in writing. And the other side of journaling is reading. He can always go back to old journals and find windows into his past.”


Characteristics of K. W. L Strategy

K Suggestions: “Have questions ready to help students brainstorm their ideas. Sometimes students need more prompting than, “Tell me everything you know about _____,” to get them started.

Encourage students to explain their associations. This is especially important for those associations that are vague or unusual. Ask, “What made you think of that?”

W. Suggestions: Ask an alternative question for generating ideas for the W column. If, in response to “What do you want to learn about this topic?” your students are either having trouble coming up with ideas, or are saying, “nothing,” try asking one of the following questions instead: “What do you think you will learn from the text you are going to read?” Choose an idea from the K column and ask, “What would you like to learn more about this idea?”

Come prepared with your own questions to add to the W column. You might want students to focus on ideas in the text on which the students’ questions are not likely to focus them. Be sure not too add too many of your own questions, however. The majority of the questions in the W column should be student-generated.

L. Suggestions: In addition to answering the W column questions, encourage students to write in the L column anything they found especially interesting. To distinguish between the answers to their questions and the ideas they found interesting,
have students code the information in their L columns. For example, they can put a check mark next to the information that answers questions from the K column. And they can put a star next to ideas that they found interesting.

Have students consult other resources to find out the answers to questions that were not answered in the text. (It is unlikely that all of the students’ questions in the W column will be answered by the text.)". National Education Association(2015;3-4).

**Characteristics of Debate Strategy**

Debate must generally be substantive, persuasive and organized.

Debate must have the following characteristics:

1. "Informative- a good debate presents complete information and factual setting. Debate is supposed to inform the public of what they should know, to educate the people, and to help them reach a logical understanding of the facts. Debaters should not rely merely on their own opinions but on the general principles laid down by the authorities and experts.

2. Well-reasoned- arguments raised in a debate must be logical, relevant, competent and well explained. Arguments must show a direct link on the motion that is debated upon. Arguments raised must be acceptable to an average reasonable person who has an average analysis of the issues presented. All questions that will lead to the conclusion of the debate must be clarified, answered, and analyzed. Debaters should make all their points clear and understandable.

3. Persuasive- Debate should give emphasis and force to strong arguments that need the support of the people. Debaters should build rapport with their audience and help them follow the debaters' points.

4. Orderly- A debate must follow a certain format that will govern the proceeding of the debate and the conduct of
the debaters. Speeches must be organized, structured and presented in a methodological form.

5. Dynamic- Since in a debate, two teams present opposing views, said views must be responded to by both teams respectively. Each speaker must contribute and respond to the requirements and necessities of the debate. "Mateo, (2007:1-2).

Tips of Feedback Strategy

Feedback can be effective by following these tips:

"1) Find the appropriate time.

A student should create time for a one-on-one meeting away from distractions to have a calm and productive conversation (not a lecture). Don’t wait too long.

2) Create a safe space.

A student should be asked about how he/she feels during a particular event or project. It is better to know what needs improvement and will welcome suggestions.

3) Remain constructive, not critical.

Before talking to students, a teacher can ask himself why he wants to provide feedback. Feedback is effective when it is in service of a larger goal. A teacher can frame the conversation as an advice that will help a person to succeed in the future.

4) Be specific.

After constructively discussing what happened, a teacher can provide an example of what the ideal situation looks like. He can also help students to create a specific goal to work with each other in the future.

5) Stay positive.

The purpose of feedback is not to make a student feel bad. A teacher should remind her/him of strengths, and how those strengths can be complemented with new skills. A teacher can conclude by noting something positive about the event requiring feedback.
It can be difficult to determine how people will react to feedback. Many people will apply it and grow, but some may ignore it. Create a culture that values feedback and promotes positive and constructive learning opportunities." Ahn, (2015: 3-4)

**Sample of Journal Writing of Students.**

It is obvious that, there are spelling errors as "chaire". The student used the present simple tense instead of using the past simple as she describes what happened in the last lecture:

Dealing with the second trial of journal writing, it is clear that there are some punctuation and grammatical errors. This is because students were at the beginning of administering the journal writing program.
In the third sample, it is obvious that the student's journal writing is better than the previous two samples.

In the fourth sample, it is clear that the errors of spelling words became better than the first sample of the same student.

While carrying out the program, students were used to thinking of what they knew about the subject of the lecture, then about what they wanted to know about the subject and by the end of the lecture they were requested to determine what they learnt. After the lecture, the researcher met students. Debates were used. Some students demonstrated their performances followed by discussion to know merits and demerits. During the
second lecture, students were requested to do the same. Feedback was made use of as students know their errors and improved their journal writing in the following lecture.

**Administering the post test and Findings of the Study**

After implementing the brain-based learning strategies' program, the journal writing post test was administered.

As some students did not attend the post test, the researcher omitted their answer sheets in the pre-test. The students' numbers were rearranged again. The students became 43 after they had been 54. Those who did not attend might have difficult circumstances or because they might have been at the end of the academic year and might have been preparing for their final tests.

To answer the second question which is: "What is the effect of K.W.L., debates and feedback on developing each skill of journal writing of second year Basic Education students at Faculty of Education- Beni-Suef University?", the findings are in the following table:

**Table (4) Mean scores and standard deviation of pre-post test on some strategies and the journal writing skills**

<table>
<thead>
<tr>
<th>Paired Samples Statistics</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K.W.L</td>
<td>1.00</td>
<td>43</td>
<td>1.000</td>
<td>.152</td>
</tr>
<tr>
<td>K.W.L</td>
<td>3.77</td>
<td>43</td>
<td>.611</td>
<td>.093</td>
</tr>
<tr>
<td>Pair 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imp.of Debates</td>
<td>2.40</td>
<td>43</td>
<td>.623</td>
<td>.095</td>
</tr>
<tr>
<td>Imp.of Debates</td>
<td>5.00</td>
<td>43</td>
<td>.655</td>
<td>.100</td>
</tr>
<tr>
<td>Pair 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imp.of Feedback</td>
<td>2.28</td>
<td>43</td>
<td>.882</td>
<td>.134</td>
</tr>
<tr>
<td>Imp.of Feedback</td>
<td>4.60</td>
<td>43</td>
<td>.695</td>
<td>.106</td>
</tr>
<tr>
<td>Pair 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflection</td>
<td>1.35</td>
<td>43</td>
<td>.613</td>
<td>.093</td>
</tr>
<tr>
<td>Reflection</td>
<td>3.14</td>
<td>43</td>
<td>.413</td>
<td>.063</td>
</tr>
<tr>
<td>Pair 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ideas &amp; Content</td>
<td>2.07</td>
<td>43</td>
<td>1.009</td>
<td>.154</td>
</tr>
<tr>
<td>Ideas &amp; Content</td>
<td>5.16</td>
<td>43</td>
<td>.652</td>
<td>.099</td>
</tr>
<tr>
<td>Pair 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization &amp; Mechanics</td>
<td>2.14</td>
<td>43</td>
<td>1.125</td>
<td>.172</td>
</tr>
<tr>
<td>Organization &amp; Mechanics</td>
<td>4.88</td>
<td>43</td>
<td>.662</td>
<td>.101</td>
</tr>
<tr>
<td>Pair 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11.23</td>
<td>43</td>
<td>3.747</td>
<td>.571</td>
</tr>
<tr>
<td>Total</td>
<td>26.63</td>
<td>43</td>
<td>2.507</td>
<td>.382</td>
</tr>
</tbody>
</table>

It is shown that the mean in pre-test is 1.00 in strategy 1, whereas, the mean in the post test is 3.77. Dealing with standard
deviation, in the pre-test, it is 1.000, in strategy 2 while in the post test it is .611. In strategy 2, the mean in the pre-test is 2.40, but in the post test, it is 5.00. Considering standard deviation, in the pre-test, it is .623, while in the post test, it is .655. The mean in pre-test is 2.28 in strategy 3, whereas, the mean in the post test is 4.60. Dealing with standard deviation, in the pre-test, it is .882, while in the post test, it is .695. In skill 4, the mean in the pre-test is 1.35, but in the post test, it is 3.14. Considering standard deviation, in the pre-test, it is .613, while in the post test, it is .413. The mean in the pre-test in skill 5 is 2.07, but it is 5.16 in the post test. Regarding, standard deviation, it is 1.009 and it is .652 in the post test. In skill 6, the mean in the pre-test is 2.14, but in the post test, it is 4.88. Considering standard deviation, in the pre-test, it is 1.125, while in the post test, it is .662. In total, the mean in the pre-test is 11.23, but in the post test, it is 26.63. Considering standard deviation, in the pre-test, it is 1.125, while in the post test, it is 2.507.

It is obvious that means of the post test are more than those of the pre test. These results show that Second year Basic Education students made use of the journal writing skills' program.

To answer the third question which is: "What is the effect of K.W.L., debates and feedback on developing the overall skills of journal writing that are important to second year Basic Education students at Faculty of Education- Beni-Suef University?", the following results are shown:

**Table(5) The results of T Test to measure the differences between the pre-test and the post-test of the experimental group**

<table>
<thead>
<tr>
<th>Pair</th>
<th>Mean Differences</th>
<th>Std. Deviation Mean Differences</th>
<th>Std. Error Mean Differences</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 K.W.L</td>
<td>2.767</td>
<td>1.020</td>
<td>.156</td>
<td>17.796</td>
<td>42</td>
<td>.01</td>
</tr>
<tr>
<td>Pair 2 ImP.of Debates</td>
<td>2.605</td>
<td>.849</td>
<td>.129</td>
<td>20.116</td>
<td>42</td>
<td>.01</td>
</tr>
<tr>
<td>Pair 3 ImP.of Feedback</td>
<td>2.326</td>
<td>1.210</td>
<td>.184</td>
<td>12.608</td>
<td>42</td>
<td>.01</td>
</tr>
<tr>
<td>Pair 4 Reflection</td>
<td>1.791</td>
<td>.709</td>
<td>.108</td>
<td>16.560</td>
<td>42</td>
<td>.01</td>
</tr>
<tr>
<td>Pair 5 Ideas&amp; Content</td>
<td>3.093</td>
<td>1.171</td>
<td>.179</td>
<td>17.315</td>
<td>42</td>
<td>.01</td>
</tr>
<tr>
<td>Pair 6 Organization &amp; Mechanics</td>
<td>2.744</td>
<td>1.177</td>
<td>.179</td>
<td>15.288</td>
<td>42</td>
<td>.01</td>
</tr>
<tr>
<td>Pair 7 Total</td>
<td>15.395</td>
<td>4.112</td>
<td>.627</td>
<td>24.549</td>
<td>42</td>
<td>.01</td>
</tr>
</tbody>
</table>
It is shown that the total of the mean differences is 15.395, and standard deviation is 4.112. Std. Error Mean is .55438 and the value of T is 24.549.

To answer the fourth question which is: "Which strategy has a great effect more than the other used strategies?", Ideas & Content came first as the mean difference is 5.16 in table (4); whereas, in the pre-test, it was 2.07

Discussion and Interpretations of the Study.

The lowest score in the pre/test was 4, while the highest score was 19. In the post/test, the lowest score was 21 and the highest score was 32. This is because students benefited from the program. They told the researcher that they studied the program well and made use of it as they are prepared to teach in schools in the following year. The researcher answered their questions related to the program during lectures at Faculty of Education. It was clear in standard deviations that the values are nearer to the highest values. It means that the effect of the program was positive. Students' scores have become better in their post test.

Considering T test in table (5), it has been shown that students were improved in all skills of journal writing. There were statistically significant differences at the level (0.01) in favour of the post test.

The current study dealt with journal writing and the usage of brain based learning strategies. It is different from Elliott; Formhals; Wheat, (1999). as they addressed vocabulary knowledge, which referred to the understanding of words, the overall ideas and concepts being communicated, and the ability to use those words in the appropriate context. Cantrell; Fusaro; Dougherty, (2000) Compared the effectiveness of incorporating two different types of reading comprehension strategies with journal writing to improve learning in social studies at the seventh-grade level. Gammill, (2006) stated that elementary teachers can use writing to learn effectively and regularly in their classrooms, not only to strengthen students' writing skills but
also to deepen reading comprehension and encourage active learning.

In the second dimension, entitled: "Debates and Journal writing", Brown, (2012). showed that language teachers spend much of their time providing corrective feedback on students' writing in hope of helping them improve grammatical accuracy. This paper described shared peer journaling as one way in which to cope with challenges such as complex debates in the field and student resistance to interpretive paradigms; whereas, Humble ; Sharp,.(2012)described shared peer journaling as one way in which to cope with challenges such as complex debates in the field and student resistance to interpretive paradigms.

In the the third dimension, entitled "Feedback and Journal writing". Lap ; Yen, (2013) showed that the nature of peer feedback and its impacts on writing in English has attracted much attention of researchers and educators. Gan.; Hattie, (2014) investigated the effects of prompting on secondary students' written peer feedback in chemistry investigation reports. In particular, students' feedback features were examined in relation to the use of criteria, feedback specificity, and feedback levels; whereas, Schwegler ; Altman, (2015). Showed that because feedback is a critical component of the continuous improvement cycle of the Quality Matters (QM) peer review process, the present research analyzed the feedback that peer reviewers provided to course developers after a voluntary, nonofficial QM peer review of online courses.

The present study came up with findings that may help students in their future whether in the universities or secondary schools.

**Recommendations of the Study**

It is recommended to take into account the following:

1. Brain-based learning strategies should be considered in learning students in secondary education to train students on sub-skills of writing.
2. Journal writing should be involved in activities at Faculties of Educations.
3. The difference between males and females should be considered while doing other researches on journal writing.
4. Students are to be encouraged to share in journal writing through participating in families at their faculties.
5. Directing teachers, trainers, and supervisors to the necessity of writing sub-skills in general and journal writing in particular to develop students' writing sub-skills and express themselves clearly.
6. Second year students in basic education should be given other courses in writing to be prepared for teaching practice in schools in third year
7. There should be competitions in writing at different faculties in different universities

Suggestions for Further Studies

The following studies are suggested:

1. The Effect of Debates on the Functional Writing Skills of Secondary School Students
2. The Effect of Feedback on Developing Handwriting Skills in English of Primary Education Pupils
3. The Effect of K.W.L. on Developing Writing Reports of Secondary School Students
4. The Effect of Using Brain–Based Learning Strategies on Developing Listening Comprehension Skills
5. The Effect of Using Debates on Developing Some English Speaking Skills of First Year Students in Basic Education at Faculty of Education
6. The Effect of Using Debated and Feedback on Developing Essay Writing Skills of English Majors at Faculties of Education
References


Gammill, Deidra M. (2006) Learning the "Write" Way", in Reading Teacher, V.59 N.8 PP.754-762


