BEHIND THE SCENE OF SOCIAL NETWORK SITE AS A LEARNING TOOL

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Abstract

Universities around the world are making efforts to offer subjects and courses under the banner of 'flexible learning' and extending their offers via Massive Open Online Course (MOOCS). As the current student generation is well equipped with internet skills, universities are utilizing online learning where it is applicable.

Sociocultural theory (Vygotsky, 1978) emphasizes that learning develops through social relationships and therefore, social interaction and collaboration are essential; the role of social interaction is core to learning language. A Social Network Site (SNS) that promotes strong community-based communication could offer a 'society', as was envisaged by Vygotsky's notion of social interaction leading to learning. If it achieves this, language learners and native speakers form a SNS community and we could expect them to provide and receive scaffolding to share a wide range of knowledge.

This paper presents a study which investigated the efficacy of SNS by examining the provision of scaffolding and interactions between Japanese language learners and native speakers. By analyzing the data using a new activity system model, this paper proposes new ways of teaching foreign languages using online discussion forums involving mixed proficiency levels to enhance learners' motivation and language acquisition.

1 Introduction

Universities around the world are making efforts to offer a wide variety of subjects and courses under the banner of 'flexible learning'. In addition, universities are extending their offers via MOOCS in an attempt to interpret the incoming students' interests (Dixon & Fuchs, 2015; Fernando, 2015). It certainly appears to be a clever move to utilize online learning where it is applicable. However, the introduction of these systems raises interesting questions such as, how can we analyze these online communications? What can we learn from previous experiences so as to improve these online discussion forums? This paper will present findings of a recent study which considered these questions by investigating the efficacy of SNS in aiding second language acquisition. The study examined the provision of scaffolding and interactions between Japanese language learners and native speakers, and analyzed this data through a new activity system model. The study proposed new ways of teaching foreign languages using online discussion forums, which were programmed to enhance learners' motivation and language acquisition. This paper focuses on two of the research questions from the study:

- 1. What factors influence collaborative learning and the provision and take-up of scaffolding?;
- 2. In relation to the above question, what differences does varying levels of proficiency cause between groups?

2 Activity Theory

Online discussion forums that act as a learning platform could reflect a notion from Vygotsky's sociocultural theory. Vygotsky (1978) emphasizes that social interactions and collaborations are essential to learning activities, where learning is determined by social relationships and is mediated by language within the social discourse. According to Vygotsky, the role of social interaction is at the core of learning language; and therefore, you learn about language and you learn through language. Furthermore, Vygotsky's process of internalization is achieved through interaction in a shared, culturally meaningful context. In the process of this internalization, assistance given to complete the task is seen as scaffolding. Wood, Bruner and Ross (1976) introduced the term scaffolding to describe the support given to a young child by a mother or tutor in one-to-one interaction. Since then, assistance given to complete a task is frequently referred as scaffolding. Various scholars (for example, Aljaafreh & Lantolf, 1994; De Guerrero & Villamil, 2000; McLoughlin, 2004; Ohta, 1995; Yamamoto, 2009) have defined and categorized scaffolding; some used broader terms while others gave it a narrow focus. In the study, scaffolding is defined broadly as any assistance given to complete a task including any assistance from a person or other objects such as a dictionary, textbooks and online resources. This broader definition of scaffolding allows us to accommodate the complexity of interactions in online discussion forums.

Vygotsky (1978) also created the idea of mediation, where he developed a triangular model to describe the connection between stimulus and response to guide an action. Leont'ev (1978) and Engeström (2001) further developed this triangular model. Engeström (2001, p.135) argues that there is a need 'to develop conceptual tools to understand dialogue, multiple perspectives, and networks of interacting activity systems'. Using such activity systems, Activity Theory explains the intricacy of an activity built upon the social, cultural and historical contexts by assisting in microgenetic analysis from sociocultural perspectives. Activity Theory addresses the issue of individual development, activity and the social context for the purpose of understanding human activities as purposeful activity based on motives. In other words, an activity is motive driven and constitutes an object, subject, mediating artifacts and subordinate units of analysis of actions and operation (Leont'ev, 1978).

Activity Theory and activity system models have been used to visually explain the conflict and resistances as well as cooperation and collaboration in multi-layered dialogue such as in work places. However, the activity system concept has not yet been thoroughly explored to explain the dialogues over online discussion forums using a SNS. In order to reflect a 'reader' and a 'writer' in a SNS and a 'topic' of discussion forum, the new model of activity system, called Online Joint Activity System (OJAS) (see Fig. 1), was created (Christensen, 2013; Christensen & Christensen, 2015).

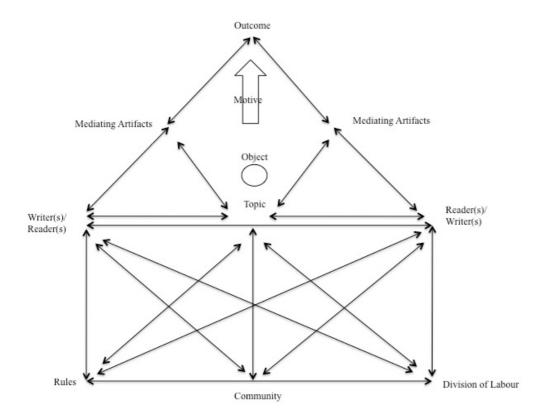


Fig.1. Online Joint Activity System

The OJAS reflects online communications by recognizing that all participants in these environments act as both reader(s) and writer(s). The 'writer' composes a written 'text' on a particular 'topic', using 'mediating artifacts' that are available to a writer, such as electronic dictionaries, computers, online dictionaries and other online resources. The written 'text' under the 'topic' then produces 'outcomes'. The topic can be seen as an 'object' in the OJAS. However, 'object(s)' in an activity system are in a constant state of transition and construction, as the activity progresses. Therefore, a 'topic' in the OJAS is classified as one of constituent components of the activity system. The 'reader(s)' receive the writer's text and becomes a 'writer'. Both the 'reader' and the 'writer' follow the rules in order to participate in the interactions at the SNS. Each reader and writer has the same division of labor.

The next section of this paper describes the research design and the methods of data collection.

3 Research design and data collection

The site 'Nihongo4us' was created specifically for the study, and was within the SNS called Bebo. The study was conducted in three phases: Pre-session, Nihongo4us Session, and Postsession. During the Pre-session, the participants participated in an orientation, a Japanese proficiency test, a questionnaire and a semi-structured interview. The Nihongo4us Session is the focal of the study where the online communications took place over a 13-week period. The detailed activities undertaken during the Nihongo4us Session is described at the end of this section. During the Post-session, the participants completed a survey, an individual semi-structured interview and a Japanese proficiency test.

Participants were all volunteers and either current students or graduates from an Australian university in Sydney (the University of New South Wales: UNSW). Sixty-five Japanese language learners (Learners¹) and seven native speakers participated in the study. They were carefully divided into seven groups; two groups at an introductory level (IG#1 and IG#2) and five groups with a mixed level in Japanese proficiency (MG#1-MG#5). Each group had one or two native speakers. Great consideration was given in grouping these participants, so as to evenly distribute gender, language competencies, cultural backgrounds and friendships (see Table 1).

					Had	Japanese language courses				
Groups	No of Learners	No of Native Speakers	Male	Female	travel to Japan	Not yet enrolled*	1 st year	2 nd year	3 rd year	year and above
IG#1	11	1	3	9	4	0	11			
IG#2	11	2**	2	11	4	1	10			
MG#1	9	2**	3	6	7	1	1	2	4	1
MG#2	9	2**	4	7	7	0	1	2	4	2
MG#3	8	1	3	6	7	0	1	2	4	1
MG#4	9	1	4	6	6	0	1	2	4	2
MG#5	8	1	3	6	8	0	1	1	5	1
Total	65	7	24	51	43	2	36	9	21	7

Table 1: Configuration of each group

During the first few weeks of the Nihongo4us Session, each participant set up their own home page including their first activity of writing a self-introduction in Japanese. The next set task was to read each other's self-introduction and make comments. This task had two main objectives: for the participants to become acquainted with one another, and for each participant to further familiarize themselves with the various tools.

The discussion forums were organized so that each Learner nominated a week to act as the discussion leader. Discussion leaders were responsible for choosing a discussion topic, starting a discussion thread, and facilitating the discussion forum in that nominated week. This approach had three purposes. Firstly, it ensured that the topic was of interest to the participants. A topic chosen by the participants might attract more discussion threads than topics chosen by a researcher or from a textbook. Secondly, it ensured that every Learner was actively involved in the discussion forums. Thirdly, it distributed the role of discussion leader evenly within a group, rather than relying on a native speaker to act as a facilitator. Details of schedules for participants' activities and time lines were described in the handbook provided to each participant.

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Total 65 7 24 51 43 2 36 9 21 7

* Not yet enrolled' indicates the participants are not yet enrolled in the program of Japanese Studies at UNSW. However, they have sufficient prior knowledge of Japanese to participate in the study.

^{**} The second native speaker was assigned to assist the first native speaker if he/she needed.

¹ In this paper, 'Learners' (capitalized) indicate Japanese language learners who participated in the study, whilst 'learners' are used as a generic term.

The Learners kept a weekly reflective logbook (Logbook) to reflect on their learning and experience of the Nihongo4us Session. The pro-forma copy of the Logbook outlined ten questions to prompt a Learner. The Logbook entry was sent to the researcher via email at the end of each week. The Logbook entries were utilized as a record of:

- time spent on the site;
- operation of Nihongo4us;
- change of learning patterns; and,
- participants' feelings and thoughts regarding Nihongo4us.

The Logbook entries provided an alternative data source for qualitative analysis and were also later used during the post-session interviews to clarify and understand participant's perceptions.

During the Nihongo4us Session, native speakers took on the role of a facilitator. They were to motivate their group members as a whole, as well as undertaking general housekeeping and providing any scaffolding in regards to Japanese language and social and cultural discussion.

Data for the study was elicited from multiple sources at various stages as the study progressed. The design underlying these data sources aimed at making data available for multiple purposes and to richly inform the study's research questions.

4 Results

The study observed three major categories of scaffolding: Linguistic; Content; Navigation. Linguistic Scaffolding is defined as assistance given to the participants to accurately express what they mean. This includes making linguistic suggestions or corrections of sentences, phrases, or use of Japanese characters (*Hiragana*, *Katakana* and *Kanji*). Content Scaffolding is defined as assistance given to participants to help develop and navigate their ideas and thoughts in order to extend the discussion level. Navigation Scaffolding is defined as the assistance given to participants regarding the navigation of the SNS tools available at the Nihongo4us site, such as the use of a computer, tools and housekeeping matters in order to facilitate smooth running of the Nihongo4us Session.

Six hundred and ten scaffoldings were observed over the 1500 posts made during the Nihongo4us Session. Just under half of these scaffolding instances were Navigation Scaffolding (45%), closely followed by Linguistic Scaffolding (41%) and Content Scaffolding (12%).

4.1 Set up stage of Nihongo4us

During the two to three weeks of the set up stage, participants contacted each other and made posts commenting on each others' self introductions. The number of posts and the average number of characters posted per post in the group during this set up stage indicated the general trend of online interactions in each group. These numbers did not indicate any distinct differences between the introductory and mixed level groups. However, differences were observed across the seven groups, therefore, factors beyond language competence might have caused those differences. For example, a mixed group MG#5 had frequent but relatively short posts. MG#2 had lengthy but less frequent posts, while MG#4 had more frequent and relatively long posts. The introductory group IG#1 had shorter and less frequent posts than

those in IG#2. In fact, IG#2 made more posts than MG#3 and longer posts than MG#5. Therefore, the proficiency levels could not be the only factor determining the length or frequency of posts.

During the set up stage, both the native speakers and the Learners, excluding MG#3, provided Linguistic Scaffolding, asking questions about the meaning of words and correcting the posts of fellow Learners. Both the native speakers and the Learners provided Navigation Scaffolding to help one another in setting up their homepages and to offer guidance on how to navigate the site, as it was new to everyone. Therefore, it was understandable that for most groups nearly half of the Navigation Scaffolding occurred during the set up stage.

Furthermore, during this set up stage, the Learners had to nominate their discussion week. This task also triggered more Navigation Scaffolding as it included housekeeping matters. These two factors explain the reasons why we observed more Navigation Scaffolding during the set up stage. In other words, the groups with a larger higher number of Navigation Scaffolding instances were those who discussed housekeeping matters and assisted each other to navigate in the site. Furthermore, the groups with more Navigation Scaffolding during the set up stage were able to establish a supportive online community.

Forty-one percent of total posts (633 of total 1510 posts) were made during the set up stage. Across the seven groups the interactions seemed heavily weighted towards the set up stage. Although the interactions were mainly between two participants, MG#4 and MG#5 produced interactions involving more than two participants. MG#4 produced threads involving three or four participants. MG#5 produced threads involving three or five participants. These threads, involving multiple participants, produced more than six posts. The longest threads contained 17 posts involving five participants in MG#5 and the second longest thread contained 16 posts with two participants in MG#4. The nature of interactions during the set up stage was to 'get to know each other'; therefore, the participants were not heavily involved in deep discussions, such as analyzing Japanese culture or language. The interactions were based on common interests held by the participants. The native speakers of IG#1 and MG#3 did not interact with the Learners as much as the native speakers in other groups even if the Learners were actively involved in the interactions.

4.2 Discussion forums

The number of discussion forums held over the 10-11 week period ranged from three to ten, with an average of seven topics per group. Some groups (IG#1, MG#3 and MG#5) took a week off during the Christmas and New Year Period, while others continued discussions. The discussion forum was held at Nihongo4us site over the Internet; therefore, the site was available to the participants at all times, offering a platform very different from attending a class.

The number of discussion forums held in a group was a reflection on the dynamic activities of that group. For example, discussion forums in IG#1 and MG#3, had fewer discussion topics (six and three respectively) and therefore, fewer posts made (see Table 2).

Table 2. Summary of interactions during the discussion forums

Groups	No. of Discussions held	No. of Posts	No. of Linguistic Scaffolding	No. of Content Scaffolding	No. of Navigation Scaffolding	
IG#1	6	45	7	0	0	
IG#2	8	156	37	4	12	
MG#1	9	65	5	6	5	
MG#2	8	83	13	14	2	
MG#3	3	40	11	0	5	
MG#4	8	110	21	18	8	
MG#5	10	119	49	22	13	
Total	52	618	143	64	45	
Average	7	154	20	16	6	
Total No. of Scaffolding			252			

The participants discussed a wide range of topics, for example, studying Japanese, expression of love in Japanese, food, music, *anime*, experiment with a time capsule, economics, gender issues, future jobs, culture shock, Japanese customs and climate change.

The study also observed that a number of posts were made outside of the discussion forums (see Table 3). The contents of these posts were not related to the discussion topics, but tended to be personal posts such as season's greetings, birthday greetings to a fellow participant, general discussion as well as providing scaffolding on those posts.

Table 3. Summary of interactions outside of discussion forums

Groups	No. of Participants	No. of Posts	No. of	No. of Content	No. of	
			Linguistic	Scaffolding	Navigation	
			Scaffolding	Scarrolding	Scaffolding	
IG#1	3	27	0	0	6	
IG#2	11	66	18	3	8	
MG#1	6	30	0	0	14	
MG#2	6	17	2	0	1	
MG#3	3	16	4	0	7	
MG#4	6	59	2	8	22	
MG#5	4	44	6	0	43	
Total	39	259	32	11	101	
Total No. of Scaffolding			144			

Some Learners took the Nihongo4us Session as an opportunity to ask various questions regarding Japanese expressions and Japanese culture. These posts attracted posts that were made up of Linguistic and Content Scaffolding instances. A number of Navigation Scaffolding instances were observed outside of the discussion forums. For example, some groups had to reorganize discussion leaders due to some Learners becoming inactive. Naturally these housekeeping matters required Navigation Scaffolding. Additionally, there was ongoing assistance provided to Learners who had problems navigating the site. On such

occasions, the participants helped each other and these posts were also included in Table 3 as Navigation Scaffolding.

4.3 Logbook entries at a glance

During the Nihongo4us Session, the Learners kept a Logbook entry once a week to reflect on their activities. The Learners' participation in the Logbook entries varied due to their personal circumstances as well as the number of discussions held within each group. The study collected 169 entries from 38 Learners. Twelve Learners regularly submitted Logbook entries and some provided detailed information. Table 4 summarizes Logbook entries received from the respective groups.

Groups	Number of Logbook entries submitted
IG#1	12 (7%)
IG#2	39 (23%)
MG#1	19 (11%)
MG#2	26 (15%)
MG#3	13 (7%)
MG#4	37 (21%)
MG#5	23 (13%)

Table 4: Summary of Logbook entries per group

The most commonly mentioned comments in the Logbook entries were 'they learned new *Kanji*/vocabulary' (71%) and were closely followed by 'they learned new grammar or produced grammar notes' (68%). Other common comments were 'struggled to digest the post' (42%) and 'improved reading' (36%). The Learners recognized the difficulties and their weaknesses; however, they were also able to recognize their progress over the 13-week session.

4.4 Post-Session

At the end of the Nihongo4us Session, the survey and post-session interviews were conducted. Among the 39 Learners who completed the Nihongo4us Session, 20 Learners returned the survey, and 18 Learners participated in the post-session interviews.

From the responses on the survey, 95% of the Learners enjoyed the discussion on Nihongo4us and 90% of the Learners responded that they would like to participate in it again. 75% thought that they had learnt things in the discussion that they would not have figured out on their own and 70% thought that Nihongo4us helped them to look at topics from different perspectives. Although 75% of the Learners responded that they would prefer a face-to-face class, 60% responded that Nihongo4us gave them an opportunity to ask questions that they would not have asked in a class. Furthermore, 90% of the Learners agreed that the process of talking/writing through topics helped them to understand Japanese better.

5 Discussion

The results shown above present some differences in the provision of scaffolding and development of discussion forums across the seven groups rather than in accordance with the

proficiency levels. However, the numbers do not explain how each group reached and produced those results. The paper will now focus on IG#2 and MG#4. Between the two introductory level groups, IG#2 produced more discussion topics and was able to keep the majority of the participants for the duration of the Nihongo4us Session. Amongst the mixed level groups, MG#4 produced a similar result to IG#2; the number of discussions held were the same and the majority of the Learners stayed on to participate. Furthermore, both IG#2 and MG#4 produced a similarly high number of Logbook entries.

Studies that rely on volunteers, such as this study, often face retention issues. The study was conducted during the university holiday and did not have any assessment tasks linked with the participation of the study. Some Learners were travelling outside of Australia and some of those could not connect to the Internet during their travel (this was particularly relevant to the Learners in China where SNS are frequently blocked from access). Therefore, the number of Learners who participated in the discussion forums fluctuated and some groups had a significant number of Learners who discontinued or became inactive. Some Learners advised of their changed circumstances, some did not. To a certain extent, the number of Learners during the discussion forums and the number of Logbook entries indicated the level of Learners' motivation, meaning that the Learners in both IG#2 and MG#4 were motivated and able to maintain their motivation compared to the Learners in other groups. The common factors observed with IG#2 and MG#4 were:

- During the set up stage, all the participants especially the native speakers were actively interacting with fellow participants and providing scaffolding;
- All the participants were openly sharing their thoughts and opinions from the set up stage;
- The participants also interacted outside of discussion forums and were actively providing scaffolding; and
- The participants as a group engaged in discussion forums each week.

Active interaction, including the provision of scaffolding during the set up stage, was crucial in establishing the supportive and friendly environment. For example, if a Learner had difficulty making his self-introduction visible to fellow participants, other members helped to assist until everyone in the group could see his self-introduction. Both IG#2 and MG#4 had multiple participants chatting during the set up stage and producing long threads. This was seen as evidence of the members getting to know each other, which later facilitated those groups to support each other to fulfill the division of labour and rules in the OJAS.

The division of labour shown in the OJAS for the Nihongo4us Session is to be a discussion leader for a week during the Nihongo4us Session; to provide scaffoldings to the fellow participants; to make posts; and, to participate in discussion forums. The rules are to follow set instructions covering explicit and implicit conventions and norms of acceptable and appropriate online behaviors for participating in Nihongo4us. If these actions were not followed, a contradiction would occur and affect the outcome. Similarly if any mediating artifacts such as a computer were not available to the participants, a contradiction would occur and affect the outcome.

IG#2 and MG#4 also had a number of participants interacting outside discussion forums including providing scaffoldings to each other. The participants asked a variety of questions, around grammar, the use of certain *Kanji*, and study abroad which were not directly related to

a discussion topic at the time. Other examples for interactions outside the discussion forums were that the participants in those groups sent season greetings or birthday greetings, and if someone had been away, the fellow members sent a message to see what was happening to him/her and a welcome back message was posted when he/she came back. These actions were seen as encouragement as well as showing thoughtfulness towards their fellow members, not only for the Learners who had been away but also for other members of the group. The Learners' Logbook and interviews also confirmed that the Learners in those groups felt comfortable to ask questions outside of the discussion forums. Such evidence indicates these groups were able to establish a supportive online community. In other words, the number of participants and scaffoldings outside of the discussion forums indicate the level of supportiveness within the community.

An example of how a supportive community impacts a Learners' behavior can be seen where the nominated discussion leader was absent or did not upload a topic, and a fellow Learner volunteered to be the discussion leader and uploaded an alternative topic. As a result, the group avoided contradictions in the OJAS and was able to continue their activities at the Nihongo4us site. Their actions can be described visually using the OJAS; showing how the supportive online community allowed the Learner to volunteer for a discussion leader when it was not his/her turn, which then fulfilled the requirement of division of labour and rules. Figure 2 shows a visual representation of what was observed in IG#2: where an absence of a writer would normally trigger contradictions in OJAS, the actions of a volunteer in IG#2 over-rode any problems and triggered others to make posts, which in turn avoided contradictions in the rules and the division of labour.

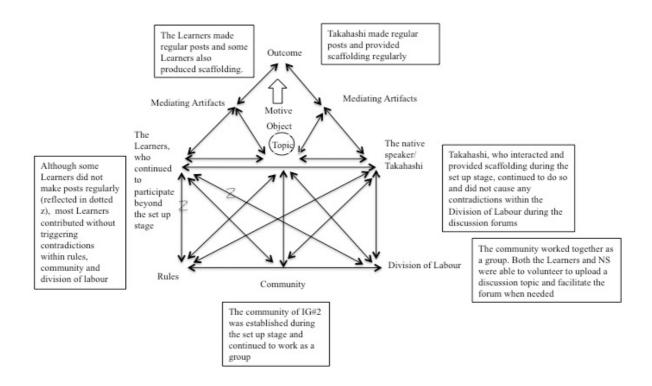


Figure 2: Overview of OJAS of balancing act of IG#2 during the discussion forums

However, the Learners' Logbook and post-session interview revealed that if the group could not establish a supportive online community, the Learners did not feel comfortable enough to volunteer as a discussion leader or ask questions outside of discussion forums. In other words, it took a lot of courage for the Learners to provide scaffolding. Furthermore, for a Learner to volunteer to be a discussion leader on behalf of a fellow Learner in the presence of a native speaker, it took a lot more courage.

Needless to say that all the Learners had great respect towards the native speakers and the Learners saw a native speaker as a role model. However, beginners or middle level learners in the mixed groups also saw the senior Learners as a role model and they were able to learn from both the senior Learners and the native speakers. The seniors could also advise or share their experiences about both Japanese studies and how they lived in Japan or participated in an exchange program. Sharing their personal experiences offered the fellow Learners rich information.

The fellow learners' inputs were important and had as much effect on the Learners as the native speakers' inputs. According to the Learners, when fellow Learners especially the senior Learners responded, the juniors felt relieved and assured that the meanings were conveyed, which motivated them to make further posts. Communication only happens when participants understand what each other is saying. Unlike face-to-face interactions, online communication does not provide any extra clues such as body gesture or facial or tonal clues. Therefore, the response or replies from fellow participants become more vital. Absence of replies and lack of inputs from the native speakers in IG#1 and MG#3 made the Learners more anxious as they thought nobody understood what they had written or that there were no interests in their post. This escalated the lack of interactions in the groups and the Learners were discouraged and made less posts.

Just having one level such as an introductory level gives a comfortable buffer zone for the Learners to make posts but if the learners are ready, the mixed level can offer more stimulants and opportunities for the learners to accelerate and acquire more skills. Exposing the Learners to various advanced levels of Japanese, the Learners can see their future goals. A range of language structures presented at Nihongo4us showed what both junior and senior Learners achieved in their own levels. The junior Learners observed how the senior Learners were able to switch between using colloquial or polite language depending on their audience. At the same time, for the senior Learners, reading the junior Learners' posts allowed the senior Learners to recognize and acknowledge their own progress. This encouraged the senior Learners to keep studying and engaging in Nihongo4us.

The Learners who completed all the tasks showed improvement in their final proficiency level test. They also commented and reported in their survey, Logbook entries and interviews that they were able read faster than before Nihongo4us. Some struggled to read the posts initially because of unknown *Kanji*, words, or/and new grammar. However, gradually they learnt to understand the overall meaning of the posts without stumbling on each word. Some Learners kept a record of new words, *Kanji* and grammar, which amounted to many books or large excel files.

A number of Logbook entries indicated that the Learners of IG#2 and MG#4 were highly motivated and able to keep their motivation to study Japanese and improve their Japanese

language skills. Their motivation was kept high due to having fewer contradictions in the OJAS throughout the Nihongo4us Session. Less contradictions occurred in both groups, as the groups were able to establish a supportive online community, therefore, the division of labour functioned within the group as the members acted within the rules and continued to make posts and provide scaffolding to each other and maintained weekly discussion forums. This balancing act occurred as the group gradually built a supportive community which had been begun by the participants, including the native speakers, interacting well and providing scaffolding during the set up stage.

6 Limitations

All research needs to acknowledge its limitations. This study is primarily limited in two regards: the selection of the research site; and, some data being subject to a 'survivor bias'. All the volunteer participants were from the same university and, therefore, they were exposed to the same institutional culture. If the participants were from different universities, they might have had different expectations and might have behaved differently.

Less than a third of Learners who had commenced partaking in Nihongo4us completed all activities. As a result, the study was unable to incorporate data derived from the participants who had discontinued or became inactive. Consequently, it is likely that findings may overstate the extent of scaffolding and which factors that had most impacted the scaffolding. However, the questionnaire that was collected at the beginning of the study demonstrated some differences between the continuing and discontinuing Learners. For example, the group of Learners who completed the Nihongo4us Session showed higher levels of motivation and a desire to learn Japanese; whereas the Learners who had discontinued presented a stronger desire to learn independently but engaged more frequently in receptive activities rather than productive activities. Considering these differences, the Learners who discontinued are likely to have had different opinions on a SNS activity and the provision of scaffolding.

The choice of SNS platform for Nihongo4us was not a mainstream SNS, therefore, it might have presented different results. SNSs are not identical in their designs and operations and so research results based on only one SNS may not be fully generalized across other SNSs.

Lastly the study was conducted out-of-classroom without any assessment regime. Since assessment is understood to influence students' behavior (Pasfield-Neofitou, Spence-Brown, Morofushi, & Clerehan, 2012; Vonderwell, 2003), the results might have been different had the study been assessable. However by being not assessable, the study was able to provide a more accurate representation of each Learner's potential.

The above limitations mean that the results of the study are less applicable to certain pedagogies. However, these limitations also point to potentially fruitful future research.

7 Conclusion

Analyzing data using a new activity system model: the OJAS showed the importance of balancing mediating artifacts, the community, the division of labour and the rules for the writers and the readers to trigger their posts. The study proposes new ways of teaching

foreign languages where online discussion forums involving mixed proficiency levels are incorporated into normal face-to-face classes in order to enhance learners' motivation and language acquisition. While timetabling may be difficult to incorporate a face-to-face mixed level discussion forum, learners can access online discussion forums at their own convenient time. Students can arrange the discussion topics, and learners from all levels can participate, thus it is likely that the learners' motivation will also increase. Furthermore, they will also be exposed to a variety of language styles from which they can learn.

Such a forum can provide an authentic platform where the learners can learn to communicate and convey what they want to say. Online forums can also be open to graduates should they wish to further pursue their knowledge of the language. The exchange of knowledge and information in such forums can be very rewarding and it can offer a platform where people can continue to learn a language beyond the classroom.

References

- Aljaafreh, A., & Lantolf, J., P. (1994). Negative feedback as regulation and second language learning in the zone of proximal development. *Modern Language Journal*, 78, 465–487.
- Christensen, M. (2013). *Online activities for learning Japanese as a foreign language*. Unpublished (Doctoral dissertation), University of New South Wales, Sydney.
- Christensen, M., & Christensen, M. (2015). Language learner interaction in social network site virtual worlds. In E. Dixon & M. Thomas (Eds.), *Researching language learner interactions online: From social media to MOOCs* (pp. 193–211). Texas: the Computer Associated Language Instruction Consortium (CALICO).
- De Guerrero, M. C. M., & Villamil, O. S. (2000). Activating the ZPD: Mutual scaffolding in L2 peer revision. *The Modern Language Journal*, 84(i), 51–68.
- Dixon, E., & Fuchs, C. (2015). Face to face, online, or MOOC How the format impacts content, objectives, assignments, and assessments. In E. Dixon & M. Thomas (Eds.), *Researching language learner interactions online: From social media to MOOCs* (pp. 89–105). Texas: the Computer Associated Language Instruction Consortium (CALICO).
- Engeström, Y. (2001). Expansive learning at work: Toward and activity theoretical reconceptualization. *Journal of Education and Work, 14*(1), 133–156.
- Fernando, R. (2015). The role of interaction in MOOCs and traditional technology-enhanced language courses. In E. Dixon & M. Thomas (Eds.), *Researching language learner interactions online: From Social media to MOOCs* (pp. 63–88). Texas the Computer Associated Language Instruction Consortium (CALICO).
- Leont'ev, A. N. (1978). Activity, Consciousness, and Personality. from Prentice-Hall: http://www.marxists.org/archive/leontev/works/1978/index.htm
- McLoughlin, C. (2004). Achieving excellent in teaching through scaffolding learner competence. Paper presented at the Teaching and Learning Forum: Seeking Educational Excellence. Retrieved from http://lsn.curtin.edu.au/tlf/tlf2004/mcloughlin.html
- Ohta, A. S. (1995). Applying sociocultural theory to an analysis of learner discourse: Learner-Learner collaborative interaction in the zone of proximal development. *Issues in Applied Linguistics*, 6(2), 93–121.

- Pasfield-Neofitou, S. E., Spence-Brown, R., Morofushi, M., & Clerehan, R. (2012). Implementing social networking in a higher education language course: Interaction and assessment in conflict. In J. Peterson, O. Lee, T. Islam & M. Piscioneri (Eds.), Effectively implementing information communication technology in higher education in the Asia-Pacific region (pp. 201–217). New York: Nova Science Publishers.
- Vonderwell, S. (2003). An examination of asynchronous communication experience and perspectives of students in an online course: A case study. *Internet and Higher Education*, 6(1), 77–90.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press.
- Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of child psychology and psychiatry 17*, 89–100.
- Yamamoto, S. (2009). Novice ga expert no gakushu ni kouken surutoki kyoushitsu kuukan ni okeru soogokooi to "hattatsu no saikinsetsuryouiki" koozoo. *Sekai no nihongokyoiku*, 19(March), 69–88.