Effect of Online Flipped Classroom on Students' Writing Development at Senior High School*

Abdullah Sarani (Corresponding Author) **
Associate Professor of Applied Linguistics, University of Sistan and Baluchestan, Zahedan, Iran.
Muhammad Jalil Zarei***
M.A Student, University of Sistan and Baluchestan, Zahedan, Iran.
Hossein Navidinia****
Associate Professor of Applied Linguistics, University of Birjand, Birjand, Iran.

Abstract

Recent developments in technology and education have created an enormous array of opportunities in the field of language learning and teaching. From one side, modern technologies are promptly attracting new users, providing growing dimensions, and allowing more sophisticated uses. Form the other side, the students᾽ zeal toward utilizing mobile technologies in classroom brought the idea of examining these technologies in the context of Iran. To this end, this study investigated the effect of flipped classroom on Iranian EFL students' writing development at senior high school. A group of 48 K-10 male students were conveniently assigned into two groups. The students of the control group were taught writing using distance method just like a traditional classroom held online, while the students of experimental group were taught writing through online flipped method. The results using independent and paired sample *t*-test and ANCOVA revealed that the experimental group outperformed the control group in content, organization, and vocabulary areas.

Keywords: Online Flipped Classroom, Online Traditional Classroom, Writing Improvement, High School Students,

1. Introduction

Today with the rise of technological advances and huge demands on being in touch in various international contexts, English writing skill is required to be an essential mean for communication. Students in English as a foreign language context will need English writing skills ranging from a simple paragraph and summary skills to the ability to write essays and professional articles (Ahmed, 2016). Teaching English writing is not only the primary concern for students but also, as Lee (2003) states, for teachers, researchers, textbook writers, and program designers in the domain of foreign language teaching.

It has been found that writing is one of the most difficult language skills to master (Kurk & Atay, 2007). Writing is complex; hence it is challenging and difficult as students should go through different stages in process writing (Alsamadani, 2010). Moreover, it is necessary for students to make a balance between issues like content, organization, vocabulary, language use, and mechanics used in their writing, even for different genres, which they make writing problematic for them. Therefore, there is a general consensus of opinions concerning the complexity of writing among language teaching scholars, and it has been the focus of research among most of them to enhance teaching and learning of writing especially for low-proficiency and K-12 learners. These students have few resources (linguistic and rhetorical) to draw from and are not familiar with the writing processes or able to control their writing for genre suitability, accuracy and fluency (Su Ping, Verezub, Adi Badiozaman, & Chen, 2020). Thus, teaching low proficiency students to write 'a text that is both rhetorically and linguistically appropriate' (Forey, Firkins, & Sengupta, 2012) could be even more challenging (Cumming, 1989).

Improving students' writing using technology and student-centered approaches (specifically active-learning approaches), online flipped classroom is one of those methods which could help students in this realm. To begin with online teaching, it can be defined as "a form of distance education where technology mediates the learning process, teaching is delivered completely using the Internet, and students and

instructors are not required to be available at the same time and place" (Siemens, Gašević, & Dawson, 2015, p. 100). Distance education at least in the last decade has gained a huge reputation in the world among university students since it removes the barrier for finding high quality materials regardless of geographical location and university where they study. They can have access to content produced by top priority universities in the world, so it improves the teaching quality worldwide. The research shows online teaching can be at least as effective as traditional on-site teaching (Nguyen, 2015). However, modern approaches and methods will not lead to efficient improvement unless they are examined under special circumstances. Regarding online teaching, these special circumstances could be the mode of delivery whether synchronous or asynchronous.

One way to improve the efficiency of the students writing would be applying the flipped approach fully online (Stöhr, Demazière, & Adawi, 2020). The flipped classroom is a blended learning (BL) format in which students learn content online before class, mostly through videos, and do more practice-oriented work in class (Bergmann & Sams, 2012). An interesting discussion of BL is the one describing it as a combination of methodologies including the constructivist, behaviorist, and cognitivist. In this definition, elements of the Present-Practice-Produce (PPP) and Task-Based Language Teaching (TBLT) approaches are found to fit in a BL instructional program (Sharma, 2010). In today's advanced world, it would be wrong to consider learners as passive recipients of information. Instead, they are more potentially enabled to progress, be more actively engaged, motivated, autonomous, and independent. Learner autonomy is a term widely used to describe independent, lifelong learning, which is an essential skill in the current and modern lifestyle. Likewise, a flipped classroom gives the opportunity to the students to have more active participation, and it helps with making the classroom an interactive learning environment (Chuang, Weng, & Chen, 2018). The environment of a large and overpopulated classroom makes peer collaboration difficult and awkward (Baepler, Walker, & Driessen, 2014); therefore, flipped

classroom facilitates small group works (Baepler et al., 2014) and/or provides the opportunity for extra individual practices in the classroom, which results in fostering learners' autonomy.

Despite the growth of interest in the flipped classroom method and online teaching, more research needs to be done on the effectiveness of these methods in the field of foreign language teaching since a few of them have been conducted in language writing courses. Of studies undertaken in this area (Abe, 2020; Ahmed, 2016; Dugartsyrenova, 2020; Engin, 2014; Leis, Cooke, & Tohei, 2015; Nguyen, Lee, Nguyen, & Naidu, 2019; Pritchard & Morrow, 2017; Su Ping et al., 2020), almost all of them were conducted at tertiary level which show K-12 learners were not of scholars' interest for conducting research. In this study, our focus is on improving the writing content, organization, vocabulary, language use, and mechanics among grade 10 students of senior high school in Birjand, Iran, using online flipped classroom method

2. Literature Review
2.1 Distance Learning

Since almost two centuries ago, there have been diverse definitions and labels attributed to distance learning or distance education (DE), yet with slight differences, in the literature (Spector, Merrill, Van Merrienboer, & Driscoll, 2008). Of the early definitions, one can refer to not being the need, for both teachers and students, to be present in the same physical environment. Thereafter, the definitions and application of distance learning has evolved as mentioned earlier. Gradually, computers became involved in the definition of distance learning where they were used to deliver the education to the learners using either hard copy or media.

2.2 Flipped Classroom

Improving students' writing using technology and student-centered approaches (specifically active-learning approaches), flipped classroom could be used to help language users with their writing ability. Flipped classrooms have been widely used in various fields including engineering (Karabulut- Ilgu, Jaramillo Cherrez, & Jahren, 2018), mathematics (Lo, Hew, & Chen, 2017), statistics (Strayer, 2012),

teacher education (Turan & Göktaş, 2018), and health education (Hew & Lo, 2018). In addition, flipped classroom has become a hot topic in the field of foreign language teaching (Wang, An, & Wright, 2018).

The flipped classroom is a blended learning (BL) format in which students learn content online before class, mostly through videos, and do more practice-oriented work in class (Bergmann & Sams, 2012). Interestingly, BL is a combination of theories including constructivist, behaviorist, and cognitivist in which PPP and TBLT have a root in (Sharma, 2010). In a knowledge-based, technology driven society, learners are no longer considered passive recipients of information. Instead, they are more potentially enabled to progress, be more actively engaged, motivated, autonomous, and independent. Learner autonomy is a term widely used to describe independent, lifelong learning, which is an essential skill in the current and modern lifestyle. Likewise, a flipped classroom gives the opportunity to the students to have more active participation, and it helps with making the classroom an interactive learning environment (Chuang et al., 2018). The environment of a large and overpopulated classroom makes peer collaboration difficult and awkward (Baepler et al., 2014); therefore, flipped classroom facilitates small group works (Baepler et al., 2014) and/or provides the opportunity for extra individual practices in the classroom, which results in fostering learners' autonomy.

Flipped classroom is in accordance with the learning theory of Bloom's revised taxonomy (Wilson, 2016), whereby the learners first gain factual knowledge and comprehension (the lower levels of cognitive work) outside of the classroom and concentrate on the application, analysis, synthesis and evaluation (the higher level of cognitive work) during class with support from their teachers and classmates (Tucker, 2012).

Many studies in the literature have been conducted to evaluate the effect of flipped classroom on improving students' writing at tertiary level and education contexts in English language institutes (Abedi, Keshmirshekan, & Namaziandost, 2019; Ahmed, 2016; Engin, 2014; Leis et al., 2015; Nguyen et al., 2019; Su Ping et al., 2020). However,

few studies addressed this topic at K-12 writing improvement, and this study aimed to fill this gap.

2.3 Online Flipped Classroom

"In the online flipped classrooms, unlike the original flipped classroom model, students and teachers will not meet physically, but online"(Stöhr et al., 2020). This approach is newly born and is not rich in the literature and more research needs to be done to evaluate the efficiency of this approach although in higher education it is gaining reputation (Chen, Wang, & Chen, 2014). What is just clear to all is that this approach is distinguished from both online and flipped classrooms. Consequently, more research must be conducted in this realm and the instructors must scaffold this transaction to new modes of online instruction delivery. The results of a study conducted by Stöhr et al. (2020) showed strong evidence to support the significance of this approach on students' learning.

There is a plethora of research having been done on both flipped approach and distance education in the field of English language teaching, however, little has been done to draw on online flipped model despite it is undergone a revolution in terms of its novelty and effectiveness. Moreover, almost all studies present in the literature have investigated the effect of only flipped approach on writing development of tertiary students but not K-12 learners who are being considered weak in terms of their knowledge and resources which they have. Owing to the fact that both teachers and students are not accustomed with technology in the educational system in Iran, conducting such studies has been neglected irrespective of any positive or negative effect they might have on the development of both teachers and students. Thus, having a meticulous look at writing development of K-12 learners in terms of content, organization, vocabulary, language use, and the mechanics in a small scale in Birjand high schools is vital to look for better solutions to overcome inefficiencies. We can also come to the terms with a more effective strategy which can be best suited for over-populated classes in our educational system; meanwhile, this strategy could be a great help to the perception and designing innovative, long-

term, and collaborative learning projects. In this regard, the researcher makes an endeavor to seek answers to the following research questions:

1. Do online flipped vs. traditional online classrooms have differently significant effects on the Iranian EFL learners' writing content, organization, vocabulary, language use, and mechanics?

3. Method
3.1 Participants
The participants of the study were 48 male EFL high school learners in Birjand, Iran. They were chosen among 80 students based on convenient sampling. All the participants were studying grade 10 and, convenient sampling was the only option available to the author. They were all in the age of 15 or 16 who had studied English for five to seven years. It is noteworthy to mention that none of the participants had already experienced flipped and online flipped classroom before including in the research. After a placement test to assess their proficiency level in writing, those in the same level were divided into two groups of control and experimental.

3.2 Instrumentation
3.2.1 Pre-test and Post-test
In order to evaluate the effectiveness of our treatment, a pre-test and post-test were conducted. Therefore, two topics for each test were given to them which were related to the same theme. Pre-test was given to the students before the treatment to both online flipped classroom (experimental group) and distance group (control group). Then, the post-test was given to the both experimental group (EG) and control group (CG). The tests were assessed by two raters whose intra-raters' reliability was acceptable for content, organization, vocabulary, language use, and mechanics (p> 803).

3.2.2 Scoring Profile
Students' writings were scored by two English instructors whom they both had experiences in teaching writing and teaching IELTS based on an analytical scoring profile which was developed by Jacobs, Zinkgraf,

Wormuth, Hartfiel, and Hughey (1981) (See appendix A). The final grade of each learner was calculated by intra-rater reliability.

3.3 Data Collection and Procedure

The study was conducted during the second half of the school year in 2019-2020, in 3 high schools in Birjand. First, the researcher, who was the instructor in these schools, reviewed among 7 grade 10 classes which he had to choose the classes in which he could apply his treatment based on convenience sampling. Finally, 5 classes were chosen, and owing to the Covid-19 outbreak, the author had the chance to hold all 5 classes online at the same time, so two online classes as control and experimental were created out of these 5 classes. In each class, 24 students were present.

EG received the treatment through flipped classroom in a fully online platform. Therefore, the whole online session in the synchronous platform was spent on asking comprehension check questions and giving feedbacks to their essays (about 35 minutes), and students had enough time (approximately 55-60 minutes) to finish writing an essay in the class and to pose their problems to give feedback or discuss them. On the other hand, the other class was taught in traditional method. Thus, mostly students could not finish their essay writing in the class, and they had to finish it at home. Then, they sent it to the instructor. According to the extensive amount of time spent on teaching each session, there was not enough time to discuss the problems and give comprehensive feedbacks on students' essays in the class. Mostly, the feedback was done on their task on Google Docs.

Consequently, to be able to see if there was any significant difference between learning essay writing using online flipped classes and traditional online classes for Iranian high school EFL learners, one-way ANCOVA was conducted on the pre-test and post-test of both control and experimental groups.

4. Results

4.1 Descriptive Analysis of Demographic Statistics

It was stated above that 48 male k-10 students were chosen and were assigned to the two groups of experimental and control. In order to ascertain the homogeneity of the two groups in terms of their writing ability the descriptive statistics of two groups is provided in the table below.

Table 1. Descriptive Statistics of the Scores of variables in the Pre-test and Post-test Stages by Online and Online Flipped Methods

Variable	Status	Method	Mean	Std. Deviation	Skewness	Kurtosis
Content	Pre-test	Distance	15.06	3.00	-0.52	1.41
		Online Flipped	15.28	2.08	1.90	4.50
	Post-test	Distance	20.53	4.76	0.62	-0.20
		Online Flipped	24.47	4.87	-0.92	0.58
Mechanics	Pre-test	Distance	2.82	0.67	0.50	5.77
		Online Flipped	3.36	0.79	1.06	0.44
	Post-test	Distance	2.86	0.46	-0.17	1.00
		Online Flipped	3.63	0.92	0.26	-0.99
Language Use	Pre-test	Distance	18.20	5.73	-1.18	0.83
		Online Flipped	20.08	4.94	-1.74	3.06
	Post-test	Distance	18.16	5.24	-1.21	0.52
		Online Flipped	20.40	4.17	-1.46	2.43
Vocabulary	Pre-test	Distance	9.03	3.30	2.04	3.71
		Online Flipped	8.03	1.50	1.91	4.08

	Post-test	Distance	11.39	4.13	0.84	-0.57
		Online Flipped	14.28	2.27	-0.02	0.34
Organization	Pre-test	Distance	16.54	3.04	-0.78	-0.66
		Online Flipped	15.30	3.05	-0.36	-0.83
	Post-test	Distance	13.50	2.59	0.85	-0.62
		Online Flipped	14.19	2.33	0.20	-0.23

In line with the research question of the study, 5 null hypotheses were formulated. To test the hypotheses, the relevant data were collected and one-way ANCOVA was run to test them. The presuppositions for running ANCOVA (homogeneity of regression line, homogeneity of error variance, and model error variance) were checked first.

4.2 Homogeneity of Regression Line

Table 2. Results of the Default Homogeneity (Equality) Slope of the Regression Line

Source of Change	Sum of Squares	df	Mean Square	F	Sig.
Content	1.98	1	1.98	0.08	0.77
Organization*	2.98	1	2.98	11.03	0.002
Vocabulary	15.75	1	15.75	1.45	0.23
Language Use	15.27	1	15.27	1.00	0.32
Mechanics	8.03	1	8.03	1.36	0.25

Given the significance in the variables which is more than 0.05, it can be concluded that the assumption of regression line slope homogeneity is established in the analysis of covariance analysis.

4.3 Homogeneity of Error Variance

Table 3. Leven's Test to Check the Homogeneity of Errors Variance

Variable	F	df1	df2	Sig.

Content	0.05	1	46	0.81
Vocabulary*	14.52	1	46	0.0001
Language Use	0.14	1	46	0.70
Mechanics	0.17	1	46	0.68

Given the significant levels of the Leven's test which are greater than 0.05, the assumption of equality of model errors variance is accepted.

4.3 Model Error Variance

Table 4. The Kolmogorov-Smirnov's Test to Check the Normality of Errors

Variable	Z	N	Sig.
Content	0.10	48	0.10
Organization*	0.31	48	0.0001
Vocabulary	0.10	48	0.20
Language Use	0.10	48	0.10
Mechanics	0.09	48	0.20

Considering the significance level of Kolmogorov-Smirnov's test which is more than 0.05, the assumption that the model errors are normal is accepted except the organization variable ($p<0.05$).

Based on the tables, the assumptions for running ANCOVA were met for content, language use, and mechanics variables whose results are reported in Table 5 and not for organization and vocabulary variables. Accordingly, non-parametric tests were run for organization and vocabulary variables whose results are reported in Table 6 and Table 7, respectively.

Table 5. One-way ANCOVA Results for Content, Organization, and Mechanics

Variable	Sum of Squares	df	Mean Square	F	Sig.	Eta Squared
Content	178.96	1	178.96	7.58	0.007	0.15
Language Use	19.09	1	19.09	1.25	0.26	0.02

Mechanics	9.68	1	9.68	1.62	0.20	0.03

According to the Table 2, EG outperformed the CG ($p<0.05$) in case of content variable, while there was no significant difference for language use and mechanics variable ($p>0.05$).

However, significance of organization variable in the Kolmogorov-Smirnov's at the level of distance and online flipped was less than 0.05 ($p<0.05$); therefore, Mann-Whitney U test was used which showed there is a significant difference between CG ($p<0.05$).

Table 6. Variable Test Statistics of Organization in Distance and Online Flipped Method

Organization	
Mann-Whitney U	137.50
Z	-3.19
Sig.	0.001

Moving on to the vocabulary variable, the significant levels of Leven's test was less than 0.05; therefore, the assumption of quality of model errors variance is not accepted to run ANCOVA, and the significant level of Kolmogorov-Smirnov test is more than 0.05. Considering the mean scores of distance group (11.39) and online flipped group (14.28), two-sample independent *t*-test was run which showed the vocabulary variable in EG was significant ($p<0.05$).

Table 7. Two-sample Independent T-test results for Vocabulary Variable

	Leven's Test for Equality of Variance		Two-sample Independent T-test					95% Confidence Interval of the Difference	
	T	Sig.	T	Sig.	df	Mean Difference	Std.	Lower Bound	Upper Bound
Vocabulary	9.47	0.004	-2.99	0.005	35	-2.88	±3.60	-4.83	-0.93

5. Discussion

This study was an attempt to answer the question: 1. Do online flipped vs. traditional classrooms have differently significant effects on the Iranian EFL learners' writing content, organization, vocabulary, language use, and mechanics? Consequently, 5 null hypotheses were formulated for each variable in the research question that both classes have the same effect on learners' writing content, organization, vocabulary, language use, and mechanics. Of 5 hypotheses in this study, 3 of them which were concerned learners' writing content, organization, and vocabulary were rejected, while language use and mechanics were not rejected. This is one of the main distinctions of this study with previous studies in this realm which scrutinizes different aspects of writing in detail, and it does not analyze students' writing holistically.

Generally, it was manifested that implementing flipped method in online writing classrooms could be beneficial which can foster learners' writing ability. As a matter of fact, the students in the online flipped classroom outperformed the students in the distance classroom in their writing content, organization, and mechanics. As for the content, it is suggested that when students are familiar with the topics, they can produce a smooth text which is both enriched with information and structurally complex (Winfield & Barnes-Felfeli, 1982). As the treatment in our online flipped classroom was video-mediated, students were informed what they were expected to do in the upcoming session which resulted in better performance and involvement of the students in the content area keeping them in higher levels of Blooms' taxonomy longer. As an active learning strategy, giving one-to-one feedback by the teacher himself and the peers is another effective strategy which could help students not only in their writing content but organization and vocabulary as well.

In our EG, the students were given a list of academic related vocabulary and collocation, with having their use and usage highlighted, enabling them to analyze the samples critically which it is in line with the enforcing effect of reading interventions on quality of

writing (Graham et al., 2018). Another important feature of this study was the amount of freedom in practice both inside and outside of the classroom given to them by utilizing online flipped method which has a compelling effect not only on students' writing content but organization and vocabulary.

Organization is one of those characteristics which sticks out easily in one's writing irrespective of the delivery mode of teaching in the class; therefore, using conjunctions, pronouns, sequence markers, discourse markers, and articles can be used conveniently. An extensive growing body of research in literature has shown the organization (cohesion and coherence) is among those subscales which students could get high scores (Reyhan, 2012; Todd, Thienpermpool, & Keyuravong, 2004; Yen-Chu Tseng, 2006). The feedback addresses earlier when given "correctively" by both teachers and peers influences the improvement of the text organization (Huisman, Saab, Van Driel, & Van Den Broek, 2018).

In EG, it is justified that the interaction, feedback, and especially in our case sample reading raised their awareness toward cohesion and coherence. They found out a distinct factor for a professional writing is the "move". In other words, they were interested in a native-like and well-organized text in which there is a smooth flow of ideas which cause them to produce a compelling text. As a result, there were so curious and eager to learn a large variety of cohesive devices which they mostly came across by asking their teacher, peers, and searching the web. It can be claimed that being exposed to a systematic instruction, more specifically reading and analyzing the samples and feedback available in the class, and writing more make a huge contribution to their logical thinking and analysis ability. All of the above-mentioned factors are leading causes of producing a very well-organized text while using topic-related words in right places in the text.

It is implied that vocabulary can be enlarged by writing (Jing-Jing, 2017) because vocabulary use and usage are enforced by exposure and practice. This is what is offered in a flipped classroom. As a matter of fact, it helps the learners with changing their passive knowledge of

vocabulary into active. Congruent use of vocabulary in a context is considered "a strong indicator of whether the writer has adopted the conventions of the relevant discourse community" (Nation, 2013, p. 178). Once students produced better content in EG, it is another indicator of understanding discourse community which is a support of our treatment to the increased knowledge of students in using the proper use of vocabulary in the text. Familiarity with the topic is an important factor which our treatment made it convenient for the students. Continuing on the theme of topic area, linguistic complexity in a text is affected by familiarity with the topic (Yang, 2015).

Students in both groups were taught and informed about the grammar lessons essential to their writing. Due to the accessibility and availability of the grammar text books and resources, they themselves took the responsibility of their learning in grammar. Also, because form is easy to apply in one's writing, students were innately motivated to learn and use more in their writing in both classes. In the same way, mechanics is at the service of the grammar rather being a category of grammar (Hirvela, Nussbaum, & Pierson, 2012) which shows it is grammatical in nature. It must not be neglected that comprehending mechanic rules is easy, and mastery of its rules does not take much time. Therefore, even by little feedback and practice, chance of making error will be reduced which is an account to the acceptable performance of learners in both groups.

6. Conclusion

This study was an endeavor and a persuasive proof for those who doubt the effectiveness and the practicality of online flipped in teaching writing to Iranian EFL students. Utilizing online flipped model in a class gives students enough freedom to practice and push the boundaries of the classroom beyond physical walls and eradicates the limitation present in on-site classes. Generally, it can be concluded that online flipped method positively influences students' writing content, organization, and vocabulary; meanwhile, no significance difference was observed for language use and mechanics. Theoretically, with the expansion of technology-mediated tools in education during the past

two decades in Iran, utilizing these means of instruction seems completely reasonable. Consequently, boundaries of learning in new millennium can be developed beyond the classroom environment; and that is mostly owing to the rapid development of technologies. Another striking implication of this study is using contents prior to the class which provide learners with video or motion graphic contents. Using synchronous platform while receiving the instruction in advance, it could be regarded as an advantage since some of inhibitions and affective factors will not hinder the teaching procedure; nevertheless, having synchronous classes in every region might not be available.

It should be noted that this study is not without limitations. First of all, the participants used in this study were all male learners studying grade 10 at senior high school. For further research, the same method can be replicated for other students in language institutes rather K-10 learners. Also, another line of research can focus on evaluating the effectiveness of this method in mixed gender participants or female learners.

References

Abe, M. (2020). Interactional practices for online collaborative writing. *Journal of Second Language Writing, 49*, 100752.

Abedi, P., Keshmirshekan, M. H., & Namaziandost, E. (2019). The comparative effect of flipped classroom instruction versus traditional instruction on Iranian intermediate EFL learners' English composition writing. *Journal of Applied Linguistics and Language Research, 6*(4), 43-56.

Ahmed, M. (2016). The effect of a flipping classroom on writing skill in English as a foreign language and students' attitude towards flipping. *US-China Foreign Language, 14*(2), 98-114.

Alsamadani, H. A. (2010). The relationship between Saudi EFL students' writing competence, L1 writing proficiency, and self-regulation. *European Journal of Social Sciences, 16*(1), 53-63.

Baepler, P., Walker, J., & Driessen, M. (2014). It's not about seat time: Blending, flipping, and efficiency in active learning classrooms. *Computers & Education, 78*, 227-236.

Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day*: International society for technology in education.

Chen, Y., Wang, Y., & Chen, N.-S. (2014). Is FLIP enough? Or should we use the FLIPPED model instead? *Computers & Education, 79*, 16-27.

Chuang, H. H., Weng, C. Y., & Chen, C. H. (2018). Which students benefit most from a flipped classroom approach to language learning? *British Journal of Educational Technology, 49*(1), 56-68.

Cumming, A. (1989). Writing expertise and second- language proficiency. *Language learning, 39*(1), 81-135.

Dugartsyrenova, V. A. (2020). Supporting genre instruction with an online academic writing tutor: Insights from novice L2 writers. *Journal of English for Academic Purposes, 44*, 100830.

Engin, M. (2014). Extending the flipped classroom model: Developing second language writing skills through student-created digital videos. *Journal of the Scholarship of Teaching and Learning*, 12-26.

Forey, G., Firkins, A. S., & Sengupta, S. (2012). Full Circle: Stakeholders' Evaluation of a Collaborative Enquiry Action Research Literacy Project. *English teaching: practice and critique, 11*(4), 70-87.

Graham, S., Liu, X., Bartlett, B., Ng, C., Harris, K. R., Aitken, A., . . . Talukdar, J. (2018). Reading for writing: A meta-analysis of the impact of reading interventions on writing. *Review of Educational Research, 88*(2), 243-284.

Hew, K. F., & Lo, C. K. (2018). Flipped classroom improves student learning in health professions education: a meta-analysis. *BMC medical education, 18*(1), 38.

Hirvela, A., Nussbaum, A., & Pierson, H. (2012). ESL students' attitudes toward punctuation. *System, 40*(1), 11-23.

Huisman, B., Saab, N., Van Driel, J., & Van Den Broek, P. (2018). Peer feedback on academic writing: undergraduate students' peer feedback role, peer feedback perceptions and essay performance. *Assessment & Evaluation in Higher Education, 43*(6), 955-968.

Jacobs, H., Zinkgraf, S. A., Wormuth, D. R., Hartfiel, V. F., & Hughey, J. B. (1981). English composition program. *Testing ESL Composition: a Practical Approach*.

Jing-Jing, F. (2017). A Study on the Application of CAT in English Writing from the Perspective of Social Constructivism. *DEStech Transactions on Social Science, Education and Human Science*(icaem).

Karabulut- Ilgu, A., Jaramillo Cherrez, N., & Jahren, C. T. (2018). A systematic review of research on the flipped learning method in engineering education. *British Journal of Educational Technology, 49*(3), 398-411.

Kurk, G., & Atay, D. (2007). Students' writing apprehension. *Journal of theory and Practice in Education, 3*(1), 12-23.

Leis, A., Cooke, S., & Tohei, A. (2015). The effects of flipped classrooms on English composition writing in an EFL environment. *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT), 5*(4), 37-51.

Lo, C. K., Hew, K. F., & Chen, G. (2017). Toward a set of design principles for mathematics flipped classrooms: A synthesis of research in mathematics education. *Educational Research Review, 22*, 50-73.

Nation, I. S. (2013). *Learning vocabulary in another language Google eBook*: Cambridge University Press.

Nguyen, N. Q., Lee, K. W., Nguyen, D. N. P., & Naidu, S. (2019). An Investigation into Using Flipped Classroom Model in an Academic Writing Class in Vietnam. *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT), 9*(1), 32-57.

Nguyen, T. (2015). The effectiveness of online learning: Beyond no significant difference and future horizons. *MERLOT Journal of Online Learning and Teaching, 11*(2), 309-319.

Pritchard, R. J., & Morrow, D. (2017). Comparison of online and face-to-face peer review of writing. *Computers and Composition, 46*, 87-103.

Reyhan, A. (2012). The Use of Guided Writing and Sequences of Pictures as Teaching Technique to Enhance the Ability of Writing Narrative of Students in "Different English Course". *Organization, 20*(18), 17-14.

Sharma, P. (2010). Blended learning. *ELT journal, 64*(4), 456-458.

Siemens, G., Gašević, D., & Dawson, S. (2015). Preparing for the digital university: A review of the history and current state of distance, blended, and online learning.

Spector, J. M., Merrill, M. D., Van Merrienboer, J. J., & Driscoll, M. P. (2008). *Handbook of research on educational communications and technology* (Vol. 3): Springer.

Stöhr, C., Demazière, C., & Adawi, T. (2020). The polarizing effect of the online flipped classroom. *Computers & Education, 147*, 103789.

Strayer, J. F. (2012). How learning in an inverted classroom influences cooperation, innovation and task orientation. *Learning environments research, 15*(2), 171-193.

Su Ping, R. L., Verezub, E., Adi Badiozaman, I. F. b., & Chen, W. S. (2020). Tracing EFL students' flipped classroom journey in a writing class: Lessons from Malaysia. *Innovations in Education and Teaching International, 57*(3), 305-316.

Todd, R. W., Thienpermpool, P., & Keyuravong, S. (2004). Measuring the coherence of writing using topic-based analysis. *Assessing writing, 9*(2), 85-104.

Tucker, B. (2012). The flipped classroom. *Education next, 12*(1), 82-83.

Turan, Z., & Göktaş, Y. (2018). Innovative Redesign of Teacher Education ICT Courses: How Flipped Classrooms Impact Motivation? *Journal of Education and Future, 13*, 133-144.

Wang, J., An, N., & Wright, C. (2018). Enhancing beginner learners' oral proficiency in a flipped Chinese foreign language classroom. *Computer Assisted Language Learning, 31*(5-6), 490-521.

Wilson, L. O. (2016). Anderson and Krathwohl–Bloom's taxonomy revised. *Understanding the New Version of Bloom's Taxonomy*.

Winfield, F. E., & Barnes-Felfeli, P. (1982). The effects of familiar and unfamiliar cultural context on foreign language composition. *The Modern Language Journal, 66*(4), 373-378.

Yang, W., Lu, X., & Weigle, S. C. (2015). Different topics, different discourse: Relationships among writing topic, measures of syntactic complexity, and judgments of

writing quality. *Journal of Second Language Writing, 28*, 53-67.

Yen-Chu Tseng, H.-C. L. (2006). The effects of online conjunction materials on college EFL students' writing,. *System,, Volume 34, Issue 2,*, Pages 270-283. doi:https://doi.org/10.1016/j.system.2006.01.006.

APPENDIX A
Analytical scoring profile developed by (Jacobs et al., 1981)

Aspect	Level	Criteria
Content	30 - 27 26 - 22 21 - 18 16 - 13	EXCELLENT TO VERY GOOD: knowledgeable, substantive, thorough development of thesis, relevant to assigned topic. GOOD TO AVERAGE: some knowledge of the
Organization	20 – 18 17 - 14 13 - 10 9 - 7	EXCELLENT TO VERY GOOD: fluent expression, ideas clearly stated/ supported, succinct, well organized, logical sequencing, cohesive. GOOD TO AVERAGE: somewhat choppy, loosely organized but main ideas stand out.
Vocabulary	20-18 17-14 13-10 9-7	EXCELLENT TO VERY GOOD: sophisticated range, effective word/ idiom choice and usage. GOOD TO AVERAGE: adequate range, occasional errors of word/ idiom form, choice. FAIR TO POOR: limited range, frequent errors of word/ idiom form, choice, usage, meaning VERY POOR: essentially translation, little knowledge of English vocabulary, idioms, word
Language Use	25-22 21-18 17-11 10-5	EXCELLENT TO VERY GOOD: effective complex construction, few errors agreement. GOOD TO AVERAGE: effective but simple construction, minor problems in complex construction. several errors of agreement. tense. FAIR TO POOR: major problems in simple/complex construction, frequent errors of VERY POOR: virtually no mastery of sentence construction rules, dominated by errors, does
Mechanics	5 4 3	EXCELLENT TO VERY GOOD: demonstrates mastery of conventions, few errors of spelling. GOOD TO AVERAGE: occasional errors of not obscured FAIR TO POOR: frequent errors of spelling,