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THE ROLE OF FEEDBACK IN THE PROCESSES AND OUTCOMES OF ACADEMIC WRITING IN ENGLISH AS A FOREIGN LANGUAGE AT INTERMEDIATE AND ADVANCED LEVELS

DISSERTATION SUMMARY

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INTRODUCTION

Second language (L2) writing is an essential component of students' literacy development in school curricula, as well as a catalyst for personal and academic advancement. In an effort to improve writing, providing written corrective feedback (WCF) is considered to be an effective pedagogical practice. Also, students' preferences to receive feedback and their positive attitudes towards teacher feedback were spotlighted in previous research (Lee, 2008b, 2008a; McMartin-Miller, 2014; Zacharias, 2007). However, the facilitative role of feedback in L2 writing has been debated over the past decades (e.g., Ferris, 1999, 2004, 2006; Ferris & Kurzer, 2012; Truscott, 1996, 2007, 2010; Truscott & Hsu, 2008). In response to these debates, the bulk of research examined the extent to which students benefit from written feedback on their writing (Benson & DeKeyser, 2018; Hartshorn & Evans, 2015; Karim & Nassaji, 2018; Kim et al., 2020; Nicolas-Conesa et al., 2019; Shintani et al., 2014; Zhang, 2021).

With the availability of multiple sources of feedback for learners nowadays, recent studies have shifted the emphasis from investigating the effects of a single feedback type to exploring how multiple sources of feedback could be complemented (Niu et al., 2021; O'Neill & Russell, 2019). Against this backdrop, I studied how English as a foreign language (EFL) university students in Myanmar and Hungary utilised teacher and automated feedback on their writing. Precisely, my studies examined the role of feedback in EFL classrooms from two perspectives: the effectiveness of written feedback on students' writing over an academic semester and their engagement with teacher and Grammarly feedback (https://www.grammarly.com). I also examined the impact of written feedback on syntactic complexity in students' texts, as concerns were raised with regard to the unfavourable effect of feedback on the complexity of students' writing which possibly resulted from their attention to producing accurate texts (Polio, 2012; Truscott, 2007).

Eight chapters make up the dissertation. Chapter I begins with a summary of the importance of providing feedback in developing L2 writing and teachers' feedback practices in classrooms. It includes a general overview of theoretical and pedagogical rationales for conducting four empirical studies. The chapter also introduces contextual information about the two education contexts (i.e., Myanmar and Hungary) in which the empirical studies took place.

Chapter 2 is devoted to the theoretical and empirical perspectives of written feedback research in L2 writing. Particularly, it focuses on the construct of feedback; it provides a comprehensive overview of theoretical and empirical perspectives of the role of written feedback in L2 writing. Moreover, the chapter reviews previous studies on four key variables of WCF research: research design features, feedback-related features, writing task-related features, and accuracy measures. In light of what has been learned from the literature, the chapter concludes with research gaps. This provides a foundation for the empirical studies that will be conducted in the following chapters (Chapters 4, 5, and 6).

Chapter 3 presents the research design and methodology used in the experimental studies. Given that these studies are naturalistic classroom-based inquiries, some contextual constraints (e.g., the absence of control groups) are noted. Specifically, the chapter provides an overview of instruments, feedback treatments, and data analysis.

Chapter 4 reports the findings of the first study which explored the potential of integrating Grammarly into writing instruction to complement the teacher feedback in an EFL course in Myanmar. Students' successful revisions in response to feedback from multiple sources and their writing improvement on the post-test shed light on the positive impact of feedback on students' writing performance. These findings were triangulated with students' self-assessment questionnaires in which I elicited their views on the usefulness of feedback.

Chapter 5 details the second study which examined the impact of WCF on syntactic complexity in students' texts. Initial findings revealed no significant differences between first

drafts and revised texts, resulting in minimal variance between comparison pairs. Moreover, no significant differences were found on the pre- and post-tests on all complexity measures.

Chapter 6 comprises the third study: it explored Hungarian EFL students' behavioural engagement with teacher and automated feedback. After identifying the focus of teacher and Grammarly feedback (Paid version), I studied how students engaged with feedback through analysing revision operations in their revised texts. The results showed differences in feedback focus (the teacher provided form- and meaning-focused feedback) with unexpected outcomes: students' uptake of feedback resulted in moderate to low levels of engagement with both teacher and Grammarly feedback.

Chapter 7 presents the results of the fourth study: it examined whether syntactic complexity and language-related errors can help differentiate written texts produced by students at varying proficiency levels. Findings suggested that most complexity measures distinguished the texts produced by Myanmar and Hungarian students. Further investigations into the students' error patterns also revealed statistically significant differences.

Chapter 8 presents a bird's eye view of my research within a rich field of inquiry in light of the results of the four studies and summarises implications for research and pedagogical practice. It also discusses the limitations of the studies and outlines directions for future research.

THEORETICAL BACKGROUND

Feedback is regarded as a central concept in language learning; it is viewed as a means to ensure language accuracy and to foster learner motivation (Ellis, 2009a, 2009b). It bridges the gap between students' present knowledge which indicates areas to improve further (i.e., what is understood) and the target language which students need to acquire (i.e., what is aimed to be understood) through highlighting the areas for improvements explicitly or implicitly.

Previous studies on the effectiveness of teacher and automated feedback

Although significant positive impact of teacher feedback has been found on students' writing, it takes teachers considerable time and effort (Ferris, 2007; Zhang, 2017) to find ways to tackle students' writing issues at word, sentence, and text levels. Time constraints, large class size, and teachers' workload pose challenges that prevent them from giving adequate feedback. Consequently, teachers tend to offer feedback primarily on language-related errors rather than on content-related issues in students' writing (Lee, 2009). Thus, to ease teacher feedback burden and to enhance the efficacy of teacher feedback, the role of automated feedback has come on the foreground.

Concerns over the use of automated writing evaluation (AWE) feedback linger in terms of scoring, complexity of AWE feedback, amount of feedback, and failure in reflecting social, contextual, and multimodal aspects of writing (Stevenson & Phakiti, 2019). In the case of scoring, AWE programmes might assign high scores to texts that have been deliberately illogical; using complex sentences with sophisticated ideas due to the nature of automated feedback generated by the system (i.e., failure to identify the semantic aspects of writing).

Despite these pitfalls of automated feedback, studies document that it lowers teachers' feedback burden and allows them to be selective in feedback they provide (Grimes & Warschauer, 2010). Particularly, the integration of automated feedback into writing instruction is expected to reduce teacher's feedback workload and allow them to better use their time and focus more on content-related issues. Therefore, Stevenson and Phakiti (2014, 2019) called for more research which examines how automated feedback can be integrated into classroom contexts to support writing instruction. Such inquiries are hoped to contribute to the understanding of how teachers can make effective use of automated feedback when responding

to students' writing and how they can go about selecting errors that automated feedback fails to respond to.

Previous studies on the impact of feedback on syntactic complexity of student writing

In studies examining the importance of providing feedback on students' writing, the majority of research aims to examine how different feedback strategies aid the development of students' writing accuracy. Findings from such studies showed that the provision of WCF is beneficial for significant improvements in linguistic accuracy (e.g., Ellis et al., 2008; Karim & Nassaji, 2018; Rummel & Bitchener, 2015; Van Beuningen et al., 2012; Zhang & Cheng, 2021). While there is consensus that WCF could potentially improve accuracy, little evidence suggests that it could promote syntactic complexity (e.g., Hamano-bunce, 2022; Van Beuningen et al., 2012; Zhang & Cheng, 2021). Limited studies in WCF research examined whether the provision of WCF influences syntactic complexity in students' writing (Eckstein et al., 2020; Eckstein & Bell, 2021; Hartshorn & Evans, 2015; Van Beuningen et al., 2012; Xu & Zhang, 2021). Findings from such studies are inconclusive: some studies (Fazilatfar et al., 2014; Hamano-bunce, 2022; Van Beuningen et al., 2012) found that WCF supports the development of syntactic complexity and does not make students produce structures that were linguistically simplified, whereas others (e.g., Eckstein & Bell, 2021; Hartshorn et al., 2010) stressed an adverse effect on writing complexity.

With these findings in mind, further studies are needed to examine the impact of WCF on syntactic complexity in writing. It is hoped that investigating how feedback influences syntactic complexity of students' writing can help teachers gain a better understanding of which aspects of syntactic complexity could or could not be developed by feedback. Moreover, such awareness can indicate whether feedback on L2 writing leads students to produce structurally less complex writing as a result of attempting to improve their linguistic accuracy.

Previous studies on student engagement with feedback in L2 writing

Student engagement with feedback has been an under-researched area in L2 writing, although student engagement studies in education research demonstrated a positive association with achievement-related outcomes (see Fredricks et al., 2004). Particularly in L2 writing research, Ellis (2010) conceptualized student engagement with feedback as the ways in which students respond to WCF; this is determined by students' revision operations in response to feedback and the strategies they use to revise their work (behavioural engagement), their cognitive investment in processing WCF (cognitive engagement), and their attitudinal reactions to WCF (affective engagement).

Taking a multi-case study approach, previous studies investigated the nature of student engagement with the teacher, peer, or AWE feedback on students' writing (e.g., Ranalli, 2021; Zhang, 2017; Zhang & Hyland, 2018, 2022). Other studies examined how individual factors such as learners' beliefs, language proficiency, and feedback literacy mediated their engagement with WCF (Han, 2017; Han & Xu, 2019; Storch & Wigglesworth, 2010). Most studies have suggested that engagement is a crucial mediating variable that explains how students make use of feedback. Key findings indicated that extensive engagement with feedback led to high levels of uptake (Zhang & Hyland, 2018; Zhang, 2017) and lack of engagement with feedback may be attributed to individual factors including both linguistic and affective factors.

Previous studies on syntactic complexity and language proficiency

The relationship between syntactic complexity and language proficiency has been examined extensively (Lu, 2011; Ortega, 2003; Wolfe-Quintero et al., 1998). Research on L2 writing suggests that, despite differences in studies, indices of complexity increase as students become more proficient in the target language (Barrot & Agdeppa, 2021; Crossley 2020; Lu 2010, 2011; Ortega 2003; Wolfe-Quintero et al., 1998). In other words, they tend to produce more complex syntactic structures with longer and more varied sentences. Barrot and Agdeppa (2021) revealed an interaction between language proficiency and syntactic complexity measures such as length of production unit indices, degree of phrasal sophistication indices, and weighted clause ratio. Other studies examined changes in learners' syntactic complexity over time (e.g., Barrot and Gabinete 2019; Bulté and Housen 2014; Yoon and Polio 2017) and reported developments characterized by measures of syntactic complexity. Bulté and Housen (2014), for instance, found a significant increase in the length of linguistic units at all levels of syntactic organization (e.g., phrase, clause, sentence, and T-unit) over the course of a semester-long academic English language programme. Overall, these empirical studies have stated that syntactic complexity is an objective index of L2 writing proficiency.

METHODOLOGY OF EMPIRICAL STUDIES

Informed by the research which explored the efficacy of written feedback on students' writing (Benson & DeKeyser, 2018; Ferris, 2006; Karim & Nassaji, 2018; Mirzaii & Aliabadi, 2013), I adopted the pretest-posttest experimental design in my investigations. Moreover, the selection of the research design is also informed by the rationale for the research project. Particularly, I explore how students benefit from teacher and automated feedback and their engagement with these feedback sources in EFL classes. To fulfil these research aims, I designed three classroom-based studies at two higher educational institutions. The research instruments include writing tasks, writing assessment rating scales, a language background questionnaire, and a self-assessment questionnaire. The data analyses that I performed were written feedback, analysis, revision analysis, syntactic complexity analysis, and qualitative analysis of students' self-assessment questionnaire. In all these studies, students received feedback from their teacher and Grammarly. The provision of teacher feedback took place either in Microsoft Word by using the "Track Changes" function (Studies I and II) or in Google Docs (Study III) where the students submitted their work and the teacher provided written feedback on different aspects of their texts. In order to keep the feedback process as natural as possible, the instructors were not asked to change their normal practice or to limit their feedback to language- or content-related issues.

Despite using Grammarly as a feedback provider in all three of my studies, I used the free version in Study I and II, and Grammarly Premium in Study III. In both versions, Grammarly offers instant feedback for improvement once a paper is uploaded online, but the feedback scope differs depending on the version being used. For example, feedback in Grammarly free version is limited to spelling, grammar, punctuation, and conventions, such as spacing, capitalization, and dialect-specific spelling (Koltovskaia, 2020). With the premium version, writers receive feedback on four broad areas of writing issues: accuracy (grammatical and mechanical errors), clarity (writing issues that impact conciseness), delivery (issues relating to tone detection, politeness, formality, and inclusive language), and engagement (issues relating to word choice and sentence variety).

RESEARCH AIMS AND FINDINGS OF EMPIRICAL STUDIES

The first study explored the potential of integrating automated feedback into writing instruction in an EFL course in Myanmar. To fulfil this aim, I examined feedback strategies and the scope of teacher and Grammarly feedback in students' writing. I explored how students exploited feedback from multiple sources (i.e., teacher, Grammarly, and combined) in their revisions. I further scrutinized the general impact of feedback provision on students' writing performance over an academic semester. To triangulate research with students' perceptions of feedback, I probed into their emic perspectives regarding the usefulness of feedback from different sources through self-assessment questionnaires.

The second study investigated the influence of multiple feedback sources on syntactic complexity of Myanmar EFL students' writing and to explore the effect of students' levels of proficiency (high-, mid-, and low- performing students) on the changes in their syntactic complexity during the course. It is hoped that this study will have implications for research on L2 writing. For example, the findings will contribute to the growing body of WCF research, where few studies devote attention to the impact of WCF on syntactic complexity while informing researchers on how WCF affects students' writing complexity.

The third study examined how Hungarian university students engaged with teacher and automated feedback, and their feedback uptake. Comparison of teacher and Grammarly feedback was made with the intention to understand feedback scope and how students engaged with two feedback sources. In addition to the influence of form-focused feedback, the effect of meaning-focused feedback was also investigated, as L2 teachers in a writing course provide feedback targeting both language and content-related issues.

As an alternative to holistic and analytical rating assessment, measuring syntactic complexity of students' writing through automated tools has become a promising way to assess writing proficiency. To this end, the fourth study investigated the syntactic complexity in the writing of first-year undergraduate EFL students in two higher education institutions in Hungary and Myanmar. Moreover, I examined the language-related error patterns in students' writing to better understand the role of errors in L2 writing proficiency.

Study 1. How teacher and Grammarly feedback complement one another in Myanmar EFL students' writing

After receiving feedback over a semester, the students improved their writing performance, as is shown in the significant increase in their post-test scores across four assessment criteria. As presented in Table 1, there was substantial improvement in *task achievement* and *coherence and cohesion* in their post-test scores. Similarly, in connection with *grammatical range and accuracy* and *lexical range and accuracy*, the analysis suggested that the students showed notable improvement from the pre-to post-test. The effect sizes for all significant comparisons of learners' writing performance were medium to large (Plonsky & Oswald, 2014).

Table 1. Comparison between pre-and post-test regarding students' writing performance

Assessment Criteria	Pre-test		Post-test		$t(26)$	p	Cohen's d
	Mean	SD	Mean	SD			
Task achievement	2.25	543	2.65	.551	3.82	.003	.71
Coherence & cohesion	2.25	610	2.61	.560	3.90	.002	.75
Grammatical range & accuracy	2.20	559	2.52	.628	2.88	.017	.55
Lexical range & accuracy	2.26	685	2.69	.483	3.55	.003	.68
Overall writing performance	8.98	2.091	10.46	1.965	3.14	.006	.61

The question of whether Grammarly could be integrated into writing instruction could be answered by how the students responded to feedback in their revision. The comparison of revision outcomes in three conditions provides support for the potential of using Grammarly along with teacher feedback. The reason is associated with high percentage of successful revision in singular-plural (92.9%), subject-verb agreement (92.3%), word form (90%), punctuation (84.6%), article/determiner (84.3%), and preposition (84.2%) following Grammarly feedback. Thus, it seems reasonable to suggest that utilizing Grammarly to handle errors in these categories could be effective and spare time for teachers to focus on other higher-level writing issues. Specifically, though the teacher made 22 feedback points in terms of errors in sentence structure, 40.9% of them were left unattended. This partly reflects indirectness or vagueness of teacher feedback which makes it difficult for students to act upon (Tian & Zhou, 2020). What should be stressed is that teachers might be able to pay more attention to these errors if they can efficiently make use of Grammarly to deal with surface-level errors.

Study 2. The effects of teacher, automated, and combined feedback on syntactic complexity in EFL students' writing

The findings indicated minimal differences between most comparison pairs; this outcome meant no significant effects of feedback from multiple feedback on students' writing complexity in their revised texts. This was not the case, however, for some complexity indices in Essays 1 and 4 in which students received teacher and combined feedback. Particularly in Essay 1, students' decline in three T-unit measures (i.e., mean length of T-unit, T-unit complexity ratio, and complex nominals per T-unit) indicates that they applied fewer words, clauses, and complex nominals in T-units in their revised texts compared with their first drafts.

To determine the effect of WCF on writing complexity over the course, I conducted a paired sample *t*-test and compared the means of syntactic complexity on the pre-and post-tests. Students' writing complexity showed little variation over a semester of WCF intervention with no significant differences in the complexity measures between the pre- and post-writing assessment (Table 2).

Table 2. Comparisons of syntactic complexity measures in the pre-and post-tests

Index	Pre-test		Post-test		Paired sample *t* tests		
	M	SD	M	SD	*t*	df	*p*
MLT	14.63	2.69	14.64	2.61	0.01	26	0.99
MLS	15.84	3.13	16.12	3.16	0.87	26	0.38
C/T	1.62	0.26	1.64	0.25	0.50	26	0.61
DC/C	0.36	0.08	0.36	0.09	−0.38	26	0.70
CN/C	0.85	0.27	0.84	0.25	−0.22	26	0.82
CN/T	1.34	0.37	1.39	0.5	0.64	26	0.52

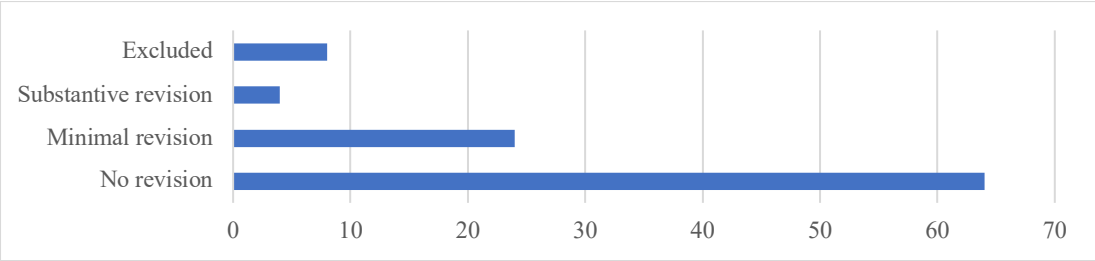
Specifically, while results demonstrated increases in the means of MLT, MLS, C/T, and CN/T in the post-tests, these complexity gains did not reach statistical significance. Furthermore, the means of subordinate clauses per clause remained unchanged from pre- (M = 0.36) to post-tests (M = 0.36). In addition to these results, the students showed a reduction in the measure of complex nominals per clause, suggesting that the students produced fewer complex nominals per clause (e.g., adjective + noun, possessives, prepositional phrases) in the post-tests compared to pre-tests. All in all, it is reasonable to suggest that WCF does not show any effects on students' syntactic complexity development.

Study 3. Higher-proficiency students' engagement with and uptake of teacher and Grammarly feedback in an EFL writing course

An examination of students' behavioural engagement with form-focused feedback suggested that they used four revision operations: correct revision, incorrect revision, no revision, and deletion. Generally, the results suggested that students engaged with both teacher and Grammarly feedback as reflected in their revision operations and feedback uptake; however, the degree of engagement varied across the two feedback modes. Particularly, of the 107 feedback points from the teacher, 53 (49.5%) were considered for revision regardless of whether they led to correct or incorrect revision outcomes. In the case of Grammarly, students considered 138 (28.7%) feedback points for revision out of 481 flagged errors. Although the comparison of revision ratios suggested that students' uptake of teacher feedback tended to be higher than that of Grammarly feedback, the fact that 129 error flaggings resulted in successful revision indicated how helpful they found Grammarly feedback and how consciously they engaged with it.

In addition to form-focused feedback, I analysed the students' behavioural engagement with the teacher's feedback on meaning. Figure 1 illustrates the students' revision patterns. Overall, a high ratio of teachers' comments (64%) was not considered in the students' revised essays. These unattended comments might be attributed to students' low engagement with meaning-level feedback or their partial understanding of the teacher commentary feedback. For example, the teacher's comments on students' texts tended to be vague or obscure (e.g., *Your essay has valid ideas, but some paragraphs need to be revised. Take a look at how you could connect the ideas found in your first two paragraphs.*). This may partly explain why they failed to integrate the feedback into their revisions. Furthermore, the fewest attempts were made for substantive revision on their essays (4.0%), although 24% of the comments were considered for minimal revision.

Figure 1. Revision operations of meaning-focused teacher feedback



Study 4. Investigating syntactic complexity and language-related error patterns in EFL students' writing

Overall, the findings from the two syntactic complexity analysers consistently demonstrated that most complexity indices were found to distinguish the essays produced by the two groups, indicating that the essays produced by the Hungarian students had greater syntactic complexity in comparison to those of the Myanmar cohort. As for the indices calculated by Coh-Metrix, significant differences were found in the two groups in two indices: sentence syntax similarity and left embeddedness (number of words before main verb), but not in the number of modifiers per noun phrase.

In connection with the 14 indices computed by L2SCA, the independent samples *t*-tests indicated significant differences in the two groups (Table 3). Particularly, the two measures of the length of production units: MLS and MLT differentiated the two groups, as the mean scores were significantly higher in the essays of the Hungarian students, compared to the essays of

the other group. However, MLC did not separate the proficiency levels, resulting in no statistically significant differences between the two groups.

Table 3. Results of independent samples *t*-tests of 14 syntactic complexity measures computed by L2SCA

Syntactic complexity measures	Index code	Myanmar		Hungary		Independent samples *t*-test	
		Mean	SD	Mean	SD	*t*	*p*
Length of production unit	MLC	8.67	1.87	8.38	1.07	-0.72	.470
	MLS	15.17	3.28	19.72	3.26	5.20	**<.001**
	MLT	13.69	2.74	15.14	2.62	2.02	**.040**
Sentence complexity	C/S	1.77	0.34	2.37	0.37	6.19	**<.001**
Coordination	CP/C	0.23	0.12	0.17	0.09	-2.19	.030
	CP/T	0.36	0.17	0.31	0.16	-1.22	.230
	T/S	1.11	0.13	1.31	0.17	5.01	**<.001**
Subordination	C/T	1.59	0.19	1.81	0.23	3.80	**<.001**
	CT/T	0.43	0.11	0.57	0.11	4.67	**<.001**
	DC/C	0.35	0.08	0.40	0.07	2.69	**.009**
	DC/T	0.57	0.19	0.74	0.19	3.22	**.002**
Particular structures	CN/C	0.93	0.41	0.75	0.23	-2.06	.040
	CN/T	1.45	0.59	1.36	0.49	-0.62	.530
	VP/T	2.00	0.29	2.32	0.38	3.42	**.001**

Note. Index code is a typical code presented in L2SCA programme.

SUMMARY OF FINDINGS AND LIMITATIONS

The present research aimed to examine how teacher and automated feedback facilitate students' writing in their EFL courses and how students engaged with these feedback types. Keeping these aims in mind, my studies examined feedback strategies and the scope of teacher feedback and Grammarly feedback (free and paid versions), as well as how students responded to feedback in their revisions and how their writing performance improved by the end of the course. Results suggested that the integration of these feedback sources have great potential in reducing teacher feedback burden and enhancing the efficacy of teacher feedback. Moreover, given that students' engagement with meaning level feedback from the teacher was rather minimal, my results provide some indication that introducing revision strategies and engaging students in learning-oriented activities would be beneficial in helping them clarify feedback information and increasing awareness about how to address teachers' commentary feedback. Further investigations into the impact of feedback on syntactic complexity indicated that feedback does not tend to reduce the complexity of students' writing, although it did not scaffold the development of syntactic complexity either. Moreover, a comparison of Myanmar and Hungarian students' writing based on syntactic features and language-related errors revealed significant differences between them. These findings shed light on the importance of assessing different aspects of syntactic complexity and language-related errors to distinguish writing proficiency of students. Taken together, I believe that my studies contribute to a better understanding of the role of academic writing in English as a foreign language in general and that of written feedback in the processes and outcomes in writing pedagogy.

While the studies in this dissertation provided intriguing insights into some major aspects of WCF research, some of their limitations need to be acknowledged and addressed in future

studies. First, the study recruited students from intact university English classes, where students usually receive written feedback on their writing. Therefore, I did not include a control group without feedback, which limits the ability to make comparisons between those who received feedback and those who did not. Therefore, it would be beneficial to include a control group in future research to maximize the comparability of results across studies.

Second, my inquiries were conducted in specific educational settings where participants were enrolled in undergraduate English Studies programmes. For example, it is possible that the findings would have been different if students from specializations other than English had been included. Therefore, future research should examine how English majors and non-English majors respond to feedback, as I assume that students' writing motivation, perceptions of the usefulness of feedback, and the degree of engagement with feedback might vary depending on specialization.

Third, the participants of studies came from one Myanmar university and one Hungarian university; thus, it is unclear to what extent the results can be generalized to students from other higher education institutions in Myanmar and Hungary. Also, even at these two institutions, possible differences arising from classroom-related factors (e.g., how much time is devoted to developing writing, and how teachers usually offer feedback in their EFL classes) and other socio-cultural differences might impact the findings of this study. A further limitation is that my investigations relied on small datasets from intact classes; hence, my findings should be interpreted with caution. Therefore, future research should consider recruiting larger samples of written texts and compiling a larger corpus over the years to make generalizable suggestions on the impact of feedback on EFL students' writing and their engagement with multiple sources of feedback.

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PUBLICATIONS PERTAINING TO THE TOPIC OF THE DISSERTATION

Journal articles

1. Thi, N. K., Van, Vo. D., & Nikolov, M. (*in press*). Investigating syntactic complexity and language-related error patterns in EFL students' writing: Corpus-based and epistemic network analyses. *Language Learning in Higher Education*.
2. Thi, N.K., Nikolov, M. (2023). Effects of teacher, automated, and combined feedback on syntactic complexity in EFL students' writing. *Asian-Pacific Journal of Second and Foreign Language Education*, *8*(6), 1–17. https://doi.org/10.1186/s40862-022-00182-1
3. Thi, N. K., Nikolov, M., & Simon, K. (2022). Higher-proficiency students' engagement with and uptake of teacher and Grammarly feedback in an EFL writing course. *Innovation in Language Learning and Teaching*, 1–16. https://doi.org/10.1080/17501229.2022.2122476
4. Thi, N. K., & Nikolov, M. (2021a). Feedback treatments, writing tasks, and accuracy measures: A critical review of research on written corrective feedback. *Tesl-Ej*, 25(3), 1–25.
5. Thi, N. K., & Nikolov, M. (2021b). How Teacher and Grammarly Feedback Complement One Another in Myanmar EFL Students' Writing. *Asia-Pacific Education Researcher*, 31(6), 767–779. https://doi.org/10.1007/s40299-021-00625-2

Conference papers

1. Thi, N. K. (2023). Engagement with written corrective feedback: What can we learn from student engagement research in L2 writing?. Abstract book: *XIX Conference on Educational Assessment*. Szeged, Hungary: Doctoral School of Education, University of Szeged, pp. 18–18.
2. Thi, N. K. (2022). Student engagement with teacher and automated feedback in an online EFL writing course. Abstract book: *In SIG 1&4 2022, Exploring research synergies to learn from each other*. Cadiz, Spain: Universidad de Cadiz, Spain, pp. 31–31.
3. Thi, N. K., & Van, Vo. D. (2022). Measuring syntactic complexity in EFL students' writing: A corpus-based analysis. Abstract book: *In SIG 1&4 2022, Exploring research synergies to learn from each other*.Cadiz, Spain: Universidad de Cadiz, Spain, pp. 31–31.
4. Thi, N. K. (2022). Written corrective feedback and its impact on syntactic complexity in EFL students' writing. Abstract book: *XVIII Conference on Educational Assessment*. Szeged, Hungary: Doctoral School of Education, University of Szeged, pp. 51–51.
5. Thi, N. K. (2021). An Exploratory Study on How Myanmar EFL Students Benefit from Teacher Feedback on L2 Writing. In: Molnár, Gyöngyvér; Tóth, Edit (ed.): *The answers of education to the challenges of the future*: XXI. ONK. National Educational Science Conference. November 18-20, 2021. Szeged, Hungary: Institute of Education, University of Szeged, pp. 415-415.
6. Thi, N. K. (2021). Assessing Practical Issues in the Efficacy of Written Corrective Feedback: A Review of Empirical Studies. Abtract book: *The 14th Training and Practice International Conference on Educational Science*. Kaposvár, Hungary: Kaposvár University Faculty of Pedagogy, pp. 134-134.

7. Thi, N. K. (2021). An Investigation into Measures of Linguistic Accuracy in Written Corrective Feedback Research. Abstract book: In EARLI 2021: *Education and Citizenship: Learning and Instruction and the Shaping of Futures*. Online, pp. 132-132.
8. Thi, N. K. (2021). An Exploratory Study on How Myanmar EFL Students Benefit from Grammarly Feedback. Abstract book: In EARLI 2021: *Education and Citizenship: Learning and Instruction and the Shaping of Futures*. Online, pp. 14-14.
9. Thi, N. K. (2020). Developing Life Skills Education in Primary Schools in Myanmar. In Hercz, Mária; Lindner, Johannes (ed.) *Developing Social Entrepreneurship in Childhood*: International Conference and Exhibition of the UKids Project. December 5-15, 2020. Budapest, Hungary: Faculty of Primary and Pre-School Education, Eötvös Loránd University, pp. 26-27.
10. Thi, N. K. (2020). Exploring the role of automated feedback in writing classrooms: A review of empirical studies. Abtract book: *The 13th Training and Practice International Conference on Educational Science*. Kaposvár, Hungary: Kaposvár University Faculty of Pedagogy, pp. 90-90.
11. Thi, N. K. (2020). Exploring How Motivation and Corrective Feedback Interact: A Review of Empirical Studies. Abstract book: VI. Ipszilon Konferencia. Budapest, Hungary: ELTE PPK, pp. 46-46.