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Using the Internet to Foster Independent and Collaborative Learning: Reflections from Students in an EFL Writing Course Louise Ohashi

Keywords

Collaboration sociocultural theory online learning EFL writing

Introduction

In English as a Foreign Language (EFL) academic writing courses, teachers are often faced with the multiple challenges of developing their students' English language and writing skills, as well as increasing their topic-based knowledge. With limited class time this can be challenging, so students generally need to be provided with guided learning opportunities outside of class. In this study, a web-based project that combined collaborative and individual work was designed to help learners acquire more knowledge about their major (linguistics) and improve their English language and academic writing skills outside of class.

Theoretical Framework

The theoretical underpinnings of this project lie in sociocultural theory, which was developed by the Russian psychologist Lev Vygotsky (1978) and has since been very influential in the field of second language acquisition (Firth & Wagner, 2007; Lantolf, 2000a, 2000b; Lantolf & Appel, 1994; Lantolf & Poehner, 2011; Ohta, 1995, 2000; Swain, Kinnear, & Steinman, 2011). This theory argues that learning is sociocognitive, in that social interaction is needed for cognitive development. As Vygotsky (1978) explains:

Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (interpsychological) and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relationships between individuals. (p. 57)

This seems to indicate that if people have the opportunity for social interaction and individual

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reflection then development is possible. However, this is an oversimplification as Vygotsky also theorized that learners need to be a) interacting with someone who is more knowledgeable and b) be attempting to do something that is just beyond their current ability level. The gap between what someone can do alone and with the help of someone more experienced was referred to by Vygotsky (1978) as the zone of proximal development, which he defines as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). This concept has been applied extensively in foreign language learning contexts (de Guerrero & Villamil, 2000; McCafferty, 2002; Ohta, 1995, 2000; Poehner & Lantolf, 2013), with students successfully learning from each other in many cases. Given that class time and access to teachers is generally limited in university-level EFL writing classes and that learner-to-learner interaction has been shown to lead to skill development, it is pertinent for educators to explore the learning opportunities that can be created between students outside of class.

Context and Research Ouestion

This case study was conducted with students from an EFL writing course at a women's university in Tokyo, Japan. All of the participants were Japanese women in their early 20's who were majoring in linguistics. Convenience sampling was used to select the 21 participants, all of whom were enrolled in an academic English writing course that was taught by the researcher. Students in this course were not only faced with learning how to improve their English language and academic writing skills, they were expected to gain a deeper understanding of linguistics. This project began in the latter part of the first semester of a year-long course that was being taken in the third year of an undergraduate degree. The university streams students into their English writing classes according to their major (linguistics, cultural studies, British/American literature) from the third year, so while the participants had studied their major in Japanese, many of them were learning about it in English for the first time. In the early part of the course it was apparent that they lacked familiarity with many of the English terms that are commonly used in linguistics, and that they needed a better grounding on some of the most common branches. This website project was designed to help familiarise them with this core knowledge and vocabulary, while simultaneously working on their English writing and referencing skills, following MLA guidelines for the latter. For best results, it was felt the project should include collaboration and individual reflection as sociocultural theory suggests that both of these factors are needed for development (Vygotsky, 1978).

This study was guided by the following overarching research question:

Can an online project that requires collaboration and individual reflection help EFL students to develop their English language and writing skills (including referencing), and deepen their understanding of their major (linguistics)?

This question was examined from the students' perspective and partially triangulated with data from the website that they created.

Method

This project took a little more than a semester to complete, starting in the latter part of the first semester of the 2013-2014 academic year and finishing at the end of the second semester. It could have been completed in a shorter period but the main focus of the students' course was essay writing, which meant that class time and homework time for this project had to be allocated around work on other writing tasks. This research project involved several key steps, which are briefly outlined in Table 1.

Table 1.

Key Steps in the Linguistics Website Project

Step One	In the latter part of the first semester, students read several sections on a linguistics website created by students at The University of Sheffield (n.d.) to get a basic understanding of different branches of linguistics and ideas on how to format a website.
Step Two	Students were randomly divided into groups of two or three (10 groups in total) and assigned a branch of linguistics to create a page on. During class they were shown how to access the website add content and edit it. This was done by showing the students what to do on a shared screen, and trouble shooting with them as they attempted to replicate it. A user guide that included screenshots was also used in class and posted online for future access. A page on a branch of linguistics that was done by the teacher was shown as a model. Students started working on their page of the website during this introductory lesson and worked on it for homework for two weeks.
Step Three	At the end of the first semester a grading rubric that outlined the key requirements of the website was distributed and discussed in class (Appendix 1). Students worked on the site together for homework over the break between semesters and for the first two weeks of the next semester. In the first class of semester two, pages that addressed the grading criteria well were used as models Students were given a week to edit their pages.
Step Four	Students were shown the peer evaluation sheet, which used the same rubric as the grade sheet in Appendix 1, and used it in pairs to evaluate a page made by their peers. They (individually) read and evaluated one branch of linguistics per week for homework for eight weeks. All evaluations were anonymous.
Step Five	Students were given all of the feedback sheets from their classmates and used them to edit their website before the assessment deadline.
Step Six	A survey that asked students whether they felt the linguistics website project helped to build different skills was administered. Due to collection errors the survey was given in two parts Appendix 2 shows an amalgamation of the two surveys.
Step Seven	The linguistics website was analysed to see if the work students had done reflected the data collected in the survey.

All of the 21 students in the class agreed to do the survey, in which they were asked to indicate their level of agreement to a series of statements on a 4-point Likert scale. The survey is divided into three sets of questions: those that ask about the benefits of doing the linguistics project on the whole, those that address the collaborative element of the project and those that focus on individual reflection. Each question set gathers data about the target areas of this project; namely, English language and writing skills, including referencing, and knowledge about linguistics. Full details of

the survey can be found in Appendix 2. As quantitative data like this requires larger, random samples the results of this survey cannot be generalised to the wider population. To further understanding of the students' position, qualitative data such as interviews were considered, but time constraints prevented the collection of this data. Despite these limitations, it was felt the data collected would provide sufficient information for a decision to be made on the inclusion of a similar website project in the 2014-2015 academic year and that reporting the study may encourage others to conduct similar pilot studies of their own.

Results

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The main data that is drawn on in this study was obtained from the survey in Appendix 2. Due to a data collection error only 19 responses were collected for some questions, so all responses will be given in percentages for easy comparison.

In question set one, students were asked to report on the extent to which they felt doing the linguistics website project was beneficial. The vast majority of participants agreed that doing it benefited them in a number of ways, with 90% reporting an improvement in their English language skills, 95% reporting an improvement in their English writing skills and 95% reporting that it improved their academic text referencing skills. In addition, all of the students said that it helped them to understand their major field of study, linguistics, better. A full breakdown of their level of agreement for each benefit is shown in Table 2.

Table 2. Students' Views on the Benefits of Doing the Linguists Website Project

	SA	Α	D	SD
It helped me to improve my English language skills (ex. vocabulary, grammar).	19%	71%	10%	0%
It helped me to improve my English writing skills (ex. text organization, topic development).	33%	62%	5%	0%
It helped me to improve my MLA referencing skills.	24%	71%	5%	0%
It helped me understand linguistics better.	67%	33%	0%	0%

 $\it Note. \ SA = strongly \ agree, \ A = agree, \ D = disagree, \ SD = strongly \ disagree.$

All percentages are rounded to the nearest whole number.

Question set two looked more closely at the potential benefits the collaborative element of this project offered. As Table 3 shows, the majority of students felt that they were able to help their classmates to improve their English language skills (72%), English writing skills (84%) and referencing skills (57%), and help them to gain a better understanding of linguistics (81%). The benefits that students gained for themselves by working with others are even more encouraging, with 86% attributing an improvement in their English language skills to their classmates, 94% agreeing that their classmates helped them with English writing skills, 76% reporting that their MLA referencing skills improved due to their classmates and 90% reporting that their classmates helped

them to understand linguistics better.

Table 3. Students' Views on the Benefits of Working with Classmates

	SA	A	D	SD
I helped my classmates to improve their English language skills (ex. vocabulary, grammar).	5%	67%	29%	0%
My classmates helped me to improve my English language skills (ex. vocabulary, grammar).	29%	57%	14%	0%
I helped my classmates to improve their English writing skills (ex. text organization, topic development).	37%	47%	16%	0%
My classmates helped me to improve my English writing skills (ex. text organization, topic development).	47%	47%	5%	0%
I helped my classmates to improve their MLA referencing skills.	14%	43%	43%	0%
My classmates helped me to improve my MLA referencing skills.	33%	43%	24%	0%
I helped my classmates to understand linguistics better.	19%	62%	19%	0%
My classmates helped me to understand linguistics better.	33%	57%	10%	0%

Note. SA = strongly agree, A = agree, D = disagree, SD = strongly disagree.

All percentages are rounded to the nearest whole number so not all results add up to 100%.

Question set three, the results of which are presented in Table 4, sought to evaluate the extent to which private reflection assisted with the development of the participants' skills. Private reflections were examined by asking participants to report on the extent to which they felt individually evaluating their peers' pages on the website impacted upon their skill development. All of the students felt it helped them to improve their English language skills and learn new things about linguistics. Furthermore, the vast majority felt that it helped them to learn how to improve their English writing skills and improve their MLA referencing skills.

Table 4.

Students' Views on the Benefits of Reflecting on and Evaluating their Peers' Work

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	SA	A	D	SD			
While evaluating other students' pages, I improved my English language skills (ex. vocabulary, grammar).	26%	74%	0%	0%			
While evaluating other students' pages, I learned how to improve my English writing skills (ex. text organization, topic development).	68%	26%	5%	0%			
While evaluating other students' pages, I learned new things about linguistics.	62%	38%	0%	0%			
Evaluating other students' pages helped me to improve my MLA referencing skills.	21%	74%	5%	0%			

Note. SA = strongly agree, A = agree, D = disagree, SD = strongly disagree.

All percentages are rounded to the nearest whole number so not all results add up to 100%.

The survey elicited information from the students on whether or not the linguistics website project *helped* them to do things such as deepen their understanding of linguistics and improve their referencing skills. While this project does not seek to measure the extent to which this has been done, evidence of skill acquisition as displayed through the website would strengthen claims that improvements had been made. One area that was relatively easy to check across all of the groups' pages was referencing. The pages they made were checked to see if students had a) directly copied without quoting, b) paraphrased without listing the source, and c) correctly formatted the reference list. While the students claimed to have improved their referencing skills, all ten pages on the website had either included parts that were copied without quoting or had parts that listed material which had been paraphrased without a source. First, evidence of unreferenced quotes was searched for and these were found on seven pages. The remaining three pages were examined to see if complex material had been paraphrased without a listing a source, and this was found on all three pages. This shows that students were still confused about when they needed to add a source and/or how to correctly do so. In terms of the reference lists the results were more promising as while they all contained errors, they tended to include all of the key information that was required and were close to the correct format. Furthermore, some pages only had very minor errors, such as on the punctuation level. As the vast majority of students had needed to make major corrections to their reference lists in essays completed before they created the website pages, it is possible that students did indeed make improvements in this area by doing this project.

Discussion and Limitations

This research investigated whether an online project that required collaboration and individual reflection helped EFL students to develop their English language and academic writing skills (including referencing), and deepen their understanding of their major (linguistics). From the students' perspective, it seems that this has been achieved, with the majority of them indicating that the project helped them to do so. However, an analysis of one aspect of the website, referencing, revealed that the participants were still unclear on how to avoid plagiarism. Prior to the start of this project and throughout it there were repeated attempts to instil the importance of careful referencing, both to avoid plagiarism and meet formatting requirements, but only the latter seems to have been relatively successfully acquired. Due to time constraints a similar effort to triangulate data has not been made for the other key areas of this research project. This could have been done by conducting interviews, comparing more data from the website with the students' responses or comparing essays that were completed by students before and after the project. Despite these limitations, the results suggest that the project has the potential to address the key learning areas that were targeted, so a similar project will be used in next year's writing course. A follow-up project will be conducted with the students in that course, using richer data sources such as those mentioned above

Another potential limitation can be found in the project's design, as the students were assigned to groups randomly. For development to occur it has been argued that social interaction with a more capable peer is needed (Vygotsky, 1978). At the time that the groups were assigned it was not clear

how much each student knew about different branches of linguistics, but essay grades could have been used to put students with stronger and weaker English language and academic writing skills together. However, it was expected that even when assigned randomly differences in capabilities would surface, for example with one group member more knowledgeable about grammar and another more knowledgeable about referencing, and that these would lead to students being able to learn from each other. Whether or not this actually happened could have been probed through interviews had time permitted, and should be considered in future research.

Conclusion

The majority of EFL students in this small-scale pilot project found creating and evaluating an English website on linguistics useful for developing their English language and academic writing skills, as well as for deepening their knowledge on their major. While there is some evidence to suggest that these improvements still leave them with gaps in their ability to do things such as correctly documenting their sources, taking part in the class project has arguably propelled them forward on their developmental journey. The use of convenience sampling in this study prevents the generation of definitive findings that can be widely generalised, but links may be made with existing research and the results could be used to spark further research (Bryman, 2008). While generalisations cannot be broadly extended to the wider population, it is expected that some readers will be able to draw naturalistic generalisations (Stake, 1995) from this study's findings. For teachers, this may help in deciding whether to introduce a similar project into courses they teach.

References

- Bryman, A. (2008). Social research methods (3rd ed.). Oxford: Oxford University Press.
- de Guerrero, M. C., & Villamil, O. S. (2000). Activating the ZPD: Mutual scaffolding in L2 peer revision. *The Modern Language Journal*, 84(1), 51-68.
- Firth, A., & Wagner, J. (2007). Second/foreign language learning as a social accomplishment: Elaborations on a reconceptualized SLA. *Modern Language Journal*, *91*(5), 800-819.
- Lantolf, J. P. (2000a). Introducing sociocultural theory. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning*. (pp. 1-26). Oxford: Oxford University Press.
- Lantolf, J. P. (Ed.). (2000b). *Sociocultural theory and second language learning*. Oxford: Oxford University Press.
- Lantolf, J. P., & Appel, G. (1994). Theoretical framework: An introduction to Vygotskian perspectives on second language research. In J. P. Lantolf & G. Appel (Eds.), *Vygotskian approaches to second language research* (pp. 1-32). Norwood, NJ: Ablex Publishing Corporation.
- Lantolf, J. P., & Poehner, M. E. (2011). Dynamic assessment in the classroom: Vygotskian praxis for second language development. *Language Teaching Research*, 15(1), 11-33.
- McCafferty, S. G. (2002). Gesture and creating zones of proximal development for second language learning. *Modern Language Journal*, 86(2), 192-203.
- Ohta, A. S. (1995). Applying sociocultural theory to an analysis of learner discourse: Learner-learner collaborative interaction in the zone of proximal development. *Issues in Applied Linguistics*, 6(2), 93-121.

- Ohta, A. S. (2000). Rethinking interaction in SLA: Developmentally appropriate assistance in the zone of proximal development and the acquisition of L2 grammar. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning.* (pp. 51-78). Oxford: Oxford University Press.
- Poehner, M. E., & Lantolf, J. P. (2013). Bringing the ZPD into the equation: Capturing L2 development during computerized dynamic assessment (C-DA). *Language Teaching Research*, 17(3), 323-342.
- Stake, R. E. (1995). The art of case study research. Thousand Oaks, CA: SAGE.
- Swain, M., Kinnear, P., & Steinman, L. (2011). *Sociocultural theory in second language education: An introduction through narratives.* Bristol: Multilingual Matters.
- The University of Sheffield, School of English Literature, Language & Linguistics. (n.d.). *All About Linguistics*. Retrieved from http://allaboutlinguistics.com
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press.

Appendix 1: Grade Sheet (Peer Review Sheet Model)

Webpage Title (branch of linguistics):	s):			Su	Submission Date:	ion D	ate:						
Name:	Student Number:	Name:				Stu	dent]	Student Number:	er: _				
(If applicable) Name:	Student Number:												
1) We did approximately the same amount of work on this assignment. Yes / No If you answered "no", please write how much each student did	amount of work on this assignment	Yes / No If you	answ	ered '	no", p	lease	write	how	mucł	ı eac	n stud	lent c	lid
in percentages here:													
			0	_	2	3	4 5	9	7		8		10
Appearance: The website is attractive (ex. pi spacing)	ex. pictures/colours/layout) and there is consistency (ex. font/size/	ncy (ex. font/size/											
Headings/Labels: Key information/sections are clearly highlighted	are clearly highlighted												
Overview: The site starts with a brief overview of the branch of linguistics	ew of the branch of linguistics												
Subject expansion: The site also explains the branch of linguistics in much more detail	e branch of linguistics in much more detail												
Examples: The site gives examples (words/oof linguistics)	Examples: The site gives examples (words/diagrams/audio files) to help learners understand the branch of linguistics	rstand the branch											
Links: The site has links to other sites that are relevant to the branch of linguistics	re relevant to the branch of linguistics												
Works Consulted: Sources that are quoted fi	Works Consulted: Sources that are quoted from or paraphrased are listed according to MLA guidelines	MLA guidelines											
Glossary: There is useful list of key words with easy-to-understand definitions	ith easy-to-understand definitions												
Questions for the Reader: There are questi	Questions for the Reader: There are questions that guide the reader to think more deeply about the branch of linguistics (ex. problems/conflicting views)	deeply about the											
Accuracy (spelling/grammar/punctuation): There are few errors	: There are few errors												
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Appendix 2: Survey

1.	Please share your level of agreement with the following statements about doing	the
	linguistics homepage assignment.	

It helped me to improve my English language skills (ex. vocabulary, grammar).	•	•	•	•
It helped me to improve my English writing skills (ex. text organization, topic development).				
It helped me to improve my MLA referencing skills.	•	•	•	
It helped me understand linguistics better.				

2. Doing the linguistics website project required you to work with classmates. Please share your level of agreement with the following statements.

	Strongly Agree	Agree	Disagree	Strongly Disagree
I helped my classmates to improve their English language skills (ex. vocabulary, grammar).	•	•	•	•
My classmates helped me to improve my English language skills (ex. vocabulary, grammar).	•	•	•	•
I helped my classmates to improve their English writing skills (ex. text organization, topic development).	•	•	•	•
My classmates helped me to improve my English writing skills (ex. text organization, topic development).		•	•	•
I helped my classmates to improve their MLA referencing skills.	•	•	•	•
My classmates helped me to improve my MLA referencing skills.	•	•	•	•
I helped my classmates to understand linguistics better.	•	•	•	•
My classmates helped me to understand linguistics better.		0		•

3. In this course you were required to evaluate your classmates' pages on the linguistics website. Please tell me how much you agree or disagree with the following statements.

	Strongly Agree	Agree	Disagree	Strongly Disagree
While evaluating other students' pages, I improved my English language skills (ex. vocabulary, grammar).	•	•	•	
While evaluating other students' pages, I learned how to improve my English writing skills (ex. text organization, topic development).		•	•	•
While evaluating other students' pages, I learned new things about linguistics.	•	•	•	
Evaluating other students' pages helped me to improve my MLA referencing skills.			•	•

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