教育部教學實踐研究計畫成果報告
Project Report for MOE Teaching Practice Research Program

計畫編號/Project Number：PED1100950
學門專案分類/Division：教育
執行期間/Funding Period：2021.08.01 – 2022.07.31

計畫名稱/Title of the Project:
"重新看見": 運用多模態活動引發寫作學習者之自我修改行為/
"Re-vision": Multimodal composing activities, self-revision, and process writing in English

配合課程名稱/Course Name:
學術英文寫作/Academic English Writing

計畫主持人(Principal Investigator)：范幼珊 (Yu-Shan Fan)

共同主持人(Co-Principal Investigator)：N/A

執行機構及系所(Institution/Department/Program)：

臺北醫學大學/通識教育中心/語言中心

成果報告公開日期：☐立即公開 ☑延後公開(統一於 2024 年 9 月 30 日公開)

繳交報告日期(Report Submission Date)：08/31/2022

"重新看見": 運用多模態活動引發寫作學習者之自我修改行為
"Re-vision": Multimodal composing activities, self-revision, and process writing in English

1. 本文 Content

1. 研究動機與目的 Research Motive and Purpose

English writing ability has been regarded as a fundamental academic competence for EFL learners. However, learning to write in English is a complicated and long journey since writing requires the mastery of linguistic knowledge as well as strategic knowledge (Yeh, Heng, & Tseng, 2020). During the writing process, writers go through a recursive process, including planning, drafting, revising, and editing. The importance of revision in the writing process has been recognized while increasing attention has been called to effective revision strategies and revision instruction (Sengupta, 2000). In English writing courses, teacher and peer feedback has been used as the conventional approach for revision practices. In addition, most student writers have expected to receive teachers' feedback whether orally or in written forms, for their revision suggestions.

However, one of the biggest problems of relying on teacher and peer feedback as the main revision prompt is twofold. First, teachers' feedback may help student writers to improve the current drafts they are working on. For most student writers, making revisions in response to teachers' feedback has been regarded as a promise for better drafts and grades. Given the fact that student writers did not fully understand the rationale behind the teacher's feedback, the specific feedback, unfortunately, does not guarantee to become revision strategies or revision competence that help students with their next writing tasks. Secondly, a worst-case scenario for teachers is that student writers do not display writers' autonomy when counting merely on teacher-led or others' feedback for their own writing. A number of studies have reported that most student writers prefer to receive teacher feedback over other kinds of feedback and even some expect to have all their errors marked by their instructors (Elola & Oskoz, 2016; Yang, Badger, & Yu, 2006). As argued, "At best the students see their writing altogether passively through the eyes of formal teachers or their surrogates, the textbooks, and are bound to the rules which they have been taught" (Sommers, 1980, p. 49). This quote has raised attention for teachers to include appropriate and effective revision strategies in the English writing curriculum. By doing so, we, writing teachers, could not only prepare our student writers with the ability to make effective revisions by themselves but also facilitate their writers' autonomy.

In addition to relying merely on others' feedback for revision, another problem remains whether students are able to make quality textual changes that improve their writing performance. Traditionally, to encourage students' self-revision practices, a checklist or a list of prompted questions is provided by instructors or included in many composition textbooks, which are fundamentally teacher-led and in the form of linguistic guidance. However, in classroom practice, it has been observed that student writers would either have no clue about what to revise, or they tempt to revise at a superficial level of their drafts, thereby failing to detect global issues, such as the lines of reasoning (Sengupta, 2000; Sommers, 1980). On the other hand, many factors could result in ineffective textual changes, including students' English proficiency and their writing experience. More importantly, students may lack strategies that help to "re-view" their drafts with different eyes and to help them to identify the dissonance between their intended meaning and the actual depiction.

Recently, research has focused on how to integrate multimodal modes and modalities in facilitating language learning. In the field of second language writing, there has been increasing attention on the potential of integrating multimodality with the teaching and learning of English writing (Dzekoe, 2017; Elola & Oskoz, 2016; Jiang, 2017). Specifically, research has called attention to how the assistance of digital technology and online tools could empower learners to detect global and local issues in their writing. In addition, how transfer among various modes, such

as oral, written, and visual modes could help learners notice linguistic and rhetorical issues, thereby initiating textual changes to improve their writing performance. Driven by the above problems, this teaching research project explores the pedagogical applications of digital and multimodal composing activities to facilitate students' self-revision practices. Specifically, this project targets using multimodal composing activities in the revising stage to explore (1) what types of revisions were triggered on students of different English proficiency levels or academic English writing experience, (2) whether students-initiated textual changes contribute to their writing quality, and (3) how student writers perceived the role of multimodality in their revising process.

2.   文獻探討 Literature Review

This teaching project was informed by three theoretical frameworks–process writing theory, revision studies, and multimodal composing. The following sections will introduce empirical studies and pedagogical implications that provide important insights into the design and practice of this teaching project.

2.1 Process writing theory

Process writing approach centers on an idea that writing should be regarded as a process rather than a product (Ferris & Hedgcock, 2013; Flower and Hayes, 1981; Weigle, 2005; 2014). As a result, process writing theory is regarded as a learner-centered approach which takes into account various factors such as learners' needs, goals, and learning styles (Durga, & Rao, 2018). To be specific, writers go through stages of writing practices, including prewriting, drafting, editing, revising, and publishing (Bayat, 2014). In the prewriting stage, writers generated ideas and topics for writing as well as decided the target audience while in the drafting process, they translated ideas into written expressions. Although the writing process approach features different stages of writing, all the stages are cyclical and recursive, which indicates that writers may go back and forth in different stages (Badger, & White, 2000). For instance, some writers would still check the content and the organization in the revision stage while others may do textual changes at all stages of the writing process. In the revision stage, writers are expected to reread their writing, receive feedback from teachers or peers, and make substantive changes to improve the logic of ideas or the quality of their writing (Faraj, 2015; Laksmi, 2006).

2.2 Revision studies

During the writing process, various factors may impact second language (L2) writers' revision practice and behavior, such as their past L2 writing and learning experience, learners' perceptions about revision practice (Sengupta, 2000), and the application of writing tools and mediums.

To facilitate students' revision process, most pedagogical research has explored the application and effectiveness of feedback interventions, mostly focusing on teacher and peer feedback (Chang, 2012; Kamimura, 2006; Liang, 2010; Min, 2006; Wu, 2006; Yang, Badger, & Yu, 2006; Yu & Lee, 2014, 2015). From the learners' perspective, receiving feedback from a second person helps to notice aspects that need improvement in their drafts. Moreover, L2 learners could expect to receive feedback preferably from teachers over from their peers, and count on the feedback they have received to make corresponding revisions. On the other hand, pedagogical activities, such as using a revision checklist, guided questions, or read-the-text-out-loud are commonly suggested by most ESL composition textbooks, writing teachers, or writing centers. The rationale behind these approaches is to engage student writers to "switch from writer-centered to reader-centered" so that they can review, evaluate, and edit their drafts with fresh eyes (Purdue Online Writing Lab).

More recently, a wide range of applications of computer-mediated, digital tools and online writing environments has offered new opportunities as well as challenges to engage learners in writing practices, especially in L2 writing classrooms (Chao & Huang, 2007; Dressman, McCarthey, & Prior, 2019; Zheng & Warschauer, 2017). Particularly, compared with traditional, text-based writing practices, computer-mediated tools could contribute to a greater frequency of text revisions at the discourse level or at the syntactic level in L2 writers' writing (Li & Cumming,

2001). However, less attention has been paid to how self-revision could be triggered in the writing process. Most importantly, while many revision strategies request learners to apply linguistic resources to make a textual revision or to make revisions "intuitively", teachers and researchers have been exploring other possible resources, means and strategies for writers to apply for making substantive changes to improve their own writing performance.

Self-revision provides learners with opportunities to view their own writing reflectively, which could raise their responsibility as writers. It is also a valuable way that helps to increase learner autonomy in the learning of writing (Cresswell, 2000). When learners become aware of their writing styles and are conscious of their decisions and actions in writing and revising, this awareness will lead to growth as experienced writers and also make what learners learned in a writing classroom into transferable writing competence (MaCarthy, Meier, & Rinderer, 1985; Zimmerman & Kitsantas, 2002).

2.3 Digital Multimodal Composing

Digital multimodal composing (DMC) refers to "a textual practice that involves the use of digital tools to produce texts by combining multiple semiotic modes that include, but are not limited to, image, word, and soundtrack" (Jiang, 2017). In recent years, there is a growing concern about integrating DMC into English writing pedagogy. Pedagogical implications of multimodal L2 writing have highlighted its potentials in facilitating learners' understanding and engagement in the writing process (Vandommele, et al., 2017), autonomy and voice-enhancing (Hafner & Ho, 2020).

Much research has attempted to integrate different modes in learning projects, such as digital storytelling, in order to facilitate EFL learners' language learning and to explore the affordances of multimodality in the learning process.

Several studies have reported the potentials of using nonverbal modes to compensate for students' writing difficulties (Hafner, 2013; Nelson, 2006, Yang, 2012). In the study by Shin and Cimasko (2008), it examined how ESL writers in a freshman composition class learned to compose multimodal argumentative essays. The findings revealed that students used non-linguistic modes to support the written texts as well as to project their cultural and national identities and to express emotional connections with the writing topics. More recently, Dzekoe (2017) studied how the implementation of computer-based multimodal composing activities (CBMCAs) helped ESL students to acquire the English language through writing and how CBMCAs triggered ESL students to make self-revisions. Specifically, the researcher integrated a listening activity (i.e. NaturalReader) and an interactive poster activity (i.e. Glogster) in the prewriting stage. The findings revealed that the integration of various modes helped students to notice linguistic and rhetorical aspects of writing that needed improvement, and thus making more content-level textual changes. In addition to highlighting the benefits of integrating multimodal composing activities, the researcher acknowledged that it is equally important to call for attention to a pedagogical shift from the curriculum that focuses on "learning-to-write" into "writing-to-learn".

3. 研究問題 Research Question

This teaching research project is to explore the pedagogical applications of multimodal composing activities in EFL writing classrooms. By anchoring multimodal composing activities with process writing, the teaching design aims at triggering self-revision practices of EFL writers. Specifically, two research questions guided this project are listed as follows:
   (1) What types of revisions (i.e. micro-level versus macro-level revisions) do students make when prompted by multimodal composing activities?
   (2) How do students' writing experiences or their English writing proficiency relate to the types and frequency of self-initiated textual changes?
   (3) How do multimodal composing activities impact students' perceptions of the English writing and revising process?

4. 研究設計與方法 Research Methodology

The student participants were recruited from two sections of the Academic English Writing course, including 39 undergraduate students and 21 graduate students with medical and health-related majors. Adopting a mixed-method approach, primary data included (1) students' revision history, (2) students' multimodal writing projects, (3) students' reflective journals, (4) the teacher's field notes, (5) a questionnaire, and (6) grades of students' draft and revised version of research papers. Quantitative data were analyzed to examine the types and frequency of self-revisions and to associate types of self-revisions with the overall writing quality. On the other hand, qualitative data, which triangulated teacher's observations, students' reflections, and students' multimodal writing products, were analyzed using content analysis to reveal how multimodal composing activities facilitated self-revision behavior.

Specifically, to analyze the types and frequencies of students' self-revisions, the major textual documents were the two drafts of students' research papers. Each student's research papers, Research paper-Draft 1 and Research paper-Draft 2 (hereafter referred to as R-D1 and R-D2), were compared using "Compare Documents" in Microsoft Word, as shown in the screen print (Figure 1). All the textual changes appearing in the "Revisions" pane at the left side of the screen were scrutinized, while format changes (e.g. adding spacing, adjusting fonts) were eliminated from the revision list. The principal investigator further computed numbers and frequency of textual changes as well as analyzed the types and rhetorical functions of each revision.
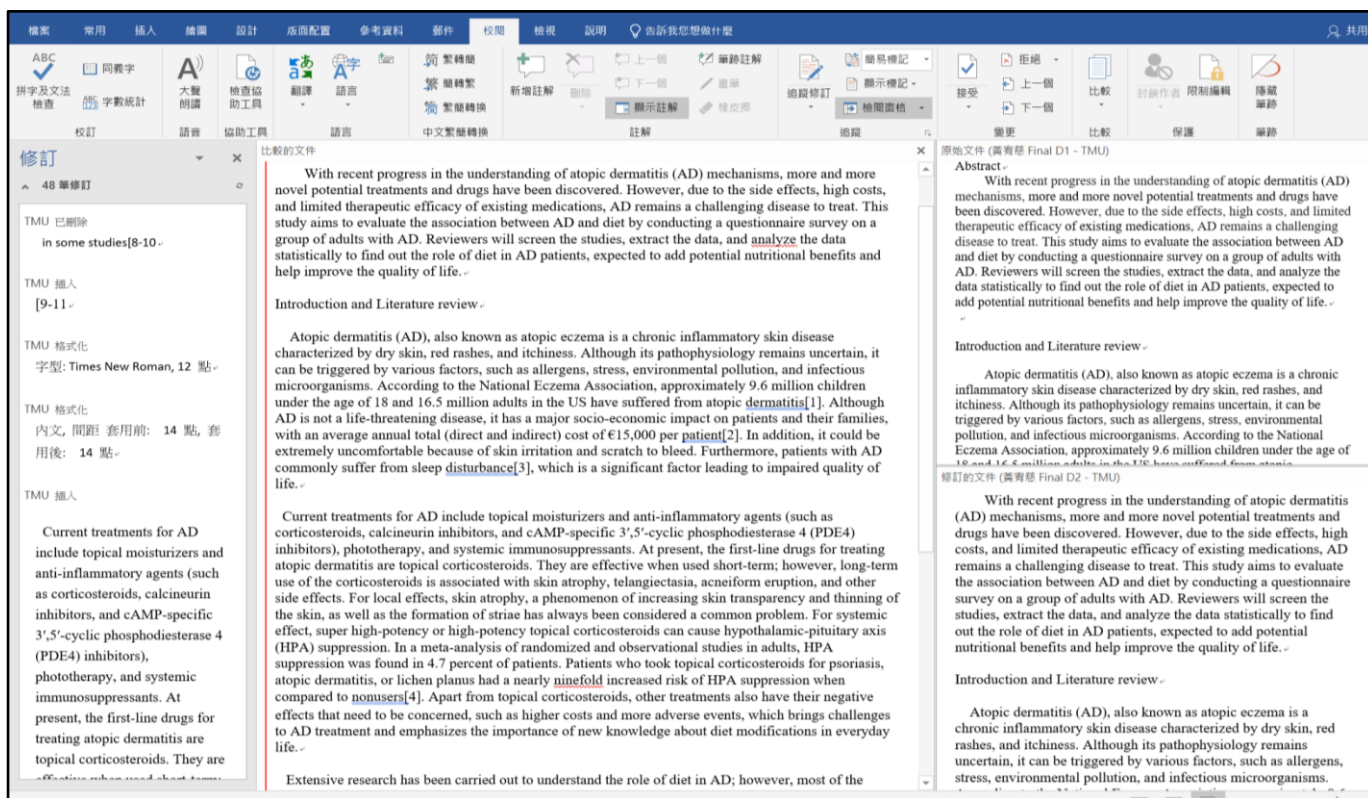

Figure 1 Sample printscreen of textual changes between R-D1 & R-D2

5. 教學暨研究成果 Teaching and Research Outcomes
(1) 教學過程與成果

To facilitate students' self-revision practices, the course started with a whole class revision instruction and then introduced multimodal composing activities as a teaching intervention in the revision process. Detailed guidance of revision instruction and multimodal composing activities were explained as follows.

Step 1: A whole-class revision instruction

In Week 2, the instructor planned the whole-class revision instruction, which included a number of learning activities, pair work, and collaborative practice. Process writing theory was introduced to students in accompaniment with the explanation of multimodal composing projects. Learning activities include audience awareness (Appendix A), and revision practice (Appendix B) via Google Docs.

Step 2: Multimodal composing procedure

After the whole class instruction, students composed a sequenced multimodal composing assignment, which included a proposal and a final research paper based on the same research topic. Students were guided to complete two cycles of the multimodal composing practices as illustrated in Figure 2. Each cycle started with and ended in text-based practices while a multimodal composing activity was implemented between the first and the second draft. After the multimodal activities, students were encouraged to scrutinize the first drafts, practiced a self-initiated revising process, and then submitted their revised texts as the second drafts to the instructor for grading via Google Classroom.
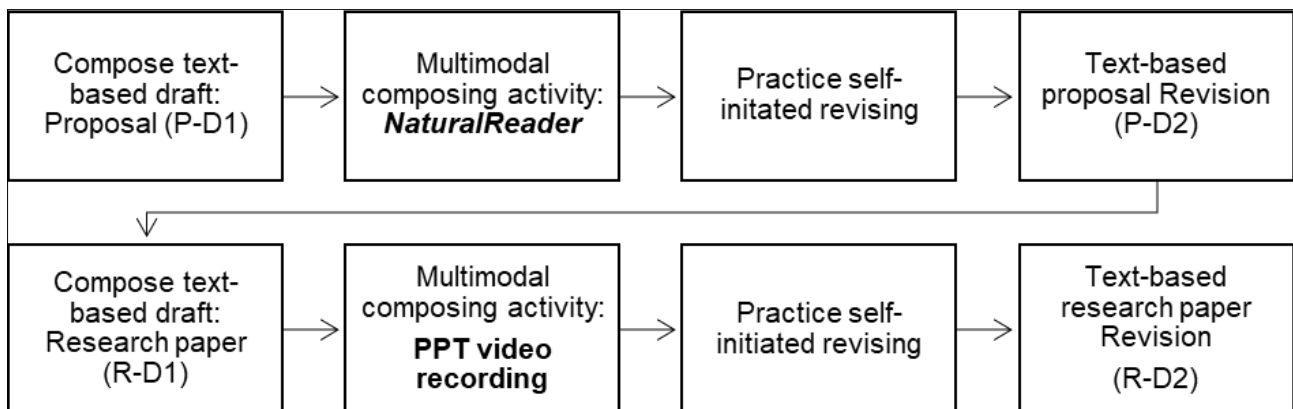

Figure 2. Writing cycle of the sequenced multimodal composing process

The detailed multimodal composing procedure was listed in Table 1. The sequenced-multimodal composing project was designed in accordance with writing process theory and facilitated by digital technologies, including Google Docs, an online Text-to-Speech program, and Microsoft PowerPoint.

Table 1. Multimodal composing procedure

Sequenced-Multimodal composing project	Composing activities Teaching design	Modes and modalities	Assisted digital technology
Research proposal draft (P-D1)	• Compose a text-based research proposal on a self-selected research topic. • Draft a research proposal that includes the research topic, personal experience or the research motivation, significance of the topic, and specific aspects to focus on.	Written	Google Doc
Use web-based Text-to-Speech (TTS) program	• Students use the TTS program to convert the written text of their P-D1 into speech. • Students listen to natural sounding voices of the RP drafts and highlight words,	Oral	*NaturalReader* / Google Doc

	sentences, or content issues that are needed revisions. • The instructor holds conferences with each individual student to provide suggestions and discuss directions for subsequent revision.		
Research proposal revision (P-D2)	• Students make revisions in accordance with the notes they kept on the RP drafts and the feedback they receive from the instructor.	Written	Google Doc
Research paper draft (R-D1)	• Students compose a text-based research paper draft, which is elaborated from the same topic of the RP.	Written	Google Doc
Multimodal presentation	• Record a 3-5-minutes academic presentation using Microsoft PowerPoint. • Integrate verbal (e.g. oral narration, typology) with non-verbal modes (e.g. still images, infographics). • After the PPT video presentation, students are required to reflect on the incongruities between intended meaning and the actual verbal execution, especially in the content, organization, and sentence aspects. • The instructor holds conferences with each individual student to provide suggestions and discuss directions for subsequent revision.	Written/ Oral/ Visual	Microsoft PowerPoint
Research paper revision (R-D2)	• Students revise research paper drafts based on the reflections and feedback.	Written/ Visuals	Google Doc

In the following paragraphs, students' learning outcomes were presented in accordance with the three research questions proposed.

RQ1: What types of revisions were prompted by multimodal composing activities?

First, the findings revealed that multimodal composing activities elicited students to make both macro-level (e.g. content, organization) and micro-level (i.e. word choices, mechanism) revisions at word, phrase, sentence, and paragraph level. The text analysis of students' R-D1 and R-D2 showed that there were four major types of macro-level revisions, including addition, deletion, reshuffling, and replacement; and three types of micro-level revisions, including punctuations, spellings, and mechanisms (Table 2).

Table 2. Revision types and textual change levels in students' research paper drafts

Revision type		Textual change level
Macro-level	Definition: Macro-level changes refer to types of	• Word

	revisions that affect the quality of content or argument. The following are the macro-level changes coded from students' drafts: 1. Addition 2. Deletion 3. Reshuffling 4. Replacement	● Phrase or sentence ● Paragraph
Micro-level	Definition: Micro-level changes refer to types of revisions that do not affect the content or argument in the original drafts. The following are the micro-level changes coded from students' drafts: 5. Punctuations 6. Spellings 7. Grammar mechanisms (i.e. Subject-verb agreement, articles, singular/plural form)	● Word

In addition, macro-level revisions made by students were found to improve the overall writing quality since most of the revisions helped to improve either the quality of writing or the persuasiveness of academic arguments. Based on the analysis, five rhetorical functions of the textual changes were identified:

(1) to enrich the content or academic argument
(2) to increase the clarity of message
(3) to improve accuracy of the language use
(4) to achieve better coherence of arguments
(5) to display attitude of the writer

RQ 2: How do students' writing experiences or their English writing proficiency relate to the types and frequency of self-initiated textual changes?

Interestingly, it is found that multimodal composing activities encourage students with relatively less academic writing experience or at the intermediate level of English writing proficiency to make more revisions, especially at the macro-level. This finding challenges what a majority of revision studies have argued about self-revision behavior of novice writers. That is, it has been argued that students with lower English writing proficiency or less writing experience may revise at a superficial level, referring to textual changes that failed to improve the content or global issues in their drafts. However, in this teaching project, the text analysis showed that in general, compared to the students who were more experienced writers or with advanced level of English proficiency, those with less writing experience or with intermediate level of writing proficiency made more types of revisions at the word, phrase/sentence, and paragraph level. In addition, compared to word and paragraph level revisions, students with less writing experience or at the intermediate level made much more changes at the phrase and sentence level than those at the advanced level.

Figures 3-5 illustrated the types and the frequency of revisions at three levels made by two groups of students. As shown in Figure 3, novice students did more additions to R-D2, especially at the phrase/sentence level.
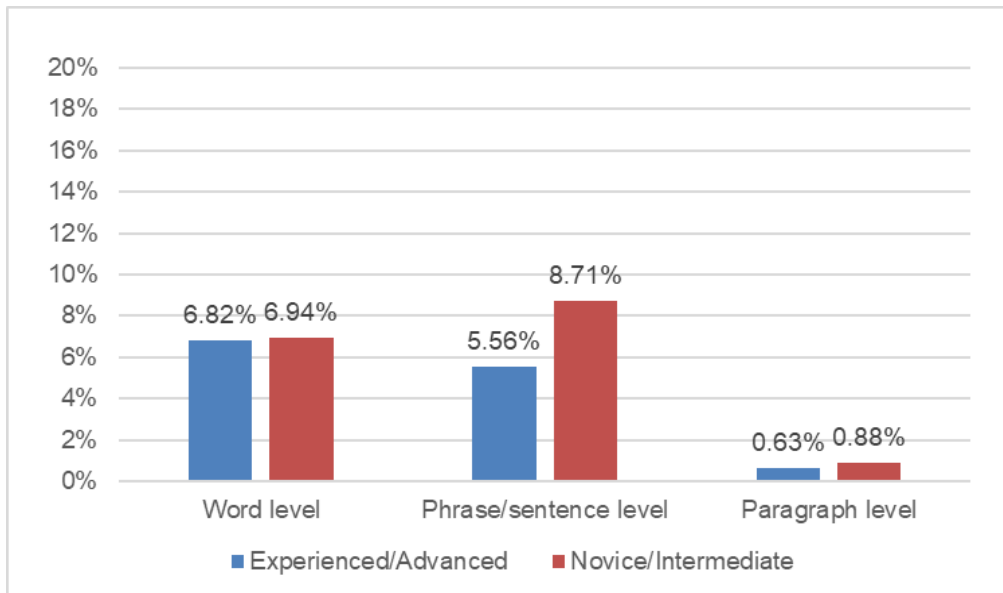
Figure 3. Frequency of "addition" practice by two groups of students

Moreover, as can be seen in Figure 4, students at the intermediate level made more deletions, at the phrase/sentence and paragraph level. The text analysis revealed that the major two reasons for deletions were (1) to eliminate contents that were not closely related to the main arguments and (2) to trim phrases or expressions that were redundant.
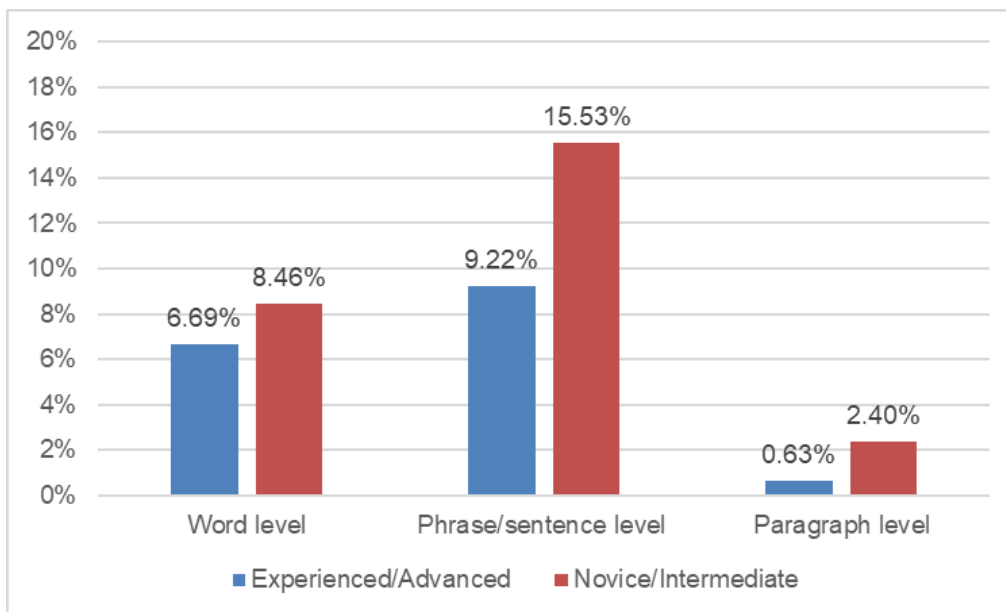

Figure 4. Frequency of "deletion" practice by two groups of students

The more textual revisions in "additions" and "deletions" by novice students may be attributed to the reason that they were still writing to explore the research topics. As a result, in the revising process, they were adjusting the logic or the main argument of their drafts.

Figure 5 showed that students at the intermediate level made more textual changes on replacement and mechanisms. Regarding the replacement, it was found that novice students learned to replace terminologies or medical terms with shorter forms, such as using abbreviations. On the other hand, novice students made twice as many revisions on mechanisms than advanced students did. This finding was not surprising since advanced students or those with more writing experience may have better command of the English language, which allowed them to produce more accurate expressions or spellings in the first draft. Yet, for intermediate students, they may focus on getting

the messages across at first while failing to pay attention to mechanisms in earlier drafts. Thus, it was anticipated that more textual changes relating to mechanisms were identified. However, students at the advanced level made slightly more reshuffling changes, which improved the coherence of their writing.
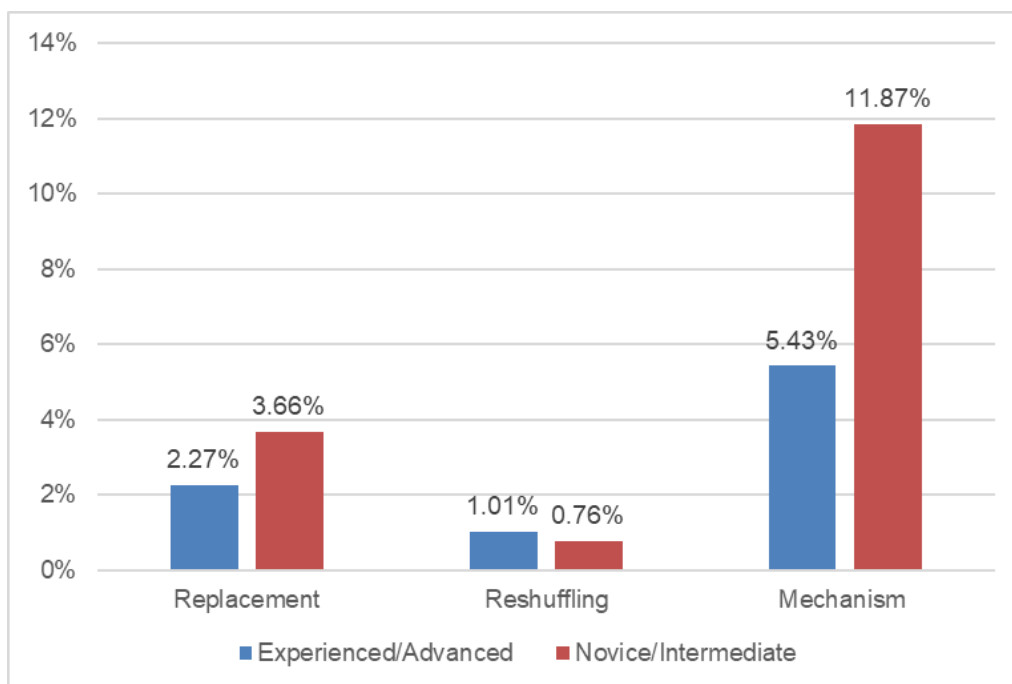

Figure 5. Other types of revision practice by two groups of students

RQ 3: How do multimodal composing activities impact on students' perceptions of the English writing and revising process?

Thirdly, multimodal composing activities are found to help students establish more ownership over their writing and enhance students' writer autonomy. One important reflection proposed by most students was that multimodal activities have challenged their perspectives about revising practices in English. When revising practices were dominated merely by the linguistic mode, teachers' commentary and feedback were regarded as the only solution to students' writing problems. On the other hand, it is found that multimodal composing activities provide students with alternative channels to examine the effectiveness of self-expression, which especially help students who have difficulty in using academic English to identify themselves as professional writers rather than English learners.

(2) 教師教學反思

This teaching research project aims to explore the pedagogical applications of multimodal composing activities to facilitate the teaching and learning of academic English writing, especially eliciting students' self-revision ability. Based on students' learning outcomes, it is found that the integration of multimodal composing activities not only encourage students to make textual revisions that improve their writing quality, but also help them to take an initiative role as active writers. In addition to the learning of the academic English writing skills, it is equally important for students to learn relative writing strategies, including revising strategies and the abilities of using digital tools that assist their writing process.

Furthermore, while implementing multimodal composing activities, it is noted that a majority of students would still express their expectation toward the instructor for constructive feedback. One of the major reasons is that the instructor may be the only source for feedback they could count on. Secondly, since the instructor is the person who assigned the writing tasks and set

up the requirement for tasks, students revealed the tendency to "write to live up to the expectation of the instructor." Especially for students who did not have a genuine learning need for academic writing, they replied more on the instructor's feedback to improve their writing in order to meet the writing requirements. In contrast, students with a specific learning goal, such as writing up their research manuscripts or thesis proposals, displayed more autonomy in the self-revision practices. They made textual changes not merely to improve their writing, but to meet the requirements of the genre–in this case, research papers.
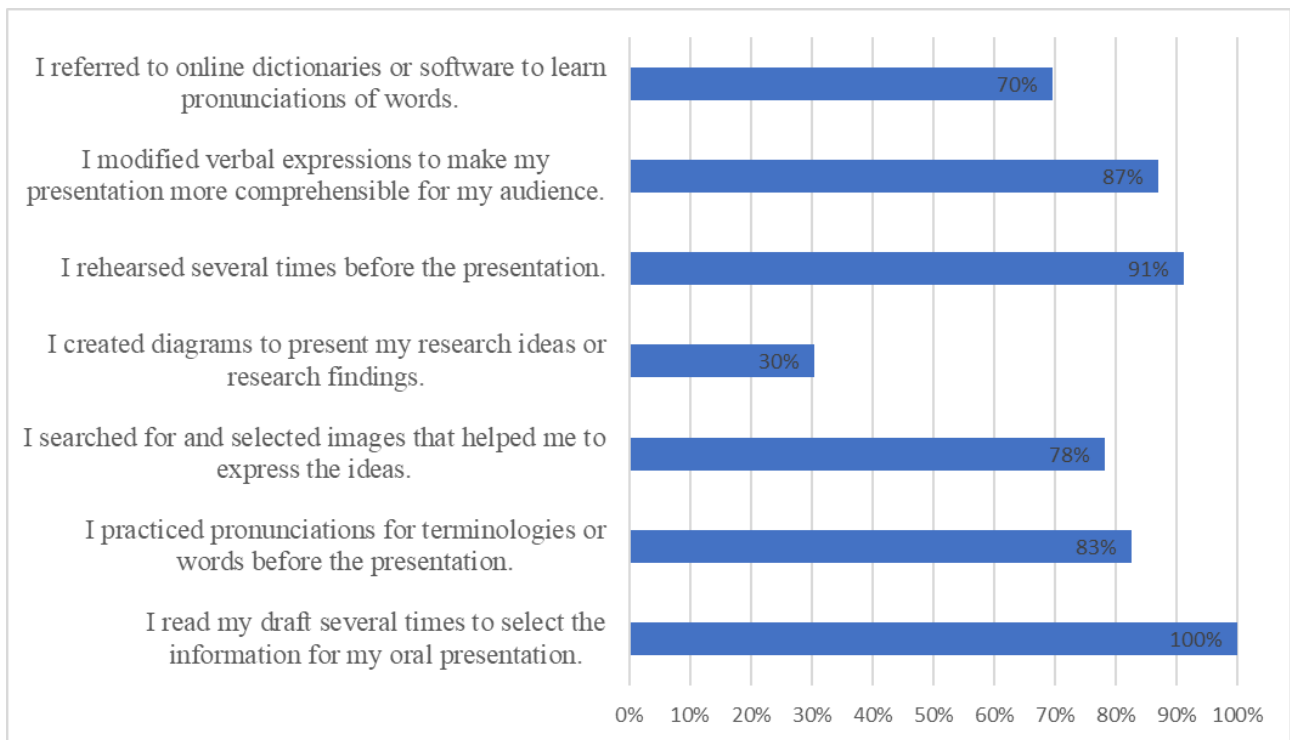
(3) 學生學習回饋

When asking students to reflect on their revising behavior and practices, most students reported that they had made great effort in the writing and revising process in order to improve the quality of their writing. In addition to the multimodal composing activities implemented in the revising process, it was found that students learned to apply multimodal approaches in the revising process, including reading, reading-out-loud, and listening to their drafts from the text-to-speech softwares (Table 3).

Table 3. Effective revising strategies that students applied

Revising strategies	Strongly agree	Agree	Disagree	Strongly disagree
I read my draft several times and highlight parts that I need to revise.	43.5%	47.8%	4.3%	4.3%
I read out loud my draft.	26.1%	43.5%	21.7%	8.7%
I read more articles in order to gain more ideas for improving my draft.	78.3%	13.0%	8.7%	0%
I used text-to-speech software and listened to my draft.	21.7%	26.1%	39.1%	13.0%
I asked my friend(s) to read my draft and gave me suggestions.	13.0%	34.8%	34.8%	17.4%

On the other hand, to evaluate the effectiveness of the multimodal composing activity, students were required to reflect on their PPT video presentation process. As shown in Figure 6, the video presentation activity motivated students to scrutinize both the content and the language expression in their drafts. Specifically, all students reported that when preparing the PPT video presentation, they read their drafts several times in order to select the most important messages for the presentation. This process helped students to review their drafts and to transform their roles from writers to readers. In addition, 87% of the students reported modifying verbal expressions to make their research ideas more comprehensible for audiences from different disciplines. Moreover, 83% of the students centered on practicing pronunciations of terminologies or words.

The chart shows percentages for various multimodal composing activities:
- I referred to online dictionaries or software to learn pronunciations of words. — 70%
- I modified verbal expressions to make my presentation more comprehensible for my audience. — 87%
- I rehearsed several times before the presentation. — 91%
- I created diagrams to present my research ideas or research findings. — 30%
- I searched for and selected images that helped me to express the ideas. — 78%
- I practiced pronunciations for terminologies or words before the presentation. — 83%
- I read my draft several times to select the information for my oral presentation. — 100%

6. 建議與省思 Recommendations and Reflections

The findings of this project suggest that self-revision could be facilitated by guiding students to examine the effectiveness of their writing through multimodal composing activities. It is also found that while students' insufficient revision ability may be contributed to the lack of training in revising skills and strategies, it is worth noting students' existing conceptions about English writing and revising is a fundamental factor that affects the types of revisions students made and the role of teacher's feedback on the revising process. On one hand, it is highly acknowledged that feedback from experienced readers (e.g. teachers, peers, paper reviewers) have a significant role in the quality of subsequent revisions being made by student writers. On the other hand, students should be guided and taught to act more actively, confidently, and competently as L2 writers and take more responsibility for their own writing. As a result, it is suggested that in addition to developing an effective model for making substantive and quality revisions, it is important to help our student writers to establish their L2 writer identities.

Finally, while increasing attention has been raised on the impact of digital and multimodal activities on learning, this project provides important insights into how English writing teachers could maximize the potential of multimodal composing activities not merely to enhance student writers' academic English writing proficiency but also to foster student writers' autonomy in the long run.

Note: 本結案報告因部分內容投稿期刊，因此延後至 2024 年 9 月 30 日公開。

二、參考文獻 References

Badger, R., & White, G. (2000). A process genre approach to teaching writing. *ELT Journal*, *54*(2), 153-160.

Bayat, N. (2014). The Effect of the Process Writing Approach on Writing Success and Anxiety. *Educational Sciences: Theory and Practice*, *14*(3), 1133-1141.

Chang, C. F. (2012). Peer review via three modes in an EFL writing course. *Computers and Composition, 29*(1), 63-78.

Chao, Y. C. J., & Huang, C. K. (2007, June). The effectiveness of computer-mediated communication on enhancing writing process and writing outcomes: The implementation of blog and wiki in the EFL writing class in Taiwan. In *EdMedia+ Innovate Learning* (pp. 3463-3468). Association for the Advancement of Computing in Education (AACE).

Cresswell, A. (2000). Self-monitoring in student writing: Developing learner responsibility. *ELT Journal, 54*(3), 235-244.

Durga, V. S. S., & Rao, C. S. (2018). Developing students' writing skills in English-A process approach. *Journal for Research Scholars and Professionals of English Language Teaching*, *6*(2), 1-5.

Dressman, M., McCarthey, S., & Prior, P. (2009). Editors' introduction: Adolescents' literacy and the promises of digital technology. *Research in the Teaching of English*, 345-347.

Dzekoe, R. (2017). Computer-based multimodal composing activities, self-revision, and L2 acquisition through writing. *Language Learning & Technology, 21*(2), 73-95.

Elola, I., & Oskoz, A. (2016). Supporting second language writing using multimodal feedback. *Foreign Language Annals, 49*(1), 58-74.

Faraj, A. K. A. (2015). Scaffolding EFL Students' Writing through the Writing Process Approach. *Journal of Education and Practice*, *6*(13), 131-141.

Ferris, D. R., & Hedgcock, J. S. (2013). *Teaching ESL composition: Purpose, process, and practice* (3rd ed.). New York, NY: Routledge.

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

Hafner, C. A. (2013). Digital composition in a second or foreign language. *TESOL Quarterly, 47*, 830–834.

Hafner, C. A., & Ho, W. Y. J. (2020). Assessing digital multimodal composing in second language writing: Towards a process-based model. *Journal of Second Language Writing*, *47*, 100710.

Jiang, L. (2017). The affordances of digital multimodal composing for EFL learning. *ELT Journal, 71*(4), 413-422.

Kamimura, T. (2006). Effects of peer feedback on EFL student writers at different levels of English proficiency: A Japanese context. *TESL Canada Journal*, 12-39.

Laksmi, E. D. (2006). "Scaffolding" students' writing in EFL class: Implementing process approach. *TEFLIN Journal*, *17*(2), 144-156.

Li, J., & Cumming, A. (2001). Word processing and second language writing: A longitudinal case study. *International Journal of English Studies, 1*(2), 127-152.

Liang, M. Y. (2010). Using synchronous online peer response groups in EFL writing: Revision-related discourse. *Language Learning & Technology, 14*(1), 45-64.

McCarthy, P., Meier, S., & Rinderer, R. (1985). Self-Efficacy and writing: A different view of self-evaluation. *College Composition and Communication, 36*(4), 465-471.

Min, H. T. (2006). The effects of trained peer review on EFL students' revision types and writing quality. *Journal of Second Language Writing, 15*(2), 118-141.

Nelson, M. (2006). Mode, meaning and synaesthesia in multimedia L2 writing. *Language Learning and Technology, 10*(2), 56–76.

Wu, W. S. (2006). The effect of blog peer review and teacher feedback on the revisions of EFL writers. *Journal of Education and Foreign Languages and Literature, 3*(2), 125-138.

Yang, Y.-F. (2012). Multimodal composing in digital storytelling. *Computers and Composition, 29*, 221–238.

Yang, M., Badger, R., & Yu, Z. (2006). A comparative study of peer and teacher feedback in a Chinese EFL writing class. *Journal of Second Language Writing, 15*(3), 179-200.

Yeh, H. C., Heng, L., & Tseng, S. S. (2020). Exploring the impact of video making on students' writing skills. *Journal of Research on Technology in Education*, 53(4), 446-456.

Yu, S., & Lee, I. (2014). An analysis of Chinese EFL students' use of first and second language in peer feedback of L2 writing. *System, 47*, 28-38.

Yu, S., & Lee, I. (2015). Understanding EFL students' participation in group peer feedback of L2 writing: A case study from an activity theory perspective. *Language Teaching Research, 19*(5), 572-593.

Sengupta, S. (2000). An investigation into the effects of revision strategy instruction on L2 secondary school learners. *System, 28*(1), 97-113.

Shin, D. S., & Cimasko, T. (2008). Multimodal composition in a college ESL class: New tools, traditional norms. *Computers and Composition, 25*(4), 376-395.

Sommers, N. (1980). Revision strategies of student writers and experienced adult writers. *College Composition and Communication*, *31*(4), 378-388.

Vandommele, G., Van den Branden, K., Van Gorp, K., & De Maeyer, S. (2017). In-school and out-of-school multimodal writing as an L2 writing resource for beginner learners of Dutch. *Journal of Second Language Writing, 36*, 23-36.

Weigle, S. C. (2005). Second language writing expertise. In K. Johnson (Ed.), *Expertise in language learning and teaching* (pp. 128–149). Hampshire, UK: Palgrave Macmillan.

Weigle, S. C. (2014). Considerations for teaching second language writing. In M. Celce-Murcia, D. M. Brinton, & M. A. Snow (Eds.), *Teaching English as a second or foreign language* (4th ed., pp. 222–237). Boston, MA: National Geographic Learning.

Zheng, B., & Warschauer, M. (2017). Epilogue: Second language writing in the age of computer-mediated communication. *Journal of Second Language Writing, 36*, 61-67.

Zimmerman, B. J., & Kitsantas, A. (2002). Acquiring writing revision and self-regulatory skill through observation and emulation. *Journal of Educational Psychology, 94*(4), 660-668.

三、附件 **Appendix**

Appendix A: Teaching material of audience analysis

Critical Reading and Thinking Practice

I. Read the following two paragraphs—A & B, which address the same topic.

   A. Looking ahead and planning your schedule
   So, you have a manuscript in your life? As demanding as a jealous lover and as burdensome as unpaid debts, the weight of this new presence can be difficult to cope with when you may already be juggling family, a job, studies, friends, and perhaps a hobby or exercise programmer. A little planning can make the load easier to bear…

   B. Time management and manuscript production
   The production of a manuscript necessarily involves issues of time management. A significant commitment of time must be made in the production of a lengthy work therefore several factors should be considered from the onset. It is often difficult to incorporate an additional workload into an already heavy agenda, and so, time management planning is essential to successful completion of the project.

II.   With your group members, discuss the prompting questions.

   A. How do you define the target audience for Paragraph A and B?
   B. How does Paragraph A differ from Paragraph B in terms of language styles, registers, or word choices?

Reference: Coffin, C. [et al.]. (2003). *Teaching academic writing: a toolkit for higher education.* NY: Routledge.

Appendix B: Teaching material of audience analysis

Revising Practice

What writing issues have you noticed from the following paragraph? Make possible revisions to connect ideas more effectively in writing. You can add, delete, re-order or club words/phrases to achieve a better information flow.

> The hotel is famous. It is one of the most well-known hotels in the country. The latest international dancing competition was held at the hotel. The hotel spent a lot of money to advertise the event. Because the hotel wanted to gain an international reputation. But not many people attended the event.

Look at the following paragraph. Make possible revisions to connect ideas more effectively in writing. You can add, delete, or club words/phrases to achieve a better information flow. When you are finished, read other's revisions.

b1011101 47	The hotel spent a lot of money to advertise the latest international dancing competition which was held at the one of the most well-known hotels in the country because the hotel wanted to gain an international reputation, but not many people attended the event.
林采翰	The hotel is so famous that it is one of the most well-known hotels in the country. To gain an international reputation, the hotel held the latest international dancing competition and spent a lot of money on advertising; however, not many people attended the event.
林紀妤	One of the most famous hotels in the country held the latest international dancing competition. The hotel spent a lot of money to advertise the event for the sake of gaining international reputation, but it's in vain, not many people attended this event.
黃翊	One of the most well-known hotels in the country held the latest international dancing competition for gaining an international reputation. Although the hotel spent a lot of money to advertise the event, not many people attended the event.