## WEB 2.0 MEDIATED COLLABORATIVE WRITING IN EFL CONTEXT: SURVEY OF EMPIRICAL RESEARCH

#### UNIVERSITAS NEGERI MALANG

#### RAHMATI PUTRI YANIAFARI

### yaniafari@gmail.com

#### **ABSTRACT**

The existence of Web 2.0 technology which allows all users to meet, read, and write online provides room for innovations in teaching and learning method. Online collaborative writing tools, a type of the social networking web 2.0, has been increasingly integrated into English language teaching and learning. A number of researches have been conducted to examine the use of this online collaborative writing.

This paper provides a comprehensive survey on researches of web 2.0 mediated collaborative writing in EFL context. A search of the literature through Directory of Open Access Journal revealed 11 empirical studies on this area. These studies are then characterized in terms of the type of the collaborative writing tool used, the level of the learners, and the methodological characteristics of the study. Result of this survey shows that most studies explore the use of online collaborative writing in higher education. The result also shows students' positive perception of such collaborative writing. They perceive it as a means of improving their writing in a supportive atmosphere.

Writing, as a skill, is important in most knowledge-intensive professions. People could spend 20% to 40% of their workday writing, and it is often that the writing is done collaboratively (Edd & Lunsford, 1992). As the Internet has become an everyday tool, the collaboration via electronic technology has increased. According to an American Business Collaborative study (Brown, H. and Tanny. J., 2007), around 80% of workers are Involved in virtual teams. The commonly used digital collaborative writing in workplace arouses the curiosity on how collaborative writing is applied in the classroom. It appears that a number of EFL researchers already conducted research on this area. A search of the literature through the internet, mainly through Directory of Open Access Journal, revealed 11 empirical studies that match the criteria. This paper endeavors to comprehensively survey those researches, by looking at the type of the collaborative writing tool used, the level of the learners, the methodological characteristics of the study, and the findings.

Prior to the discussion about the research, it's better to talk over the definition of collaborative writing and the theoretical basis. In an article on the technology and processes of collaborative writing, Farkas (1991) offers four possible definitions of collaborative process: (1) two or more people jointly composing the complete text of a document; (2) two or more people contributing components to a document; and (3) one or more person modifying, by editing and/or reviewing, the document of one or more persons; and (4) one person working interactively with one or more person and drafting a document based on the ideas of the person or persons. From these definitions, we can see that all 4 of them are possible to be applied in EFL context.

Such collaborative writing processes are supported by some theories. One of them is the socio-constructivist theory that knowledge is socially produced by communities of people and that individuals can gain knowledge if they join knowledge communities (Vygotsky, 1978). Based on this theory, learning occurs when learners improve their knowledge through collaboration and information sharing in authentic contexts. Vygostky's theory of Zone of Proximal Development (ZPD) also confirms the social aspect of learning. ZPD is the "distance between the actual developmental level as determined by independent problemsolving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978). In other words, it is the distance between what a learner can do with help and without help. It means that students can learn by themselves, but beyond certain level, they need assistance of a more knowledgeable person.

The second theory is about Community of Practice. Wenger (1998) states that collaborative learning becomes more important when it takes place in Community of Practice. As Wenger (1998) summarizes, Communities of Practice is groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly. Three components are required in order to be a community of practice: (1) the domain, (2) the community, and (3) the practice. A community of practice has an identity defined by a shared domain of interest. Beside domain, of course there needs to be the community itself, so that members of a specific domain interact and engage in shared activities, help each other, and share information with each other. The last requirement is the practice. A community of practice is not just people who have an interest in something; the members need to be practitioners. In this kind of community, students collaborate as they acquire a common understanding of a shared knowledge domain (Lave & Wenger, 1998). The importance of collaborative writing is no secret to anyone within the educational field. Equal importance should be placed on the tools and methods of collaborative writing. Therefore, empirical data from research about collaborative writing would be significant.

#### RESEARCHES ON WEB 2.0 MEDIATED COLLABORATIVE WRITING

A search through the internet, mainly through Directory of Open Access Journal, revealed 11 researches on digital collaborative writing. The year of the studies ranges from 2001 to 2013, as the use of online collaborative writing tools didn't emerge before the 21<sup>st</sup> century. Ten out of the 11 researches were examining about the collaborative writing in tertiary education level, and only 1 research was examining the collaborative writing in primary-five ESL students. It is most likely because online collaborative writing tools require computer literate user.

The collaborative writing tool used by most of the researchers –7 out of 11— is Wiki; a web application which allows people to add, modify, or delete content in collaboration with others. This type of collaborative writing tool has a tracking system that provides information for gaining an in depth understanding of what kind of editing was taking place and how that would affect student collaboration and writing skills. Figure 1 shows an example of wiki's tracking system (Woo et al., 2011). Two researches (Kasemvilas & Olfman, 2009; Hadjerrouit, 2012) mentioned clearly that the wiki they used is MediaWiki, a free and open source wiki software that has been used to power big wiki websites such as Wikipedia and Wiktionary. The other 2 researches, conducted by Krajka (2012) and Blau & Caspi (2009), chose to use Google Docs. The use of Google Docs as collaborative writing tools has been less investigated as it was opened for public much later then wiki. One other research (Grami, 2012) chose to use Blog; while one research (Kim & Eklundh, 2001) didn't mention specific collaborative writing tool. The researchers' choices of collaborative writing tools in each study match the purpose of the final product. Some researchers choose wiki because they did want their students collaboratively make a product in form of a website, those who use Google Docs emphasize more on the collaborative process rather than the product, while the one who use Blogs wants students to give comments on certain criteria after reviewing.

As discussed earlier, there are four different kinds of collaborative writing (Farkas, 1991). From those 4 types, only 2 types were used (e.g. type 1 and type 3). Nine out of 11 studies implemented the type 3 collaborative writing when one or more persons modifying, by editing and/or reviewing, the document of one person. The other 2 studies applied type 1 collaborative writing, two or more people jointly composing the complete text of a document. Both of the collaborative writing types had positive effect on students' writings. Table 1 summarizes the details of those 11 researches.

Although the researches was conducted in different setting and methods, the primary findings in each research confirms the others. The students were positive in their perceptions of using a wiki, it helped them to work better as a team and write better, encouraged peer-to-peer interaction, and facilitated online group work (Wu, 2013; Grami, 2012; Hadjerrouit, 2012; Krajka, 2012; Hadjerrouit, 2011; Woo et al., 2011; Felea & Stanca, 2010; Kessler, 2009; Kasemvilas & Olfman, 2009; Blau & Avner, 2009). Both the students and their teacher perceived the exchange of comments through a wiki platform as beneficial to their collaboration and construction of their group writing (Woo et al., 2011). Aside from the writing product, digital collaborative writing also supports students' psychological aspects related to their writing. Publishing and suggesting improvement resulted in high levels of psychological ownership and responsibility for own document (Blau & Avner, 2009). Despite the great benefit, the use of online collaborative writing tool can never be straightforward; it takes time (Hadjerrouit, 2012; Hadjerrouit, 2011). The awareness of learning writing in collaboration has to be established among students, but once it is, this particular paradigm is a powerful vehicle for language instruction (Krajka, 2012).

Table 1. Summary of the Researches

No	Author	Year	Research	Collaborative	The Focus of the	Methodological Characteristics
			Subject	Writing Tool	Investigation	
1	Kim, H. &	2001	7 PhD holders	Not specified	Revealing common	An interview study in which 11 academics as
	Eklundh, K.		and 4 PhD		collaborative writing practices	interviewees were participated
	S.		students		with particular focus on	
					reviewing documents	
2	Woo, M.,	2011	students and	Wiki	Examining the application of	A case-study
	Chu, S., Ho,		teachers in a		wikis and explore their usage	design using both quantitative and qualitative data
	A., and Li, X.		primary-five		potential, the effects they have	was chosen to explore how wiki technology helps
			English-		on student learning, and their	to scaffold L2 writers in the complex and
			language class in		effectiveness when used with	continuously changing dynamics of a real-life
			Hong Kong		appropriate instructional	classroom context where the researcher has little
					practices	control over the occurring events
3	Kessler, G.	2009	Mexican Non-	Wiki	Reporting on the initiated	It was conducted over the course of a sixteen-
			Native Speaker		attention to form within the 15	week semester.

			(NNS) English		weeks collaborative	• It relies upon the data provided by the wiki itself
			teachers		construction of a wiki	rather than face-to-face observations.
4	Krajka, J.	2012	Students of	Google Docs	Investigating the applicability	Action Research
			tertiary levels		of one particular online	• Six weeks, 20 minutes each weeks
					collaborative environment	The teaching started with a model, and then
					to implement form-focused	students were put into pairs and assigned focus-
					language teaching at a tertiary	on-form tasks in online environments
					level	
5	Felea, C. &	2010	Undergraduate	Wiki	Describing the authors' first	Introducing wiki to students
	Stanca, L.		EAP (English		attempt at introducing a	Using wiki to support a blended learning
			for Academic		wiki tool in the process of	approach of the course
			Purpose)		teaching EAP for EFL	
			students			
6	Kasemvilas,	2009	Higher	MediaWiki	Describing how a wiki can	Students taking a graduate class in knowledge
	S. & Olfman,		Education		fully support mandatory group	management (KM) were required to write and

	L.		Classes		writing	edit an introductory textbook on the subject
						<ul> <li>It was confirmed that all students were familiar with using the Internet and some of them had used wikis before</li> <li>The MediaWiki instance ran on a third-party server with restricted access</li> </ul>
7	Blau, I., &	2009	Undergraduate	Google Docs	Investigating the influence of	Participants were randomly allocated to one of five
	Caspi, A.		Students		Psychological Ownership,	experimental conditions:
					Responsibility, and Student's	Write a document, Read someone's document,
					Attitudes on Outcome Quality	revise own document
					when sharing and collaborating	Write a document, Publish draft, read someone's
					with Google Docs	document, revise own document
						Write a document, Share draft with a peer, read
						peer's draft, revise own document
						Write a document, Give draft for review by a
						peer, suggest improvements to peer's draft,

						•	revise own document  Write a document, Give draft for editing by a  peer, edit peer's draft, revise own document
8	Hadjerrouit, S.	2011	Undergraduate students	Wiki	Reporting how students develop wiki applications using a collaborative writing development approach based on rapid prototyping	•	The study spent eight weeks, and were divided into six phases according the collabo-rative writing development approach.  At the end, the students delivered a final project report to document the wiki application they developed using the MediaWiki tool as a platform to manage their writings.
9	Chia-Pei Wu	2013	Undergraduate students	Wiki	Examining a Wiki-based  collaborative writing approach  to summary writing for  language learners	•	In the first four weeks, students learned how to summarize the articles in the classroom.  In groups, they had to construct their own summary tasks and then edit each other on the Wikis.
10	Said	2012	Undergraduate	MediaWiki	Examining pedagogical issues	•	A case study

	Hadjerrouit		students		of collaborative writing with	•	Group of students working on the same
					wikis		document to edit, modify, review, and improve it
11	Grami, M. A.	2012	female Saudi	Blogs	Reporting on the experience of	•	Four writing entries were required from each
			ESL students in		seven Saudi female ESL		participant totaling 28 texts
			their tertiary		students who worked	•	Each week, participants were asked to write a
			education		collaboratively in an		topic of their choice and submit it online
					interactive online writing	•	They then post their texts in their respective
					environment over a period of		blogs where they will be viewed by their
					four weeks		colleagues for open comments
						•	The researcher then randomly assigned two texts
							to every participant to provide her feedback
							using a simple checklist of the points she needed
							to discuss.



Figure 1. Excerpt from wiki tracking system (Woo et al., 2011)

# USEFUL TIPS FOR USING WEB 2.0 MEDIATED COLLABORATIVE WRITING IN ELT

The following are some useful tips based on the 11 researches that have been successful in implementing web 2.0 mediated collaborative writing:

a. Make sure that the students are familiar with the collaborative writing tool

In Kim and Eklundh (2001), the collaborative writers didn't use specific collaborative writing tools. Even though they have the facilities, the writer didn't utilize them. This probably happened because of they were not familiar with the tools. For this reason, it is better to familiarize the students with the tool prior to the collaborative writing task.

Again, the use of online collaborative writing tool can never be straightforward; it takes time (Hadjerrouit, 2012; Hadjerrouit, 2011).

- b. Provide students with two varieties of context in which they can interact; contexts in which they do not feel compelled to strive for accuracy as well as contexts that provide explicit demands for accuracy
  - Based on Kessler's (2009) study, students are willing to collaborate in digital collaborative environments, but they may not have the willingness to strive for total accuracy. Students in this study demonstrated the ability to correct and learn from their own and classmates' form errors, but not the willingness to do so when working in an online context, when they think that the main focus is on the creation of meaning. That's why it is better to provide two different contexts, so that students can get the benefit from the autonomous environment yet they are encouraged to strive for accuracy.
- c. When wiki is used, avoid the common wiki architecture, and use the transformation structure instead

Usually, wiki overall architecture is hierarchical with the top as the start page. It is divided into main pages that have one or more sub-pages. Figure 2 shows the hierarchical architecture (Hadjerrouit, 2011). To prevent students from concentrating solely on their own part of the wiki, it is better to link each others' page by means of key words. By using the transformation structure (Figure 3), students can easily go to each others' page.

#### **CONCLUSION**

Result of this survey shows that most studies explore the use of online collaborative writing in tertiary education. The result also shows students' positive perception of such collaborative writing. They perceive it as a means of improving their writing in a supportive atmosphere. However, we cannot expect a quick result, since the use of online collaborative writing tools in ELT can never be straightforward. Students need to be familiarized with the tool.

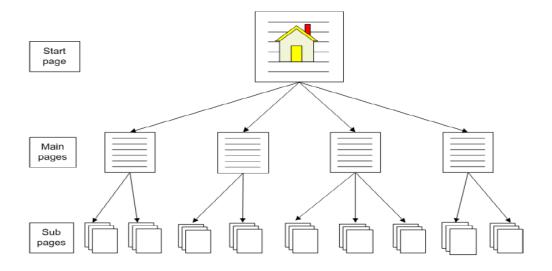


Figure 2. Wiki's Hierarchical Architecture (Hadjerrouit, 2011)

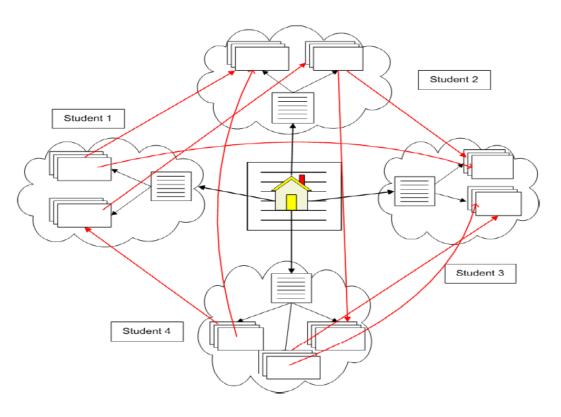


Figure 3. The Transformation Structure (Hadjerrouit, 2011)

#### **References:**

- Blau, I. & Avner, C. (2009). Sharing and Collaborating with Google Docs: The Influence of Psychological Ownership, Responsibility, and Student's Attitudes on Outcome Quality.

  In Proceedings of the E-Learn 2009 World Conference on E-Learning in Corporate,

  Government, Healthcare, & Higher Education. Canada, 2009.
- Brown, K. M., Huettner, B., & James-Tanny, C. (2007). *Managing virtual teams: Getting the most from wikis, blogs, and other collaborative tools*. Plano: Wordware Publishing.
- Ede, L. S., and Lunsford, A. A. (1992). Singular texts/plural authors: Perspectives on collaborative writing. Carbondale: Southern Illinois Univ Press
- Farkas, D.K. (1991). Collaborative writing, software development, and the universe of collaborative activity. In M.M. Lay & W.M. Karis (Eds.) *Collaborative writing in industry: Investigations in theory and practice* (p. 13-30). Amityville: Baywood.
- Felea, C., & Stanca, L. (2010). Wiki Tools and English for Academic Purposes –Fostering Collaborative and Autonomous Learning in Higher Education. *Revista de Informatică Socială*. 7(14).
- Grami, M.A. (2012). Online Collaborative Writing for ESL Learners Using Blogs and Feedback Checklists. *English Language Teaching*, 5(10): 43-48.
- Hadjerrouit, S. (2011). A Collaborative Writing Approach to Wikis: Design, Implementation, and Evaluation. *Issues in Informing Science and Information Technology*, 8(2011): 431-449.

- Hadjerrouit, S. (2012). Pedagogical Criteria for Successful Use of Wikis as Collaborative Writing Tools in Teacher Education. *IPEDR*, 27(2012): 11-15.
- Kasemvilas, S. & Olfman, L. (2009). Design alternatives for a MediaWiki to support collaborative writing, *Journal of Information, Information Technology, and Organizations*. 4(2009):87-106.
- Kessler, G. (2009). Student-Initiated Attention to Form in Wiki-Based Collaborative Writing. *Language Learning & Technology*, 13(1):79-95.
- Kim, H.C., & Eklundh, K.S. (2001). Reviewing Practices in Collaborative Writing. *Computer Supported Cooperative Work*, 10(2001): 247–259.
- Krajka, J. (2012). Web 2.0 online collaboration tools as environments for task-based writing instruction. *Journal of Faculty of Educational Sciences*, 45(2):97-117.
- Lave, J., & Wenger, E. (1998). Situated learning: Legitimate peripheral participation. New York: Cambridge University Press.
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge: Harvard University Press.
- Woo, M., Chu, S., Ho, A., & Li, X. (2011). Using a Wiki to Scaffold Primary-School Students' Collaborative Writing. *Educational Technology & Society*, 14 (1), 43–54.
- Wu, C.P. (2013). Writing performance, strategy use and students' perceptions of Wiki-based collaborative summary writing in an EFL context. *International Journal of Arts and Commerce*. 2(6): 166-174.

Rahmati Putri Yaniafari went to State University of Malang to take a major in English Language Teaching in 2008. Then, she continued to graduate program in English Language Teaching in 2012. One of her major interests is to encourage learner autonomy and creativity through the use of technology. She also authored papers related to CALL (Computer Assisted Language Learning) and presented them in national and international conferences (ELITE, NELTAL, and TEFLIN).