

A Case Study of Social Learning in iCALL-Based English Writing Course from Learners' Perspectives

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Abstract

As one of the essential theoretical concepts in sociocultural theory, social learning addresses that any learning is fundamentally a social learning process, which results from the interaction between individuals and their social context. The principal aim of this study is to explore what has come out of the social learning process in a case of a iCALL-based EFL writing course in a university in China. The study investigated 54 learners' attitudes towards the iCALL-based English writing course and what they really gained from peers' interaction (reading and commenting on peers' writings). Data was collected by means of structured and semi-structured questionnaire, open-ended interview, and collection of online-texts; data analysis was done both quantitatively and qualitatively via SPSSAU, coding and content analysis. The results demonstrate that the majority of the students have a positive attitude toward this iCALL-based English writing course, and their gains from the dialogic activity include not only their improvement in language writing ability, but also non-linguistic aspects falling into the following four aspects: cognitive domain, meta-cognitive domain, affective domain, and meaning of life. The researcher concludes that the social learning process in this case was not only a good source for languaging, which leads to the improvement of learners' language ability in the process of joint construction, but also a good source for affective and social communication within the learning community.

Keywords: social learning; iCALL-based English writing course; learners' perspectives; sociocultural theory

Introduction

The past few decades have witnessed a virtual explosion of research interest in applying technology to language teaching and learning. Much attention has been focused on understanding the role of technology in ESL/EFL pedagogical practice. As writing instruction is one of the key aspects in ESL/EFL, quite a number of language teachers and researchers worldwide began to examine the relationship of technology integration to second language writing. In China, an increasing number of language teachers and researchers have been motivated to explore how to best utilize the modern technology to facilitate EFL writing.

According to the literature review of relevant research in the last decade or so, domestic studies on technology-assisted EFL writing laid their emphasis mainly on the following three aspects: the integration of technology into curriculum, pedagogy of technology-based instruction, and application of certain learning theories. Studies focusing on the integration of technology into curriculum, which constituted the majority of research in this field, mostly explored the feasibilities, necessities, or superiorities of applying a certain educational technology, such as iWrite, Rain Classroom, Moodle, Wechat, SPOC, MOOC, etc. into English writing instructional practice. Meanwhile, this

kind of research sometimes attempted to investigate the comparative advantages of technology-assisted EFL writing, sought for efficient instructional strategies, or developed teaching software (see Li & Tian, 2018; Yingliang, & Liu Jiaying, 2018). The second category of research searched for the way as to how to work out an optimum pedagogical approach to develop the potentials and advantages of a certain educational technology in English writing teaching practice (see Yang & Dai, 2015; Zhang et al, 2016; Zhou, 2015; Zhang & Xu, 2019). Studies on self-assessment scales in online English writing also sprang up (see Pan et al, 2019; Xie & Gao, 2022).

The studies on technology-assisted ESL/EFL writing teaching have undoubtedly offered valuable insights into people's understandings of the field. However, the emphasis researchers placed on was mostly "teaching" and "how to teach", rather than "learning" and "what to learn".

The turn of the century has witnessed a significant reconceptualization of SLA which rooted from Vygotsky's Sociocultural Theory (SCT). The social-turn paradigm stresses the "social, discursive approaches to the nature of the mind" (Firth and Wagner (hereafter F&W), 1997: 287) and emphasizes language development through meaningful social interaction (Lee, 2004). The advocates for reconceptualizing SLA offered positive even heated response for F&W's appeal for "a) significantly enhanced awareness of the contextual and interactional dimensions of language use; b) an increased emic (i.e., participant-relevant) sensitivity towards fundamental concepts (F&W, 1997: 286)" (see Lafford, 2007). In this regard, research in technology-assisted ESL/EFL writing is supposed to focus on contextual and emic dimensions and shift its attention from exploring "how to teach" and "how to utilize technology to assist teaching and learning" to pursuing "how to interpret the social learning process and what learners experience with the assistance of technology", which defines the scope of the present study.

Literature Review

Social Learning in SCT

From a sociocultural perspective, all learning is fundamentally a mediated and social process, the result of interaction between two or more individuals and their social contexts. Such a concept is a concentration of two aspects to Vygotskian thought: mediation and social learning (Warschauer, 2005). The concept of mediation that all human activity is mediated by tools or signs is the heart of Vygotskian and SCT, and it is realized in the process of social learning, which together frame the present study in theory. Vygotsky suggested three major classes of mediators: material tools, psychological tools, and other human beings (see Kozilin, 1998). What is thus significant about various mediators is not their abstract properties, but rather, how they fundamentally transform human action (Warschauer, 2005). For Vygotsky (1981), the incorporation of these mediators does not simply facilitate action that could have occurred without them, but rather, by being included in the processes of behavior alters the entire flow and structure of mental functions.

The notion of social learning is virtually expressing the social origin of mental functioning. As Vygotsky (1978) advocated, any learning is fundamentally a social learning process, which resulted from the interaction between individuals and their social context. Language is the tool for individuals to socialize with others. It is during the socialization process that individuals communicate with their community, share knowledge with others, and then internalize understandings. Vygotsky (1989: 61) further claims, "social interaction actually produces new, elaborate, advanced psychological processes that are unavailable to the organism working in isolation". Vygotsky used the term internalization when explaining the interaction between an organism and its environment. In his words: "all higher mental functions are internalized social relationships" (cited from Wells, 1999).

Social Learning on CALL

The mediated social process calls for various mediators, which contain, as Vygotsky (1978) suggested, material tools, psychological tools, and other human beings. Such a categorization was later developed into a simple, but powerful, graphic representation by Lantolf and Thorne (2006: 62) as follows:

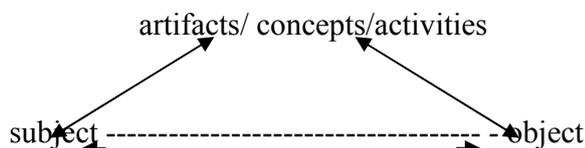


Figure 1: The mediate nature of human/world relationship

The significance of these mediational tools or activities lies in how they can transform human action by altering the entire flow and structure of mental functions, rather than simply the person plus the tool or activity. As applied to CALL, mediators in this regard range from technologies to language (linguistic activities between peers), and instructors. All these mediators function in the process of being used, and interact in complex, dynamic ways with each other and with (biologically endowed) psychological phenomena. The interweaving of those mediators and learners' biological inheritances within the computer-assisted setting gives rise to higher-mental functions that is, functions such as memory, attention, rational thinking, emotion, and learning and development that come under the intentional and voluntary control of the person (Lantolf & Thorne, 2006).

Among all culturally mediational tools, language is foregrounded as 'psychological tool' by Vygotskian views. The socializing experiences through which individuals communicate and share something with a community were considered as crucial in internalizing knowledge. Vygotsky (1978) has argued powerfully that social interaction fosters the individuals' performance through the zone of proximal development (ZPD)—the distance between what they can achieve by themselves and what they can achieve with assistance from others. According to Vygotsky (1978: 57), "Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; the first, *between* people (interpsychological), and then *inside* the child (intrapsychological)". Learners' cognitive or cultural development and internalization of knowledge occur within the transitional process from interpsychological level to intrapsychological level. CALL or iCALL offers a perfect platform for such a transitional process to proceed. In general, social learning theory treats communication, thinking and learning in CALL settings as related processes which are shaped by culture. The nature of CALL activities is that knowledge is shared and learners jointly construct understandings of shared experience. Education is seen as a dialogic process, with students and teachers working within the technology-assisted settings which reflect the values and social practices of schools as cultural institutions (Mercer, 2004).

Research Questions

The principal aim of this study is to explore what has come out of the social learning process in a case of a iCALL-based EFL writing course in a university. The study investigated 54 learners' attitudes towards the iCALL-based English writing course and what they really gained from peers' interaction. The research questions addressed in the study thus includes:

- 1) What are the learners' attitudes towards the iCALL-based English writing course?
- 2) What can learners obtain from the social learning process?

Methodology

Research Context (The Case)

The research context of this study is a *iCALL-based English Writing Course*, taught by a professor who has had years of English writing teaching experience in multi-media language labs utilizing iCALL-based platforms. Framed by tenets of social learning in SCT, the course has many of its specific features and elements.

1) Material mediator: iCALL-based learning platform

To provide a dialogic learning environment for learners, an iCALL-based writing system was established. Integrating the mediation and social learning factors, the iCALL-based learning platform offers learners plentiful learning opportunities for their autonomous learning.

The iCALL-based learning platform is composed of two sub-systems: *Teaching Management System* and *Learning System*. In the former, the instructor can monitor the whole class, upload teaching materials, score and evaluate learners' writings, and communicate with learners online. In the latter, learners can browse learning resources uploaded by the instructor, read, comment, or revise others' work, and reply to teacher and peers' comments. Besides, the Message Board on the homepage of the website can offer a forum for learners to exchange reflections on the beautiful articles provided by the teacher at the beginning of the next class.

2) Human mediators

Teacher mediator

The course emphasizes the teacher's role as a mediator in promoting learners' knowledge construction, which was particularly embodied in task designing and dynamic assessment upon learners.

When designing writing tasks, the value of the tasks was considered, and many learner-relevant, meaningful, authentic writing tasks were created by the teacher, which served as stimulus and inspirational power for learners to write and interact; when giving assessment, the teacher paid attention to the dynamic process of the learners' writing and improvement, and gave encouraging and in-time feedback accordingly.

Peer mediators

When working together, people are actually "interthinking" (Mercer 1995:3). Dialogue between peers is thought to promote the joint construction of knowledge. Through the medium of the iCALL-based writing system, each learner had the opportunity to read others' articles and gave comment to the writer. In the Message-board forum, learners of the whole class also can, collectively, accumulate ideas, explore certain topics; even argue for a controversial issue.

Writing Activities

There were generally two kinds of writing activities in the course. One was regular writing practice, generally following the process advocated by "Process Writing" approach (White & V. Arndt, 1991). Once a topic decided upon, the class would proceed step by step along the process of generating ideas, structuring, drafting, revising and editing. The other kind of activity was free writing, or fluent writing. Students were given, once every two weeks, a piece of carefully-chosen prose or poem written by famous writers. Their reflections would be shared on Message Board.

Subjects

Subjects in the study were junior undergraduates majoring in English in China. This study involves two samples of subjects. Sample 1 consists of 54 English majors from two classes (see Table 1). Their English proficiency was approximately between 100-120 in the *National College Entrance Examination (NCEE)*.

Table 1. Descriptive statistics of sample 1 (54 subjects in total)¹

Gender	English score in NCEE	Self-assessment of writing proficiency
Male: 15 Female: 39	under 90: 5 90-100: 8 100-120: 32 above 120: 9	excellent: 2 good: 19 so-so: 25 poor: 3 terrible: 0

Subjects of sample 2 were six interviewees (with two as a group), selected from the whole team for the interviews at the end of the term according to their basic information offered by the questionnaire (see Table 2). They were selected on the basis of their present writing proficiency, since the researcher intended to know how learners with different English writing levels perceive the Course.

Table 2: Descriptive statistics of sample 2 (6 subjects in total)²

Subjects	Group 1		Group 2		Group 3	
	Sun Li	Li Hua	Lu Yan	Li Xue	Qi Li	Li Na
Gender	Female	Female	Female	Female	Male	Female
English score in the NCEE	134	129	118	109	91	101
Self-assessment of writing proficiency	excellent		so-so		poor	

¹ The numbers in this table indicate how many subjects there are in each category.

² In order to protect subjects' right of privacy, all of the interviewees' real names were hidden and replaced by created ones.

Instruments

Attitude Questionnaire

Focusing on research question 1, two self-designed questionnaires were proposed to elicit the learners' attitudes towards the iCALL-based English writing course. Both of them were designed by following the instructional procedure of the Course. The first one is a semi-structured questionnaire consisting of some open-ended questions. The contents were proposed by following the suggestions of the instructor of the Course. The questionnaire was used as a preliminary exploration to elicit learners' general perceptions of the whole writing process, with the purpose of providing some hints for the development of the later structured questionnaire.

The second questionnaire is a structured one made up of two parts, background information survey and survey for learners' attitude towards the Course. The first part was designed to obtain such data as learners' gender, class, age, score in *NCEE*, years of English learning, and self-assessment of their English writing proficiency. The second part is a questionnaire including 18 self-designed statements. These statements were arranged into 5 categories which were proposed in terms of the course, namely, *general attitude*, *online exchange on Message Board*, *submitting*, *reading*, and *commenting*. To ensure the internal reliability and gauge the Chinese learners' most original perceptions of the course, the questionnaire was made in Chinese. Each statement was scored on a 5-point Likert Scale, ranging from 1=strongly agree to 5=Strongly disagree. Respondents are re-

quired to “read each statement and indicate the level of agreement or disagreement” by choosing one answer from the five for each of the 18 statements.

The reliability analysis with SPSSAU showed the Cronbach coefficient alpha for the questionnaire was .93.

Interview Protocol

The interview protocol was designed to explore the learners’ perceptions of the social learning activities in the Course. It was designed as an open-ended one, consisting of three questions which were developed specially for the research. The first interview question is still concerned with learners’ attitudes towards the Course, in particular, towards activities of reading and commenting on peers’ writings. The second one aims to investigate what has come out of the interaction involved into the Course. The last question was intentionally developed to arouse subjects’ more subtle understandings of the social learning process by associating the present course with traditional ones, which might offer some supplements for the previous two interview questions.

Text Analysis Instruments

Taking *Grounded Theory Method* (GTM) (Babbie, 2005), analysis of online text materials was conducted by referring to, firstly Henri’s (1992) model for content analysis of CMC materials, and Bloom’s (1956) *Taxonomy of Educational Objectives*. Henri (1992) proposed an analytical framework to categorize five dimensions of the online learning process: student participation, interaction patterns, social cues, cognitive skills and depth of processing, and meta-cognitive skills and knowledge. Bloom (1956) identified three domains of educational objectives: cognitive, affective, and psychomotor domain. Preliminary text analysis was assisted by the two instruments and generated two sections of coding version. More elaborate analysis performed later resulted in a modified instrument for identifying learners’ gains obtained from the social learning process. The instrument consists of four categories of gains: cognitive domain, meta-cognitive domain, affective domain, and meaning of life, within each of which there are some sub-domains. A flow chart of the instruments used in data analysis is presented in Figure 2:

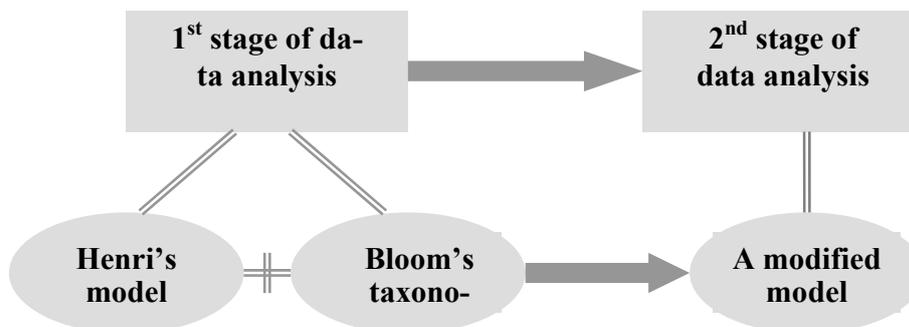


Figure 2. Instruments used in data analysis

Procedures

Questionnaire Survey

The research project was carried out as the Course started. To raise the reliability and validity of the self-designed questionnaire for exploring learners’ attitudes towards the English writing course, a semi-structured one was developed as a pilot exploration to elicit learners’ general perceptions of the whole writing process. It was delivered in the second week of the term, 54 such questionnaires were delivered and collected.

The results from the semi-structured questionnaire provided plenty of useful hints and inspirations for the design of the later formal questionnaire, which was not delivered to the subjects until they were familiar enough with the Course. 54 of such questionnaires were delivered and 51 were collected in the 12th week of the term respectively. 49 of the questionnaires were found to be valid after careful examination.

Text Analysis

Two kinds of data were collected: comments for peers' articles and reflections on the Message Board. During the whole term, there were 12 times of article-commenting activities (each class 6 times), one of which produced approximately 220 comments; and on the Message Board, 66 web pages, including 670 pieces of reflections, were automatically saved. Data retrieved later for analysis includes 120 pieces of reflections made on 5 (totally 9) pieces of prose which were delivered over the whole term, and 660 comments spreading over 3 times of commenting activities, with one in the beginning of the term, one in the middle, and one in the end. Detailed text analysis was conducted twice. Preliminary text analysis was assisted by Henri's (1992) model for content analysis of CMC materials and Bloom's (1956) *Taxonomy of Educational Objectives*. On the basis of the criterion generated from the previous analysis, all the data reserved was re-abstracted to pursue the answers to research question 2.

Interview

At the end of the Course, three open-ended interviews with the same interview questions were conducted respectively among 3 groups of subjects. The specific time and place for interviews were decided for the subjects' convenience. The interview courses with each lasting for 25 minutes approximately, were recorded and transcribed into text for data analysis.

Results and Discussion

The Learners' Attitudes towards the Course

Frequency counts for the 49 questionnaires were computed. The frequency counts indicated that the majority of the students had a positive attitude towards this iCALL-based English writing course. The pie chart Figure 3 shows the percentages of each point from 1 (strongly disagree) to 5 (strongly agree) for all the subjects and statements. As it indicates, over 75% of the students showed positive attitudes towards the mostly positively worded statements, among which statement 11 was negatively worded but reversibly scored.

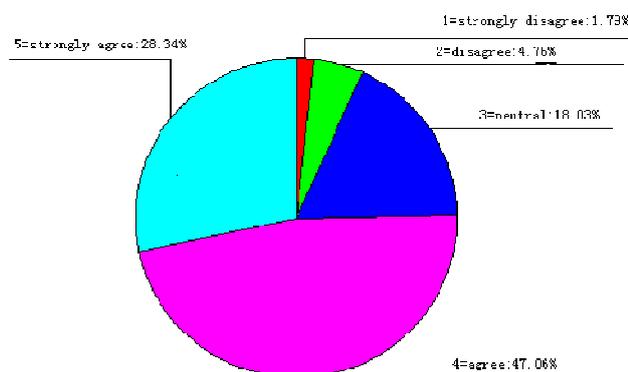


Figure 3: Percentages of each point from 1 to 5 in the five-point scale

Figure 3. Percentages of each point from 1 to 5 in the five-point scale

A mean attitude score for all subjects on each question in the questionnaire was calculated. The mean attitude score for all subjects on all questions was 3.95, much higher than a mean of 3 (representing a neutral score). As a matter of fact, mean scores on all the 18 questions were higher than the neutral.

Among the individual statements, the most positive response, at a mean of 4.35 and significantly higher than all other questions, was given to question 17 “I like to see my article be commented”. Next highest were questions 9, 13, 14 and 18 (see table 3). The least positive response, at a mean of 3.37 but still higher than the neutral score, was given to question 4 and 6 (see table 4).

Table 3. Questions with the highest mean scores

Survey questions	Means	SD
17. I like to see my article be commented.	4.35	.85516
9. Submitting link makes me treat my composition more seriously.	4.31	.82169
13. I can figure out others' advantages and my own disadvantages in writing when reading others writings.	4.20	.88928
18. I would carefully reflect on others' comments on my articles.	4.20	.70651
14. I hope my articles to be read.	4.18	.88208

Table 4. Questions with the lowest mean scores

Survey questions	Means	SD
4. I expect the next writing class.	3.37	.83401
6. I would review and browse what I wrote on the message board.	3.37	1.01435

The mean scores for all subjects on the questions in the five categories of the questionnaire were elicited, and the mean scores on the later three categories were higher than the aforementioned mean attitude score for all subjects on all questions, that is 3.95 (see Table 5). The five categories of the questionnaire were identified and entitled according to the writing activities in the course. As table 5 suggests, the highest mean attitude score went to the Commenting Link of the course, while the Online exchange on Message Board Link got the lowest mean score.

Table 5. Mean scores for all subjects on each category

Category	General attitude	Online exchange on Message Board	Submitting activity	Reading activity	Commenting activity
Mean	3.77	3.71	4.03	4.10	4.14

The above results are due to the carefully utilized theoretical framework of the course. Framed by tenets of social learning in SCT, the Course was designed to create a collaborative and dialogic learning process, which, as Vygotsky remarked, once integrated with the consideration of fullness of life, of the personal needs and interests in the task design, can provoke the motive forces that stimulate learners' learning and active interaction (Vygotsky, 1986: 11). In addition, submitting

and mutual reading and commenting activities offered students a socially and linguistically meaningful context. They developed a space for students to learn together, and exchange ideas. When fulfilling learning tasks, the learners were actually mediating each other, socializing with peers, and “interthinking” (Mercer, 1995:3).

Learners’ Gains from the Social Learning Process

Criterion for Identifying Gains

Preliminary coding and the later elaborate data analysis abstracted four domains of gains: cognitive domain, meta-cognitive domain, affective domain, meaning of life.

The cognitive domain involves linguistic knowledge and the development of intellectual or thinking abilities. Metacognitive domain has two distinct classifications: metacognitive skills and metacognitive knowledge. The former has some overlapped areas with the cognitive domain, which contains planning, self-questioning, reflection, evaluation, and self-awareness (Hara et al., 2000). The latter relates to knowledge of one’s own cognition and the regulation of that cognition. Affective domain includes the manner in which we deal with things emotionally, such as feelings, values, appreciation, enthusiasms, motivations, and attitudes. The last domain of gains, i.e. new insights in meaning of life, was coded by the researcher herself while analyzing the data. It is different from the affective domain in that it refers to some enlightenment or new perceptions learners got in morality, life, or some new values they attached to a particular object or phenomenon.

Gains

Cognitive Gains

- Cognitive Knowledge: Linguistic Development

Many students put forward their general comments on the mutual reading and commenting activities, like “*I can learn a lot of things from them*”, “*I’ve gained many useful things*”, etc. A large number of students posted that they achieved cognitive development in language or English writing. For instance, around the writing topic “*How to classify things*” and the articles students submitted, Winne posted,

“After reading them, I know much clearly about some classification and learn some new things. The articles are all clearly organized usually in several paragraphs. And I also learn some new words and beautiful sentences.”(10-31-2022 9:31:48 AM)

Similarly, Canny expressed her ideas upon mutual reading activity,

“... my passage is too common. It’s not attractive...I think their article is interesting or moving. I can know more about how to write a excellent article...”(10-31-2022 9:30:23 AM)

When asked their opinions upon the mutual reading and commenting activities, all the 6 interviewees reached an agreement that the online interaction benefited them a lot in developing their English writing abilities. Moreover, all of them positioned this point in the primary place when they answered the interview question. For instance, Li Na mentioned, “*In my opinion, writing something is expressing some opinions. After expressed, your opinions would be commented then you can know your advantages and disadvantages in them, then you know how to improve. In addition, we need to read and comment others’ writings, firstly to absorb others’ advantages, and secondly to accomplish others’ improvement...*”. Similarly, Qi Li made such a supplement, “*I can know my advantages and disadvantages in English writing from others’ comments upon my job. If my teacher herself read my article, maybe there are some mistakes or shortcomings left. But now, it is the whole class who read my article, so, there would be fewer or fewer mistakes in my jobs.*”

- Cognitive Abilities

In the latter scope of learners’ cognitive gains, that is cognitive abilities, the researcher identified six levels of cognitive abilities by consulting Bloom’s (1956) cognitive domain. The cognitive

abilities were manifested in different ways: knowledge, comprehension, application, analysis, synthesis and evaluation.

Being exposed with the whole class's writings and some classical and beautiful prose from the instructor, the learners felt delighted and extremely excited in the open space. They could learn a large amount of knowledge in various fields. For instance, around the writing topic "Process", there were a great variety of "processes" appearing in the "writing zone", such as "How to Prepare For Teaching?" (written by Li Chenhui, 11-07-2022), "How to wash jean"(written by Liu Sheng, 11-07-2022), or "How to plant vegetables"(written by Li Yufang, 11-09-2022). Whitney (11-09-2022) commented upon "How to plant vegetables" as "I will grow my favorite vegetable according your instruction and then I think I must have a good harvest .Ha ha". Many learners showed that they would like to have a try by following the processes provided by their fellows. Therefore, learners must have gained some knowledge, comprehension of it, and their application ability must have been strengthened.

Classification writing requires learners to be able to separate material or concepts into component parts, then build a structure or pattern from diverse elements, and at last classify the components according to the structure or pattern. Therefore, the four cognitive abilities of the domain: knowledge, comprehension, analysis, synthesis, were required, practiced, and strengthened in the classification writing process.

The cognitive ability that was practiced and strengthened most during the online interaction was evaluation, the highest level of cognitive abilities learners can achieve according to Bloom (1956). The most convincing embodiment of it was in mutual commenting activity. Learners in this activity would make judgments about the value of others' ideas or materials by applying some techniques such as comparing, contrasting, criticizing, etc. Around one writing topic, there would be nearly 54 pieces of writings with different titles submitted. Through trying to comment these different writings, each learner must have become more competent in evaluating or assessing activities. Their evaluation ability must have been raised and trained unconsciously. For instance, given a topic "Write a process", one of the subjects composed such an article "How to ask for money from parents?", in which he elaborated several tricks he suggested to ask money by cheating parents. Few of his classmates spoke highly of his job. Some of them commented ironically "*you are so talented! I admire you!*", or, "*you are another genius! no wonder you are so thin a boy.*". There were some who posted their disapproval or critics directly, "*I want to hit you.....*_**" or "*How can you cheat your parents??? BAD EGG!!*".

Another supporting idea for this aspect is from an interviewee. Lu Yan once mentioned that she spent a whole week in composing an article on "Contrast Writing". However, after reading others' writings, she found that others' jobs were more advantageous than hers in both the title and the contents. In spite of the energy and thinking she put upon the job, she made full use of her self-evaluation ability in finding her distances with others.

Meta-cognitive Gains

Henri's model also calls for two distinct classifications of meta-cognition: meta-cognitive skills, meta-cognitive knowledge. A fairly large number of the subjects expressed that they could know themselves better through interacting with peers. Mostly according to their words, they got more self-awareness about their disadvantages in English writing, weaknesses in personalities, or shortcomings in horizons. For instance, G36 (9:35:44 AM, Dece, 12, 2022) once posted on the Message Board, "*...please give more attention to my article. I need improvement.*" Another example was from Ma Congcong (01:53, PM Dece, 14, 2022). After reading a passage named "Love of Lifetime" given by the instructor, she posted her thoughts in the following way, "*...what we actually lack in*

ourselves are persistence and a belief in ourselves, rather than ability and opportunity...”. Li Na mentioned a similar wish during the interview, “...before that, I had little idea about my English writing level. After reading others’ writings, I found that there was a so long distance between others and me...I hope my classmates would read my writings and make some comments...”. Generally, given such an open space for exchanging ideas and communication, learners had more convenience to get self-cognition by comparing themselves to others as cognitive agents.

There were some obvious indicators of these meta-cognitive skills. For instance, Charles (9:28 AM, Oct. 31, 2022) posted such a paragraph:

i have read a sentence: youth means a temperamental predominance of courage over timidity, of the appetite for adventure over the love of ease. my article was so poor, but i do not lost my heart. because ua am youth .thanks to teacher's help, i realised my fault. perhaps i do not love english very much, but i have made a determined that i should go on work hard. persist! that a good idea!

When encountered something new or touching during online interaction, learners like Charles could connect it to himself, and made some self-evaluations or self-reflections, which were followed by a great determination or plan for his future life.

Affective Gains (Non-cognitive Gains)

The affective domain of gains refers to what learners gained from the manners in which they dealt with things emotionally, such as feelings, values, appreciation, enthusiasms, motivations and attitudes. Based on Bloom’s (1956) five major categories of learning behaviors of this domain, the present study developed a set of categories shown in Table 6 when encoding the text data.

Table 6. Categories of affective gains

Category	Definitions or indicators
Feelings	Comfort, relaxation, convenience, enjoyment, hope, worry, pressure
Positive attitudes	Positive perception of the online interaction
Motivations	Confidence or determination in pursuing a goal
Appreciation	Being aware of others’ advantages Value others’ job Show approval or respect to others

• Feelings

Data shows that most subjects demonstrated their excitement, delights, and most importantly, enjoyments in attending the writing classes. The pleasant results from the semi-structured questionnaire provided some hints and enlightenments to the later formal research. Sun Li expressed her favor towards the mutual commenting activity, “*I like the kind of feeling of sharing...*”. In addition, she felt a kind of comfort and convenience in practicing English writing this way, which could rarely be experienced in attending other courses. Still, many others displayed similar feelings in answering the questionnaire. For example, an anonymous learner wrote, “*I’m very glad to talk to others and let others know I have read their articles carefully...*”. In spite of the above mentioned favorable feelings, learners still experienced some unpleasant emotional states during the course. At the beginning of the term, Sun Li (a top student) delivered her little worry or anxiety about how her readers felt about her writings. During the interview at the close of the semester, Lu Yan mentioned openly that she felt pressed when she saw others’ better writings. Sometimes she had even suffered a great depression or feeling of failure on being aware of the gap between others and herself. Anyway,

learners could experience a variety of feelings during the online interaction, either favorable or unfavorable, which could enrich their emotional state while learning a language.

- Positive Attitudes

As the results from the semi-structured questionnaire show, two in three of the subjects or so took the social interaction in the course as a chance to improve their linguistic competence and develop themselves fully. For instance, Jack conveyed the meaning like this, *“By comparison, I can find my shortages and others’ advantages. Then I can improve myself in a fixed purpose.”* During the later interviews, all the six interviewees agreed that they learned more than English writing from the course. Li Na had more to say, *“In the past, we were as if distributed into a narrow space, in which we were exposed with little and our horizons were limited. But now we are in an open space. We have more chances to know and to experience the colorful world, though in the classroom.”*

Moreover, most learners felt delighted in owning a period of freedom in class to express themselves and make themselves known by peers. For example, Yang Xiaoyan delivered a written message at the end of her questionnaire to the instructor,

Dear Ms Liu,

Thank you for your giving us time to express ourselves and share our stories. In future, I hope you can give us more opportunities to do this. We also want a colorful class.

Yours,

Yang Xiaoyan

Another embodiment of learners’ positive attitudes lies in the encouraging comments learners made to each other and their serious-minded error corrections upon their writings. After a thorough view on the mass of comments upon others’ writings, the researcher did not find any irresponsible or imputative ones. Learners either posted some affirmative or encouraging words like *“I think in your text, your structure is very clear, the argument is powerful, and the languages are beautiful . so you’ve done a good job”* (Lina to Liu Yue, 12-07-2022 10:52:13 AM) or some sincere criticism upon one’s job, for instance, Zhang Yanan (12-05-2022 02:44:54 PM) wrote to Cai Bin, *“You choose three good aspects to express the effects of not eating a balance diet. However, maybe you can write down some details about these effects to support your ideas. We want to know more”*.

Just as Li Hua mentioned in the interview, *“...all my classmates made comments actively. For example, if you have a little progress, there would be someone who commented on your job, ‘Come on, friend, you’ve made a great improvement!’ ...although we can not read all the writings in class, everybody could get at least one comment upon his job...”*. In general, apart from the two subjects who showed their dissatisfaction with some link of the course, most learners held a positive attitude towards either a certain link or the whole course.

- Motivations

Motivations learners obtained from the social learning process here refer to the confidence or determination in pursuing a goal or some value systems that control or support learners’ future behavior. Coding analysis revealed that the learners’ motivations were mainly originated from firstly, being aware of the gaps in English writing with others, then encouragement or acceptance from others, thirdly, particular interests in the course, and in the fourth place, spiritual enlightenment from some touching materials.

Data indicated that most subjects were deeply impressed by the fact that it was easy and convenient for them to find out their gaps in English writing with others in the open space. For instance, one named Yolanda wrote such a sentence in the semi-structured questionnaire, *“After reading my classmates’ articles, I was surprised that some of them were really well-written. It seems that I need more efforts. I got more motivations to go further ^_^”*. Similarly, Qi Li in the later interview

displayed his determination and plan in further English writing practice for the reason that he realized his gap with others and motivated by it, *“Many students in our class can write quite well, especially some words. Why can they apply those beautiful words into their writing, while I can’t do it? The reason is that we indeed have a great gap in English writing. So I have decided to recite some classical articles given by our teacher, and try to memorize several beautiful new words everyday... Now, I’m trying to do that.”*

Getting encouraged or accepted by others could also have the function of motivating learners in their English writing. In the questionnaire which was for the exploration of learners’ attitudes towards the course, item 17 was about whether learners liked their writings to be commented or not, over 95% of the subjects signed a positive tick on the questionnaire. According to the later interviews, the researcher was informed that learners liked to be commented, either positively or negatively. However, as Sun Li mentioned, in most cases, learners’ comments were encouraging and exciting. Li Hua went on, *“For example, you’ve made a little improvement, and then you would be told ‘what a great progress you’ve made! Come on man!’ When you see such comments on your job, you must be very glad, ‘I got accepted. I must work harder in the future’”*. Anyway, learners became more motivated and determined in pursuing further when commented positively.

Another external stimulation that could arouse learners’ learning motivations stems from some inspiring or touching materials. Many learners expressed their confidence and determination in their future learning after appreciating those materials. For instance, Charles (9:28 AM, 10-31-2022) was driven greatly to work harder in English learning after reading the given article “Youth”,

“i have read a sentence: youth means a temperamental predominance of courage over timidity, of the appetite for adventure over the love of ease. my article was so poor, but i do not lost my heart. because ua am youth. thanks to teacher's help, i realised my fault. perhaps i do not love english very much, but i have made a determined that i should go on work hard. persist! that a good idea!”

Learning motivations could both be aroused by external factors as analyzed above and internal factors, such as personal interests. During the interview, Li Hua delivered this dimension as follows, *“From the beginning, I found it very interesting to take a class this way. My classmates can see my writings in the center, so I decided to make more efforts in order to write better...”*. Due to particular interests in participating into the course, most learners were inspired and driven to learn more and then surely achieve more.

- Appreciation

Appreciation is not only a kind of cognitive skill, but a certain emotional state. According to the present educational system, to learn to accept others, then to appreciate others is a must for a comprehensively developed person, and also a requirement of the cooperation spirit. The present course ensured a free space for learners to share their thoughts, exchange ideas and even achieve a specific instructional objective together, rather than fulfilling an assignment with complete independence. Unconsciously, learners were making use of an opportunity to join a community, know what their peers concern most, and then gradually accept others. For example, on the Message Board, learners tried to appreciate their peers by posting the following,

“Many classmates did a good job on how to classify a thing clearly and logically. I think just this matter, I will learn from them and find a good way to classify different things, so that my article will be well organised, read clearly and beautiful! come on~~” (Crystal 1, 9:34 AM, 10-31-2022)

“I want to say that our classmates are so creative that they can think out of so many different kinds of topics to classify...” (Winne, 9:31 AM, 10-31-2022)

“...i think the opinions are clear and their organizations are good...” (Kevin, 9:31 AM, 10-31-2022)

To sum up, the space for interaction inspired and strengthened learners’ appreciation ability, which was helpful to develop and educate them fully in the new century.

Meaning of Life

The domain of gains was identified and separated from the previous affective one by referring to Ye Lan’s (2004) elaboration about inspiring the energy of life within classroom teaching.

● New Insights in Life

On the Message Board, learners posted a large number of reflections which demonstrated the changes in their thoughts, and most importantly, the development of their minds. Being exposed to the modern poem “Youth”, learners were involved into appreciating it and many of them posted their reflections on the poem. The following extract is from Li Chenhui (9:25 AM, 10-31-2022), who experienced a big change in her thoughts:

“I hope I will be young forever.” This was one of my desires when I spent my 20 years old birthday, though I think this dream could never come true at that time. After reading this article, I changed my idea .Yes, with time flying ,physical ability will be weaker and weaker and wrinkles will clime onto our forehead that time we will never look young .Is it awful ? no ,now I can say. If we have good mentality, If we are brave and optimistic, no one will say you are old .I met Miss Zhuang this morning ,she still looks so energetic and there always seem to be a big smile on her face. She is a young lady ,don’t you think so ? Love your life, which is what she often told us before ,Is also the key to keep ourselves young forever.”

● New Insights in Love

Apart from some enlightenment on youth, learners got more new ideas about love, either between men and women or among human beings. A student replied to 19880408 (12-19-2022),

“I have read the article, too. I was deeply moved by the story. And I think the man Behrman is a real great artist. The last leaf which was drawn by him was a really a great work. In our daily life, maybe a stranger’s smile can make us feel warm. That is love.”

In the material world, more and more people begin to appeal for warm hearts or tenderness in the society. Around the topic “Love”, the instructor once uploaded a love story named “Love of a Lifetime”. Most of them made use of the space to state their own views upon “Love” after reading the story. A typical one should not be overlooked here,

“For the article ‘Love of a Lifetime’, I have really learned something from it. Once you meet someone who suits you, you should devote your heart and soul to love him or her and persist in doing so. Surely, you will meet many others better than him or her in your whole life, but it is useless for you to pursuit since they don’t suit you. The person with whom you will spend your life is determined in advance. Force doesn’t work before love. Marriage is a matter of mind, enjoyment and share.” (Hallie, 01:49 PM, 12-14-2022)

● New Insights in Friendship

Another aspect of learners’ new insights they obtained through the interaction is concerned with friendship. Both the semi-structured questionnaire and the later interview revealed that a majority of subjects viewed the iCALL-based interaction as a rare chance to know each other. As they said, “I can know what they are thinking and what they kept deeply in their heart”; “I have understood more about my classmates, and I feel the distance between us is shorter”.

Some of the subjects regarded the iCALL-based interaction as an opportunity to help each other. An anonymous subject expressed such wishes in her questionnaire, “We can know each other very well during the course. When I know their torments or some other feelings, I want to help them

and talk with them.” During the interview, Qi Li sighed with such feeling, “...the most important thing is the thrill from the inside, because my classmates even roommates rarely speak out their real thoughts. But during the classroom, they did it...”

- **New Insights in Morality**

The semi-structured questionnaire and the interview testified that the learners could develop their morality as the course designer had predicted and expected. Concerning parents' love, Zhang Geng got more deeply enlightened, *“I usually quarreled with my parents. Their ideas are too old. But after reading some of my classmates' stories, I gained that every parent has their own way to show their love. We should understand them and love them ...”* Similarly, Xu Chunhui got some supporting ideas for this point, *“...I've gained many useful things. I learned to be brave and confident. And I know how our parents love us. We should cherish the love around us particularly the love given by our relatives, and we should have a positive attitude to our life...”*

From the above, it should be easy to draw a conclusion that learners could not only enhance their cognitive abilities and skills but also experience some non-cognitive improvements, which were hardly accessible from traditional course design.

Conclusion

Conclusion

Overall, the study probes into what has come out of the social learning process in the case of the iCALL-based English writing course in a university from learners' perspectives, including learners' perceptions of the unique teaching and learning process and their gains benefited from it. The results show that the social learning process which dominated the iCALL-based English writing course is empirically proved to be welcome and popular among learners, and fruitful and meaningful. The unique iCALL-based learning conditions allow learners to expand and enrich their cognitive, meta-cognitive, affective domains of learning experience, and most significantly, learners' insights into meaning of life were renewed to a great extent.

The study offers some empirical evidence for the pedagogical application of SCT. It practically supports the sociocultural notion that all learning activity is mediated by tools or signs (Vygotzky, 1981; Wertsch, 1991), and internal mental activity has its origins in external dialogic activity. Meanwhile, the research sheds light on the relation of intellect and affect in classroom education. Language is inextricably bound up with the non-linguistic behavior...and embedded in the lives of those who speak it (Lantolf, 2006). In other words, intellectual activities are intrinsically connected with affective factors. The iCALL-based English writing context was not only a good source for languaging, which leads to the improvement of learners' language ability in the process of joint construction, but also a good source for affective and social communication within the learning community. The existence of the dynamic system of meaning in which the affective and the intellectual unite, has led to fruitful achievements as well as popularity of the course with the learners, which, in turn, offers empirical support for the course design in the case. To sum up, the research provides a more comprehensive understanding of the social learning process in iCALL-based EFL writing and lives up to the original intention to enhance people's understanding of the sociocultural perspectives in EFL research.

Limitations of the Research

Due to the tentativeness of the study, limitations need to be recognized in interpreting the results. Firstly, the questionnaire aiming to pursue learners' attitudes towards the course was self-made and delivered overlooking individuals' differences, such as interests, gender, etc., which might be flaw and lower its reliability. The second limitation lies in the fact that a large amount of text

analysis to explore learners' gains from the social learning process was made by the researcher herself. Though some framework or standards were available, the results and discussion still need to be interpreted with caution due to their subjectivity, which was resulted from the researcher's individual knowledge range, ability to analyze and synthesize, etc.

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