

MAKING PERSONAL CONNECTION: ELLS WRITING IN ENGINEERING CLASSROOMS

Nurir Rohmah

Politeknik Negeri Madura, Department of Electrical Industrial Engineering
nurirrohmah@gmail.com ; nurir@poltera.ac.id

Abstract: Writing across the curriculum (WAC) is becoming increasingly important for Adolescent English language learners (ELLs) academic setting. Though, WAC is oftentimes one of the most challenging academic tasks. ELLs are facing increasing demands to engage in disciplinary writing. This paper presents, examines trends, and summarizes key findings in the engineering classroom study of ELLs personal story writing. It first examines, from a theoretical perspective, what we know and what we need to know about WAC in a second language context. It then describes an analysis in which personal story writing is used to improve ELLs academic writing. The results of this study give us an in-depth and detailed picture of how ELLs fully engaged in the struggle to survive the demands of disciplinary English writing. The study was conducted in three different engineering classrooms and ELLs participated in the personal writing projects. The ELLs first and revised drafts were analyzed, and post interviews were conducted. The analyses revealed generally positive stances towards writing about their personal stories even though they found it as challenging. ELLs found improving WAC through personal stories useful. The findings of this study support the need to include personal story writing in L2 writing instruction and emphasize its value in improving ELLs ability in academic writing.

Keywords: WAC, Personal Story Writing, ELLs Writing, Engineering Classroom

INTRODUCTION

There are many engineering students who imagine that their career only depends on the ability of their technical skill. This also happened among my engineering students in Madura. While this statement is true, there are more criteria to be successful that depend not only on the technical skill but also the ability of communicating effectively both verbal and nonverbal particularly when it comes to writing. Great ideas or experiments should be delivered through effective and efficient platform of communication. Writing is one of the platform that can deliver ideas to reach more people. In writing, effective communication can happen when writers are able to deliver the idea clearly to their readers.

Most of the time, I found it is challenging to attract students to write. My students are mostly from rural places around the island where we have little to no access toward good education. Their comprehension on English is low and it is hard for me to even ask them to write, for example, an essay. In my perspectives, English classes in Polytechnic is there not only to support students as an individual language learner, but also to support students learning in their content area classes. Therefore, in the second year of my teaching career at State Polytechnic of Madura, I modified the 2nd semester syllabus in hope to get more comprehension of student's reading and writing ability. Previously, some of other content classes lecturers had shared me how challenging it was for them to build student's awareness particularly on specific skills like reading and writing for academic purposes. With a broader understanding on writing, my partner and I rearranged the syllabus for English II classes which we decided to be focused more on strengthening students' reading and writing. When I first started asking my students to write a weekly journal (submitted weekly) during their 1st semester, I recall of possibly 90% of the class were protesting as simple as "why?" or longer sentences as "ah, I don't like writing English I don't know how to write in English."

What most of English lecturers' concern is in many engineering classes, students are required or faces diverse forms of writing assignments for example Engineering Reports, Engineering Proposals, Laboratory Log Books, or the creation of manuals or user guide for many engineering devices or tools. And it also deals with the students' ability to perform writing using figures, graphics, or tables to present information and all these visuals are always on displays in almost all Engineering textbooks. What happened inside the classrooms is that students are paying less attention to their writing projects as it appears difficult for them to communicate in written forms. Most of the problems the students facing are the limited vocabulary knowledge and the lack of opportunities to given for them understand textual resources.

To stimulate students' awareness on the importance of writing, different methods of writings need to be utilized including by activating their prior knowledge and connecting it through their personal experiences. The development of students' vocabulary is slow and will take great deal of times until they begin learning a more specific knowledge related to engineering or technical issues. Mei Lin in her book admitted that one of the many problems about English writing for ELL are word choosing strategies (2015; p. 246). And that only means, students background knowledge and personal experiences are a great way to start promoting writing to improve their ability for future academic purposes.

METHOD

Who?

State Polytechnic of Madura has three different engineering programs; Industrial Electrical Engineering, Heavy Equipment Mechanical Engineering, and Shipbuilding Engineering. The study was completed in all three programs, in total of 131 students from the second semester. The data collection was conducted from Early April to Early May 2018.

What?

This study has employed one single method in data collection. The study uses the qualitative method which include participant interviews. The purpose of using the audio recording was to observe factors involved in the use of language and record them as samples for analysis. The data obtained are mainly qualitative in nature, and these are analyzed descriptively by using content analysis. Interviews were done to collect precise data. The narrative data in this study were analyzed using content analysis (McKay, 2006). The first stage of the data analysis procedure involved reading and rereading the participants' interview transcription. When reading the participants' transcription, I analyzed the narratives using a categorical content analysis (Lieblich, Tuval-Mashiach, & Zilber, 1998) as cited in Zacharias (2012).

To begin this project, I had students identify making personal connection based on the texts required to read throughout the entire semester. For our purposes, we considered the standard text to be any category of texts which include many different topics from general knowledge to topics related to each respective engineering programs. I told my students that they have 100% flexibility deciding what texts they are about to read and making connection to with consideration that students should have consulted the text to me one week prior the classroom project and presentation started.

After some brief writing intended to activate student's thinking about these connecting ideas through text, I spent a class period identifying or modeling my students what is like to

create personal connection through the text we are reading so we carefully comprehend the meaning behind it and then having students to practice like wise. For this class period, I provided all three classrooms with different selections of text ranging from texts on engineering related issues to text about arts, humanities, and sciences. I tried to communicate with students as much as possible and activate their prior knowledge during these sessions by saying that their personal connection can be of any stories or experiences, of any groups or communities that can also include their ancestry, families, sport teams, their classmates, or any student's organization they are following at that very moment.

The practice was not generally easy. A lot of students still found out that they struggled with it and that it was concerning at some points because students can go as far to recall experiences that could trigger a specific terrible memory especially when it comes to families. Although, after developing these problems, I posed the questions "what's the idea in the text that you can relate the most and be able to understand the context that the writer wanted to deliver?".

FINDINGS AND DISCUSSION

Why is Writing so important?

Writing Across the Curriculum (WAC)

It should come as no surprise that many students considered writing is only taught in language classes. Many times, the responsibility of students learning how to write becomes the activity that is only completed in the English classroom. Reinforcing writing across the curriculum supports the idea of writing as a learning process and it can be the advocate for an authentic communication between teachers and students. Writing across curriculum also supports students to discover their own interest. Britton in (Craig, 2012) categorized writing in three ways; expressive or reflecting upon ideas; transactional or conveying information for a purpose; and poetic or creating an aesthetic object (p.14). The expressive and transactional reflect the ways in which writing across the curriculum scholars begin to think about (Griffin, 1982). With the access to two different types of writing, students can practice their writing experience in both writing activities. Writing forms like reports or journals and expressive writing will allow students to learn both on how to write based on data and how to write for personal purposes. Scholars (Leki & Carson, 1997; Matsuda, 1999; McKenna & Robinson, 2006; Shih, 1986) also added that in content area classrooms, the two types of writings (expressive and transactional) can support students' development as writers. It is important that students are exposed to a lot of different writings to help them with their academic and future profession. Particularly in content area classes where writing has become one of the biggest challenges to be executed.

In addition, Shaughnessy in (Griffin, 1982) stated that writing across the curriculum is making writing a more integral part of learning process in all course (p.15). The flexibility of the writing across the curriculum will help not only the students but also the teachers. One of its many importance is because it helps in increasing the awareness of professors about why writing across the curriculum can be a great option for student to develop as writers. Scholars like (Craig, 2012; Griffin, 1982; Russell, 2012) further explain that writing across the curriculum movements has growing a broader influence in diverse disciplines for two different advantages; advocating the making meaning and connection in an authentic context and as well redefining the writing as the individual process to develop students' voice as writers and young professionals. The growing

influence then help building the concept of writing intensive in various disciplines to cater the students' potential.

Making Personal Connection

Writing in every classrooms especially English classrooms serves many different purposes;

- To provide and establish sufficient platform for students to practice and develop their writing skills
- To help students recognize the importance of writing in the classroom and workplace
- To improve their professional writing skills
- To promote writing as a way for students to learn and clarify thinking

To achieve these goals of writing, students are required to improve understanding of technical writing or content area writing. As stated in the previous section, oftentimes, it is not an easy task to achieve these writing purposes because the beliefs are that writing will not be anything beneficial for their professional working environment and mostly taught in language classes and not in engineering programs. And having to teach in a small community, I have noticed that my students lack motivation to complete assignments or lack of confidence when it comes to writing. Also, I have noticed that oftentimes, they have been told that they did more failures than successes especially for writing activity in English, a language that is not native for them.

But this practice should never continue. Students will always need the ability to write or communicate in any forms including in written format. When ask about whether they are accustomed to writing practices, my students statements were nothing shocking. Basic writers or we could call them as progressive writers, like the rest of us, don't write unless they have good reasons to write. Basic writers simply haven't read or written enough to have a working knowledge of the print code and how it is used to construct and communicate meaning. They are simply not accustomed-to using reading and writing for personal and transactional purposes; the key to their development as writers would seem to be practice with written language (Collins, 1983; p.4). So, what do teachers do to help students attracted into writing? One of the many ways to start is by activating their prior knowledge. The knowledge they brought from their homes, their communities to the school. My students come from different parts of East Java area but most of them are from coastal areas or from families earning money by farming. Therefore, our classroom reading and writing activities are activities related to these topics. Humans come to a formal education setting with a range of prior knowledge, skills, beliefs, and concepts that significantly influence what they notice about the environment and how they organize and interpret it. This in turn affects their abilities to remember, reason, solve problems, and acquire new knowledge (Bransford, Brown, and Cocking (2002) p. 10). In helping students to activate the prior knowledge they bring to the learning environment, teachers build on students' strengths and experiences to create new learning. Similarly, research on reading comprehension suggests that prior knowledge is a strong predictor of how well the reader will understand the text and make meaning or generate new knowledge and understanding (Fountas & Pinnell, 2001; Keene & Zimmermann, 1997).

When readers engage with an unfamiliar text, they rely on their prior knowledge (e.g., personal experiences, conceptual understanding, other texts) to make sense or meaning of the text. According to Keene and Zimmermann (1997), readers make three types of connections before, during, or after reading: (a) text-to-self connections; (b) text-to-text connections; and (c) text-to-world connections. For example, if a student is reading about the electricity transmission and distribution, she/he is more likely to understand what they are reading if they were at that position or has connection with the said context which is then interpreted into text-to-self connection. This understanding will develop further if the students have read other books or references related to electricity transmission or distribution.

As I began to give instruction on text to self-connection during the session, students become more receptive compared to when they learn writing in any class session as they look oftentimes uninterested and I had previously received lack of responses. Because students had clear, specific purposes for performing the search related to an actual piece of text they were developing to audiences beyond the teacher, the in-class time we spent on researching was highly productive. Students tried multiple search terms, attempted to narrow their results, read multiple summaries and articles before choosing the ones they would use for their reading and writing activities.

The triumphs were the increase in student engagement as a result of the flexibility in choosing texts and connecting to their selves. This increase was more tangible than any writing activities we had previously completed. Strong majorities of the three classes responded saying that while it was still challenging for them to understand their readings, they agreed that making personal connection through the reading and their writing made them more interested in the assignments, made them work harder and at the same time made their writing performance easier for them. It was easier for them to understand the readings and as well as reinterpreting it using their own words. My students found it hard to not only write, but also read and thus their performances in reading in their content classes are low. Despite the increasing demand of the importance of reading and writing, it is very little to see platforms given to these students to improve their reading and writing abilities and therefore, my class is there to support this activity. Mastery of content is demonstrated not only through reading but also through writing. (Knipper & Duggan: p.462)

The importance of making connections to increase reading comprehension has become ubiquitous in literacy classrooms. Increasing students' interest in reading is not only beneficial for English for engineering classrooms but also will help them to survive in any of their content area classes. A lot of topics emerge during this unit of making personal connections. The making connections framework for reading comprehension can be used on a commonplace SLE data source, reflection journals, to help us evaluate how well our students make reflections as well as provide evidence of how well students are accomplishing SLE course learning objectives (Ash, Clayton, & Atkinson, 2005). Our students have been given little to no medium to display their confidence in English writing and when they are given once, something that they found relatable to not only their schools but also their lives, they can be as hard working as they are in other classrooms.

Some of my students came up with readings on farming and so I listen to them telling stories about how their parents work extra hard to pay for their schools with the money they earned from the crops. Some students came up with stories about bullying because they experienced such unfortunate issues during their primary or secondary schools. My student,

Yusuf mentioned how difficult it was for him going through such incident, but he was well spoken in front of the class about how it was being bullied and even told his classmates to respect others. My other student, Salma, has just lost her mother few weeks before the assignment was given and so she wanted to move on with her life, wanted to bring back her desire to study and came to me one day during my office hour, telling me this text about families and losing somebody dear to us. She passionately wrote her struggle watching her mom going through such pain with her diseases. In other stories, Hendri, said in one of his consultation sessions that he found this article about welding activities and it reminded him how much he hated this lesson. During his presentation, he wrote down what he disliked about welding and why it was hard for him to love the whole class because he just was not into welding activities. The abilities in writing should be stimulated and teachers should be able to create environments that nurtures this activity. In content areas, we can always start from reading and writing different types of texts and progress to a more specific writing response that will tackle some more academic purposes.

Farris and Smith cited in (Kolb, Longest, Jensen; 2013) stated that students learn best when taught to write about subject matter they find relevant (p. 23). Making personal connection helps students to connect with the text they are reading, and it improves their understanding to interpret the meanings behind the text. My own experiences applying this personal connection writing suggest that while it might not be the highest quality writing students could produce, a more realistic literacy learning is provided accommodating their prior and content knowledge and help improving these students to achieve writing for academic purposes. Part of the difficulties of non-native English learners facing when learning English is finding the linear pattern from their native language to English and oftentimes, students give up on the way because they found it very challenging enough not being able to find the similar patterns. Non-Native English students have different ways of thinking and most of the time, their ways of writing are built by the understanding of their native language first.

CONCLUSIONS

While creating an environment that nurture students' ability in writing, it is important to note that there are other strategies available for teachers to utilize and making personal connection is only one of the many strategies that serve as an ongoing process as well as serve as a starting point for taking action about how and why we might be able to guide our students to achieve their academic performances. Making personal connection is a way to stimulate students writing and is an approach to stimulate their enthusiasm and creativity crafting their ideas into written forms. In the future, such strategies is highly recommended especially in engineering classrooms where writing has been perceived as challenging and where writing has received little to no responses.

REFERENCES

- Atkinson, D & Ramanathan, V. (2006). Individualism, Academic Writing, and ESL Writers. In Matsuda, P. K. et al. *Second language writing in the composition classroom: a critical sourcebook* (pp.165-191). New York, NY: Bedford/St. Martins.
- Atwell, N. (2015). *In the Middle: A Lifetime of Learning about Writing, Reading, and Adolescents*. Portsmouth, NH: Heinemann, 2015.
- Bean, J. C. (2011). *Engaging ideas: The professor's guide to integrating writing, critical thinking, and active learning in the classroom*. San Francisco: Jossey-Bass.

- Beer, D. F., & McMurrey, D. A. (2005). *A guide to writing as an engineer*. New York: Wiley, 2005.
- Collins, James L. "A Contextualized Perspective on Developmental Writing," Annual Meeting of the Conference on College Composition and Communication. Detroit. 19 Mar. 1983. Reading. ERIC. Web. September 24th 2018.
- Craig, Jennifer L., Learner, Neal., & Poe, Mya. (2012). *Innovation Across the Curriculum: Three Case Studies in Teaching Science and Engineering Communication*. In Zawacki, Terry Myers & Rogers, Paul M (Ed.), *Writing Across the Curriculum* (pp. 310-344). Boston, MA: Bedford & St. Martins
- Cunningham, P. M., & Cunningham, J. W. (1987). Content Area Reading-Writing Lessons. *The Reading Teacher*, 40(6), 506–512. Retrieved from <http://www.jstor.org/stable/20199523>
- Herrington, Anne J. (2012). *Writing to Learn: Writing Across the Disciplines*. In Zawacki, Terry Myers & Rogers, Paul M (Ed.), *Writing Across the Curriculum* (pp. 118-127). Boston, MA: Bedford & St. Martins
- Knipper, K. J., & Duggan, T. J. (2006). *Writing to Learn across the Curriculum: Tools for Comprehension in Content Area Classes*. *The Reading Teacher*, 59(5), 462–470. Retrieved from <http://www.jstor.org/stable/20204374>
- Kolb, K. H., Longest, K. C., & Jensen, M. J. (2013). *Assessing the Writing Process: Do Writing-Intensive First-Year Seminars Change How Students Write?* *Teaching Sociology*, 41(1), 20–31. Retrieved from <http://www.jstor.org/stable/41725577>
- Leki, I. (1992). *Understanding ESL writers: A Guide for Teachers*. Boynton/Cook.
- Leki, I., & Carson, J. (1997). "Completely Different Worlds": EAP and the Writing Experiences of ESL Students in University Courses. *TESOL Quarterly*, 31(1), 39–69. <https://doi.org/10.2307/3587974>
- Matsuda, P. K. (1999). *Composition Studies and ESL Writing: A Disciplinary Division of Labor*. *College Composition and Communication*, 50(4), 699–721. <https://doi.org/10.2307/358488>
- Matsuda, P.K. & Silva, T. (2006). *Cross-Cultural Composition: Mediated Integration of U.S. and International Students*. In Matsuda, P. K. et al. *Second language writing in the composition classroom: a critical sourcebook* (pp.252-265). New York, NY: Bedford/St. Martins.
- McKenna, M. C., & Robinson, R. D. (2006). *Teaching through Text: Reading and Writing in the Content Areas*. Boston: Allyn and Bacon, 2009.
- Russell, David R. (2012). *The writing across the curriculum movement: 1970-1990*. In Zawacki, Terry Myers & Rogers, Paul M (Ed.), *Writing Across the Curriculum* (pp. 15-45). Boston, MA: Bedford & St. Martins
- Zacharias, Nugrahenny. 2012. *EFL Students' Understanding of Their Multilingual English Identities*. Miami University. *Electronic Journal of Foreign Language Teaching* 2012, Vol. 9, No. 2, pp. 233–244 Centre for Language Studies National University of Singapore. Retrieved from
- Zinsser, W. (1988). *Writing to learn*. New York: Harper & Row.1988.