A PROPOSED MODEL ON DEVELOPING STUDENTS' ACADEMIC WRITING BASED ON CRITICAL THINKING

Dalal Abdulla Alqiawi*

***Faculty of Education, University of Jeddah, Saudi Arabia**

A PROPOSED MODEL ON DEVELOPING STUDENTS' ACADEMIC WRITING BASED ON CRITICAL THINKING

ABSTRACT_ *The acquisition of the four language skills; listening, speaking, reading and writing in English is a priority for students' success at universities. Writing, in particular, represents one of the hardest skills to learn for students. However, most of the departments at universities insist that students should be skillful enough to write their essays, papers, and reports in English.*

The present study aims at developing university students' writing skills by proposing a model that adopts critical thinking strategies in developing students' academic writing skills. The model is divided into three parts that correspond to the main characteristics of an academic paper. It covers the external framework of the academic paper and the analytic and persuasion throughout the paper, self-assessment suggestions of the written essay, and general guidelines. The method used is the descriptive method which depends on analyzing the literature and describing the adopted models to produce the proposed model. The instrument is a questionnaire consisting of the sub-cores of the model and the subjects are staff members at Department of European Languages and Curriculum and Instruction Department at University of Jeddah. In order to measure the validity and reliability of the model, the researcher use many types of validity measures like intrinsic validity, internal consistency validity along with seeking the opinions of university staff members which added weight to the model validity in training students to write academic papers. The results deduced prove that the model has reached an acceptable level of validity and reliability and can be used to train university students to write academic essays.

KEY WORDS: *Critical thinking Skills, Academic writing, Persuasive writing, Critical writing.*

I.   Introduction

In the academic situation and especially at the university level, writing possesses extra importance as it is the tool of communication through which students should express their ideas with clarity and ease. At the university level, students are supposed to learn to write properly and accurately as they are being prepared to get a job or complete higher studies and in both situations they need good writing skills.

In writing, students express their ideas, feelings, and experiences in written forms. They try to convince the readers of their opinions, so they think of their thinking in order to find logical reasons to justify the thinking they are following. Research shows that there is a strong relationship between writing and thinking as writing is viewed not only as a medium of thought but also as a vehicle for developing it. Writing has proven to be interesting and enjoyable and at the same time essential to thinking and learning [1,2].

Psychologists propose that language learning develops thinking abilities and vice versa. Through the use of specific skills and language patterns, thinking is shaped [3,4,5,6]. Block [7] implies that 'We now believe that language abilities and thinking competencies shape each other. Both are of equal intensity in fostering learning.'

II.   STATEMENT OF THE PROBLEM

English language is becoming the official language of today. It is being taught as a second or official language in almost each country around the world. It is the language of science, medicine and many other fields. It is the language to communicate with the entire world [8,9]. It is also the way to have more chances to gain good jobs in companies and government departments. Stakeholders in companies and education fields prefer to hire people who have good command of the English language. It is the language of diving in the internet and in some sites there is no other choice but English. It is used to express diversity of views and narratives in global discourse [8],

Acquiring the English language and being able to use it in general and academic situations require students to know the four language skills. It is through these skills; listening, speaking, reading and writing learners understand and express the ideas in their minds and the ideas of others. The four skills of the English language are divided into two main categories; receptive (Listening and reading) and productive (speaking and writing) [10,11]. In the receptive part learners are acquiring and understanding the ideas of others while in the productive part learners are expressing and communicating their own ideas to others. In writing, in particular, learners are supposed to listen, ask, read and understand then start to write or express their own perspective on papers. The writing skill entails the use of all of the thinking skills learners acquire. It is a multidimensional skill that requires the use of all the language skills and all the thinking skills one knows to be able to perform properly on papers [12].

Academic writing is one of the types of writing and is considered as the most challenging activity that students face. The challenge is due to: the diversity of topics and purposes, language level, and types of support used. Academic writing is always a form of writing that calls for the demonstration of knowledge and proficiency with certain disciplinary skills of thinking, interpreting, and presenting [13]. It is never just the writing part. Academic writing is an involved process that needs active skills such as: knowledge of research, ability to read complex texts

and understanding of key concepts [14].

There are four types of academic writing; descriptive, analytical, persuasive and critical [15]. In descriptive writing the student only gives information or summarizes a written article. In analytical writing, the student is supposed not only to collect facts and information but also to organize them into categories or groups according to certain features or evidence. In persuasive writing, which is the request of any academic writing, the student should present their own point of view. They should support each claim or point of view with some evidence. In critical writing, students add to their own point of view another one or two points of view. Academic writing is different from other writing forms because here the student needs to think critically, to guide his/her writing towards the intended issue, to clarify concepts, to divide the essay logically according to the sub-topic(s) to be covered in the essay, and to come to a final convincing conclusion. This suggests that whatever the type of the essay, academic writing is always in need of guided critical thinking that helps in achieving a certain well set purposes.

During the academic writing process, students need to write clearly, to write interesting and arguable pieces, and to construct paragraphs that are coherent and focused [16]. Perkins [17] postulates that the ability to produce the final copy or the first draft easily is rare even among professionals. Writing a persuasive paper requires a lot of thinking and the moment the writing ability improves the thinking is enhanced simultaneously. Students are recommended to be selective and apply accuracy in comparison or supply evidence for arguments.

Critical thinking is defined as the thinking that "has a purpose" or "reflective judgment". Critical thinking involves developing the following skills: interpreting which includes understanding the significance of data and clarifying its meaning, analyzing which requires breaking information down and recombining it in different ways, reasoning which includes creating an argument through logical steps and finally evaluating by judging the worth, credibility or strength of accounts [18]. These four skills are compatible with the characteristics of persuasive and critical academic writing as they require presenting one's point of view, supporting it with evidence and evaluating its validity by comparing it to others' point of view.

Many studies suggest that the skills of critical thinking can be infused in teaching other subjects like academic writing. Gardner and Hatch [19] argue that 'Adults who were not taught to think critically and creatively exhibit cognitive abilities that are no more advanced than the thinking processes they used when they were in the sixth grade'. Costello [20] suggests that being able to argue is one of the central objectives in education specifically when writing an essay, a critique or a persuasive appeal. Beyer [21] suggests that the teaching of thinking skills is worth doing because it can produce valued results.

However, the thinking skills should become an inseparable part of the knowledge to be learned. They should be infused with the content. Resnick [22] indicates that 'students will learn thinking abilities best when thinking is infused throughout the curriculum.' This implies that the teaching of critical thinking is as important as the teaching of knowledge. The infusion of critical thinking strategies while teaching other subjects like academic writing is a worthy subject to be suggested in order to improve students' thinking abilities as well as their academic writing skills. The infusion, in the present study, is done through presenting a model that can be used as a framework when writing academic papers. Students work actively to teach themselves how to write an academic paper with the guidance provided by the model.

Research affirmed this notion as suggested that if one is to develop any skill, s\he must provide students with a structure that shows them the right sequence of actions they must follow to attain the targeted skill, they should be trained to manage their own learning and they should be active and fully responsible for it [23,24]. Darling-Hammond et al, [25] mentioned that 'the ability to work strategically can be taught and must be learned if students are to succeed at being self-directed learners throughout their lives'. Cognitive strategy instruction proved that students who face challenges with writing are not as strategic as good writers and the result is supposed to be due to the fact that they are not using the strategic process that more effective students do [3]. In a study by Pressley and Harris [26] participants were taught appropriate and powerful strategies in reading, writing and problem solving while other participants were assigned to a control condition. Before cognitive strategies instruction both groups faced equivalent difficulty in reading, writing and problem solving. However, participants who received instruction in strategies performed significantly and meaningfully better than control participants. The notion of the present study is supported by many studies like (Pressley & Allington, [27]; Harris & Graham, [28]) which prove that it can be effective to train struggling writers to be competent writers.

The focus of the present study is to design a model that constitute a framework for guiding students in learning how to apply critical thinking strategies in writing academic papers. In the context of this study, the researcher is using the model as a self contained, formally structured experience with a coherent and explicit set of procedures, self-assessment, and general guidelines.

Model Design

The theoretical framework of the proposed model adopted the principles of three models; The Theseus Learning System (TLS) developed by Norman and Sanders [29], Teaching Cognitive Strategies for Reading, Writing, and Problem Solving by Pressley and Harris [3] and Issues in Personal, Social and Moral Education by

Bowen and Costello [1]. The models are based on varied conceptions of critical thinking that have been developed to teach students how to become better thinkers and skilful writers as well.

Norman and Sanders [29] used the organizing "tree" to show students step by step how ideas relate to one another to form a whole essay. TLS requires the student to come up with an initial question that is both central and primary. Then, students are asked to "situate" the question, as in, "Why does it matter?" or "What was the origin of or context from which the question arose?" Next is to come up with a "claim" or hypothesis that might answer or resolve the question. Once they framed the question or claim, students start to develop a thought "tree" of main ideas and supporting ideas and finally arrange the ideas into a composition.

Pressley and Harris [3] summarized how good writers proceed in the process of writing through asking them to think aloud as they write. The analysis revealed dramatic processing differences between those who perform these tasks effectively and those who do not. They concluded that good writers follow certain strategies like:

1. They draw upon a rich store of strategies for planning, text production, and revising

2. They draw upon knowledge of the patterns or schemas evident in different writing genres or models

3. They consider the audience's needs and perspectives as well as the function they intend their writing to serve

4. They are knowledgeable about their topic, doing research as necessary

5. They use effective self-regulation procedures throughout the recursive writing process until they achieve their goals

Bowen and Costello [1] conducted this issue which is a series consisting of six volumes and with each there is a resource booklet for pupils, a teacher's handbook and a booklet containing additional information about the subject-matter. The aims of the series are to develop students four language skills, promote students reasoning and argument skills, and respect independent thinking and decision-making. In the writing section, students are given opportunities to write for varied purposes, understanding that writing is essential to thinking and learning, and enjoyable in itself. Furthermore, students are taught to use the characteristics of different kinds of writing like argument, commentary, narrative, and dialogue.

The researcher derived from each of the above mentioned models certain concepts or procedures that helped in the formation of the present model. The researcher either used the concepts and procedures in the model directly or modified them to produce a new concept or procedure to form the present model. Table (1) presents the adopted principles from each model.

Table 1
Presentation of the adopted principles from the three Models

The Theseus Learning System	Cognitive Strategies for Reading, Writing, and Problem Solving	Issues in Personal, Social and Moral Education
The theme of raising the central or primary question, coming up with a "claim" or hypothesis that might answer or resolve the question Developing the thought into main ideas and supporting ideas	The possibility of teaching strategies to develop competent writers The recommendation suggested for teachers to help students overcome challenges of essay writing. The teacher can list the strategies clearly for students and students can keep in front of them as they work The teacher encourages students to attempt the strategies themselves and persuade them that following such strategies would improve their performance.	The concept of using the characteristics of different kinds of thinking strategies in writing qualitative pieces of academic essays like argumentative, commentary, narrative, and dialogue

The theme of raising the central or primary question, coming up with a "claim" or hypothesis that might answer or resolve the question.

Developing the thought into main ideas and supporting ideas   The possibility of teaching strategies to develop competent writers.

The recommendation suggested for teachers to help students overcome challenges of essay writing. The teacher can list the strategies clearly for students and students can keep in front of them as they work

The teacher encourages students to attempt the strategies themselves and persuade them that following such strategies would improve their performance. The concept of using the characteristics of different kinds of thinking strategies in writing qualitative pieces of academic essays like argumentative, commentary, narrative, and dialogue

III.   Research Methodology

Population

The population of the study consists of all the staff members who teach English as a second language at the Department of European Languages and all staff members specialized in English Language Curriculum and Instruction at the Department of Curriculum and Instruction with a total number of 60. The sample of the study includes 10 staff members from the European Languages Department and 3 from Curriculum and Instruction Department. Table (1) presents a detailed description of the sample members.

Table 2
Description of the participated staff variables

Variable	Category	frequency	Percentage
Gender	Male	0	0
	Female	13	100
Age	20-35 years of age	4	30.77
	36-50 years of age	5	38.46
	51-60 years of age	4	30.77
Educational background	European Languages	10	76.92
	Curriculum and Instruction	3	23.08
Level of experience	5-10 years of experience	3	23.08
	11-15 years of experience	4	38.46
	16-35 years of experience	6	46.15
Academic ranking	BA	0	0
	MA	0	0
	PhD	13	100
Teaching academic writing	Yes	13	100
	No	0	0

As for their educational background, more than half of the respondents (76.92%) are specialized in teaching English as a foreign language to university students at the department of European Languages and the remaining part (23.08%) are specialized in curriculum and instruction and in English language teaching in particular. The teaching experience of the respondents ranged between 5 and 35 years, with a majority (46.15%) having a high teaching experience, and a minority (23.08%) having a low teaching experience. As for their academic ranking, all the respondents have got a PhD degree in their field of specialization and all of the respondents have experience the teaching of academic writing to university students which emphasizes their qualification to judge the model.

The Model

The present model explains the practical procedures that should be followed by university students to practice writing of academic papers. The model is divided into three main sections; Procedures, Final draft and Self-assessment and General Guidelines. First, in the procedure section, the researcher explains the main parts of an academic essay along with their place and importance in the academic essay and how to present each part in the essay. Second is the final draft and self-assessment section which is divided into four main parts and each part is related to a certain part of the academic essay. In this section the student is supposed to ask him/her self certain questions in order to evaluate that part. The division of this section has four parts; introduction, main body, conclusion and referencing. Third, the last section of the model presents general guidelines that should be considered in any academic paper. The three sections are shown in the following:

1. Procedures

1.1. Identifying Purpose

specify the purpose or purposes of the essay and decide on the topic sentences of each paragraph. The purpose is derived from the title of the essay or the questions given by the tutor. By analyzing the purpose, the students come up with the main topic and sub-topics of the academic essay.

1.2. Generating Point of view

Decide clearly what his\her point of view is. Good writing requires that the author makes his\her viewpoint explicit. Sometimes, one needs to discuss the subject from different points of view in the same essay like the economic and cultural views or the cultural and religious ones.

1.3. Identifying Related Concepts

Specify concepts that would direct the division of the essay. Threshold concepts are concepts held by a certain group of specialists to be central to the mastery of a subject. Identifying threshold concepts helps students to clarify the main concepts in the paper within a language that can be understood by all the readers in the same field.

1.4. Raising Questions

Write down specific questions that through answering all the points to be discussed in the paper are covered. There are three main questions that should be asked in discussing any topic. These questions are: what, why, and how. The important point about these questions is the kind of information that would answer it.

1.5. Data Collection

Find out the correct information and the suitable resources that are realistic and clear. The information should be varied and realistic. Students can refer to as many resources as they can as long as they will give the information needed to clarify the topic.

1.6. Drawing Conclusion

Draw a conclusion that answers the questions, suggests solutions, or builds a certain point of view. Conclusions should be logical and realistic. Conclusions should come at the end of the discussion of all subtopics as well as at the end of the paper. The conclusion should be built on scientific evidence not personal opinions or views.

2. Final Draft & Self-Assessment

Before finalizing the paper and submitting it to the tutor, the student should assess and evaluate his/her final draft. In order to check the validity and reliability of the paper, it is recommended to look back at the writing, and try to answer the following questions. The recommended questions are divided into four sections.

2.1. Introduction

Regarding introduction, the student should ask

himself\herself the following questions:

1. Does the introduction identify the main concept(s) in the title or the question?

2. Have I announced my point of view?

3. Have I clarified all the main topics?

4. Have I grouped my information in a logical manner?

5. Have I concluded my introduction with the main topic(s) to be discussed in the following paragraphs?

2.2. Main Body

For the main body of the essay and different paragraphs included in the academic essay, the student should check the answers to the following questions:

6. Is there enough logical information that proves critical reading?

7. Have I divided the paragraphs according to the main topics?

8. Have I provided a logical end to each paragraph that linked it to the next paragraph?

9. Have I presented enough support to my argument?

10. Have I referred to the ideas and writings of others clearly and accurately?

11. Have I divided each page into a suitable number of paragraphs?

12. Have I taken into account the length of each paragraph?

13. Have I taken care of grammar and avoided personal pronouns?

Conclusion

As for the conclusion, the following questions should be raised:

14. Does the conclusion answer the main question or resolve the issue?

15. Have I organized my conclusion chronologically?

16. Have I used reliable and valid information to support my assumptions?

17. Have I presented suggestions or practical implications?

2.4. Referencing

In referencing, the following questions are usually asked to evaluate their accuracy:

3. Have I followed a certified referencing system?

4. Have I been consistent in my references through the whole essay?

5. Have I mentioned all the used references in the bibliography and in the text?

After answering the previous questions and examining the essay accordingly, the student is expected to be able to decide what should and what should not be included in the academic essay and to judge its' quality which is the main objective of the present study.

3. General Guidelines

There are some rules to be followed and caveats to be avoided in order to produce the academic paper. The following are the main guidelines to be followed:

1. The language used is formal; no slang or colloquial words are permitted.

2. The words should be written in full. Avoid abbreviations and contractions.

3. It is advisable to avoid personal words like I, WE, and YOU during the paper.

4. Nothing is completely certain. Always justify with evidence or scientific results.

5. Numbers should be written in full, while statistical and scientific figures are written in numbers.

6. Be objective. Avoid expressing one's own feelings or beliefs without reliable evidence.

7. Never include apologies such as shortage of time or difficulty of the subject.

8. Use general statements and never address the reader.

9. Sentences should be written as full sentences that are grouped together into paragraphs.
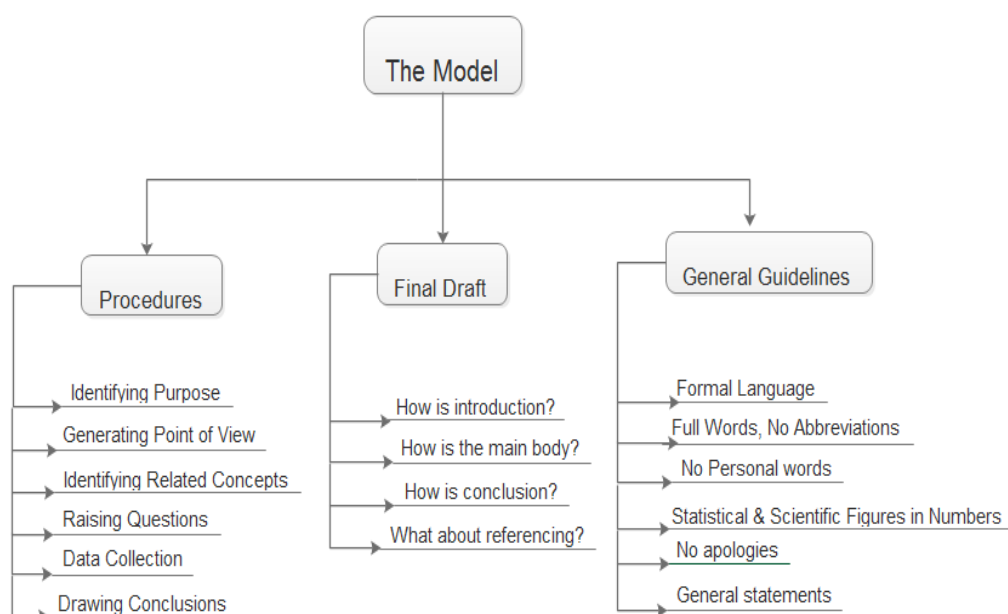
Figure 1
shows a general framework of the model that can be used as a guide for students when writing academic papers

IV. Instrument

The instrument in this study is a questionnaire designed by converting the model sub-cores into a questionnaire consisting of 10 items. Each item is ranked by a scale of three levels that range between (yes (3) - to some extent (2) – no (1)). The items of the questionnaire represent the practical steps that should be practiced by university students to wite academic papers.

Settings and Procedures

This study took place at the Faculty of Education Campus at the University of Jeddah during the second semester of the year 2015. The university accepts students in different specializations; however, all students should pass the preparatory year before joining any department. During the preparatory year students study four levels of English as a foreign language. Among the skills that should be mastered in this subject is academic writing. The mastery of academic writing in English is not exclusive to the preparatory year but it is required from students in all fields of specialization especially science, medicine, engineering and many other fields.

The study adopts the descriptive survey method in reviewing the related literature and in designing the suggested model. During the development of the model, the researcher conducted some modifications and reworded some of its items in the light of the theories and instructional models referred to and the viewpoints of the subjects. The final model of the study was constructed after considering both procedures; the analysis of the three adopted models Norman and Sanders [29], Pressley and Harris [3] and Bowen and Costello [1] and the results of the questionnaire.

V. Results

To establish validity of the model, three types of validity were measured: Content Validity, Internal Consistency Validity and Intrinsic Validity. To judge content validity of the model, it was given to the subjects and they were asked to respond to each item of the questionnaire. Each item was given three answers (yes (3), to some extent (2), no (1)).

The subjects critically reflecting on their anticipated experiences unanimously responded that the suggested model will help the students to use critical thinking strategies to write academic papers and to raise vital questions related to the addressed topic. However, the subjects expressed the opinion that the least degree of help the model can offer for the students is related to the following: to define specifically the problem related to the addressed topic, to present information relevant to the topic, to evaluate validity of information relevant to the topic, to give logical conclusions that resolve the addressed issue or answer the questions, to think open-mindedly to form connected ideas in the form of a paragraph and to produce discursive arguments that clarify his\her own beliefs as well as the challenging ones. As a whole, the respondents considered the model valid for its purpose. The frequency and percentages of agreement among subjects are presented in the following table.

Table 3
Subjects Responses to the questionnaire

No	Items	YES		Agreement Level TO SOME EXTENT		NO		Mean	St. Deviation
		freq	%	freq	%	freq	%		
1	The model helps the learner to use critical thinking strategies to write well organized academic papers	13	100	-	-	-	-	3.00	0.00
2	The model helps the learner to raise vital questions related to the addressed topic	13	100	-	-	-	-	3.00	0.00
3	The model helps the learner to define specifically the problem related to the addressed topic	8	61.5	3	23.1	2	15.4	2.46	0.78
4	The model helps the learner to present information relevant to the topic	8	61.5	3	23.1	2	15.4	2.46	0.78
5	The model helps the learner to evaluate validity of information relevant to the topic	8	61.5	3	23.1	2	15.4	2.46	0.78
6	The model helps the learner to give logical conclusions that resolve the addressed issue or answer the questions	8	61.5	4	30.8	1	7.7	2.54	0.66
7	The model helps the learner to think open-mindedly to form connected ideas in the form of a paragraph	8	61.5	4	30.8	1	7.7	2.54	0.66
8	The model helps the learner to define and clarify important concepts throughout the essay	9	69.2	3	23.1	1	7.7	2.62	0.65
9	The model helps the learner to develop reasoned opinions based on the gathered data	10	76.9	2	15.4	1	7.7	2.69	0.63
10	The model helps the learner to produce discursive arguments that clarify his\her own beliefs as well as the challenging ones	8	61.5	4	30.8	1	7.7	2.54	0.66
	Total							2.63	0.56

The internal consistency validity of the model was measured by counting the correlations between different items of the questionnaire. The correlation was measured by using Spearman Correlation coefficient factor. The results showed that all the items are significant at 0.1%. Table (3) presents the internal consistency of items.

Table 3
Presentation of the Internal Consistency of the Questionnaire

Item No.	Spearman factor	Item No.	Spearman factor
1	0.65	6	0,79
2	0.56	7	0.7
3	0.51	8	0.75
4	0.55	9	0.63
5	0.52	10	0.61

Table (3) displays that the items of the questionnaire correlated significantly with the total score of the questionnaire which ascertains the internal validity of the questionnaire.

Finally, the intrinsic validity of the questionnaire was calculated by counting the square root of reliability. The reliability was measured by counting Cornbrash's Alpha factor which shows the correlation of each item with the whole questionnaire. Cornbrash' Alpha for the questionnaire reached to 0.827 which is a high reliability value. Accordingly the value of intrinsic validity of the questionnaire reached to 0.91 which is a high validity value as well.

VI. Discussion

The present study aims at simplifying the difficulty faced by foreign language learners and especially academic essays writing by providing them with a model that can be used as a guide to direct students' writing (Al-qomoul, [13] & Hartley, [14]). The model design is based on reviewing the literature and analysing the three adopted models presented in this study with some modifications and rewordings by the researcher. The model is selected to guide university students because research has affirmed that if one aims to develop students' writing or any other skill, s\he should provide them with a structure that shows them the right sequence of actions they must follow to attain the targeted skill (Donnelly & Fitzmaurice, [23]; O'Neill & Mcmahon, [24]).

Subjects' responses to the questions about using the model in acquiring academic writing skills and the results of validity and reliability measurement confirmed that the model can be considered as a valid tool in training university students to practice academic writing skills. The model is divided into three sections to facilitate students' use and application of the model. The first section describes in details how the academic essay is divided and managed through the use of critical thinking strategies. The second section teaches students how to evaluate their writing and what questions to consider about each part of the academic essay. After writing the whole essay, the third section gives some general guidelines that should be mastered to present the academic essay in a final qualitative pattern.

VII. Conclusion

The difficulty of writing an academic persuasive paper is a challenge to all students even those at university. By

practicing and using certain structured guide, students can overcome this difficulty. The results of the statistical treatment and the subjects' responses to the questionnaire which is originally derived from the model, suggest that the model can be used successfully in training university students to write academic essays. However, more evidence is required to prove the model practicality and validity in training students to write academic essays.

The researcher suggests that more studies are required to adopt the model on a representative sample of university students to prove it's' applicability and capacity to raise university students writing skills. Other studies should be constructed to detect the possibility of using similar models in training students to acquire other language skills like reading, listening and speaking and at different education levels.

REFERENCES

[1] Bowen, M. & Costello, P. (1996). *Issues in Personal, Social and Moral Education,* Cambridge: Independence Educational Publishers.

[2] Nickerson, R. (1984). Kinds of Thinking Taught in Current Programs. *Educational Leadership*, vol. 42.

[3] Pressley, M. & Harris, K. (2001). Teaching Cognitive Strategies for Reading, Writing, and Problem Solving. In Costa, L (ed.). *Developing Minds: A Resource Book for Teaching Thinking.* 3ʳᵈ edition. Association for Supervision and Curriculum Development ASCD.

[4] Swartz, R. & Parks, S. (1994). *Infusing Critical and Creative Thinking into Content Instruction.* California: Critical Thinking Press.

[5] Bruner, J. (1986). *Actual Minds, Possible Words.* Cambridge, MA: Harvard University Press.

[6] Vygotsky, L. (1978). *Minds in Society.* Cambridge, MA: Harvard University Press. C:\Users\Hp\Desktop\Reseach 5\- Learning Centre - The University of Sydney.html

[7] Block, C. (1993). *Teaching the Language Arts: Expanding Thinking through Student-Centered Instruction.* Boston: Allyn and Bacon.

[8] Crystal, D. (2003). *English as a global language.* 2ⁿᵈ ed, Cambridge University Press.

[9] Bowden, R. (2010). *Teaching English for Sustainability.* Journal of NELTA, vol.15, No. 1-2.

[10] Aydogan, H. & Akbarov, A. (2014). The Four Basic Language Skills, Whole Language & Integrated Skill Approach in Mainstream University Classrooms in Turkey. *Mediterranean Journal of Social Sciences,* MCSER Publishing, Rome-Italy, vol.5, No. 9

[11] SIL International. (1999). *The Four basic language skills.* Available from: http://www.sil.org/lingualinks/languagelearning/OtherResources/GudlnsFrALnggAndCltrLrPrgrm/FourBasicLanguageSkills.htm

[12] Barkaoui, K (2007). Teaching Writing to Second Language Learners: Insights from Theory and Research. *TESL Reporter*, vol.4, No.1

[13] Al-qomoul, M. (2011). *Teaching and Assessing Writing Strategies for Secondary School Students and Investigating Teachers' and Students' Attitudes towards Writing Practice.* International Journal of Educational Sciences, Vol.3, No.1

[14] Hartley, J. (2008). *Academic Writing and Publishing: A practical Handbook.* Routledge.

[15] Learning Centre (2014). What is the Difference between Descriptive, Analytical, Persuasive and Critical Writing. The University of Sidney, Available from C:\Users\Hp\Desktop\D A Q 2\Reseach 5\-Learning Centre - The University of Sydney.html

[16] Paul, R. & Elder, L. (2002). *Critical Thinking: Tools for Taking Charge of Your Professional and Personal Life.* Pearson Education, Inc.

[17] Perkins, D. (1981). The Mind's Best Work. Cambridge, MA: Harvard University Press.

[18] Ardington, A. (2010). *Developing Critical Thinking Skills.* Learning to Learn: Learning Centre, Orientation Program. http://www.usyd.edu.au/lc

[19] Gardner, H. & Hatch, T. (1989). Multiple Intelligences go to School: Educational Implications of the Theory of Multiple Intelligences, *Educational Researcher.* Vol.18, No 8.

[20] Costello, P. (2007). Writing Reflectively and Effectively: Developing the Skills of Critical Thinking, Reasoning and Argument in Higher Education. *The Journal of the Higher Education Foundation.*

[21] Beyer, B. (2001). What Philosophy Offers to the Teaching of Thinking. In Costa, L (ed.). *Developing Minds: A Resource Book for Teaching Thinking.* 3ʳᵈ edition. Association for Supervision and Curriculum Development ASCD.

[22] Resnick, L. (1999). Making America Smarter: The Real Goal of School Reform. In Costa, L (ed.). *Developing Minds: A Resource Book for Teaching*

Thinking. 3rd edition. Association for Supervision and Curriculum Development ASCD.

[23] Donnelly, R. & Fitzmaurice, M. (2005). Designing Modules for Learning. In O'Neill, G., Moore, S., McMullin, B. (eds.). *Emerging Issues in the Practice of University Learning and Teaching*. Dublin: AISHE.

[24] O'Neill, G. & McMahon (2005). *Student–Centered Learning: What does it Mean for Students and Lecturers?* In: Emerging Issues in the Practice of University Learning and Teaching. O'Neill, G., Moore, S., McMullin, B. (Eds). Dublin:AISHE, http://www.aishe.org/readings

[25] Darling-Hammond, L., Austin, K., Cheung, M. and Martin, D. (2005). Thinking about Thinking: Meta-cognition. In *The Learning Classroom*. Stanford University School of Education.

[26] Pressley, M. & Harris, K (1994). Increasing the Quality of Educational Intervention Research. *Educational Psychology Review*, vol. 6.

[27] Pressley, M. & Allington, R. (1999). What Should Reading Instructional Research be the Research of? *Issues in Education*, vol. 5, no. 1

[28] Harris, K. & Graham, S. (1999). Programmatic Intervention Research: Illustrations from the Evolution of Self-Regulated Strategy Development. *Learning Disability Quarterly*, Vol. 22

[29] Norman, A. & Sanders, J. (2005). *The Theseus Learning System: A Practical Guide to Mastering Essential Thinking Skills*. A production of Knosis, LLC