Mini Project Report 3
Hongni Gou
Qiuwen Pu
Yingliang He

Teaching Context

Our third mini project focuses on TOEFL writing. The class is designed for Chinese

students in a language institution or a language program in high school or college. The students

in the institution/program ideally have intermediate level of English proficiency. The class size

needs to be relatively small, 9-12 students, due to the great amount the group work, peer review

involved in this class, and consideration of teacher's workload.

The CALL tasks designed will take place at approximately three quarters of the semester.

The instructor has covered most of the content knowledge of the writing class, namely, how to

brainstorm and form an outline, how to write different sections of an essay (such as introduction

and conclusion), how to make an argument, etc. For this class, the instructor will use a series of

activities to lead all the students to walk through the whole writing process and apply what they

have learned into a real essay question provided by the ETS sample prompt.

Learning Objectives

- To familiarize with the writing process

- To be able to brainstorm

- To engage in peer review throughout the writing process

- To improve writing quality independently

● To be able to use CALL tools to assist TOEFL writing

Technical requirement

The CALL activities only requires a laptop or a desktop, and Internet access as the

hardware requirement. In terms of the software requirement, the teacher and the students only

need to know to install a Google add-on - LucidChart, and know how to use it to formulate

flowchart. The whole class have been using it as an instructional tool throughout the semester to

make an outline for the essays. They should be able to use it without difficulties.

Task Description

Activity	Procedure
Brainstorming (Teacher will present a topic before)	Students will use https://www.polleverywhere.com to brainstorm. They can use cellphone or computer to send ideas related to the topic. The website is able to formulate a word cloud or text wall, for teacher's demonstration, explanation, or for students' reference.
Outlining (Students have some ideas from the brainstorming)	Students form into groups of three, go to the Google Doc that the teacher creates, and use LucidChart to formulate their outlines. They also need to comment on their group members outline, in terms of either the logic of the outline or the construction of the argument.
Submit to pigai.org (Students go home and finish the writing according to the outline)	The teacher creates the writing assignment on pigai.org, and set the scoring criterion to TOEFL writing. Students submit their works.
Revision (Local)	Students can revise their essay according to the suggestions from the website, mainly focusing on the grammatical errors, and usage of vocabulary.

Justify usage	If one does not agree with the revision suggestion that the website provides, s/he can justify his/her usage in the comment area. The teacher will give feedback.
Peer Review	Same group of students will review their peers' writing, globally, in terms of structure, transition, etc.
Second-round revision (Global)	Students can revise according to the peer comments
Teacher feedback	The teacher can provide feedback and suggestions that the website and students did not cover.
Final Revision	The students can do some final revisions.

Theoretical Considerations

The first theory we considered for this project is Cognitive Process Theory of Writing, which we adopted from Flower and Hayes (1981)'s article. We believe that by asking students to verbalize their thinking process when composing an essay would help them develop the habits and practices of successful writers. One of the important guidelines for this theory is the cognitive writing process, which includes different stages such as planning (the most emphasized part), drafting, and revising. Moreover, these stages are non-linear; they can be embedded into each other and enable the learning process to be more dynamic. Also, we value students' individual ideas by encouraging them to brainstorm and give peer reviews.

The second theory we took into account is sociocultural theory from second language acquisition. We designed this course as a process of mediation. We use Poll Everywhere, pigai.org, Google Doc, and Lucidchart as object-regulation to mediate students during the

learning process. Moreover, peers and instructors could be regarded as other-regulation. We want to use such mediation to move students from their Zone of Actual Development (ZAP) towards their Zone of Proximal Development (ZPD) and ultimately help them approach self-regulation.

Pedagogical Considerations

Error correction is the first concern for our pedagogical considerations. Every time students submit their writing to pigai.org, the system will give them correction mainly on grammar, lexis, and collocation. These aspects are considered to be very important for TOEFL independent writing. Meanwhile, instructors will give complementary feedbacks regarding the content, organization, logic flow, and sentence structure. By combining correction from pigai.org and from instructors, we could provide students with a more comprehensive feedback.

Encouragement of learning strategies

In this course, we want to use brainstorming (assisted by Poll Everywhere) and peer reviews/comments (assisted by pigai.org and Google Doc) to engage students in the learning community. Also, we want to develop students' awareness of self-learning and self-correction on the feedbacks from pigai.org. They could first read the feedback independently, and then seek help from the instructors if they could not understand. Moreover, pigai.org will give students some feedbacks on extended lexis and expressions. If students notice that, it might bring some incidental learning for them. Since the scoring on pigai.org is done by machine, it could give students immediate assessment. More importantly, every time students revise their essay based

on the feedbacks, they would see their scores increasing. This would be very encouraging and

conducive for their confidence building. Last but not least, the brainstorming activity using Poll

Everywhere is completely anonymous, so students could voice their true opinions.

Sustainability of technology

There are three considerations for the sustainability of technology. The first one is

whether these CALL activities have low-tech requirement. As we believe, for both instructors

and students, Poll Everywhere and Google Doc are both very easy to use. Although pigai.org and

Lucidchart might require some demonstration, it will not be too hard to operate. The second

consideration is whether these CALL activities are easy to replicate. For instructors, all of them

are easy to replicate. Instructors could use them easily for other courses. For instance, they could

use pigai.org to teach students GRE writing, or even general writing. The last consideration is

whether these CALL activities could be used for different objectives. We think that for both

students and instructors, they all could be used for different objectives. Lucidchart, for example,

could be used for drawing the concept map of TOEFL listening, and Poll Everywhere could be

used for some debates and voting in class.

Evaluation

For language learning potentials, there are several points to make. Firstly, from the

brainstorming activity to the final draft of the essay, students can develop their ability to

verbalize their thoughts into meaningful texts during the cognitive process of writing. Secondly,

by using pigai.org, grammar mistakes are provided timely with specific explanations. Through

error correction, students can improve their accuracy of grammar, which is important in language learning and TOEFL writing test. In addition to the mentioned potentials, incidental learning may also occur in reading the learning suggestions given by the composition assessment website, where students can learn some idiomatic expressions and collocations that are usually wrongly used in many Chinese students' writing.

Critics may argue against the effectiveness of the pigai.org. However, based on the researches that have been done so far, as a popular online composition assessing website, there are many advantages valued by teachers and students while disadvantages also exist. Shi (2012) uses pigai.org as an example to examine the effectiveness of online automated writing assessment program. She points out that the features that pigai.org system possess is relatively helpful to students in terms of vocabulary usage and grammar, whereas it does not improve learners writing in terms of organization, logic, and coherence.

As Liu (2014) concludes, adhering to the cognitive process writing theory, the website gives chance for students to revise their writing repeatedly until they get the satisfactory grade, which helps to develop students' good writing habits. Meanwhile, the grammar suggestions save teachers' energy and time so they can pay more attention to other more crucial global writing issues. However, the suggestions given by pigai.org sometimes can be inappropriate or misleading due to the varying contexts and dynamic and complexity of grammar. Thus, it is suggested to combine both teacher's feedback and the suggestions given by the website. It may need further improvement to increase the accuracy of grammar suggestions but meanwhile since

we encourage students to justify their grammar use if they disagree with the suggestions

provided on the website, this may also become a learning moment in which a specific grammar

point is noticed and possibly enhanced.

He (2013) believes that the scoring offered by this website has high reliability. But one

point is that generally the scores given by pigai.org are remarkably higher than the scores given

by instructors. He also says that pigai.org could give students detailed feedback on lexis and

grammar, but could not give sufficient feedback on organization, rhetoric, logic flow and

coherence. We believe that combining instructors' feedbacks and scoring will effectively solve

this problem. Initially pigai.org will automatically give students a score. Instructors could revise

that score if they like. Meanwhile, they could give complementary comments on organization,

rhetoric, logic flow and coherence. This will still be less arduous than instructors doing all the

grading alone.

The positive impact of the project are mainly reflected in two aspects. The first one is the

pragmatic abilities that students can benefit from. Through the brainstorming, concept map

drawing activities, students' awareness and actual ability of organization in TOEFL independent

writing can be improved. Then the combination of automatic assessment and self-correction can

enhance students' accuracy of grammar use. The other positive impact is computer literacy. In

this project, we integrated four main technology tools to assist language learning. By using these

tools, students' computer literacy can also be improved.

To measure the design's fitness to language learners, here we will mainly discuss the composition assessment website pigai.org. The most prominent feature of the website is it is designed especially for Chinese students, which means that almost all the grammar suggestions and error explanations are provided in Chinese. In this way, it requires little knowledge for English meta-language, which makes it easier for Chinese students to understand and correct the grammar mistakes. Also, backboned by the corpora behind the system, the automatic assessment is very sensitive to the pattern grammar errors made by Chinese students frequently. So it is helpful to point out and correct some common unidiomatic Chinglish. Also, teachers can set different assessment modes to match students' writing task on the website. Based on the writing context, here we set TOEFL independent writing as the assessment criteria to match students' learning goal. Comprehensively considering students' learning context, the employment of this tool is of great value in terms of learner fit.

Related to the learner fit, the authenticity of this design will be discussed subsequently. According to the definition, authenticity refers to the correspondence between the CALL activity and target-language activities of interest/needs to learners out of the classroom. As we have analyzed, all the activities in planning and writing in the cognitive writing process are aimed to improve students' writing ability in real TOEFL independent writing test. From this perspective, our design is featured with strong authenticity.

As for the practicality of the technology used in the project, we have to ensure the hardware and software technical support is available in the actual teaching context in China. The

fact is Poll everywhere and pigai.org are accessible in China while Lucidchart and Google doc are not. Nevertheless, we can find the substitutes for them so as to ensure the practicality of the design. For example, we can use ProcessOn to replace Lucidchart and Yiqixie to replace Google doc.

Finally, we will make a reflection of the design so as to direct further improvement. First, based on some researches that have been done so far, the suggestions given by pigai.org sometimes can be inappropriate or misleading. It is actually not a special problem of this website but many other grammar checking software due to the varying context, dynamic of grammar, and the idiosyncrasy of learner English. It may needs further improvement to increase the accuracy of grammar suggestions. But meanwhile, since we encourage students to justify their grammar use if they disagree with the suggestions provided on the website, this may also become a learning moment in which a specific grammar point is noticed and possibly enhanced. Except this, considering the technology requirement of Lucidchart and Pigai.org are not noticeably low, we think it is better to make use of the tool routinized which means students get familiar with the usage of the tool through regular and repeated using. In this way, students can make most use of the convenience of the tools in language learning. Finally, benefited from the use of technology tools, there exists the possibility to make our project an online course so that students can break the limit of space while sharing the abundant educational resources.

References

Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College Composition and Communication*, 32(4), 365-387. doi:10.2307/356600

He, X. (2013). Juku Pigaiwang yingyu zuowen pingfen de xindu he xiaodu yanjiu [Research on the Reliability and Effectiveness of English Writing Scoring Given by Juku Pigaiwang]. *Modern Educational Technology*, 23, 64-67.

Liu, H. (2014).   Juku Pigaiwang zai daxue yingyu xiezuo jiaoxue zhong de yingyong yanjiu. [Research on the Application of Juku Pigaiwang in College English Writing Teaching].   *Science & Technology Vision*, 29, 163-164.

Shi, X. (2012). Zaixian xiezuo zidong pinggai xitong zai daxue yingyu xiezuo jiaoxue zhong de yingyong yanjiu - yi juku pigaiwang weili [Research on the application of online automated writing assessment system in college English writing teaching - Pigai.org as an example]. *Modern Educational Technology,* 22, 67-71

Appendix (Links)

Brainstorming: https://pollev.com/elvinhe989

Google Doc with outline:

https://docs.google.com/document/d/1cxZ5bCSCRo4xSjVwjhWpBF0JKqH_VqVqS0bKnnbhnOc/edit?usp=sharing

Work submission to: www.pigai.org