Mohd Ayub A. F. et al. (Eds.) (2011). Workshop Proceedings of the 19th International Conference on Computers in Education. ChiangMai, Thailand: Asia-Pacific Society for Computers in Education.

Learning in Social Interaction: Two Snapshots in EFL Literature Classes

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Abstract: This paper is a longitudinal study reporting how learning communities (LCs) and online learning communities (OLCs) can be used to solve Taiwanese EFL students' lack of social interactions (spoken and written) and academic skills (academic writing and reading) in literature classes (N=40) by involving students in a social process to encourage students-students and students-instructor discussion, interpretation, production and negotiation in English. A 5-point Likert scale questionnaire designed by the university was used to assess students' learning performance and satisfaction levels. The paper concludes with a discussion of the relative contribution of social interactions to satisfy students' learning needs.
Keywords: learning communities, online learning communities, social interactions, collaborative learning, learning management system

1. Introduction

With the intention of overcoming the language problems (English) and difficulties in collaborative learning in EFL Literature classes, the researcher set about implementing an alternate "social interaction model" to teach Introduction to Western Literature for English majors at National Dong Hwa University, Taiwan (NDHU, N=40 out of 45/42, 2 semesters) by organising learning communities (LCs) and online learning communities (OLCs) embedded in the university learning management system (LMS). It focused on developing OLCs based on the same principles for developing face-to-face LCs' spoken communication by capitalising on technology's affordance for written communication. This involved students in learning "social interactions (spoken and written)" which can be viewed as a set of process in achieving group work and academic skills (academic writing and reading). This in fact means each student was required to develop approaches to solve the problems in spoken communication in English and implement a solution to the approaches that would result in the production of a concrete written knowledge in language, literature and critical thinking collaboratively. Each single student's performance was traced and recorded by the LMS and was compared to see how LCs and OLCs help students improve their ability in language problem solving, and how they respond to their LC and OLC tasks.

2 Literature Review

2.1 Social Interactions

Dewey's (1987) belief in the power of social interactions in learning still influences many contemporary educational approaches. However, due to the vast change of educational

environment, social interactions are used to question if students can grow personally and learn academically without face-to-face interactions with instructors and peers? Social interaction is defined as participating in social networks, so that higher levels of network participation can be labelled as higher levels of social multiplier. A research by Slevin (2008) indicates that e-Learning and the transformation of social interactions in higher education brought challenges for educators. Despite the difference in the pedagogical mediums, the interactive component and the differences in interactions between the traditional and Web-based pedagogical platforms, a vital need is to assess the effectiveness of interactivity in a web-based course. Students who feel a sense of connectedness and psychological closeness rather than isolation are better prepared to become more actively involved with online learning and the resulting higher order thinking and knowledge building (Baker, 2010; Engstrom, Santo, & Yost, 2008).

2.2 Learning Communities (LCs)

Lave and Wenger (1991) exclaim that learning is a social practice because a learner learns better in social settings and through social interaction which underpins Dewey's (1938) recognition of the importance of the social nature of learning. The growth of interest in learning communities within schools has been accredited to the findings of research in the 1970s and 1980s conducted into "effective schools" and shaped the "concept of school as community" (Larrivee, 2000, p. 18). A learning community not only facilitates the sharing of information or knowledge, but has the potential to create new knowledge that can benefit the community as a whole. However, when emerging research in cognitive science, the importance of the learning context and developing schema permit new learning through making connections with what was previously determined to be valid under specific conditions and contexts. The increased opportunities afforded by learning communities for peer learning and interaction allow for the development of richer, complex ways of thinking and knowing so that students learn at a deeper level (Bransford et al., 2000).

2.3 Online Learning Communities (OLCs)

Rovai (2002) and Carlen and Jobring (2005) suggest that an OLC is based on what groups of people share and do with one another, not how or where they do them. Engestrom (1993) illustrates that an OLC can be seen as a developed activity system in which a group of learners, unified by a common cause and empowered by a virtual environment, engage in collaborative learning within an atmosphere of trust and commitment. Despite an increasing interest and promise in implementing OLCs, a study by Bagherian and Thorngate (2000) show a failure of using OLCs at Carleton University (The *Carleton Hotline for Administration and Teaching*, or CHAT) because they could not recognise any educational values. Between the extremes are several contingent possibilities that different features of the Internet might be pedagogically useful for different combinations of students, course topics, and learning objectives. The challenge educators face first is how to best enable students to communicate, collaborate, and coordinate so as to facilitate knowledge capture and use online. The second issue needs to be taken carefully is the social interactions when the educators look forward to maximise technology integration in education. OLCs are not a network focused on social relationships but on social interactions instead.

3 Context and Methods, Data Source and Instrument, Measures and Discussion

3.1 Context and Methods

In Meyers's (2008) description of best online practices, instructors need to validate student perspectives, as well as acknowledge differing beliefs and biases, and to create a community that helps students become "more engaged and feel more interconnected" (p. 220). In the case of this research, the researcher played a crucial role as proposed by Bonk and Dennen (2003), pedagogical and social managerial, and technological, in developing and engaging students into LCs and OLCs by nurturing the conditions under which they can rise. Socratic seminars and literature circles were the setting for LCs while discussion forums embedded in the LMS were for OLCs. It first dealt with student responses in English of LCs (spoken) and OLCs (written), an exploratory stage to investigate insights of possible development of social interaction within two communities. The second is a confirmatory stage that the researcher investigated (1) if the use of LCs will enhance students' social interactions (spoken); (2) if the use of LCs will help motivate students' interactions in OLCs (written); (3) if the use of the two will meet students' learning achievements (academic reading and writing).

Manski's (1993) social interaction attributes, endogenous, exogenous and correlated social effects were use do answer the research questions. Endogenously, success-seeking learners may try to study hard to gain better grades. Learners may change their learning behaviours as a result of being endowed with their group. That is if a learner cares not only about his outcomes but also about the peer outcomes, he is under the influence of endogenous social effect or interaction because he relies on decisions of others a lot in the same social milieu. If the behaviour of a learner varies with the exogenous peer characteristics (called exogenous social effects), his achievement is related to the background of the reference group. If a learner in the same reference group tends to behave similarly because they are alike, then he is under the influence of correlated effects. Manski concludes that endogenous effects generate social multiplier while exogenous effects or correlated effects do not. The current research, thus, places special focus on students' endogenous engagement for their LCs and OLCs.

3.2 Data Source and Instrument

Data from the LMS was accomplished to investigate students' behaviours and performance on the LCs and OLCs in class. From the raw data the researcher constructed behavioural visualisations and network data sets based on reply relationships. The other data source is a 5-point Likert scale survey designed by NDHU. It was used to assess students' learning performance and learning satisfaction respectively. Since the questionnaire result details are classified, a general discussion is made for discussion instead of a statistical discussion.

3.3 Measures

3.3.1 Finding 1: LC and OLC Bridging and Bonding

Participants were encouraged to share their spoken literary analysis in most literature classes so the LC is something they are used to even though they still suffer from the English language use. Table 1 shows a huge achievement difference LCs and OLCs in two semesters.

Table 1. Total and Average Treads Hit, 2 semesters

	LC Task Hits, Semester 1	OLC Posts, Semester 1	LC Task Hits, Semester 2	OLC Posts, Semester 2
Total /AVG Threads per week	1,056/20	679/13	1,434/28	1,206/23

Since the instructor-researcher emphasised the pedagogical and social managerial aspects of developing OLCs. Students were aware that the LC and OLC tasks needed to be academically fulfilled. High activity participants used the LMS discussion forum both to interact with others (synchronously and asynchronously) and to act as mediators and problem solvers for the OLCs, thus established collaborative learning relationship and encouraged achievement seeking. At the end of the project all of the participants contributed to their LCs and OLCs more than the first semester (see *Table 1* and *Fig 1*). Most participants were positive toward making bonds with other members because they valued the responses from both communities.

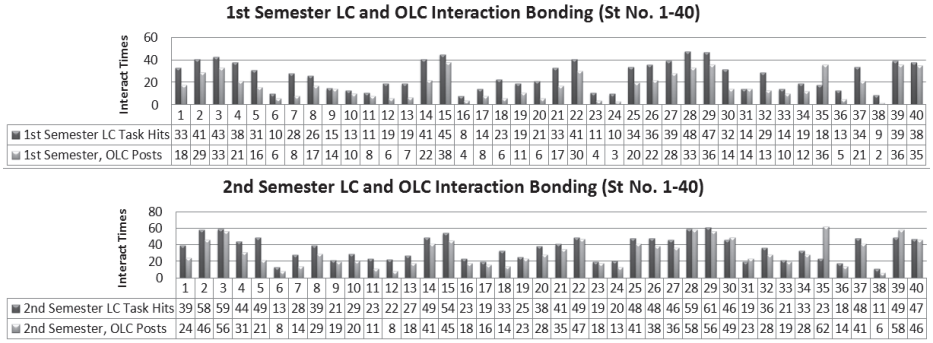

Figure 1. LC and OLC Interaction Bonding, 2 Semesters

It is also found that participants contributed one or a few messages/learning loads to discussion initiated by others, were fairly tied to relative influence of endogenous social effect on time of involving in LCs and OLCs. The R^2 values are 0.9844 and 0.9605 respectively which provide a strongly predictive behaviours correlated with social interactions (see *Fig 2*).

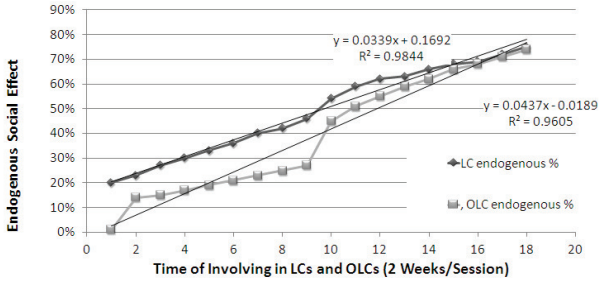

Figure 2. Endogenous Social Effect on Time of Involving in LCs and OLCs, 2 semesters

Because the participants felt a certain amount of unease with the openness of OLC discussion forum due to the reading literacy and language problems (academic reading and writing); therefore, they preferred to work in the LCs instead of OLCs especially in the first semester. The increase of LC and OLC discussion per week supports the ideas of social interactions and endogenous bonding for active learning. By getting used to being involved in both LC and OLC discussion (spoken and written), participants' active post number doubled in the second

semester which means they solved their academic performance problem collaboratively. Their structural and behavioural patterns associated with endogenous social effect showed significant influence for their LCs and OLCs. Exogenous and correlated effects did not vary in this research, so the endogenous effects are identified.

Participants were more confident to work within the community and got some peer corrections either for literary or language purposes due to the psychological sense of community. The more they worked in the LCs, the more they would like to post their polished threads to the OLC discussion forum. When participants considered OLCs in terms of the "third place" (face-to-face classroom, the first place, and LC, the second) to gain specific knowledge, they attempted to find significant "sameness" and "differences" for certain threads. The differential effect along two semesters was slightly larger for LCs (point estimate 0.9844, significant at 95% confidence) than for OLCs (point estimate 0.9605, significant at 95% confidence) (please see *Fig 2*). Similarly, the wiliness of working in the OLCs gradually increased from the end of the first semester. Thus, the research questions 1 and 2 were answered. The use of LCs will enhance students' social interactions and also the use of LCs can help motivate students' interactions in OLCs.

3.3.2 Finding 2: Endogenous Social Effects

An important concern in reading Table 2 and Figure 3 is that the interactions between learners and instructors, other learners, and the course content are very different. 46% and 27% of participants showed they were under influence of endogenous social effects. Weak instruments were not a main concern in the estimation of the endogenous social interaction effects.

Table 2. Average Percentage of Interaction Behaviours

	LC endogenous, Semester 1	LC endogenous, Semester 2	OLC endogenous, Semester 1	OLC endogenous, Semester 2
Interaction Behaviours	46%	75%	27%	74%

Socratic seminars and literature circles used for LCs encouraged students' dialogic exchange and engaged them in intellectual discussion by responding to questions with questions. Students got together to examine issues and principles related to a particular content, and produce different points-of-view. Most of the time participants were weaving their learning attitudes among endogenous, exogenous or correlated effects. With the willingness to their OLC discussion, participants showed their endogenous social effects when dealing with the written posts. There is a strong partial correlation between the face-to-face LC with Socratic seminar and literature circle indicator and the potentially endogenous regressor, the OLC discussion confidence rate. Participants got more influence from endogenous effects when working in LCs and OLCs because the course was a core class for English majors which may determine their social status in the department.

Besides, substantially larger endogenous effects were found from second semester mainly because the participants realised the LMS documented all learning process and journals of each student. The small magnitude of this effect is important both from policy and psychological perspectives, given the importance of educational attainment for students in these literature based communities. LMS discussion forum presented similar opportunities and characters to encounter participants in an informal setting and to use what literary

knowledge they know to discuss with other students. Through the process of negotiation or mediation, participants were able to find "significant others" that would help their language and literary knowledge development. As well as examining the ways in which OLCs could transform learning, it is as equally important to consider how the technologies were also transformed by the participants through social interactions.

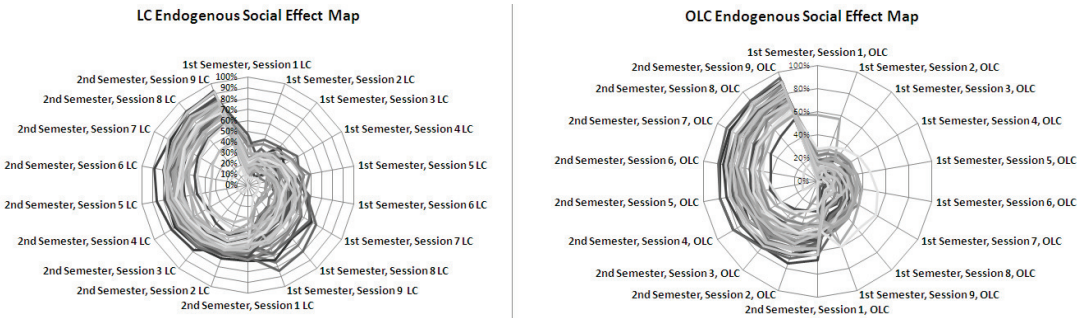

Figure 3. LC and OLC Endogenous Social Effect Map, 2 semesters

3.3.3 Finding 3: Student Performance and Satisfactions

The instructor-researcher was evaluated by the students at the end of both semesters required by the university and was scored 4.60 and 4.83 respectively (please see *Table 3*). The results in Table 3 indicate that students who experience with a learning community and online learning community are associated with higher levels of academic effort, academic integration, and active and collaborative learning (see *Questions 17 and 18*). Similarly, learning communities are positively linked into online learning communities with more frequently interacting with community members, engaging in diversity-related activities, and gaining academic achievement that emphasises higher-order thinking skills (see *Questions 20.*)

Table 3. Survey Designed and Collected by NDHU, TW translated by the researcher

Intro to Western Lit, Annual survey, NDHU, TW (at most 0.04 bonus points will be awarded if the class size is over 40)											
Strongly Agree = SA (5), Agree = A (4), Neutral = N (3), Disagree = D (2), Strongly Disagree = SD (1)											
Measure 1: Teaching and Learning Satisfaction	1st semester						2nd semester				
	SA	A	N	D	SD		SA	A	N	D	SD
1. Provides detailed sequences and scopes of the class.	31	9	3	2	0		34	7	1	0	0
2. Is expert in the subject area and has a cutting-edge grasp of academic development and how students learn.	32	8	4	1	0		36	4	2	0	0
3. Uses materials and displays to maximise student learning of all materials.	29	11	4	1	0		31	6	4	1	0
4. Orchestrates highly effective strategies and materials to motivate students.	33	8	3	1	0		36	4	2	0	0
5. Uses coherence and silky-smooth transitions to get the most out of every minute.	24	13	6	2	0		29	10	2	1	0
6. Designs lessons with clear, measurable goals aligned with unit outcomes.	25	14	4	2	0		33	6	3	0	0
7. Designs lessons that break down tasks and addresses learning needs and interests.	20	11	8	6	0		26	7	8	1	0
8. Clear and consistent evidence that various assessments is used during instruction.	24	13	6	2	0		28	10	3	1	0
9. Designs lessons involving an appropriate mix of top-notch, multicultural materials.	24	13	7	1	0		29	9	4	0	0
10. Has perfect or near-perfect attendance and routines are orderly and efficient and result in minimal time off-task.	27	12	5	1	0		34	6	2	0	0
11. Shows ongoing enthusiasm about teaching and shows a commitment to supporting the development of students.	31	10	3	1	0		35	6	1	0	0
12. Prepares diagnostic and summative assessments to monitor student learning.	27	13	3	2	0		33	6	3	0	0
13. Shows warmth, respect, and fairness for students and builds strong relationships.	27	12	5	1	0		32	5	4	0	0
14. Presents as a consummate professional and observers appropriate boundaries.	28	13	3	1	0		34	6	2	0	0
15. Designs lessons that will motivate students and sweep them up in active learning.	24	14	4	2	1		28	6	4	1	1
	Average Score:4.60						Average Score:4.83				
Measure 2: Self Evaluation	1st semester						2nd semester				
	SA	A	N	D	SD		SA	A	N	D	SD

16. I'll hand in the assignments on time.	22	12	8	3	0		28	16	5	0	0	
17. I always work and collaborate with my team/community for academic achievement.	19	15	8	3	0		28	16	5	0	0	
18. Hours spent to study for this class per week outside the classroom for academic achievement.	**6+**	**4-5**	**2-3**	**0-1**	**X**		**6+**	**4-5**	**2-3**	**0-1**	**X**	
	4	13	19	6	X		3	14	19	7	X	
19. Times absent from this class.	**5+**	**3-4**	**1-2**	**0**	**X**		**5+**	**3-4**	**1-2**	**0**	**X**	
	0	1	12	32	X		2	0	13	34	X	
Rote Memory = RM, Comprehensive = C, Utilizable = U, Analytical = An, Appraise= Ap, Creative = C												
20. Skills learned in this class.	**RM**	**C**	**U**	**AN**	**AP**	**C**	**RM**	**C**	**U**	**An**	**Ap**	**C**
	40	36	17	28	11	16	32	39	27	30	24	16

Since the course was run in the computer lab, apart from the assigned readings in the syllabus, some related open resources were set as assigned reading materials, too. Students needed to read 10% more than the regular syllabus and the working load was also higher than other literature classes which worried the teacher-researcher in the first place. However, with the accomplishment of the weekly tasks for LCs and OLCs, students showed their potentiality in managing knowledge in a different way. Both the teacher-researcher and the participants were creating a rich social and literary interaction environment (see *Questions 16, 17 and 18*). Therefore, the course had been evolved, with new technical aspects added over time to meet the needs of the participants. The annual survey confirms the possibilities offered by the e-medium are changing exponentially, yet the nature of the medium itself, as well as its content, profoundly affects any kinds of pedagogical applications as long as the educators use the medium as a tool not a burden in assisting learning.

3.3.4 Discussion

The research lays the foundation for open discussion on literature teaching in terms of students' social interaction as well as of their academic potentiality. Based on the preliminary results, the LCs and OLCs clearly changed participants' learning attitudes. Item-specific or rote-memory learning outcomes could not satisfy their academic achievement any longer, even though it's the foundation of academic knowledge. Therefore, if both teachers and fellow students can provide students with timely and meaningful feedback on their academic progress and with advice to students in academic distress, appropriate social interactions can be initiated as a learning process instead of knowledge sharing only. During the research time, the teacher-researcher and students easily linked work produced via LMS to learning outcomes and evaluated linked items within the tool in which they were produced. To the extent that LCs with Socratic seminars and literature circles, and OLCs could successfully motivate participants to learn both individually and collaboratively, the strategies can be used to evaluate the success of strategies intended to cultivate desired academic learning outcomes.

Conclusion

Like most EFL learners, Taiwanese English majors' stumbling blocks in literature related modules are the language problems and the abstraction of literary knowledge from the reading assignments both of which will influence their critical thinking performance. Major advances in research and practice in LCs and OLCs led to the realisation that it is a need to shift the focus of educational pedagogy from a teacher-centred approach to a student-centred one to solve the learning problems, language and critical thinking, in literature related classes. The paper makes three sorts of contributions in the effort to decrease anxiety and resistance in studying literature in Taiwan. First, it confirms LCs can help students read and think critically

via Socratic seminar and literature circle methods. Second, the specific attention to social interactions between LCs and OLCs distinguishes general discussion from the provisions of endogenous social effects and answered how participants learn through those effects. Last, it provides a foundation for leveraging conceptual resistance and behavioural data to identify possibilities for other learning perspectives.

The research concludes with two general claims: (1) LC is a productive way to encourage social interactions toward learning; and (2) social interactions in LMS settings should be carefully taken care through the intersection of multiple methods. Socrates seminar and literature circles are an important link between LCs and OLCs for the techniques of solving language skill problems and also development of insights and the respects of literary analysis. Those techniques and development can be formalised into rubrics and tested statistically. Not a lot research has brought social interactions into literature classes. The current research might be a new direction and believe that beginning from literary knowledge learning and sharing, item-specific oriented, to literary discussion and analysis learning, collaboration-oriented, that bridges social, information, literary knowledge and computer science. Leveraging the potential of that integration to reveal the hidden learning prospective of social interaction will require both educators and learners' aggressive academic community needs.

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