

Boosting Effective Teaching During Pandemic Covid-19 Through Computer-Mediated Collaboration

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ABSTRACT

This study offers how Computer-Mediated Collaboration (CMC), which has been commonly practiced, would give more benefits for effective teaching and learning during pandemic Covid-19. This study has been a starting and an initial endeavor to explore more about online teaching and learning. English teachers also face a high demand for technology use. With this situation, the teaching and learning process should adapt to technology involvement. The use of technology in education is manifested in diverse ways. One of them is through CMC for writing class. Using narrative inquiry as a research method, the investigation focuses on how CMC contributes to realizing successful instruction in its capacities to encourage students' enthusiasm to learn. The data are multimodal narratives taken from one teacher's experiences in teaching writing using CMC. The narratives reveal that CMC empowers students to have computer literacy without ignoring their need to have face-to-face interaction with others. Related to its effect on the students' skills, CMC has given students experience editing and revising the essays more accurately as other students mediate the process. It also builds a sense of connectedness among teachers, students, and learning.

Keywords: *Computer-Mediated Collaboration, Effective Teaching, Writing Skill*

1. INTRODUCTION

Recently, there have been growing interests among English Language Teaching (ELT) practitioners to use technology in the classroom. Technology, such as computer-mediated learning, has been regularly utilized as a tool. Teachers experienced some challenges to transform from traditional to the technology-based classroom. Some biographical research reported teachers' effort to have effective teaching with technology. They have tried many ways from very conventional to high-tech strategies [1], [2]. A research exploring teacher's experiences on her professional journey as an EFL teacher who engages with technology reveals that the media used by the teacher strongly influenced effective teaching. Thus, when the teacher facilitates the class with diverse media, including computer-mediated learning, the students' academic performance was affected [3].

Meanwhile, returnee children helped a lot adjust to new classroom situations through CMC used by Korean teachers [4]. In teaching reading, beginning teachers

who equipped themselves with CMC found that classroom instruction's quality gained advancement [5]. To extend the findings on CMC, it was reported that EFL teachers' professional activity in creating their practices through CMC showed that the instruction quality unequivocally influenced by the capacity to enable media [6]. All those studies discovered that teachers are continuously within the circumstance, expecting them to provide themselves with information and capability to get to current theories and instruction practices, including current demand in technology utilization for teaching development. Since it is understood that teachers of higher degrees, such as universities, are still within the engaging process of technology use in their teaching, it has become a bit complicated for a few teachers.

Up to this point, teachers as agents of change for professional development have a crucial position in the teaching profession and support the classroom to achieve the learning goal. Teachers need to engage with technology utilization because it becomes a must in today's teaching process. With the high speed of the

changing world, indicating the simultaneous change in information and technology, teachers are expected to fill themselves with knowledge and skill to get new teaching theories and practices. Meanwhile, studies on teachers' professional development in employing CMC becomes the interest of educational researchers. By researching teachers' use of CMC, we can distinguish which best practice of CMC gearing it to effective instruction. In line with teachers' effort to discover effective instruction, they naturally are in the circle of professional development as it represents skills and understanding extension that should be accomplished by all university teachers, which is precisely what students need in learning a language [7].

It is significantly required to study the stages of university teachers' development centering on their engagement with CMC to realize successful instruction. The development stages are also relevant information for the teachers themselves, other teachers, and the institution as the point to choose to accomplish professional development activities. This research is carried out to obtain a more profound understanding of teachers' engagement with CMC through Google Docs as a way to achieve effective teaching. This platform was newly used among writing teachers who apply collaborative writing. At the level of statistical data on the effects of Google Docs, it has been found that the use of Google Docs affects students' performance. In the area of the teacher's side, the exploration of the use of Google Docs has been the area that needs to investigate further. The findings, then, will provide information on how university EFL writing teacher uses Google Docs to reach effective teaching.

Meanwhile, research on the use of Google Docs has become a topic of interest among educational practitioners at some educational levels [8, 9, 10]. In English Language Teaching, it has been reported that the use of Google Docs promoted students' critical thinking skill [11]. In addition, Google Docs also helped students to develop their autonomy in learning writing [12]. Previous research exploring students' opinions toward the use of Google Docs in EFL writing also showed positive perceptions in which the students experienced mutual collaboration during the classroom interaction [13]. Therefore, the present study proposes a different design in exploring the positive effect of using Google Docs in teaching collaborative writing through teacher's perspectives.

1.1. Computer-Mediated Collaboration for Effective Teaching

Teaching is viewed as an intricate craft. It needs great efforts in all aspects of the teaching and learning

process, including the teaching media. Technology development opens for facilitating the class with various teaching media. In the current situation, Information Communication Technology (ICT) in education has become a growing phenomenon. It is a challenge and, at the same time, also an opportunity for English teachers toward effective teaching as it covers all aspects of learning [14]. Effective teaching welcomes techniques that best serve the learning needs of their students. Effective teachers help students learn on their own as well as with and from others. They know that students learn best if they are provided with opportunities to learn from the teacher and other students and from sources outside the school that are now more readily accessible through various technology forms [15]. In this context, CMC becomes one of the supplementary media to achieve effective teaching. CMC gives students a chance to monitor writing progress and provide feedback on others' essays. It is essential to set a practical instruction to observe each student's accomplishments closely. This way enables teachers to provide every one of their students with regular feedback on their performance and gives them valuable information to assess their teaching impact.

Another feature of effective teaching is building a positive relationship between students-students and student-teachers. CMC supports the process of building a positive relationship from its usage. CMC allows students to be active in the collaboration, which then they get to know them and take a particular interest in their overall development and progress. Effective teaching empowers students to work collaboratively to benefit student learning [16]. Among the benefits of using computers in effective teaching and learning is that it facilitates group work, providing direct feedback and speed of communication [17, 18]. Also, it promotes reflective, considerate, and asynchronous negotiation of meaning among the students [19, 20].

2. RESEARCH METHOD

The research uses a qualitative approach, narrative inquiry, to describe, explore, and find personal subjectivity that is socially constructed. The use of narrative inquiry helps to gain a better and more in-depth understanding of teachers' utilization of CMC in instructional practices. The stage is from how the teacher keeps updated the information or the content of instruction that directs to effective teaching via CMC, the teaching materials provided in the instruction process employing CMC, and the applied assessment. It also includes an investigation of compelling instruction features using CMC from a resource teacher's commonalities.

The data of the research were primarily taken from one teacher's written and oral narratives. The participant was selected based on her intensity in using CMC through the Google Docs platform. There were three writing teachers teaching in the semester who applied collaborative writing. However, only one teacher developed collaborative writing with Google Docs. The written narrative was collected from the narrative frame; meanwhile, the oral narratives were derived from interviews. Moreover, classroom observation was also conducted to gain a comprehensive picture of effective teaching through CMC. The data from the research subject are about the information related to teacher engagement with CMC.

Firstly, the data were collected by asking the teachers to write the narrative frame, continued by interviewing them based on the appointment. The focus of the narrative frame and interview was the in-progress activities of enriching teachers' knowledge and practices on the use of CMC and its contribution to accommodating effective teaching. The semi-structured interview allows researchers to build knowledge-producing and future dialog about how teachers interpret effective teaching through CMC and other related questions about effective teaching. Meanwhile, unstructured interview functions as the instrument for a more in-depth exploration of teachers' experiences towards successful teaching and for seeking compelling circumstances that facilitate efficient teaching through CMC. The data on the implementation of the CMC were obtained by observation. Another critical research method for getting a real image of how CMC promotes effective teaching is classroom observation. The researcher is equipped with a checklist of findings focusing on instructional activities with provided tasks and classroom interaction.

Data were analyzed through some steps. Firstly, the data were classified by referring to the research questions. In order to evaluate the data, interpretative instruments such as data interpretation and perception were mostly used. There is no attempt to generalize the results, as this is qualitative research, but it generates the CMC definition for effective teaching by stating the relationship between the theories.

3. DISCUSSION

Narratives from the teachers revealed that the instructor realized that using Google Docs as a collaboration forum was her best practice. It used cross-age tutor evaluations in an English writing class, enabling her to examine the students' writing process and development [21]. It suggested that she has started to allow students to use CMC in learning writing. She

organized five students by assigning one student as a leader (editor) and the other four as members (suggest only). The group outline could be viewed with Google Docs by other members, allowing them to provide feedback. From the display, the teacher can control all the activities.

"At present, I find doing collaborative writing is easier since I use google Docss for my students and me. It solved students' problem in managing time to meet. Also, from google Docss I can still controlling 'who' is doing 'what'." 6.15 (T2BP)

The teacher found that her collaborative writing class was efficient and time-saving since she did not have to meet the students to have writing consultation one by one but as in a team. It is in line with one of the strengths of using computer mediated instruction. Besides, as the teacher experienced teaching writing for both motivated and less motivated students, she found out that one of the effectiveness of collaborative writing is that it facilitates those less motivated students who usually hesitate to interact individually with the teacher to see her in a group, and helps those students not to feel nervous.

"Individual writing seemed to be ineffective because it does not give any chance for the students to learn from their friends. When they write individually, for brave students, they never hesitate to come and see for consultation, but for shy students, they felt doubt to see me having face-to-face interaction." 2.1 (T2Rea)

It was one proof of her engagement with online collaborative writing when she began to include Google Docs in her writing class. Meanwhile, computer-mediated interaction has increased immensely in the past 20 years [22]. Google Docs mainly serves as a web-based word processor where, by accessing the same document online, all group members and student tutors can readily access and communicate with each other. It made it possible for students to create, edit, and remove writing content easily. Students benefited from using Google Docs for substantial peer interactions, motivation, and vocabulary gain [23, 24]. T2's collaborative writing class will be continued in this way. Google Docs works well at the tertiary level in which learners' autonomy becomes university students' requirement. The instructional benefits of Google Docs allow students to sharpen collaborative skills and inspire them to foster peer scaffolding and co-construction of knowledge [25]. Google Docs plays a vital role in improving students' motivation and engagement during the writing process, which is known as a complicated process.

The teacher's teaching of collaborative writing by employing Google Docs as a tool shows that she was sure that it is appropriate for her class. It is one of the characteristics of an effective teacher who understands

better which method and tool or media suitable for her students to achieve the course's learning objective. The teacher strongly believed that it would make the students ease in the process of learning how to write, as she stated below:

"...by asking students to do collaborative writing with the belief that it could ease the students to get ideas and make them learn from their friends" 4.9 (T2Ev)

The teacher's belief in collaborative writing effectiveness was also derived from her experience when she was a trainee student. She was helped a lot by having collaborative writing in her training course. So she becomes a catalyst when now she is the teacher and the facilitator of the writing course. She firmly believed that her students would also learn and feel like what she experiences in learning collaboratively. She admitted that in the following narrative:

"I remembered, during nine months, I did my pre-departure training, I rarely did individual assignments. Most of the tasks were done collaboratively in 'roundtable' that gave me chance to share and discuss ideas. By doing collaborative works, I could learn something from my friends either new things or the missing lesson which had been taught by the instructor in the class. From this experience, I thought that 'Oh, I should do like this.'" 4.5-8 (T2Rea)

Based on the observation, students demonstrate a positive attitude to collaborative writing with Google Docs. It helps students exhibit positive attitudes to the use of the online writing method and be pleased with their meaningful experiences with peer e-tutors. Online tutoring exercises strengthened their ability to write in English, and they reported a willingness in the future to engage in similar practices. A few issues resulted from the usage of Google Docs, including occasional missing screen data and an unintended lag that occurred during the online writing process [26]. However, compared to the minor challenge, Google Docs brings stimulating situations during group work as Google Docs fosters students' sense of confidence [27, 28]. Students feel free to check each other essay without any burden to offend others' feelings. The template in Google Docs has facilitated them to provide constructive feedback.

"It seemed that low achiever had fresh air from the collaboration..." 5.11 (T2IE)

The teacher pointed out that the fresh air of Google Docs has influenced the way students see and value collaboration. The writing classroom is no longer a supporting place to compose and refine. As a result, low motivated students who usually took a passive role became confident to share with other students. It was seen from the activity of peer assessment. Low learners found that there were still some writing difficulties for

even high achiever students. One last important thing about the value of Google Docs was its potential to reduce students' anxiety. As it is understood that with its complexities, writing skills easily has made EFL students feel anxiety, displeasure, and less effective in writing. It can be seen from the following teacher's statements:

"Collaborative writing can reduce my students' anxiety to write as they have more heads to think about the essay." 6.9 (T2NE)

The situation of the classroom becomes very interactive without ignoring the importance of face-to-face interaction. Through Google Docs, CMC empowers students with a sense of connection to high demand for computer literacy in their future lives. On the other hand, CMC serves both educational and nurturing effects in the classroom. The educational effects are on students' language skills, which become accurate in writing a text. The accuracy includes the grammar, vocabulary, and substance of the text. The nurturing effect is also a significant feature of CMC. This model of the classroom offers a space for students to experience joyful learning throughout the lesson. It also allows students to be more open to comments from class members.

"So, grammar improvement was clearly seen compared to content and organization." 6.6 (T2IE)

After reflecting on all of the experiences, the teacher suggested what to do next. It reflected her constant reflection about what she had done and her great effort to establish a better practice of collaborative writing. Since she had already learned the beneficial impact of collaborative writing, she specifically mentioned her hopes in the below statement to continue implementing collaborative writing based on the appropriate context.

"For the next writing class, I want to change the strategy by involving google Docss in order to encourage students' involvement. I knew that they were underpressure to write collaboratively, but they took advantage from it. Finally, I love collaborative writing." 8.7 (T2Ho)

4. CONCLUSION

The extensive use of technology affects any human life, including in the field of education. Technology opens up particular doors for the improvement of the teaching and learning process. With CMC, the use of Google Docs, language classrooms has excellent exposure to developing the standard of class interaction and student writing. The technology aims to make classroom engagement relevant for both teachers-students and students-students. They learn better when they have got the media to share their thoughts. Teachers quickly attract students' attention to learning the

material; in the meantime, students are more interested in further exploring the materials.

This study raises two implications. Theoretically, this study strengthens the connection between technology use in the language classroom and collaborative writing. Practically, it indicates that technology cannot be avoided as it becomes a crucial intellectual supplement to improve students' writing skill. Achieving successful teaching by CMC is never without challenge. Teachers' readiness and advanced computer literacy are also a significant obstacle to plan for. Comskillsnsive studies on teachers' computer literacy and the CMCchallengesm model are crucial subjects to be explored.

REFERENCES

- [1] D. C. Soekirno, Phases of awareness: Why I became an English teacher. *English Teaching: Practice and Critique*, vol. 3(1), p. 59-70, 2004.
- [2] P. L. Ha, *Teaching English as an International Language. Identity, Resistance, and Negotiation. New Perspectives on Language Education*. Multilingual Matters Ltd. 2008.
- [3] Y. H. Lu, *Stories of Teacher Identity: A Narrative Inquiry into East Asian ESL Teachers' Lives*. Unpublished Dissertation. University of Maryland, 2014.
- [4] S.Y. Hong, *A Narrative Inquiry into Three Korean Teachers' Experiences of Teaching Returnee Children*. Unpublished Dissertation. 2009. University of Alberta, 2011.
- [5] C.U. Edge, *Making meaning with "Readers" and "Texts": A Narrative Inquiry into Two Beginning English Teachers' Meaning Making from Classroom Events*. Unpublished Dissertation. University of South Florida, 2011.
- [6] Y. Xu, *Becoming Researchers: A Narrative Study of Chinese University EFL Teachers' Research Practice and Their Professional Identity Construction*. *Language Teaching Research*, vol. 18(2), pp. 242-25, 2014.
- [7] S. Wichade, Factors Related to Professional Development of English Language University Teachers in Thailand. *Journal of Education for Teaching*, vol. 38(5), pp. 615-627, 2012.
- [8] M. Firth & G. Mesureur, Innovative uses for Google Docss in a University Language Program, *The Jalt Call Journal*, vol. 6 (1), pp. 3-16. 2010.
- [9] A. Apergi, A. Anagnostopoulou & A. Athanasiou, E-Learning for Elementary Students: The Web 2.0 Tool Google Drive as Teaching and Learning Practice, *World Journal of Education*, vol. 5 (3), pp. 1-7. 2015.
- [10] M. Woodrich & Y. Fan. Google Docss As A Tool For Collaborative Writing In The Middle School Classroom, *Journal of Information Technology Education: Research*, 16, pp. 391-410. 2017. Retrieved from <http://www.informingscience.org/Publications/3870>
- [11] E. Wahyuni, Collaborative Learning Activities with Internet-Based Nature Of Google Docss, *The Proceeding of 4th International Conference the Community Development in ASEAN*, pp. 261-266. 2017.
- [12] N. Boyes, Building Autonomy Through Collaborative Writing with Google Docss, *OnCUE Journal*, vol. 9(3), pages 228-238. 2016.
- [13] K.O. Jeong, A Study on the Integration of Google Docss as a Web-based Collaborative Learning Platform in EFL Writing Instruction, *Indian Journal of Science and Technology*, vol. 9(39), pp. 1-7. 2016. DOI: 10.17485/ijst/2016/v9i39/103239
- [14] S. O'Neil. *A Guide for Effective Teaching*. CUP. 2016
- [15] C. Mulligan & R. Garofalo, A Collaborative Writing Approach: Methodology and Student Assessment. *THE LANGUAGE TEACHER*: 35(3), pp.5-10, 2011.
- [16] A. F. Dobao, Collaborative Tasks in the L2 Classroom: Comparing Group, Pair, and Individual Work. *Journal of Second Language Writing*, vol. 21, pp. 40-58, 2012.
- [17] D.A. Hantula, The Virtual Industrial/Organizational Psychology Class: Learning and Teaching in Cyberspace in Three Iterations, *Behavior Research Methods, Instruments, & Computers*, 30, pp. 205-216. 1998.
- [18] T.A. Pychyl, D. Clarke, & T. Abarbanel, Computer-Mediated Group Projects: Facilitating Collaborative Learning with the World Wide Web, *Teaching of Psychology*, 26, pp. 138-141.1999.
- [19] L. Cifuentes, K. L. Murphy, R. Segur, & S. Kodali, Design Considerations for Computer Conferences, *Research in Computing in Education*, vol. 30(2), pp. 177-201.1997.
- [20] D.C Lewis, J.A. Treves, & A.B. Shaindlin, Making Sense of Academic Cyberspace: Case study of an

- Electronic Classroom, *College Teaching*, vol. 45(3), pp. 96-100. 1997.
- [21] R. Cullen, J. Kullman & C. Wild, Online Collaborative Learning on an ESL Teacher Education Programme. *ELT Journal*, vol. 67(7), pp. 425-43, 2013.
- [22] N. Storch, Collaborative Writing in L2 Contexts: Processes, Outcomes, and Future Directions. *Annual Review of Applied Linguistics*, CUP, vol. 31, pp.275-288, 2011.
- [23] L. Yang, Examining the Mediational Means in Collaborative Writing: Case Studies of Undergraduate ESL Students in Business Courses. *Journal of Second Language Writing*, vol.23, pp.74–89, 2014.
- [24] H. C. Lee & P. L. Wang, Discussing the Factors Contributing to Students' Involvement in an EFL Collaborative Wiki Project. *ReCALL*, vol. 25(02), pp.233 – 249. 2013. DOI: 10.1017/S0958344013000025
- [25] S. H. J. Liu & Y. J. Lan, Social Constructivist Approach to Web-Based EFL Learning: Collaboration, Motivation, and Perception on the Use of Google Docss. *Educational Technology & Society*, vol. 19 (1), pp.171–186, 2016.
- [26] W. C. Lin & S. C. Yang, Exploring the Roles of Google.Docs and Peer E-tutors in English Writing. *English Teaching: Practice and Critique*, vol. 12 (1), pp.79-90. 2013.
- [27] S. Yu & I. Lee, Understanding EFL Students' Participation in Group Peer Feedback of L2 Writing: A Case Study from an Activity Theory Practice. *Language Teaching Research*, vol. 19(5), pp.572-593. 2014.
- [28] Y. M. Fung, Collaborative Writing Features. *RELC Journal*, vol. 41(1), pp. 18-30. 2010. DOI: 10.1177/0033688210362610