

**The Impact of Using Vee Diagram Technique on Iraqi EFL
Secondary School Female Students' Performance in Composition Writing
Assistant Instructor: Suzan Abid Hassan
Master in Methods of English Language Teaching
Ministry of Education\ General Directorate of Education in Babylon**

أثر استخدام تقنية مخطط V على أداء طالبات المدارس الثانوية العراقية دارسات اللغة الإنكليزية كلغة اجنبية
في كتابة الإنشاء

م.م. سوزان عبد حسن

المديرية العامة لتربية بابل

Susanaljubouri@yahoo.com

المستخلص

تستهدف الدراسة الحالية الى ايجاد اثر استخدام مخطط V كأسلوب تدريسي في اداء طالبات المرحلة الثانوية العراقية دراسات اللغة الانكليزية لغة اجنبية في الانشاء. وقد صيغته فرضية صفرية تنص على انه لا يوجد فرق ذو دلالة احصائية بين متوسط درجات المجموعة التجريبية التي درست باستخدام مخطط V ومتوسط درجات المجموعة الضابطة التي درست باستخدام اسلوب التدريس المتبع حالياً في تدريس الانشاء. اختيرت عينتين من طالبات المرحلة الرابعة الثانوي في الفرع العلمي في ثانوية المسعودي للبنات في بابل لهذه التجربة حيث كوفئت العينتين من حيث عوامل العمر الزمني، الاختبار القبلي، ودرجات الطالبات في اللغة الانكليزية في امتحان البكلوريا. ثم درست المجموعة التجربة باستخدام مخطط V اما المجموعة الضابطة فقد درست باستخدام الاسلوب المستخدم حالياً في المدارس لتدريس الانشاء. وقد استخدمت الخطوات والاجراءات المتقدمة في Alvarez, Gowin (2005) في تدريس الانشاء باستخدام مخطط V حيث درس الانشاء والاستيعاب القرائي معاً. حللت نتائج الاختبار البعدي باستخدام معادلة الاختبار التثائي لعينتين مستقلتين. وقد اظهرت النتائج تفوق المجموعة التجريبية التي درست باستخدام مخطط V في الانشاء على المجموعة التي درست باستخدام الاسلوب المتبع حالياً في التدريس. وقد اوصت الدراسة باستخدام اسلوب التدريس باستخدام مخطط V في تدريس الانشاء.

الكلمات المفتاحية: تقنية، مخطط V، طالبات، المدارس الثانوية، العراق، دراسة، اللغة الإنكليزية، إنشاء.

Abstract

The present study aims at Finding out the impact of using Vee Diagram technique on Iraqi EFL Secondary School female Students' Performance in composition writing. A null by prosthesis has been posed which states that there is no statistically significant difference in the mean score of experimental group which is taught composition writing by the vee Diagram, and that of the control group which is taught composition writing by the currently used technique. Two groups from 4th grade have been selected from Al- Masu'di secondary school for girls in Babylon. The two groups have been equalized in age, pretest, and students' scores in the Baccaloriate Examination. The experimental group has been taught composition writing by the vee diagram by following Gowin and Alvarez steps (2005) employed in teaching. Data of the posttest has been analyzed by using the t-test for two independent samples equation. Results show that the experimented group composition writing performance score has been better than that of control group. It is recommended to teach composition writing by employing the Vee diagram.

Keywords: Technical, V Plan, Students, Secondary Schools, Iraq, Study, English, Creation.

1-Introduction

1-1- problem and significance of the study

One of the most challenging aspects of foreign language learning is the field of learning how to write in an FL, even for those who speak English as a first language. Writing is the ability that requires

extensive and specialized instruction. It has been identified as are of the essential process skills in the world. (Hyland, 2003: Xiii).

Writing is are of the most effortful activities that humans indeed can implement. It is a complex and cognitively demanding activity. It cannot be performed as a sequence of discrete steps. It requires the simultaneous combination of several strategies and application of various mental resources. (Mertens, 2010. x.2)

Writing as a skill is an activity that can usefully be prepared for by work in the other skills of listening, speaking, and reading (Natiars, 2009:133). It is both a recursive and a dynamic process. To be successful need an understanding of a quality text as well as knowledge of writing strategies that can be used to shape and organize the writers' process. (Merters, 2010: x-2).

Effective writing requires a high degree of organization regarding the development, and structuring ideas, in formation and arguments, high degree of organization regarding the development, and structuring ideas, in formation and arguments, high degree of accuracy, complex grammar devices, a careful choice of vocabulary and sentence structures in order to create style, tone and in formation appropriate for the readers of ore's written tart. All these points make the teaching of writing a complex matter, since all this should be taken into consideration for efficient leaning of writing strategies (Hedge, 2005:7).

Teaching writing in Iraq face many problems since teachers concentrate on the written product rather than the process of writing, where the stress in a quantity of writing rather than quality. (Al-Rifar, 2001; Adnan, 2006; Al-Hassar, 2005; Al-karkhi, 1999). Therefore, new teaching techniques need to be practiced and investigated to find there impact an student's composition, are of which is teaching by the vee Diagram. Vee diagramming is an instructional or teaching tool underpinned by Ausubel's theory (1968) of "Meaningful Learning". It has been used to facilitate reflective thinking and learning. To lean meaningfully, individuals must choose to relate new knowledge to relevant concepts and propositions they already know. The vee diagram aids students in this linking process by acting as a meta-cognitive tool that requires students to make explicit between previously learned and newly acquired information (Ausubel, 1968: 267; Novak and Gowin, 1984, Alvarez and Risko, 2007). It is a visual and graphic organizer that support students to understand and write better.

To the best of the researcher's knowledge, no other study has attempted to achieve the aim stated in the present study; therefore, it is an attempt to fill this gap.

1-2 Aim

The present study aims at finding out the impact of using Vee diagram technique an Iraqi EFL. Secondary school female student's performance in composition writing.

1-3 Hypothesis

It is hypothesized that there is no statistically significant difference in the mean score of the experimental group which is taught composition writing by Vee Diagram, and that of the control group which is taught composition writing by the currently used technique.

1-4 Valve

It is hoped that the present study would be of great valve to Iraqi EFL Secondary school teachers to help then use a modern technique in teaching writing, and students as well to help them develop their skill composition writing and raise their performance scores.

II-Theoretical Background

2-1 Meaningful Learning and Advance Organizers

Meaningful learning is part of higher order thinking. Such higher order thinking takes place when individual perceives the inter relationship between two or wore ideas, old and new. Already learned know ledge is fully understood by the individual and that the individual knows how that specific fact relates to other stored facts in the brain, in such case the learned knowledge is meaningful. (Ausubel, 1963:45).

The promotion of meaningful leaning is not only about providing the learner with the tools, but also encouraging the application of the tools as practitioners building skills and knowledge through their own knowledge. Making process (Brownet al, 1989:42).

(Ausubel, 1963:46) put the below three steps as meaningful leaning process:

- 1- The material presented to the learner must be related in same sensible style, that new information must be fitted into a larger pattern.
- 2- The learner must possess relevant ideas to which the new ideas can be related or anchored. The learner must already have appropriate subsuming concepts in his/her cognitive structure.
- 3- The learner must actually attempt to relate, in some sensible way, the new ideas to these which he/she presently possesses.

Meaningful learning could be enhanced by using advance organizers. Organizer are abstract reads presented in advance of the lessen. They represent a higher level of generality and comprehensiveness than the new material. Good learners (writers) are those who already possess clear and well organized cognitive structures and, therefore, they profit very little from the use of organizers (Ausubel et.al, 1968:171).

Graphic organizers, as advance organizers, involve developing a graphic arrangement of ideas. Mayer ideas are connected to supporting ideas and details by systematic arrangement of lines, geometric shapes and arrows (porter, 2009: internet).

They are visual and graphic display that depicts the relationships between facts, terms and or ideas within a learning task. They are sometime referred to as knowledge maps, concept maps, story maps, cognitive organizers, or concept diagrams (Hall and Strongman, 2002: 1).

There are different form of advance organizers such as network tree, spider map, problem and solution map, continuum scale, cycle map, etc. One of such advance organizers is the vee diagram. It is used in teaching reading comprehension and writing. Writing in this respect depends on the using of advance organizers (i.e- vee diagram) to link ideas analyze texts, organizing ideas, etc. Therefore, the teaching of both reading and writing facilitate the learning process and consequently produce good writers.

2-2 Vee Diagram

The Vee Diagram consists of a V-shape separating theoretical/ conceptual thinking from the methodological elements of inquiry, i. e doing. Both sides actively interact with each other through the use of the focus question (s) that directly relates to events and /or objects (Alvarez and Risko, 2007: 15)

The structure of the Vee diagram with its various labels and guiding question provide a systematic guide for students to reason from the problem context (event /object) and given information (records) in identifying relevant principles, theorems, formal definitions and major rules (principles and concepts) which can guide the development of appropriate methods and procedures (transformations) to find an answer (knowledge claim) to the focus question. The arrow indicates that there is a continuous inter play between the two sides as students reason through the various sections of the vee (Afamasaga-fuatai, 2004:32)

The Vee (v) is a name derived from the shape of the diagram. It is a structured visual means of relating the methodological aspects of an activity to its underlying conceptual aspects. It focuses on the salient role of concepts in learning and retention. It was designed by Go win in 1977, but underpinned as an instructional tool by Ausubel (1968). It was developed as a way to aid the understanding of meaning for relationships among events, processes, or objects. It is a tool that helps are to observe the interplay between what is known and what needs to be known or understood. It is a record of an event that was investigated (Novak, 1989:204)

Gowin and Alvarez (2005:35) believe that using the vee diagram could serve the below three purposes:

- 1-Planning a research project.
- 2-analyzing a research article a document, and

3- Acting as a teaching /learning tool.

Go win's knowledge Vee is a visual representation of the relationships between basic epistemological elements. It is a graphical depiction of learning activity as it moves from the events to data collection transformation to knowledge claims to value claims as a research project is being planned or completed (Talebinezhad, 2007).

The basic parts of the Vee Diagram as described by Gowin (Novak and Gowin, 1984:56) are:

- 1- The left or conceptual side of Vee is composed of philosophies, theories, principles and concepts, those constructs that provide the foundation or context for further learning.
- 2- The focus question in the center of the Vee is based on the conceptual side and must clearly address on issue specific to the left side. The apex points to the events and objects which are at the root of all knowledge production. Events and objects are the activities and materials which comprise the normal practical experience and have as their immediate.
- 3- The up right side represent the results of the events and objects, first of which the record or specific results of the experience. They in turn can be transformed to a more useable format such as graphs or statistical analyses which in turn can be used to create knowledge claims in which new generalizations side, and supported by the elements below it, are the value claims which identify the worth of knowledge claims or place them in the context of the underlying theory.

Several benefits have been identified of using the Vee diagram in teaching / learning as stated by Novak and Gowin (1984:91) and wander see (1990:73):

- 1- Learner will be more confident of themselves as they go through the learning process. They will feel good about themselves because what they are doing is more meaningful to them, and as such learners are able to organize their thinking in a coherent way.
- 2- It helps learners to do better in tests requiring problem solving skills.
- 3- Learners become more experienced within time and their performance increases.
- 4- Learners organize meaning in a more coherent and comprehensive way.
- 5- It helps to tap into the existing knowledge structure, pick up misconceptions, and identify gap knowledge.
- 6- It increases the communication skills.
- 7- It increases cooperative learning by giving learners opportunities to study together.

In order to teach effectively by using the Vee diagram Gowin and Alvarez (2005: 75-83) suggest the steps below:

- 1- The teacher asks the basic question, and then draws a Vee diagram on the board centering the focus question in the middle of the Vee, in forms students that this vee diagram will answer the basic question.
- 2- The teacher discusses the conceptual side of the Vee by firstly: writes about the philosophy and the beliefs about the nature of knowledge.
- 3-The teacher writes secondly: about the theories related to such philosophy.
- 4-The teacher write thirdly about the principles and how students should be able to differentiate among many concepts related to subject matter.
- 5-The teacher writes fourthly the concepts that will be dealt with through specific lesson. The teacher stimulates about each concept trying to activate their previous knowledge gradually depending on students' ideas with waking relations and connections between the conceptual side and the procedural are and trying to fill the right port of the diagram (procedural side) with knowledge claim, transformation, and records.
- 6- The teacher draws finally the sequence of the events and objects at the bottom of the Vee and writes inside it the duties that students will be responsible for after fulfilling the diagram.

III Procedure, Methodology, Data Analyses, Results, Conclusive and Recommendations

3-1 The Experimental design, Population, and Sample

The design used in the present experimental work is the pre/post test control group non-randomized design which is a partial control design. The population includes the 4th grade female students, the secondary school in Babylon during the academic year 2015-2016. The total number of the sample is 9465. The sample of the study is selected from Al Masu'di secondary school for girls. The total number of the sample is 84 distributed into 43 subjects as an experimented group, and 41 subjects as a control group. They are female students enrolled in the scientific branch.

3-2 Equivalence lence of the Groups

The two groups have been equalized in the below factors:

3-2-1 Age (in Month)

To find out whether there is a statistical difference between the two groups in the student's age, t-test for two independent samples has been used. No statistically significant difference has been identified in age variable since the computed t-value which is 0.728 is lower than the tabulated t-value which is 1.99 on 0.05 level of significance at 82 degree of freedom. (See table 1)

Table (1)
The t-test values between the two groups in Age Variable

Crop	N	X	SD	d f	t-values		Level of significance
					computed	tabulated	
Exp.	43	187.720	4.890	82	0.728	1.99	0.05
Can.	41	186.878	5.706				

3-2-2 Students score in English in the Bacatorate Examination

By using the t-test for two independent samples has been used to find out whether there is a statistical significant difference in the students' scores at the Baccaloriate Examination in English. No statistically significant difference has been found since the computed t-value which is 0.857 is lower than the tabulated value which is 1.99 on 0.05 level of significance and 82 degree of freedom. (See table 2)

Table (2)
The t-test values between the two groups in Baccaloriate Examination

Crop	N	X	SD	d f	t-values		Level of significance
					computed	tabulated	
Exp.	43	68.116	10.637	82	0.728	1.99	0.05
Can.	41	66.170	10.143				

3-2-3 Sample's Scores on the Pre-test

A pretest has been constructed consisting of a free writing topic entitled "How you spend your leisure Time in Vacation". The pretest has proved to be valid since the jurors have agreed on the topic to be within the level of the present study sample, while the reliability coefficient has been computed by using the Alpha-Cronbach formula where it has been found to be 0.79.

The pretest has been administered before starting the experimental work at the beginning of the first semester. The students have been asked to write from 100-120 words paragraph about the topic above. By using t-test for two independent samples, no statistically significant difference has been found between the two groups since the computed t-value which is 0.311 is found to be lower than the tabulated are which is 1.99 on 0.05 level of significance and 82 degree of freedom. (see table 3)

Table (3)
T-values on the pre-test between the two groups

Crop	N	X	SD	d f	t-values		Level of significance
					computed	tabulated	
Exp.	43	15.348	4.540	82	0.728	1.99	0.05
Can.	41	15.024	5.027				

3-3 Description of the Post-test

The posttest is a free writing topic entitled "Using Social Media to Make Friendships". The students of the present study sample have been asked to write a paragraph of about 100-120 words on the topic above using their own experience and words. Face validity of the posttest has been checked by asking several experts in ELT (5members) to judge it, who all agreed on the suitability of the topic to the student's level. Its reliability coefficient also has been computed as described in 3.5.3.

3-4- The Experimental Procedures

1-The Experimental group

The experimental group has been taught by the Vee diagram steps stated earlier in the present study. The teacher here selects from the different composition writing activities stated in the 4th grade prescribed textbook, which are taught by the Vee Diagram procedures and steps. Students have asked to practice samples of compositions to be analyzed by using the Vee diagram, then they have been asked to write short paragraphs about similar topics.

2-The control group

The control group has been taught the composition uniting activities by the techniques stated in the 4th grade prescribed textbook.

3.5-The Pilot study

The aims behind conducting a pilot study are to:

- 1- See the clarity of the test instructions and time needed for answering.
- 2- Check the item analysis of the test items, and.
- 3- Compute the test reliability coefficient.

Each of the above aims have been achieved as described below:

3-5-1 The Clarity of the Test Instructions.

Since the test consists of a topic entitled: "Using Social Media to Make Friendships". The students have been asked to write freely on the topic aforementioned. The paragraph should range between 100-120 words. It is found that the test instructions have been clear and easy. The time needed to answer the test is 40 minutes.

3-5-2 Item analysis of the post test Scanning Scheme

Item analysis means checking the item difficulty level plus the item discrimination power. The Scoring scheme adopted here is described below:

- 1- Vocabulary ad structure.
- 2- Organization, ad Register.
- 3- Presentation and Coverage of Points.
- 4- Relevance, handwriting and spelling.

Table (4) below shows the indicates of both item difficulty level and item discrimination power since the above scoring scheme items have been Considered as the post test item.

Table (4)
Item Difficulty level ad Item Discriminating Power Indices of the Posttest

No-of Item	DL	DP
1	0.43	0.72
2	0.60	0.35
3	0.32	0.69
4	0.77	0.30

3-5-2 Reliability of the Posttest

By using the Alpha-Cronbach formula, the reliability coefficient equals 0.84. The reliability sample is the same as the pilot study sample and equals 50 female students selected randomly from the same school where the experimental work has been conducted, but from different sections.

3-6 Firal Application of the Experiement

Before the end of the first semester of the academic year 2015-2016, the experimental and control groups have been exposed to the post-test. The experimented work has lasted for 8 weeks includes the port test administration. The students have to answer the post test within 40 minutes and to write freely a paragraph of about 100-120 words about the above mentioned topic. Then the response sheets are collected then scored. Data then are analyzed by using suitable statistical means.

3-7 Statistical maars

1-T-test for two independent samples.

2-Alpha-Cronbach formula.

3- Difficulty level Formula.

4- Discriminating power formula.

3-8 Data Analyris, Resulls, Conchvsurs ad Reconrendations

Dala has been analysed by using the t-test for two independent somples formula. The analysis shows that there is a statistically significant difference between the mean score of the experimented group and that of the control group since the computed t-valve is 3.376 which is his her than the tabulated t-value which is 1.99 on 0.05 level of significance ad 82 beeree of freedom. This means that the null hypothesis has been rejected and that the experimental group which is taught by the Vee diagram teclwique has a better performance in composition writing than the control group. (see table 5)

Table (5)
T-values on the pre-test between the two groups

Croup	N	X	SD	d f	t-values		Level of significance
					computed	tabulated	
Exp.	43	45.302	5.659	82	3.376	1.99	0.05
Can.	41	41.024	5.956				

It is concluded that teaching composition writing by the Vee Diagram has proved to be effective and it increases the experimented group subjects performance and scores. It is recommended that Iraqi EFL Secondary school teachers shandl use the Vee diagram in teaching Iraqi EFL secondary School students Composition writing since it has an effective role in increasing their scores and performance.

Bibliography

- 1- Hyland, K. (2003) *Second Language Writing*. USA. Cambridge University Press.
- 2- Mertens, N.L. (2010) *Writing: Process, Tools and Techniques*. New York. Nova science Publishers, Inc.
- 3-Nations, I.S.P. (2009) *Teaching ESL/EFL Reading and Writing*. UK. Routledge, Taylor and Francis.
- 4- Hedge, T. (2005) *Writing*. Oxford/New York: Oxford University Press.
- 5- AL-Rifer, F. kh. (2001) *The Effect of Teaching Text Structure and Organization on EFL Undergraduate's Skills of Writing Expository*. Unpublished Ph.D. Dissertation. College of Education /Ibn Rushd. University of Baghdad.
- 6-Adnan, Ghazwan (2006) *An Awareness of EFL College Student's Competency in Writing for practical Purposes*.
- 7-Al-Hassan, B.A (2005) *The Effect of Process-Oriented Technique on the Achievement of the Female Teacher's Institutes in Writing English Texts*.
- 8-Al-Karkhin, A-Y. (1999) *Difficulties faced by Iraqi EFL College Students in Writing English Composition*. Unpublished M.A. Thesis: College of Education/ Ibn Rushd. University of Baghdad.
- 9-Ausubel, D.P. (1968) *The use of Advance Organizers in the Learning and Retention of Meaningful Verbal Material*. *Journal of Educational Psychology*, vol, 267.
- 10- Novak, J.D. and D.B. Gowin (1984) *Learning How to Learn*. New York: Cambridge University Press.
- 11 – Al-vares, M.C. and V.J. Risko (2007) *The Use of Vee Diagrams with Third Graders as a Metacognitive Tool for Learning Science Concepts*. Department of Teaching and Learning. Teaching and Learning Presentations, E-research @ Tennessee State University.
- 12- Ausubel, D.P. (1963) *The Psychology of Meaningful Verbal Learning: An Introduction to school learning*. New York: Grune and Stratton.
- 13-Broen, J.A. Collins, and P. Duguid (1989) *Situated Cognition and the Culture of Learning*. *Educational Researcher*, 18(1), 32-42. Retrieved March, 11, 2003. From: <http://www.Exploratorium.Edu/IFI/resources/museumeducation/ situated. Html>.
- 14-Porter, Karia (2009) *Reading: Post Phase*. [http:// departments. Weber. Edu](http://departments.Weber.Edu).
- 15-Hall, M. and B. Strongman (2002) *Psychological Views of Reading*. New York: Heinle and Heinle.
- 16-Alvarez, M.C. and V.J. Risko (2007) *The Use of Vee Diagrams with Third Graders as a Metacognitive Tool for Learning Science Concepts*. Department of Teaching and Learning. Teaching and Learning Presentations, E-Research @ Tennessee State University.
- 17- Afamasaga- Fuata'i, K. (2004) *Concept Maps and Vee Diagrams as Tools for Learning New Matgematics Topics*. *Concept Maps: Theory, Methodology, Technology Proc. Of the First Int. Conference on Concept Mapping* (A.J. Canas, J.D. Novak, F.M. Gonzales, Eds.) Pamplona, Spain.
- 18-Novak, J.D. (1989) *Helping Students Learn How to Learn: A View from a Teacher-Researcher*. Third Congress on Rresearch and Teaching of Screince and Mathematics, Santiago de Compostela, Spain.
- 19-Talebinezhad, M.R. (2007) *The Effect of Concept Mapping in Expository Writing on EFL Student's self –Regulation*. *The Linguistic Journal*, Volume (2) Issue (1).
- 20-Wandersee, J.H. (1990) *Concept Mapping and the Cartography of Cognition*. *Journal of Research in Siemce Teaching*, 27(10), 923-936