#### **CHAPTER V**

# **CONCLUSION AND SUGGESTIONS**

This chapter presents a summary of the research and findings. The second section presents the suggestions for improvement of education practices and for further research.

# 5.1 Conclusion

With the increasing demand of skilled workers each year, it is important for the University to prepare their students to be critical thinkers. In the future, the students are not only competing with humans but, with robots and artificial intelligence too. In order to compete, students should be critical and creative in developing ideas and solutions.

In line with that, critical thinking should be practiced. As the educators, teachers should incorporate critical thinking activities in every subject and provide learning environment that foster students' critical thinking. In Widya Mandala Kalijudan Campus, the campus provides the students with various learning facilities such as; libraries, language laboratory, quiet spaces to do independent study, book and free internet connection for the students to use. The students could use books and the internet connection to collect data for the essays. Each language laboratory also completed with language assistants to help and assist the students whenever the students have any difficulty. In brief, not only the lecturers of Writing D who encouraged the students to apply the skills during the lecture, the campus also creates a good learning environment for the students to study by their own.

In this study, the researcher found that Writing D lecturers in Widya Mandala Catholic University followed the instructions from the Ministry of Education to teach critical thinking skills to the students. The lecturers introduced and taught critical thinking skills through different methods and approach. The students' response towards the skills were positive and they could comprehend the information given by the lecturers. Although many students faced difficulties in the beginning, as they practiced the skills over and over, they found that the skills are very helpful and useful for them. The students said that the skills help them during the lesson, class discussions and especially during the making of their essays. Some of the students also added that the skills helped them outside of the class too. This proves that with the right methods and approach, students could easily learn critical thinking. In addition, the students' responses also proves that there is correlation between writing and critical thinking skills.

Besides the finding that critical thinking was taught during Writing D class, this study also verify that critical thinking and writing are related. As the students mentioned in the interview, they used analyzing, reasoning (the most), problemsolving and decision making skills while composing their essays. The students also added that with the help of critical thinking, they could create more substantial essays and they could write effectively because they knew what they are going to write on their essays.

### 5.2 Suggestions

Based on the result of the study, the researcher would like to add some suggestions for English learners, teachers and future researchers.

1) Suggestions for English language learners

From the answers and results of the study, the researcher would like to suggest that English language learners should try to use or apply decisionmaking and problem-solving skills either in class or outside class since both skills are very useful for students. By practicing critical thinking skills, students would get used to incorporating and applying the skills in every tasks.

### 2) Suggestions for English language teachers

Based on the students' answers, they showed enthusiasm in learning critical thinking skills through different approaches during Writing D class. It is a positive thing that the teacher should keep up. If it is possible, teachers could experiment with different methods and approaches of teaching critical thinking skills to the students. Particularly, using medias like videos or short films could raise student's enthusiasm on learning the skills.

3) Suggestions for future researchers

In this study, the researcher only focused on the students of Writing D class. The researcher would like to suggest that future researchers would explore some other subjects as critical thinking is appliable for almost every subject, especially reading. The reason is, while reading students could apply

analyzing skill to analyze problems, apply reasoning and problem-solving skills to answer questions and to evaluate their answer again.

Furthermore, the researcher expected that future researchers could study critical thinking from different aspects too. Future researchers probably could study what motivates the student to apply critical thinking since the researcher didn't discuss it in this study.

#### REFERENCES

Ahrash N. Bissell and Paula P. Lemons, A New Method for Assessing Critical Thinking in the Classroom, BioScience 56 (January 2006): 66-72.

Ahmad, N., Khan, F. N., Munir, N., et al. (2013). Factors affecting the learning of English at secondary school level in Khyber Pakhtunkhwa, Pakistan. *International Journal of English Language and Literature Studies*, 2(2), 95-101.

Angell, J. R. (1906). "Perception", chapter 6 in psychology: An introductory study of the structure and function of human conscious, third edition. New York: Henry Holt and Company.

Andrej Demuth. (2013). Perception Theories. Slovakies: Kraków.

Allegereti, C. L. & Frederick, J. N. (1995). A Model for Thinking Critically About

Technical Issues. Teaching of Psychology, 22(1), 46-48.

Banning M. (2006). Measures that can be used to instill critical thinking in nurse

prescribers. Nurse Education in Practice, 6, 98-105.

Baldwin, T.(1998). Analytical philosophy. In The Routledge Encyclopedia of Philosophy. Taylor and Francis. Retrieved 23 Jan. 2021.

Byrne, Donn. (1997). Teaching Writing Skill. London: Longman Group UK.

Brookhart, Susan M. (2010). *How to assess higher-order thinking skills in your classroom*. United States of America: ASDC Member Book. Bloom, B.S., et al. (1956) A Taxonomy of Educational Objectives: Handbook I The Cognitive Domain. Longman, Green Co., New York.

Clement, J. (1979). Introduction to research in cognitive process instruction. In Lochhead, J. And Clement, J. (Eds.), Cognitive process instruction. Hillsdale, NJ: Lawrence Erlbaum Associates. Cañas, José. (2006). Cognitive Flexibility. 10.13140/2.1.4439.6326.

Dar, M. F., & Khan, I. (2015). Writing anxiety among public and private sectors Pakistani undergraduate university students. Pakistan Journal of Gender Studies, 10(1), 121–136.

Davidson, B.W. (1998). Comments on Dwight Atkinson's "A critical approach to critical thinking in TESOL": A case for critical thinking in the English language classroom. *TESOL Quarterly*, 32(1), 119-123.

Davidson, B.W., & Dunham, R. A. (1997). Assessing EFL student progress in critical thinking with the ennis-weir critical thinking essat test. *JALT Journal*, 19(1), 43-57.

Dewey, John, 1910, How We Think, Boston: D.C. Heath.

Dyan, V. L. (2010). Improving Writing Skill through Guided Writing: a classroom action research at the third-grade students of IPA 1 class of SMAN 1 Karanganyar in the Academic Year of 2009/2010.

Ennis, R. H. (1989). Critical thinking and subject specificity: Clarification and needed research. Educational Researcher, 18(3), 4-10.

Elder, L. & Paul, R. (1994) Critical thinking: Why we must transform our teaching.

Journal of Developmental Education, 18(1), 34-35.

Facione, P. A. (2011). Measured Reasons and Critical Thinking. Lillbrae, CA: The California Academic Press.

Franken, Robert E. (1994). Human Motivation. Pacific Grove, Calif: Brooks/Cole Pub. Co.

Fliegel, R., and Holland, J. (2011). Rhetoric and critical thinking. *Annual Meeting Teagle/Spencer Project Duke University*.

Geiser, S., & Studley, R. (2001). UC and the SAT: Predictive validity and differential impact of the SAT I and SAT II at the University of California. Retrieved March 1, 2002, from the University of California, Office of the President. Geiser, S., & Studley, w. R. (2002). Uc and the sat: Predictive validity and differential

impact of the SAT I and SAT II at the University of California. Educational Assessment, 8(1), 1–26.

Greenlaw, S. A. & DeLoach, S. B. (2003). Teaching Critical Thinking with Electronic Discussion. The Journal of Economic Education, 34(1), (Winter), 36-52.

Gene A. Budig, Writing: A Necessary Tool: Mr. Budig Issues a Call to Policy Makers, Educators, and Business Leaders to Get Serious about Improving Our Students' Writing Skills, Phi Delta Kappan 87 (May 2006): 663.

Gurses, A., Acikyildiz, M., Dogar, C., & Sozbilir, M. (2007). An investigation into the effectiveness of problem-based learning in a physical chemistry laboratory course. Research in Science & Technological Education, 25(1), 99–113.

Graham, S., & Perin, D. (2007). Writing next-eff ective strategies to improve writing of adolescents in middle and high schools. The Elementary School Journal, 94(2), 169–181.

Hayes, J. R., & Flower, L. S. (1980). Identifying the organization of writing processes. In L. W. Gregg & E. R. Steinberg (Eds.), Cognitive processes in writing (pp. 3-30). Hillsdale, NJ: Erlbaum.

Haider, G. (2012). An insight into difficulties faced by Pakistani student writers: Implications for teaching of writing. Journal of Educational and Social Research, 2(3), 17–27. Heaton, J. B. (1989). *Writing English language test*. London, England: Longman Pearson Education.

Hyland, K. (2003). Second language writing. Ernst Klett Sprachen.

Reitz, Joseph. (1987). Behaviour in Organizations. Homewood: III.

Renner, C.E. (1996). Enrich learner's language production through content-based instruction. Paper presented at a National Conference on Lingua e Nuova Didattica, Modena, Italy. ERIC Document Reproduction Service no. ED 411 694

Robert H. Ennis (1996), Critical Thinking. Argumentation. 14. 48-51. 10.1023/A:1007850227823.

Kang, N., & Howren, C. (2004). Teaching for conceptual understanding. Science and Children, 421(1), 28-32.

Kennedy, M., Fisher, M. B., & Ennis, R. H. (1991). Critical thinking: Literature review and needed research. In L. Idol & B.F. Jones (Eds.), *Educational values and cognitive instruction: Implications for reform (pp. 11-40)*. Hillsdale, New Jersey: Lawrence Erlbaum & Associates.

Keefe, J.W.,& Rhoder, C. (1992). "Teaching for thinking." Reston, VA: National Association of Secondary School Principles.

Kellogg, R. T. (1994). The Psychology of Writing . New York : Oxford University Press.

Kellogg, R. T. (2001). Long-term working memory in text production. Memory & Cognition, 29, 43-52.

Kellogg, Ronald T., & Rauelson, Bascom A. (2007). Improving the writing skills of college students. Psychonomic Bulletin Review. 14 (2), 237-242.

Klimova, Blanka. (2012). The Importance of Writing. Paripex - Indian Journal Of Research. 2. 9-11. 10.15373/22501991/JAN2013/4.

Khemlani, S.S., Byrne, R.M.J. and Johnson- Laird, P.N. (2018), Facts and Possibilities: A Model- Based Theory of Sentential Reasoning. Cogn Sci, 42: 1887-1924.

Landsman, J.,& Gorski, P. (2007). Countering stantardization. Educational Leadership 64(8), 40-41

Larsson, Kristoffer. (2017). Understanding and teaching critical thinking—A new approach. International Journal of Educational Research, Volume 84, Pages 32-42.

Levy, C. M., & Ransdell., S. (1995). Is writing as difficult as it seems? Memory & Cognition, 23, 767-779.

Lipman, M. (1988). Critical thinking: What can it be? Educational Leadership, 38-43.

Mayer, Richard & Wittrock, Merlin. (2006). Problem Solving.. Handbook of Educational Psychology.

McCutchen, D. (1984). Writing as a linguistic problem. Educational Psychologist, 19(4), 226–238.

McFarland, D. (1977). Decision making in animals. Nature 269, 15-21.

McLeod, S. (2018). Questionnaire. Retrieved from Simply Phsychology Website: https://www.simplypsychology.org/questionnaires.html

Moffett, J., & Wagner, B. J. (1983). Student-centered language arts and reading: A handbook for teachers. (5th ed.). Boston, Massachusetts: Houghton Mifflin.

Mintre, Rosalinda & Lie, Anita. (2020). Higher order thinking questions in teaching reading in a private primary school, 45.

Nation, Paul. (2009). Teaching ESL/EFL reading and writing. New York: Routledge, 112.

Nariza, S. G., and Salam, U. (2014). Critical thinking in literature review writing section of students' theses. *Portal Garuda*.

Nunan, David. 2003. Practical English Language Teaching. New York: McGraw-Hill

Norman, D. A. (Ed.) (1981). Perspectives on cognitive science, Hillsdale, NJ: Erlbaum.

Nickerson, R. S., Perkins, D. N., & Smith, E. E. (2014). The teaching of thinking. Routledge, United Kingdom.

Piaget, J. (1971). Genetic epistemology. (E. Duckworth, Trans.) New York: W. W. Norton & Company.

Pearson, P. D., & Tierney, R. (1984). On becoming a thoughtful reader: Learning to read like a writer. In A. Purves, & O. Niles (Eds.), Becoming readers in a complex society (p.144-173). Chicago: University of Chicago Press.

Potts, Bonnie (1994) "Strategies for Teaching Critical Thinking," Practical Assessment, Research, and Evaluation: Vol. 4, Article 3. Quitadamo I. J, Kurtz M. J. (2007). Learning to Improve: Using writing to increase critical thinking performance in Malaysian undergraduates. Proceedings of the EDU-COM 2008 International conference. Sustainability in Higher Education: Directions for Change, Edith Cowan University, Perth Western Australia, 19-21 November 2008.

Scriven, M., & Paul, R. (2007). *Defining critical thinking*. The Critical Thinking Community: Foundation for Critical Thinking. Retrieved January 2, 2008, from http://www.criticalthinking.org/aboutCT/define\_critical\_thinking.cfm

Shakirova, D. M. (2007). Technology for the shaping of college students' and uppergrade students' critical thinking. Russian Education & Society, 49(9), 42-52.

Sternberg, R. J. (1990). Thinking styles: Keys to understanding student performance. Phi Delta Kappan, 71(5), 366-371.

Stanford, G., & Roark, A. (1974). Human interaction in education. Boston,

Massachusetts: Allyn and Bacon.

Staton, J. (1984). Thinking together: Language interaction in children's reasoning. In C. Thaiss, & C. Suhor (Eds.), Speaking and writing, K-12: Classroom strategies and the new research (p.144-187). Urbana, Illinois: National Council of Teachers of English.

Tarigan. (1985). Membaca : sebagai suatu ketrampilan berbahasa.

Todd, V.; Hudson, J. C. Using Graded Peer Evaluation To Improve Students Writing Skills, Critical Thinking Ability, And Comprehension Of Material In A Principles Of Public Relations Course. *TLC* **2007**, *4*.

Tung, Chi-An., Chang, Shu-Ying. Feng Chia Journal of Humanities and Social Sciences, No.19. (Dec. 2009), pp.287-317.

Tsui, L. (2002). Fostering critical thinking through effective pedagogy: evidence from four institutional case studies. Journal of Higher Education, 73(6), 740-763.

Vygotsky, L. (1962). Thought and language. Cambridge, Massachusetts: The MIT Press.

Wise, Kurt. (2005). The importance of writing skills. 139.