Available online at www.sciencedirect.com

ScienceDirect

Procedia - Social and Behavioral Sciences 192 (2015) 526 – 533

Procedia Social and Behavioral Sciences

2nd GLOBAL CONFERENCE on LINGUISTICS and FOREIGN LANGUAGE TEACHING, LINELT-2014, Dubai – United Arab Emirates, December 11 – 13, 2014

The Effects Of Different Task Types On Learners' Performance In Collaborative Virtual Learning Environment

Hadisesh Yadollahi[a] * Ali Rahimi[b],

[a]*Languages & Linguistics, Sharif University of Technology, islamic Republic of Iran*
[b]*Bangkok University, Thailand.*

Abstract

This study was conducted to examine how various task types affect the extent to which learners engage in form-related changes (FRC) and meaning-related changes(MRC).To this end,15 Iranian language learners (9 female and 6 male) participated in instruction sessions in which they learned how to self-correct and peer-correct three writing tasks ,namely ; argumentative, informative , and analytical. Etherpad package was used to facilitate the communication among the learners as they shared their responses and feedback on each other's writings. Data analysis indicated more instances of peer-correction (54%) compared to those of self-correction (46%) in the three task types. The results of a Chi-square analysis illustrated that the difference in the instances of corrections produced was statistically significant (X2=10.890, p=0.00). In this regard, the results indicated that the number of corrections produced in the analytical task was higher than that of other tasks. Another Chi-square test (Chi-Sq = 6.754, DF = 2, P-Value = 0.034) proved that the participants in all task types made statistically significant changes in meaning-related aspects compared to the changes they made to the formal ones in their written products. A t-test analysis revealed that learners' focus between form and structure was not significantly different whether they work individually or collaboratively. (P-value = 0.3 for argumentative task, P-value = 0.26 for analytical task). However the analysis showed that the emphasis of accuracy and meanings (p-value =0.031 for argumentative task, P-value = 0.033) increased when they worked in groups. The findings of an interview revealed that most of the interviewees agreed that the writing and editing in collaboration with peers were a positive and useful experience.

Peer-review under responsibility of Academic World Research and Education Center.

Keywords: E-learning, Social Constructivism, Etherpad, Collaboration, Editing, Feedback, Writing.

1. Introduction

* Hadisesh Yadollahi Tel: +43635652352
E-mail address: hadis.yadollahi@gmail.com

Peer-review under responsibility of Academic World Research and Education Center.
doi:10.1016/j.sbspro.2015.06.083

The advent of the computer, in parallel with the development of the Internet, has resulted in fundamental changes in human relationships. In other words, the way human beings interact with one another has been revolutionized due to the breakthroughs made in the realm of the computer and the Internet. The presence of the cyber space, as well as varied virtual sites, has rendered access to information easy and readily available. This is considered to have been one of the greatest and most considerable achievements of humankind. This achievement, in turn, has led to the realization of electronic learning.

Electronic learning (hereafter referred to as E-learning) could be defined as the application of information technology in education. As (Aj-jan & Hartshorne, 2008) maintain "low cost, ubiquity, accessibility and ease of use are all potential affordances making Web 2.0 technologies more attractive than traditional software in teaching and learning environments".

In turn, E-learning has brought with itself a number of achievements, among which one can name collaborative learning. (Liu &Hansen, 2002)state that collaborative writing is a writing activity in which writers work in groups and provide information on each other's writing, either in a written, oral, or computer-mediated mode .As pointed out by (Storch, 2005) students are more receptive to feedback while doing collaborative tasks because they are responsible for the collaborative writing activity. Collaborative learning creatively engages learners in the process of acquisition and provides learners with opportunities for thinking and learning in more interactive and dynamic settings, compared with more traditional types of teaching (Liu &Hansen 2002).

2. Review of related literature

To the present day, a considerable number of research studies have attempted to investigate how and in what ways EFL/ESL learners acquire the ability to write (Bitchener, Young, & Cameron, 2005; Chandler, 2003; Ellis, 2009a, 2009b; Ferris, 1995, 1999, 2004; Grabe & Kaplan, 1996; Hyland & Hyland, 2006; Reid, 1993; Sheppard, 1992; Truscott, 1996, 1999, 2004; Vyatkina, 2011; Zamel, 1985). In addition, psychologists have been taking an increasing interest in the writing process over the last decade, which, as illustrated by (Hayes and Flower, 1980), resulted in the emergence of models of human cognition and task behavior during writing. The ability to write a text requires mastery of a score of other sub-skills or components, such as lexical knowledge and rhetoric (Truscott, 1996). In addition to accuracy in writing, which seems to be the main concern, other aspects have received particular attention. As (Lidvall, 2008) maintains one of these aspects involves meaning and authenticity in writing. In collaborative writing tasks students sometimes make meaning related changes (hereafter referred to as MCR) to their writings. According to (Kessler and Bikowski, 2010) MRC is any meaning-related change a student makes such as changing a letter, word, sentence, paragraph or the entire wiki (p.45). (Kessler and Bikowski, 2010) coding category was adapted to examine meaning-related changes in their collected data. However, the change of a letter, for example, the change of a misspelled word such as 'improvment' to 'improvement', was coded as a form-related change unless it led to a change in the meaning of a sentence. Form related changes (hereafter referred to as FRC) according to Lund (2008) refer to grammatical accuracy and appropriate use of grammatical forms in different contexts.

Writing has long been considered and researched by the individualistic perspective. From this perspective, priority is given to the production at the expense of the processes the writer goes through in composing a text. Nevertheless, investigations into how an individual writes a text have begun to receive some special attention. In this approach to research, ongoing thinking processes of writers, in conjunction with their decision-making abilities in relation to various aspects of the writing process, are analyzed at a macro-level. This has led to a new dimension that has its roots in social constructivism and its focus specifically on the collaborative nature of learning.

Social constructivism was introduced by Vygotsky. According to the original views of Vygotsky and neo-Vygotskyan researchers' viewpoints, acquisition of new material cannot be based solely on assimilation and accommodation of new knowledge on the part of the learner (Lantolf, 2000; Vygotsky, 1962, 1987). Instead, knowledge is acquired through social interaction and integration into a knowledge community. Collaborative learning, as an offshoot of this theory, necessitates that learners be engaged in acquiring teamwork skills. Thus, individual learning relies heavily upon group learning. In this type of learning, two-way teamwork is encouraged as it is argued that construction of knowledge is fostered through scaffolding and social interaction.

3. Collaborative Writing

Acquiring the skill of writing through collaboration teaches the learner how to experience and accept joint responsibility while trying to reach a goal. This, in turn, heightens the decision-making capacities of the learner in different aspects, such as content, structure, and language use (Storch & Noamy, 2005). To date, many research projects have been conducted to investigate the impact of collaborative writing on the improvement in EFL/ESL writing performance (Donato, 1988; Storch, 2002).

In order to practice collaborative writing, EFL/ESL, learners should perform tasks. Based on literature (Breen, 1987; Ellis, 2003; Long, 1985; Skehan, 1998), one important issue in regard to preforming tasks is the place of grammar or form. According to (Skehan, 1998; Skehan & Foster, 2001), the extent to which learners concentrate on form varies, depending on the type and nature of a particular task. The nature and type of the task also influence learners' interaction and collaboration, and the most important of all, learners' engagement in their learning (Blumerfeld & Meece, 1988; Doyle, 1983).

Concerning engagement, (Fredricks et al., 2004) have enumerated three types of engagement in learning tasks. The first type is behavioral engagement that signifies participation in academic, social, and extra-curricular activities. The second engagement type is known to be cognitive that encompasses involvement in learning, motivation to learn, willingness to exert an effort to learn difficult concepts and skills, and the use of learning strategies. The third type is affective engagement that includes emotional aspects, such as feelings, attitudes, perceptions towards the educational environment, and relationships between themselves, teachers and classmates.

In order to have a better understanding of levels and types of engagement, one should have a clear picture of various task types. (Mitchell and Carbone, 2011) introduced an eight-dimension typology of task characteristics, including routine-never, artificial-authentic, closed-open, simple-complex, individual-collaborative, degree of ownership, degree of linkage, and degree of reflection on learning. As various task characteristics tend to result in different educational outcomes, EFL/ESL teachers should select tasks with the appropriate purpose and audience in mind. As a case in point, collaborative tasks, as opposed to individual tasks, are hypothesized to cause learners to activate higher-order cognitive thinking, and to better develop interpersonal and social skills.

4. Technology and Collaborative Writing

The advent of the Internet and, more recently, software packages operating within web 2.0 has revolutionized the way education is delivered to EFL/ESL learners. (Trigg and Suchman, 1989) reported how they had used NoteCards as a collaborative authoring environment in their work. They saw the advantages of a hypertext medium and therefore borrowed from communication theories and sociology to propose issues worthy of examination such as "meta-discussions" and "convention adoption". However, their published account provided inadequate insights to support the claim that collaborative authoring was itself aided by hypertext or even information technology.

Regardless of the limitation of the current knowledge, there is no shortage of enthusiasm about potential advances in collaborative authoring as a result of emerging technologies. A number of packages used for educational purposes have been introduced, the examples of which include wikis, Google Does, and Etherpad, which is the focus of this study.

Etherpad is a web-based collaborative tool that allows several writers to simultaneously have access to, compose, and/or edit a text, relying on each other's help and ideas. In doing so, each and every writer has the chance to compose in a distinct colour. The software package also provides a chat box in which the writers communicate with one another and write to each other anything other than the text in question. Each collaborative document is called a pad, which can be saved using a password the writers have decided on.

To the present day, a considerable number of research studies have been conducted with the aim of investigating the impact of employing high-tech software on how EFL/ESL learners and/or teachers respond to instructions (Kessler, 2009, 2012; Lee, & Lund, 2008). Despite their fruitfulness, it should be borne in mind that the vast majority of these studies have been limited to the application of wiki tools, and as a result much less attention has been paid to other equally valuable tools, such as Etherpad.

Furthermore, in the context of Iran, there is a dearth of research into the viability and usefulness of employing technology in order to improve Iranian language learners' ability to write. It appears that Iranian ELT scholars have neglected especially the question of how different task types have any impact upon learners' writing performances. Given this dearth of research, it is important to embark upon a study in an attempt to investigate the effects of the use of technology on Iranian EFL learners' writing ability. The technology in focus in this study is Etherpad; that is, the study investigates how the collaborative tool, Etherpad, plays the role in the improvement of Iranian EFL

learners' writing ability.

Research questions

Q (1): In an electronic collaborative writing project, how do various task types affect self- as well as peer-correction?

Q (2): In an electronic collaborative writing project, how do various task types affect the extent to which learners engage in form-related changes (FRC) and meaning-related changes (MRC)?

Q (3): Is there any significant difference between the number of form-related or meaning-related revisions made in collaborative writing and those made in individual writing?

Q (4): How do learners perceive and feel about the use of Etherpad and collaborative writing tasks?

5. Methodology

Participants

The present study included 15 EFL learners, nine of whom were female and six of whom male. Their average age was 24 and they all spoke Persian as their mother tongue. All the participants were familiar with how to use a computer and how to browse websites on the Internet. They were also proficient users of high-tech software packages used in English language learning.These participants, under the supervision of the teacher-researcher, also formed a group in which the mobile application Viber was used to chat and discuss various issues. However, none of these participants was either familiar with Etherpad or had done a group writing project before.

Instruments and materials

The data was collected by means of 1) three kinds of collaborative writing tasks, namely, argumentative, informative, and analytical; 2) two kinds of individual writing tasks, namely, argumentative and analytical; 3) a questionnaire, to inquire about the participants' perceptions of and feelings about the use of Etherpad to compose texts, and 4) a semi-structured interview conducted at the end of the study.

The topics available on the GRE and IELTS past exam papers were chosen for argumentative and analytical tasks. The rationale behind this choice was primarily the familiarity of the participants with these two standardized tests, as well as the participants' intention to be prepared for the taking of these tests. The relevance of the topics to the participants' experience and plan was believed to render the tasks meaningful and authentic, and thus encourage their active and meaningful engagement in the assignments.

Data collection procedure

Prior to the study, all the participants took the language proficiency test (IELTS mock test), the results of which indicated that the average score was 5.5. Reference to the Common European Framework (CEF) showed that these participants' language proficiency fell somewhere on the borderline between levels B1 and B2, which meant that the participants possessed language abilities ranging from intermediate to upper-intermediate. These participants, in the course of the study, were enrolled on a 4-month IELTS preparation course. The classes were held three days a week, with each class taking four and a half hours. Even though all the participants were proficient users of the Internet and high-tech software packages in English language learning, none of these participants was familiar with Etherpad; nor had they done a group-writing project before. Therefore, it was necessary to instruct the participants on how to use Etherpad, how to do team projects, how to make self- and peer-corrections, and how to give peer feedback.

These instructions were given to the participants in only one session on the first day of the first week of the study. In the session, the teacher-researcher explained to the learners the different task types and the importance of collaboration. In addition, the researcher showed the participants how to comment on each other's texts and how to edit one another's written products. . The rest of the week was spent on individual writing tests. The tests required the participants to individually do an argumentative and analytical writing task on Etherpad. All the participants wrote on the same topic in four days. The participants, within these days, were asked to edit their products and save

them on Etherpad. The purpose was to ensure that the participants had a clear understanding of the process of making text corrections and that they were familiar with the application of Etherpad. On the final day of the first week, the teacher-researcher randomly assigned the participants to various groups, reminded them of the process of composing and editing texts, and asked them to start their own Etherpad account.

The second week was devoted to doing one collaborative informative task, the completion of which lasted three days. During the third week all participants were given an argumentative task to complete. They were asked to save all their revisions on Etherpad so that the teacher-researcher had full access to the written products and revisions made by them. Both tasks took the participants a minimum of four and a maximum of five days to complete. During the fourth week participants were asked to carry out the analytical writing tasks. The individual and collaborative tasks (argumentative and anlyticl) have parallel topics and same conditions.

As the last step, the final week of the study involved the participants in responding to a questionnaire, which asked them to express their opinions as to the usefulness and effectiveness of writing and editing texts on Etherpad. Likewise, a semi-structured interview was conducted at the end of the study. In doing so, the researcher randomly selected five of the participants and invited them to attend the interview session. The purpose of the interview was to gain a better understanding of the participants' perceptions and feelings in relation to working collaboratively with other peers on Etherpad.

Results and discussion

Regarding the first question, data analysis indicated more instances of peer-correction (54%) compared to those of self-correction (46%) in total. In the informative task, self-correction was more employed than peer correction. In the same vein, in the argumentative task the number of peer correction instances was higher. Likewise in the analytical task, the task fostered both types of corrections, and the highest number of corrections produced, belonged to this task type. In this regard, the results of the Chi-square analysis illustrated that the difference was statistically significant ($X2=10.890$, $p=0.00$).It could thus be concluded that the number of corrections produced in the analytical task type was higher than that of other tasks.

Respecting the second research question, a chi-square indicated that the three task types engaged learners in significantly different numbers of changes made to their written products. As well as this, this statistical test (Chi-Sq = 6.754, DF = 2, P-Value = 0.034) proved that the participants in all task types made statistically significant changes in meaning-related aspects compared to the changes they made to the formal ones in their written products.

To obtain the results of the third research question, a paired t-test was conducted to determine whether there is a significant difference between individual and collaborative writings in terms of focusing on form or meaning. The analysis revealed that there was no significant difference between the focus on form and that on structure whether the learners work individually or collaboratively. (P-value = 0.3 for argumentative task, P-value = 0.26 for analytical task). However the analysis showed the emphasis of accuracy and meanings (p-value =0.031 for argumentative task, P-value = 0.033) increased when they worked in groups.

Respecting more attention being paid to accuracy the results of the interview revealed that this task-argumentative- was perceived as an academic and formal piece of writing by participants. Additionally, they knew that there was at least one audience -teacher-researcher- for whom the text carried significance .These reasons therefore provided the participants with higher level of incentive to pay more attention to accuracy in this task type.

Overall, regarding FRC it was found that in collaborative tasks the majority of changes made belonged to the categories of word choice and spelling, with the number of word choice changes being higher than spelling ones. In individual writing tasks the highest number of changes were produced in spelling and capitalization, with the number of spelling changes being upper than capitalization cases.

With respect to the fourth research question, the present study arrived at the following findings. First and foremost, it was found that although the perceptions and feelings of the five participants who attended the interview differed from one another, four of them agreed that the writing and editing in collaboration with peers were a positive and useful experience. This finding was corroborated by the results of the questionnaire. However, one of the participants expressed their dissatisfaction with the project as he believed that the time could have been spent more profitably on other pedagogic activities.

Moreover, the participants, in the interview as well as by the questionnaire, stated that the collaboration is both instructive and effective. In this relation, one of the participants maintained that "writing collaboratively is a very fruitful activity as many of the topics, details, and grammatical points suggested by different group members would

have simply been neglected or missed by individual writers, had we been engaged in independent writing." The participants, in general, confirmed that collaboration can lead to wider expertise, broader use of knowledge, and better combination of skills and thoughts, all of which culminate in a text becoming well-organized and well-written.

Furthermore, regarding the perceived differences between individual and collaborative writings, the participants asserted that the latter tends to be superior to and more beneficial than the former in academic contexts. As one of the interviewees observed, "Once engaged in collaborative writing, writers spend less time composing and comparatively more time concentrating on the process, as well as on the feedback they receive from other peers, both of which can render production better in quality." A number of the interviewees also mentioned that in a virtual context, i.e., on the Internet, availability is no longer a concern; that is, there is no need to set meeting times for editing and proofreading since all writers involved in the project can simultaneously have access to the text, write part of the text, discuss issues, and revise the parts they deem necessary.

On the other hand, the participants believed that when students are engaged in individual writing, they are deprived of the cooperation, help, and advice provided by their peers, and they compose texts for the sole end reader, the teacher, and focus on the text as a mere static product. Thus, the quality of the text produced individually is not comparable to that written in collaboration with other peers. One of the interviewees' remarks in this relation reads as follows:

> "Individual writing can in some cases be effective. For example, when the purpose of writing is to exercise certain aspects of the language or when there is not enough time, because team work requires considerably more time to be done. But, all in all, the content of texts, written by a team of students, is high-quality as it reflects the collective wisdom and knowledge of a number of peers, and there is generally less repetition of ideas and redundancies."

Despite all the positive points the respondents expressed in connection to this research project and the novel experience they went through, there were a score of negative points that merit a discussion. The most noticeable criticism seems to regard the fact that some participants found the whole process of writing in collaboration with their peers confusing and not very straightforward. In other words, some of the participants argued that collaborative writing could be a complex; confusing process owing to the differences in styles of writing and the differences in the amount of knowledge of English language that peers had brought to the writing tasks, all of which could lead to misunderstanding. Another issue the participants raised concerns their beliefs that collaborative writing is in the vast majority of cases a very time-consuming process and that the time spent in groups could be spent more profitably and constructively on one's own production of better quality texts.

6. Conclusion

In regard to the perceived significance of self- and peer- corrections and their relevance to meaning and form related changes in acquiring the skills of writing, the present study set out to investigate, first and foremost, the number of changes which were produced by learners in this regard. To this end, 15 Iranian language learners (9 female and 6 male) participated in the instruction sessions in which the researcher showed them how to do self- and peer-correcting as well as had them work collaboratively using Etherpad.

The findings that this study arrived at can be compared with those of other studies that were conducted with the aim of investigating the impact of employing high-tech software on how EFL/ESL learners and/or teachers responded to instructions (Kessler, 2009, 2012; Lee, & Lund, 2008). The present study has corroborated the effectiveness of employing high –tech software in English language learning, more specifically in English writing.

Findings also fall in line with many research projects which investigated the impact of collaborative writing on the improvement in EFL/ESL writing performance (Donato, 1988; Storch, 2002).

Moreover, the findings also showed that the collaborative nature of tasks and the implementation of high- tech software can benefit meaning-related changes in the writing process which, in turn, leads to improvements in the process of writing.

The positive findings of the impact of collaborative tasks on the acquisition of English writing skills have proved valuable to Iranian language Institutes. The results have shown that EFL learners can benefit from the social potentials brought about by various tasks in new software packages. The interactions, as the study indicated, can provide an effective context within which learners learn English writing skills by means of meaning negotiations.

This is because in the interactions, they can share their feedback and responses, which in turn, gives birth to the synergy in the group. In other words, as all group members share their knowledge of writing, they need to convey their intended meanings.

As mentioned earlier there is a dearth of research into the viability and usefulness of employing technology in order to improve Iranian language learners' ability to write. The results of this study shed light on the possible usefulness of the application of newly emergent software in language learning in general and the writing process in particular. Additionally, the findings of this investigation could be cross validated through replicating the study in other cultural and contextual ELT settings worldwide to gain a better insight into the effectiveness of technology on language learning. Likewise, further investigations may be conducted with more task types and other variables incorporated into the activities in order to enhance the acquisition of the writing skills.

References

Ajjan, H., & Hartshorne, R. (2008). Investigating faculty decisions to adopt Web 2.0 technologies: Theory and empirical tests. Internet & Higher Education, 11(2), 71-80.

Bitchener, J., Young, S., & Cameron, D. (2005). The effect of different types of corrective feedback on ESL student writing. Journal of Second Language Writing, 14(2), 19-205 doi:10.1016/j.jslw.2005.08.001.

Blumenfeld, P., & Meece, J. L. (1988). Task factors, teacher behavior, and students involvement and use of learning strategies in science. Elementary School Journal, 46, 26.

Breed, M.P. (1987) Learner Contributions to task design. London: Prentice Hall International.

Chandler, J. (2003). The efficacy of various kinds of error correction for improvement of the accuracy and fluency of L2 student writing. Journal of Second Language Writing, 12(3), 267-296.

Donato. R. (1988). A psycholinguistic rationale for collective activity in second language learning. Unpublished doctoral dissertation. University of Delware. New York.

Doyle, W. (1983). Academic work. Review of Educational Research, 53, 159-199.

Ellis, R. (2003). *Task-based language learning and teaching*. New York, NY: Oxford University Press.

Ellis, R. (2009). A typology of written corrective feedback types. ELT Journal, 2(2), 97-107.doi:10.1093/elt/ccn023.

Ferris, D. R. (2004). The 'grammar correction' debate in L2 writing: Where are we, and where do we go from here? (and what do we do in the meantime...?) Journal of Second Language Writing, 13(1), 49-62. doi:10.1016/j.jslw.2004.04.005.

Fredericks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence Review of Educational Research, 74, 59 – 109..

Grabel and Kaplan.1996. Language Teaching Methodology. Sydney: Pearson Educational.

Hyland, K., & Hyland, F. (2006). Feedback on secondlanguage students' writing. Language Teaching, 39, 77–95. doi:10.1017/S0261444806003399

Hayes, J. and Flower, L. (1980) Identifying the organization of writing processes. In L. Gregg and E. Steinberg (eds.) *Cognitive Processes in Writing.* Hillsdale N.J.: Lawrence Erlbaum Associates.

Kessler, G. (2009). Student-initiated attention to form in wiki-based
collaborative writing. Language Learning & Technology, 13(1), 79-95.

Kessler, G., Bikowski, D., & Boggs, J. (2012). Collaborative writing among second language learners in academic web-based projects. *Language Learning & Technology*, *16*(1), 91-109.

Lantolf, J. P. (ed.) (2000). *Sociocultural theory and second language learning*. Oxford: Oxford University Press.

Lee, L. (2008). Focus-on-form through collaborative scaffolding in expert-to-novice online interaction. Language Earning & Technology, 12(3), 53-72.

Lidvall, C. D. (2008). Get real: Instructional implications for authentic writing activites. Retrieved May 13, 2014, from http://discoverarchive.vanderbilt.edu/bitstream/handle/1803/789/CarlyLidvallCapstone.pdf?

Liu, J. and Hansen, J. (2002). Peer response in second language writing classrooms. Ann Arbor: University of Michigan Press.

Long, Michael H. 1985. Input and second language acquisition theory. In Gass and Madden 1985.

Lund, A. (2008). Wikis: A collective approach to language production. *ReCall, 20*(1), 35–54.

Mitchell, I., & Carbone, A. (2011). A typology of task characteristics and their effects on student engagement. *International Journal of Educational Research*,*50*(5), 257-270.

Reid B (1993) 'But We're Doing it Already!' Exploring a Response to the Concept of Reflective Practice in Order to Improve its Facilitation, Nurse Education Today, 13: 305-309.

Sheppard, K. (1992). Two feedback types: Do they make a difference? RELC Journal, 23(1), 103-110. doi:10.1177/003368829202300107.

Skehan, P. (1998). A cognitive Approach to Language. *Learning. Oxford: Oxford University Press*.

Skehan, P. and P. Foster 2001. "Cognition and tasks". In Cognition and Second Language Learning P. Robinson (ed.), 183–205. New York: Cambridge University Press.

Storch, N. (2002). Patterns of interaction in ESL pair work. Language Learning, 52(1), 119–158.

Storch, N. (2005). Collaborative writing: Product, process and student's reflections. Journal of Second Language Writing, 14, 153-173.

Trigg, R. and Suchman, L. (1989) Collaborative writing in NoteCards. In R. McAleese (ed.) *Hypertext: Theory into Practice*. Norwood N.J.: Ablex.

Truscott, J. (1996). The case against grammar correction in L2 writing classes. Language Learning(46) 2 ,(327-369 .doi:10.1111/j.1467-1770.1996.tb01238.x.

Truscott, J. (1999). The case for 'the case against grammar correction in L2 writing classes': A response to Ferris. Journal of Second Language

Writing.8(2), 111-122. doi:10.1016/S1060-3743(99)80124-6.
Truscott, J. (2004). Evidence and conjecture on the effects of correction: A response to Chandler Journal of Second Language Writing, 13(4), 337-343. doi:10.1016/j.jslw.2004.05.002.
Vyatkina, N. (2011). Writing instruction and policies for written corrective feedback in the basic language sequence. Second Language Journal, 3(1), 63-92.
Vygotsky, L. S. (1962). *Thought and language*. Cambridge, MA: MIT Press.
Vygotsky, L. S. (1987).*The collected works of L. S. Vygotsky: Volume 1, Thinking and speech*. New York: Plenum Press.
Zamel,V. (1985). Responding to student writing. TESOL Quarterly, 19 (1), 79- 101.