

JALT2024 • MOVING JALT INTO THE FUTURE: OPPORTUNITY, DIVERSITY, AND EXCELLENCE

NOVEMBER 15-18, 2024 • SHIZUOKA GRANSHIP, SHIZUOKA, JAPAN

Navigating the Review Process in a World of Generative Al

Matthew Armstrong

Kyushu University

Tanya McCarthy

Kyoto University

Reference Data:

Armstrong, M. I., & McCarthy, T. M. (2025). Navigating the review process in a world of generative Al. In B. Lacy, R., P. Lege, & P. Ferguson (Eds.), *Moving JALT Into the Future: Opportunity, Diversity, and Excellence*, JALT. https://doi.org/10.37546/JALTPCP2024-02

The benefits of peer review have long been recognized in research literature as a key component in Academic Writing courses. As writing courses become more inundated with Al-generated (GenAl) content, however, it is important for instructors to rethink feedback practices in second language classrooms. This action research was conducted as part of a three-year government funded study aimed at understanding the positioning of four types of feedback (self-checks, peer review, teacher, and GenAl feedback) from learner perspectives. Survey results showed students' perceptions of the benefits and limitations of each type of feedback, as well as their preferences for the future as they advanced to more difficult writing courses. The paper concludes with considerations for language teachers to re-envision the feedback process in their specific teaching contexts to help improve students' critical assessment of their writing and facilitate academic integrity.

査読の利点は、学術的な文章作成における重要な要素として、研究文献で長らく認識されてきた。しかし、AI生成 (GenAI) コンテンツが文章作成の授業に浸透しつつある現在、第二言語学習者向けの授業におけるフィードバックの在り方を再考することが求められている。本リサーチは、政府による3年間の助成研究の一環として実施されたものであり、学習者の視点から、自己評価、査読、教師フィードバック、そしてGenAIフィードバックという4種類のフィードバックの位置づけを理解することを目的としている。調査結果からは、各フィードバックの利点および限界に対する学生の認識、ならびにより高度な文章作成課程への進級を見据えた際の学生の希望が明らかとなった。最後に、本稿では、言語教員が各自の教育現場に即した形でフィードバックの在り方を再構築し、学生の批判的評価能力の向上と学術的誠実性の涵養を促すための提言を行う。

There are many strategies for improving the quality of Academic Writing (AW) in L2 classrooms. The main source of feedback is the writing teacher who is expected to give feedback on several drafts of a piece of writing before submission. Today, however, peer-feedback is generally considered to be an essential academic skill for first-year students in higher education as a key component of learner development (Gao & Schunn (2023). Peer-feedback, however, can be challenging for less proficient L2 students as it requires a high degree of cognitive processing. It involves identifying strengths and areas to improve, making concrete suggestions for improvement, and coming to decisive conclusions about the quality of the writing (King, 2002; Zhang & Gao, 2024). Self-assessment through checklists is thus also encouraged as a means of reflecting on writing to improve writing competence. With the emergence of Generative AI (GenAI), such as Chat GPT (OpenAI, 2022), the feedback process has seen tremendous changes which require careful navigation in the current AW landscape.

The researchers of this study report on a three-year government-funded study which examined perceptions of four types of feedback, namely self-check, peer review, teacher, and GenAl feedback. In particular, the researchers sought to understand the benefits and limitations of each feedback type, as well as future preferences from learners' perspectives. Results helped the authors to understand the most suitable style of feedback to use in their L2 classrooms to help students improve critical assessment, promote independent learning, and encourage integrity in academic writing. Through this study, the authors hoped to provide more clarity on how to navigate the feedback process in a world of GenAl.

Four Feedback Types in Academic Writing

There are four types of feedback that can be used by instructors of AW courses. Traditionally, instructors have taken on the leading role in giving feedback as the "expert' or "authority" in the AW classroom. However, over the years, as communicative methods



began to transform L2 classrooms and research into the efficacy of corrective feedback increased, teacher feedback, in turn, shifted to helping learners take a more active part in the learning process. Through dialogue, students are now encouraged to think more deeply about their learning to address specific problems and critically think about how to make improvements instead of relying solely on the teacher for guidance (see Wei & Liu, 2024, for a systematic review of peer feedback). There are numerous studies which also encourage the use of checklists. Self-guided checklists, for example, are used as a starting point to train students in peer feedback (de Almeida Soares, 2021), facilitate awareness-raising (Vasu et al., 2018), enhance accountability (Ford, 2015), and improve overall writing competence (Ratminingsih et al., 2018). However, peer feedback has taken on the most prominent role today as it is "crucial for encouraging and consolidating learning" (Hyland & Hyland, 2006). Although research has shown that it is the reviewer (not the writer) who might benefit more from the peer-feedback process (Lundstrom & Baker, 2009), more recent studies have demonstrated that there are reciprocal benefits (Cao et al., 2019).

In the past two years, GenAl has become an "inextricably part of how students will write in the academy and beyond" (Dobrin, 2023, p. 20), with some pushback from instructors and administrative departments. Universities now recognize GenAl as an effective learning tool in AW classrooms but also acknowledge the potential for academic misconduct. Clear university policies have thus since been established at the authors' institutions, emphasizing ethical usage and academic integrity. Dai et al. (2023, p.84) conceptualized ChatGPT as having a "rich potential to empower students and enhance their educational experiences and resources." In their study, they found that GenAl provided more detailed feedback than the teacher's and of a similar quality. This finding was also similar to Mizumoto and Eguchi (2023), who found ChatGPT reliable and accurate. Escalante et al. (2023) recommended a blended approach as they found an equal balance among student preferences for AI and human feedback without having a negative effect on learning outcomes. On the other hand, Mayer (2024) cautions that students must be taught how to use GenAl ethically and responsibly. These studies illustrate that the research literature is not unequivocally supportive of any one method as each has its own benefits and drawbacks.

It is difficult to determine which type of feedback is most suitable for learners as it depends on various factors, such as the teaching context and approach, course goals, learner proficiency, level of feedback training, mode of review (oral or written), and even gender differences and power dynamics. This study, therefore, focused on student perception of the four types of feedback to ascertain which they found most suitable

for their needs, challenges faced, and how they preferred to move forward as they faced more advanced writing.

Research Background and Context

Since November 2022, when ChatGPT was launched publicly, there has been a significant rise in the number of free or reduced cost GenAl tools which have become available. In the authors' universities, this resulted in English teachers and administrative departments having to make sudden decisions about how or whether to incorporate GenAl into English courses and establish specific guidelines on its usage. In June 2023, the Japanese Ministry of Education, Culture, Sports, Science, and Technology (MEXT) released a public statement on how to handle Al in primary and secondary schools stating that "Generative Al should be addressed based on the potential benefits and possible risks that may arise from its use in educational fields" (MEXT, 2023a, pp. 29-30). The Ministry quickly followed up with a second document in July for technical colleges and universities (MEXT, 2023b) expressing that universities should take a proactive approach in providing appropriate guidelines depending on institutional goals. The researchers felt that it would be an excellent opportunity to discover learner perception of GenAl as well as current feedback practices.

Both researchers' universities place a strong emphasis on academic freedom and integrity as fundamental to education. Independent learning and critical thinking practices are an inherent part of the AW course to facilitate learner development. AW especially played a crucial role in preparing freshman students for more advanced in their second to fourth years. After one year, students were expected to understand how to produce logical, academic texts with well-supported ideas using credible sources. They were further expected to critically identify strengths and weaknesses in their own and other students' writing. For this study, GenAl was included along with self, teacher and peer-checks as part of the writing process making four feedback types (See Table 1).

Feedback Process During the Semester

Students were expected to complete two essays during the 16-week course. Several review activities and feedback lessons were included to help students critically reflect on their writing. The x-axis in Table 1 illustrates when writing assignments were due and how the four types of feedback were organized during the 16-week course. The authors also categorized each feedback type into categories and levels based on the expected standard of learner development at specific parts of the course. The y-axis shows the



three levels labelled as L1, L2, and L3. L1 feedback was more directive, L2 feedback was guided, and L3 emphasized higher cognitive processes that would foster learner development (see Appendix A for details).

Table 1
Four Types of Feedback and Expected Level of Self-directedness

	Writing Diagnostic				Essay 1 Feedback Essay 1 Essay 2 outline lesson submission outline			Feedback lesson	Essay 2 submission		ond to questions						
vels	Level 3												(S)	(T)			
Feedback Levels	Level 2						(S)	(P) (T)		(T) (AI)	(P)			(P) (AI)			
	Level		(T)		(T) (AI)	(P)											
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16

Key:

(L1) Level 1 Directive Feedback

(T) Teacher Feedback

(L2) Level 2 Guided Feedback

(P) Peer-feedback

(L3) Level 3 Developmental Feedback

(S) Self-check

(AI) Generative AI Feedback

Teacher Feedback

Following the process writing approach, students were asked to submit an outline three weeks before the final essay submission (Weeks 4 and 10). Detailed feedback was given on the first draft of the outlines by the teacher in a Google Document following the grading criteria. Students revised their drafts based on the teacher's advice in preparation for the peer-feedback lesson (Weeks 7 and 13). Outlines were graded as part of the final essay grade which gave students extrinsic motivation (see Kirchhoff, 2016) to participate actively during the feedback lesson. In the past when the outlines did not receive a grade, there were mixed levels of participation. Students were given the choice to use their L1 or L2 during peer feedback. Communication with the teacher was done in the L2. The same approach was used for the final essay. For the first essay, the teacher provided directive and guided feedback (L1-L2 in Table 1). For the second essay, only developmental (L3) feedback was given on the final essay to hand over

more responsibility to the learners. During and after peer-feedback lessons, students were invited to ask the teacher questions in the Google Doc on specific areas that they were uncertain about rather than use the generic phrase, "please check my essay." This encouraged the student to reflect deeply on their writing and engage in critical dialogue with the teacher.

Self-checklist

Before the peer-feedback class, students were asked to complete a self-checklist to assess their own writing. A five-point checklist was given for the first essay, and a more comprehensive eight-point checklist was used for the second essay. Appendix A gives an overview of the specific criteria included in each checklist.

Peer-Feedback

The peer-feedback class was held the week prior to final submissions. This gave students sufficient time to revise their writing and ask the teacher for assistance. Various group tasks (quizzes or games) were organized to review important grading criteria with the rest of the class time used for peer feedback and revisions. This "feed-forward" approach (Duncan, 2007) encouraged students to become more actively involved in the feedback process from an earlier stage of the writing process and helped them to be more proactive before the final assignment was due.

GenAl Feedback

After receiving advice from the teacher and peers, students prompted GenAl for feedback on specific areas and suggestions for improvement. The prompts and results (in L1 or L2) were shared in the open online forum to increase knowledge about how to use the tool effectively. In accordance with the rules of academic integrity and plagiarism, students were reminded not to simply copy and paste Al suggestions, but to critically think about the suggestions and decide if the Al advice corresponded with what was taught in class. It was also emphasized that Al feedback should match their personal style of communication (or their "voice").

Overall, having these four types of feedback on writing drafts helped students to understand their strengths and weaknesses in various AW components. By engaging in critical dialogue, students could review important points together, which encouraged learner development. As students' knowledge of AW conventions deepened, they began



to understand how to use GenAl as a tool for learning. Having to include an academic writing disclaimer at the end of their essays with a description of how/if GenAl was used and sharing the prompts (Appendix B) further helped students to understand how to become more self-reliant.

Data Collection and Analysis

Two questions guided this study:

- What are students' perceptions of the benefits and limitations of different feedback types in the AW classroom?
- What do students consider to be the most suitable method of feedback as they encounter more advanced writing courses?

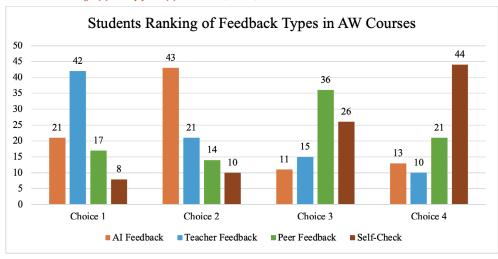
These questions sought to understand benefits, drawbacks, and future feedback preferences from student perspectives. A second study is currently being conducted to understand teacher viewpoints.

Data were collected through a survey conducted at the end of the semester about student preferences. Eighty-eight students completed the survey fully. Incomplete surveys were discarded. Students were informed that the researchers would be collecting responses for research purposes and that the results would have no effect on their grade. The researchers obtained consent to share survey results so that teachers could gain a better understanding of feedback preferences. Surveys were completely anonymous to protect student identities.

Survey Findings: Feedback Benefits, Drawbacks, and Future Preferences

Students were asked about their preferences in a survey administered at the end of the semester (Appendix C). Quantitative data was collected from questions 1-3 (Q1-Q3) and qualitative data was collected from Q4-Q5. Students responded to the survey in English. Regarding the first question (Q1), Figure 1 shows that students overwhelmingly chose teacher feedback as their first choice (42 of 88 students or 48%) followed by Al (21 of 88 students or 24%).

Figure 1
Student ranking of four types of feedback (n=88)

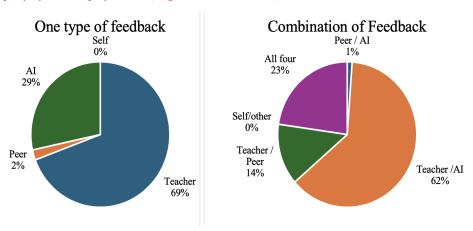


For their second choice, Al feedback was the preferred method (43 of 88 students or 49%) followed by teacher feedback (21 of 88 students or 24%. Peer review and self-checks received the lowest preference ratings.

Figure 2 illustrates both the most preferred feedback-type and preferred combinations of feedback for students among teacher, peer, and Al (Q2 and Q3 in the survey). As a follow-up, students were asked to explain the reason for their choices in Q4.



Figure 2
Specific feedback preferences (single and combination)



Again, students overwhelmingly chose teacher feedback (69%) if they were allowed only one type of feedback. Surprisingly for the researchers, 29% of students thought it would be ideal if they could use GenAl only for feedback. When asked about which combination of feedback they thought would be most suitable, students again chose Teacher/Al at 62%. This shows the level at which GenAl has started to influence student preferences over peer review. In past research conducted by the researchers, peer review was considered one of the more useful tasks in AW courses (McCarthy & Armstrong, 2019). This shift to GenAl as the preferred method yielded valuable insight.

Benefits and Challenges of Feedback Types

Qualitative data were first downloaded and then sorted into benefits and challenges under three categories, namely teacher, GenAl, and peer. There was no preference for self-checks. Employing content analysis, the researchers then searched for commonalities within the data.

Benefits

Appendix D presents a breakdown of the key reasons for learner preferences for three types of feedback. Salient points gleaned were that students consider teachers the

authority in the classroom as they set the tasks and grade the final product. Students do not fully trust feedback from other sources (peers or themselves) and consider GenAl to be the best method to complement teacher feedback. Students recognized the limits of teacher feedback (lack of time, immediacy, and quantity) and felt that using GenAl was a more suitable method to receive sufficient and more immediate feedback. Interestingly, although students recognized that GenAl feedback did not always match the assignment goals or course expectations, they felt that it could help to improve their writing in the following ways:

- consistent and accurate feedback on grammar and vocabulary
- concrete and detailed suggestions for improvement if the prompt is written well
- user-friendly, easily accessible at any time of the day (unlike the teacher), and offers multilingual support

Overall, students felt that GenAl was the best method to improve their writing outside of class. However, what they agreed on almost unanimously is that after receiving Al feedback, they required teacher feedback for final confirmation to produce a highquality piece of writing. This suggests perhaps that their level of self-directedness and/or knowledge of AW components was at a stage where they were not yet ready to take full responsibility for their learning. This dependence on the teacher as the final authority was natural for freshman students who had experienced only one year of university education. For students who preferred peer-feedback, they felt that classmates could help to generate additional ideas, express different viewpoints, and provide accurate feedback based on course requirements. As GenAl did not know course requirements, students relied on peers to ensure that essays met the expected standard. Students also reported that peer reviewers recognized bias and stereotypes, which AI tended to overlook. An interesting observation was that higher proficiency students tended to have a more positive overall attitude towards peer feedback, which is a similar finding to Gao et al. (2023). Working with peers encouraged a reciprocal relationship as students supported each other in improving their essays, which further created a more dynamic and interactive classroom atmosphere.

Challenges

Appendix D shows key challenges that learners experienced for the three feedback types. Research literature showed that the main issue typically perceived by students when receiving teacher feedback is the lack of detailed comments (Lee, 2008; Zacharias,



2007). However, in this study, the students' main concern was that the teacher was not always readily available. Although teacher feedback on initial drafts was detailed both written and orally, how often the teacher could provide feedback and the quantity of comments was limited due to time constraints, and number of students. Thus, students reported that it was more useful to prompt GenAl for feedback independently outside of class with the 90 minutes of lesson time being used for reviewing AW components and asking questions.

Regarding GenAl feedback, students were aware that it was not always trustworthy. GenAl did not understand specific structural patterns taught in class, nor did it produce credible or accurate sources unless specifically prompted. Even then, students realized that they had to read the source themselves to judge its credibility. Another major challenge for students was that without a well-written prompt, Al feedback was too long, overly generalized, and complicated to read, which made it difficult to decide which advice was beneficial. On the other hand, students reported in the survey that they were learning how to write better prompts to receive more effective feedback by reading other students' prompts in the forum and seeing the results generated (Appendix E).

Regarding peer feedback, some students lacked confidence to give feedback saying they did not have the ability (even when guided by self-checklists), and in one case, a student said it was "scary!" Some reported that they found their partner's feedback to be untrustworthy and/or "wrong." Although the teacher explained that even incorrect feedback could be beneficial as recognition of peer errors showed an understanding of AW knowledge, students argued that feedback was not useful unless it improved their writing.

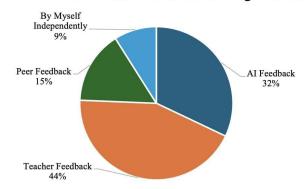
A final point raised by students was the preference for written feedback regardless of the type, as they were able to read it several times as they made revisions. Listening to the teacher during one-to-one sessions was difficult for lower proficiency students and a few said that they could not find the words quickly to respond to the teacher in the limited time frame. Students further reported that it was effective to take notes on their paper drafts or in a notebook while listening to the teacher's feedback. Google Docs thus proved to be an effective tool for the teacher to guide discussions, as well as leaving a 'paper' trail to remember feedback, check prior drafts, and follow student progress from draft to the final product.

Survey Findings: Beyond First Year Writing

When asked which feedback would be most suitable to prepare them for more advanced writing courses (Survey, Q5), students' responses were somewhat mixed (Figure 3).

Figure 3
Learner preference for feedback in the future

Preferences for Future Advanced Writing Courses



Similar to the previous responses given to Q1-Q3, Teacher Feedback remained the number one choice (44%), followed by Al feedback (32%). However, unlike Q1-Q3, which saw Teacher Feedback at 69% Al Feedback at 29%, Peer Feedback at 2%, and Self-checks at 0%, learners' felt that in the future, it would be more effective for them to discuss writing collaboratively with peers (15%) and think more independently about their own work (9%). The reasons given for their choices were overall more thoughtful as they carefully considered their future academic and research life at the university (see Appendix F for excerpts taken from survey responses).

Discussion and Concluding Thoughts

The purpose of this study was to understand student feedback preferences on academic writing, challenges faced, and their perceptions on how they would like to approach feedback in future writing courses. Findings presented in this study gave practical insights into the role of GenAl in AW courses and its impact on traditional teacher and peer feedback. It further offers suggestions for how instructors could navigate this new landscape.



GenAl as a Complement to Teachers and Peers

Students' inability to discern whether GenAl's feedback is accurate or not demonstrates that teacher feedback remains essential for instructors to help students navigate GenAl responses. GenAl feedback during the AW course was generally accurate concerning academic expression, logic and coherence. However, its inability to pick up certain nuances such as bias, stereotypes, and culturally offensive content made it necessary for teachers to raise awareness of its shortcomings and train students accordingly. With sufficient exposure to how to write effective prompts to match learning needs, GenAl can serve as a useful collaborator (Michel et al. 2025; Warschauer, et al., 2023) to facilitate action, such as helping students to improve writing problems that they have self-diagnosed.

GenAl and Independent Learning

As Al feedback can be tailored to personalize learning with effective prompts, it can be used effectively alongside self-checklists as a tool for transformation, motivation, and engagement. That is, if students use GenAl responsibly and collaboratively, they can self-diagnose weaknesses in their writing and then use GenAl to understand how to improve these areas. By training themselves how to write and rewrite prompts to address specific areas in their writing, students can engage with their learning more actively outside of the classroom and sharpen their critical thinking skills.

Overdependence on GenAl

Although several benefits of using GenAl emerged from the data, one area of major concern for the researchers observed in student responses was their trust in GenAl without critical assessment of the feedback responses. Without having deep foundation knowledge of academic writing competencies, some students struggled to understand the feedback, even in their L1. In some cases, students did not understand how to apply the advice, which resulted in simply copying and pasting the suggested improvements without further thought. In these instances, the teacher reminded students of academic integrity regarding plagiarism and directed them to the university's guidelines on GenAl usage. Students were especially encouraged to develop and trust their own 'voice' by back-translating English feedback into the L1. There were some students who disregarded the self-checklists, opted out of discussions with peers or the teacher, and decided to place their faith solely in GenAl feedback. At the end of the semester, these students were unable to confidently or effectively produce a piece of writing at the

expected standard, as they had not developed the ability to critically evaluate writing or deepen the learning process. In this way, used irresponsibly, GenAI feedback was found to negatively affect learner development.

Limitations and Suggestions for Future Research

The researchers did not try to identify whether GenAl or human reviewers were superior, or if students saw progress in their academic writing skills due to any particular method of feedback. Instead, we aimed to understand students' perceptions of the benefits and limitations of four types of feedback and their preferences as they advanced to more challenging writing assignments.

There are two limitations which need to be discussed before presenting the final reflections. Although this study included students in various faculties with varying levels of proficiency, it would be difficult to generalize findings to all AW teaching contexts. For instructors who have a similar student body and curriculum, this research can provide insights, but depending on factors such as students' attitude to feedback, proficiency level, course goals, number of students taught, and teacher constraints among others, results may differ. A second limitation is the burden on the teacher to prepare and provide different types of feedback for each assignment. To understand how to provide feedback, students need to be trained. This requires substantial effort from the teacher, which will not be possible in classes with large student numbers.

Currently, the researchers are conducting interviews with teachers to understand their perspectives on the four types of feedback. Sharing the findings from the study can help instructors to reflect on feedback practices in their own classrooms and lead to open discussions with colleagues. Another possible study would be to understand the relationship between students' proficiency level and the most suitable kind and level of feedback to help facilitate learner development. A third study, which the researchers have recently begun, is understanding how students are using GenAl for AW and analysing the prompts they use. Having an academic integrity disclaimer showing if/how GenAl was used and asking students to show the prompts helps students to understand the importance of maintaining academic integrity and the teacher can understand how to better guide the students.

Findings from this research were quite illuminating, and it is hoped that readers will reflect on their current teaching situations and consider how to (re)frame feedback in the AW process.



Notes

1. Google Docs is an Al-powered document to help create, edit, and collaborate in real time with others on content.

Bio Data

Matthew Armstrong has been teaching at Kyushu University for over 20 years and has published widely on peer-assisted learning in the classroom. His research interest mainly lies in creating inclusive classrooms and using authentic literary materials in the L2 classroom <armstrong@flc.kyushu-u.ac.jp>

Tanya McCarthy currently works at Kyoto University and has been teaching and advising second language learners for two decades. Her interests lie in learner autonomy, self-directed learning inside and outside the classroom, and maintaining inclusivity in learning spaces. Her recent research focuses on the power of meaningful and authentic dialogue to transform learning. <mccarthy.tanyamiranda.7n@kyoto-u.ac.jp>

References

- Cao, Z., Yu, S., & Huang, J. (2019). A qualitative inquiry into undergraduates' learning from giving and receiving peer feedback in L2 writing: Insights from a case study. *Studies in Educational Evaluation*, *63*, 102–112. https://doi.org/10.1016/j.stueduc.2019.08.001
- Dai, Y., Liu, A., & Lim, C. P. (2023). Reconceptualizing ChatGPT and generative Al as a student-driven innovation in higher education. *Procedia CIRP*, *119*, 84–90. https://doi.org/10.1016/j. procir.2023.05.002
- de Almeida Soares, D. (2021). Using 'Checklists' to train students in peer revision in the EFL writing classroom. *Humanising Language Teaching Magazine*, 9(3).
- Dobrin, S. I. (2023). *Talking about generative Al: A guide for educators*. Broadview Press. https://files.broadviewpress.com/sites/uploads/sites/173/2023/05/Talking-about-Generative-Al-Sidney-I.-Dobrin-Version-1.0.pdf
- Duncan, N. (2007). Feed-forward: Improving students' use of tutors' comments. Assessment & Evaluation in Higher Education, 32(3), 271–283. http://dx.doi.org/10.1080/02602930600896498
- Escalante, J., Pack, A., & Barrett, A. (2023). Al-generated feedback on writing: insights into efficacy and ENL student preference. *International Journal of Educational Technology in Higher Education*, 20, 57. https://doi.org/10.1186/s41239-023-00425-2
- Ford, K. (2015). Making checklists material for maintaining academic tone in EFL student writing. *JALT Materials Writers SIG*, *23*(2), 13–18.

- Gao, Y., An, Q., & Schunn, C. D. (2023). The bilateral benefits of providing and receiving peer feedback in academic writing across varying L2 proficiency. *Studies in Educational Evaluation*, *77*, 101252. https://doi.org/10.1016/j.stueduc.2023.101252
- Hyland, K., & Hyland, F. (2006). Feedback on second language students' writing. *Language Teaching*, *39*(2), 83–101. https://doi.org/10.1017/s0261444806003399
- Kirchhoff, L. (2016). Motivation in the writing centre: A peer tutor's experience. *Journal of Academic Writing*, *6*(1), 31–40. https://doi.org/10.18552/joaw.v6i1.282
- Lee, I. (2008). Student reactions to teacher feedback in two Hong Kong secondary classrooms. *Journal of Second Language Writing*, *17*(3), 144–164. https://doi.org/10.1016/j. jslw.2007.12.001
- Lundstrom, K., & Baker, W. (2009). To give is better than to receive: The benefits of peer review to the reviewer's own writing. *Journal of Second Language Writing*, *18*(1), 30–43. https://doi.org/10.1016/j.jslw.2008.06.002
- Mayer, C. (2024). Navigating the new frontier of generative Al in peer review and academic writing. In B. Buyserie & T. N. Thurston (Eds.), *Teaching and generative Al: Pedagogical possibilities and productive tensions*. Empower Teaching Open Access Book Series.
- McCarthy, T. M, & Armstrong, M. I. (2019). Peer-assisted learning: Revisiting the dyadic interaction process in L2academic writing. *Asian EFL Journal*, 23(3), 6–25.
- MEXT. (2023a, June16). Basic plan for the promotion of education. https://www.mext.go.jp/en/policy/education/lawandplan/20240311-ope_dev03-1.pdf
- MEXT. (2023b, July 13). 大学・高専における生成AIの教学面の取扱いについて【概要】[Handling of teaching and learning aspects of generative AI in universities and technical colleges (Summary)]. https://www.mext.go.jp/kaigisiryo/content/000245316.pdf
- Michel, M., Bazhutkina, I., Abel, N., & Strobl, C. (2025). Collaborative writing based on generative AI models: Revision and deliberation processes in German as a foreign language. *Journal of Second Language Writing, 67*, 101185. https://doi.org/10.1016/j.jslw.2025.101185
- Mizumoto, A., & Eguchi, M. (2023). Exploring the potential of using an Al language model for automated essay scoring. *Research Methods in Applied Linguistics*, 2(2), 100050. https://doi.org/10.1016/j.rmal.2023.100050
- OpenAl. (2022). Introducing ChatGPT. https://openai.com/index/chatgpt/
- Ratminingsih, N. M., Marhaeni, A. A. I. N., & Vigayanti, L. P. D. (2018). Self-assessment: The effect on students' independence and writing competence. *International Journal of Instruction*, *11*(3), 277–290. https://eric.ed.gov/?id=EJ1183438



- Vasu, K., Nimehchisalem, V., Fung, Y. M., & Rashid, S. M. (2018). The usefulness and effectiveness of argumentative writing self-assessment checklist in undergraduate writing classrooms. International Journal of Academic Research in Business and Social Sciences, 8(4), 200–217. http://dx.doi.org/10.6007/IJARBSS/v8-i4/4008
- Warschauer, M., Tseng, W., Yim S., Webster, T. J., Jacob, S., Du, Q., & Tate, T. (2023). The affordances and contradictions of Al-generated text for writers of English as a second or foreign language. *Journal of Second Language Writing*, 62, 101071. https://doi.org/10.1016/j.jslw.2023.101071
- Wei, Y., & Liu, D. (2024). Incorporating peer feedback in academic writing: A systematic review of benefits and challenges. *Frontiers in Psychology*, *15*. https://doi.org/10.3389/fpsyg.2024.1506725
- Zacharias, N. T. (2007). Teacher and student attitudes toward teacher feedback. *RELC Journal*, *38*(1), 38–52. https://doi.org/10.1177/0033688206076157
- Zhang, Y., & Gao, Y. (2024). Exploring the dynamics of student engagement with receiving peer feedback in L2 writing. *Assessing Writing*, 60, 100842–100842. https://doi.org/10.1016/j. asw.2024.100842

Appendix A

Explanation of Expected Level of Feedback During the Semester

	Teacher (T)	Peer (P)	Self-Check (S)	GenAl (Al)
			, ,	Collaborative
	Developmental Feedback: The	Reciprocal Peer Feedback: Peers	Eight-point Self-checklist on	GenAl: Students
			grading criteria:	'talk' with Al
	teacher responds	encouraged to		
	to specific	actively participate in the feedback	structure, content,	collaboratively
	questions from the learner who		language, format,	to improve areas
		process to	credibility of	of writing that
	has self-diagnosed	critically assess	sources, accuracy	they have self-
	weaknesses and	a peer's work in	of citations	diagnosed as
	asks for specific	a professional	and references,	problematic.
١.,	advice. This	manner.	Turnitin	Students critically
ack	requires deeper	Reciprocal	plagiarism	evaluate the
g	processing of	feedback (two-	detector;	feedback and
Level 3 Developmental Feedback	information which	way collaborative	academic integrity	determine that
[a]	leads to long-	feedback between	disclaimer	they have used
ent	term learning	peers of a similar	(plagiarism and	their own "voice"
Щ	and the ability to	proficiency level	use of GenAl).	when making
log	think critically	and/or degree	Checklist to	revisions. Full
eve	about writing.	of experience)	be completed	disclosure of Al
D	By reducing	should result in	before the peer	usage (how it
el 3	direct feedback,	deep reflection	review lesson and	was used (or not)
ě	students were	of points raised	then submitted	as well as the
-	forced to act more	for both students'	along with the	specific prompts or
	independently	strengths and	final product	questions written)
	and think more	areas to improve.	as part of the	as part of the
	critically about	Discussion done	grading process	academic integrity
	their writing.	completely in	to understand	disclosure.
		the L2 with the	students' ability	
		goal of improving	to critically self-	
		understanding	assess their own	
		of writing and	writing.	
		improving learning		
		outcome.		



		Teacher (T)	Peer (P)	Self-Check (S)	GenAl (Al)		
		Teacher Guided	Dialogic Peer	Five-point Self-	Assistive GenAI:		
		Feedback: The	Feedback: After	checklist on	GenAl used for		
		teacher reviews	reviewing key	grading criteria:	generating ideas		
		the specific criteria	grading points	structure, content,	for brainstorming		
		that will be used	for the specific	language, format,	and writing an		
		to grade writing	assignment,	and references for	outline. Students		
		assignments from	student(s) are	the specific writing	ask Al to give		
		the planning	encouraged to	assignment.	general advice		
		stages to the final	write constructive	Checklist to be	on their writing		
		product. Written	feedback on	completed before	and provide		
'	Level 2 Guided Feedback	feedback given via	a clean copy	the peer review	suggestions for		
;	qp:	Google Docs as	of the writer's	lesson and then	improvement.		
	Fee	suggestions and/or	assignment	used in discussion	Students engage in		
,	[pa]	probing questions.	(printed copy or	with peers to guide	critical discussion		
'	ıid(Students asked to	in Google Doc)	improvements.	about the Al		
	ษ	think of solutions	and then engage		feedback with		
,	2 2	to improve their	in dialogue		a peer based on		
	eve	writing based	to improve		grading criteria.		
	7	on teacher	peer's writing.		Students asked to		
		suggestions.	Discussion done		disclose whether		
		Verbal feedback	in the L1 or L2		GenAl was used in		
		given one-to-	based on comfort		their writing (or		
		one during the	level. The goal of		not) and in what		
		following lesson	the feedback is		capacity.		
		using the Google	to become more				
		Doc comments	critical when				
		and student	assessing another				
		replies to steer the	student's work.				
		discussion.					

		ı		
	Teacher (T)	Peer (P)	Self-Check (S)	GenAl (Al)
	Prescriptive	Guided Peer	Basic Self-checklist:	GenAl Use
	Feedback:	Feedback: Students	Checklist divided	Prohibited : GenAl
	The teacher	follow the basic	into before and	must not be used
	provides detailed	self-checklist	after writing	at any point during
	feedback on	when assessing	the assignment.	the assignment.
	errors identifying	their peer's	Before writing:	Students are
	strengths, areas	writing. Writer	brainstorming,	required to write
	to improve	and reader(s)	researching the	assignments
	and specific	compare findings	topic, writing	based on prior
\ \ \	suggestions or	to improve writing	an outline and	knowledge and/
acl	recommendations	assignments.	a first draft.	or through
Level 1 Directive Feedback	to improve the	Discussion done	After writing:	researching
Fee	writing (Google	in the L1 or L2	structure; quality	sources. Students
ive	Docs or printed	based on comfort	of key sentences	are asked to
scti	assignment). This	level. The goal	in the writing	acknowledge that
)ir(requires minimal	of the feedback	assignment (e.g.,	no Al was used
11	processing of	is to understand	thesis statement,	during the writing
vel	information from	key points in the	topic sentences,	process in the
Le	students and	grading criteria	supporting	academic integrity
	results in short-	through peer	ideas, restated	disclaimer.
	term gains in	work.	thesis); unity and	Students are
	learning. Modeling		coherence; format;	allowed to use
	direct feedback		non-academic	software to help
	aimed to provide		language.	with translations
	training for			and grammar or
	students in how			spell checks.
	to give feedback			
	in peer review			
	classes.			



Appendix B

Examples of Academic Integrity Disclaimer and Student PromptsAcademic Integrity Disclaimer

This essay [*The Economic Benefits of the introduction of IRs*] was created with assistance from [*ChatGPT4.0*]. This tool was used for the following purposes:

- to generate ideas for background research
- · to improve grammar and spelling
- to translate from Japanese to English

The following are the prompts that were used:

- IRが地方自治体の税収を上げる理由を教えて下さい
- カジノにまつわる関連産業の発展について書かれた論文を教えて下さい
- IRが日本の国際競争力を高める理由を教えて下さい

I, (student name), declare that I have not plagiarized (copy and pasted) information directly from online or printed sources, or from Generative Al. All sources used in this essay have been cited correctly and included in the reference list.

Academic Integrity Disclaimer

This essay [*The Disadvantages of Fast Fashion*] was created with assistance from [*ChatGPT-4*]. This tool was used for the following purpose:

to check my grammar and academic language

The following are the prompts that were used:

- Explain the grammatical errors in my essay.
- Read this essay and make suggestions to improve the academic language. Explain why my expressions are not academic.

I, (student name), declare that I have not plagiarized (copy and pasted) information directly from online or printed sources, or from Generative Al. All sources used in this essay have been cited correctly and included in the reference list.

Appendix C

Survey Questions

This survey describes the four types of feedback used in this course.

- 1. Teacher feedback
- 2. Self-Checklist
- 3. Peer Feedback
- 4. GenAl Feedback

- Q1. Rank the following four types of feedback in order of preference from 1 (my first choice) to 4 (my last choice).
- Q2. If you could only receive one type of feedback, which would you prefer?
- Q3. If you could receive a combination of feedback, which would you prefer?
- Q4. Explain the reason for your preferred choices of feedback
- Q5. In the future when you will face more advanced writing (e.g. writing research papers in your field), what kind of feedback do you think would be best to help you to become a better writer? Explain the reason for your choice(s).



Appendix D

Reasons for Learner Preferences and Challenges Experienced Benefits

Teacher			Al		Partner		
1.	Expert on writing	1.	Comprehensible	1.	Gives objective advice		
2.	Personalize learning for students	2.	Provides suggestions for improvement	2.	Expresses different viewpoints		
3.	Confirm accuracy of feedback from other sources	3. 4.	Ease of use & accessibility Checks vocabulary, grammar, spelling	3. 4.	Quality advice when accurate Can evaluate writing		
4.	Provide general and specific feedback	5.	Encourages independent, out-of-class learning		J		
5.	Teachers grades the essay	6.	Unbiased				

Challenges

	Teacher		Al		Peer		
1.	Cannot respond	1.	Complicated feedback	4.	Difficulty Giving Feedback		
	immediately	2.	Disconnect with academic	4.	Advice Not Trustworthy		
			essay	5.	Unpreparedness		
		3.	Unsure which advice is useful	6.	Lack of Ability		

Appendix E

Example of ChatGPT Feedback in the Online Forum Useful GenAl Feedback

Prompt: Read the following essay and make suggestions to improve the academic language. Explain why my expressions are not academic.

Response:

Here's a detailed academic review of the first half of your essay, including suggestions to improve the academic tone and explanations for why some expressions are not formal enough:

Original:

"What do most people eat for dinner? Possibly a dish containing beef, pork, chicken, or fish. Very few people would answer that they ate insects."

Revised:

"Typical dinner meals for many individuals often include beef, pork, chicken, or fish, whereas the consumption of insects remains uncommon in most regions."

Why:

- Phrasing like "What do most people eat for dinner?" uses a conversational question that's better suited for casual writing.
- "Very few people would answer..." is vague and informal. Using "remains uncommon" is more objective and academic.

\downarrow

Original:

"It has been attracting much attention as a food culture of the future."

Revised:

"It has garnered increasing attention as a potential sustainable food source for the future."

Why:

- "Much attention" is vague; "increasing attention" or "growing interest" is more precise.
- "Food culture of the future" is ambiguous; "sustainable food source" is clearer and more academic.



Vague GenAl Feedback

Prompt: Check my essay and give me suggestions for improvement.

Response:

Your essay presents a compelling view of Al to revolutionize healthcare and manufacturing with strong arguments backed by examples. Here are some suggestions to improve clarity, coherence, and flow.

Feedback from A

Your essay presents a compelling view on the potential of AI to revolutionize healthcare and manufacturing, with strong arguments backed by examples. Here are some suggestions to improve clarity, coherence, and flow:

- 1. Refine the Introduction for Clarity: The introduction could be clearer with a more specific thesis statement. Instead of opening with a rhetorical question, consider a direct statement outlining the main points of the essay. For example:
- "Artificial Intelligence (AI) is rapidly advancing, transforming industries like healthcare and manufacturing, and improving quality of life. This essay examines how AI is
 enhancing convenience, health, and productivity in society."
- 2. Clarify Transitions: Improve the flow by adding smoother transitions between paragraphs and ideas. For example, when transitioning from healthcare to manufacturing, use phrases like "Beyond healthcare, Al is also revolutionizing manufacturing..." This helps readers follow the argument more easily.
- 3. Organize the Healthcare Section: In the healthcare section, reorganize the points for a logical flow.
- Start with an introduction to smart homes and Al's role in healthcare.
- Then discuss the role of AI in managing health conditions at home.
- $\circ \ \ \mathsf{Finally, bring up \, specific \, advances, \, like \, \mathsf{POCUS, \, as \, examples \, of \, how \, \mathsf{Al \, is \, enhancing \, medical \, technology}}$
- 4. Strengthen Argument with Current Data: Adding more recent data or examples could strengthen the argument. You could mention real-world companies, Alpowered devices, or recent advancements in Al-assisted diagnostics.
- 5. Refine Technical Explanations: The definitions of big data and IoT could be simplified to ensure they're accessible. For example:
- "Big data refers to vast collections of information that companies analyze to understand customer preferences and design personalized products."
- o "IoT connects devices and sensors to share real-time information, making manufacturing more efficient and automated."
- Conclude with a Forward-Looking Statement: The conclusion feels repetitive and could be more impactful. Consider ending with a forward-looking statement that
 reflects on potential future societal changes due to Al, like:
- "As Al continues to evolve, its potential to transform society will only expand, promising a future where healthcare, manufacturing, and daily life are more efficient, accessible, and personalized."

7. Language and Grammar:

- Use parallel structure where possible to improve readability (eg, "Al enhances both quality of life and manufacturing efficiency").
- o Correct small grammar issues, such as "hese days" in the manufacturing section and "in particularly" in the healthcare section.

By following these suggestions, your essay will present a clearer and more cohesive argument on the transformative power of Al.



Appendix F

Reasons for future feedback preferences

Al feedback

This is because AI feedback can be improved if we gave it proper way to check our essays. And other reason is that the data base of AI is based on the frequency of native speakers' grammer usage and we can have AI feedback whenever we want. However it is not good to be completely dependent on AI feedback since it can't always provide true informations. We also need to be checked by teachers.

Teacher Feedback

I think teachers feedback is the most effective because the information teachers provide is reliable than other systems of feedback-AI, my friends, and myself.

Peer Feedback

The skill of mutual evaluation with a partner is important, and it is an area I want to improve. My method of mutual evaluation in this class was imperfect, thus I was not able to put all of my effort into improving the other person's writing. However, I cannot always rely on the teacher. I would like to place more importance on mutual evaluation in the future, as it allows us to evaluate on an equal footing and to utilize the skill of the other person's writing in our own writing.

By Myself Independently

I think feedback by myself is best because in the future I will have to check my paper by myself and I have already learned the way to revise the essay thank to my teacher, OOO-sensei.

Combination of feedback

I think the combination of feedback from teacher and partner and AI is the best, because the teacher gives me advice about structure, the partner gives me other examples I haven't realized, and AI gives me very detailed advice and other expressions I can use.

Teacher tells me about the structure (most important in essay), peers evaluate whether my content is interesting, and AI shows some mistakes of spelling or grammar.