Online activities for learning Japanese as a foreign language

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Online Activities for Learning Japanese as a Foreign Language

by

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Abstract:

The study investigated 'out-of-classroom' collaboration and factors influencing scaffolding amongst Japanese language learners and native speakers (NS) participating in social network site (SNS) discussion forums. The driving curiosity underlying this study is vested in a need to understand how the efficacy of online language education can be improved. Whilst a large and growing body of literature dwells in issues related to online education, it is notable that the literature has not yet traversed what makes effective applications of online education without face-to-face classroom contexts (out-of-class). The under-researched areas on online discussion forums relate to those conducted in: out-of-class environments; without an assessment regime; and, with diversity in participants' language proficiency levels. Furthermore, the use of a SNS as a platform for investigating these areas is underexplored.

The study engaged Japanese language learners and NS at an Australian university participating in discussion forums using a commercial SNS. Qualitative data was gathered from multiple sources: interviews; questionnaire; survey; reflective logbooks; language proficiency tests; and, online data. The interactions between the participants, comparing seven different groups were analysed with a new more finely grained Activity System: the Online Joint Activity System (OJAS), which was devised as a tool to reflect on interactions on SNS-based forums as a contribution to theory.

The study found that proactive users of CMC enjoyed participating in the SNS-based forums to gain confidence in using Japanese and to improve their reading and writing skills. Both NS and Learners at all levels could provide scaffolding in three categories (linguistic; content; and navigation) identified in the study. Interactions between participants, especially NS including scaffolding from NS, are vital in the creation of a supportive online learning environment. In such an environment, discussion leaders' and NSs' inputs influence scaffolding provision and development of forums more than consistency or diversity of language competency. The OJAS helped to explain the interactions and contradictions observed in this study, taking into consideration the SNS environment. The study notes that SNS based language programs can make valuable complements to existing face-to-face programs. Additionally, it presents practical implications for future studies and teaching practices in SNS-based collaborative activities.

…… **Signature**

…… **Witness**

3/4/2014
…… **Date**

FOR OFFICE USE ONLY **Date of completion of requirements for Award:**

THIS SHEET IS TO BE GLUED TO THE INSIDE FRONT COVER OF THE THESIS

TO

Mark, Emi and Erika

And

The memory of my parents Shigeru and Keiko Iseki and aunt Rosemary Pang

ABSTRACT

The study investigated ‘out-of-classroom’ collaboration and factors influencing scaffolding amongst Japanese language learners and native speakers (NS) participating in social network site (SNS) discussion forums. The driving curiosity underlying this study is vested in a need to understand how the efficacy of online language education can be improved. Whilst a large and growing body of literature dwells in issues related to online education, it is notable that the literature has not yet traversed what makes effective applications of online education without face-to-face classroom contexts (out-of-class). The under-researched areas on online discussion forums relate to those conducted in: out-of-class environments; without an assessment regime; and, with diversity in participants’ language proficiency levels. Furthermore, the use of a SNS as a platform for investigating these areas is underexplored.

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ABBREVIATIONS

ACTFL OPI	The American Council on The Teaching of Foreign Languages Oral Proficiency Interview
ACMC	Asynchronous Computer Mediated Communication
BBS	Bulletin Board System where users are able to make posts, read and share news with other users
CMC	Computer Mediated Communication: any tools that allow communicative exchange to take place involving two or more computing devices (including emails, blogs, and BBS)
Email	Electronic Mail: the most popular method of sending electronic messages over the Internet
ESL	English as a Second Language
IG#	Introductory Groups numbered either 1 or 2 consisting of students of Japanese Language who had not progressed beyond the first year program
JLPT	Japanese Language Proficiency Test
JESS	Japan Educational Exchanges and Services
JF	Japan Foundation
J-Pop	Japanese Popular culture
L2	Second language
MG#	Mixed Groups numbered 1 to 5, consisting of students of Japanese Language at any level (including some introductory level Learners)
NS	Native speake

OJAS	Online Joint Activity System
SNS	Social Network Site; an online service that builds and reflects on social relations among people. SNSs offer various SNS tools such as photo, video, music, internal mail, online games, polls, blog. Examples of SNSs include Bebo, Facebook, MySpace, and Mixi (SNS in Japan).
SPOT	Simplified Proficiency Oriented Test: the Japanese language proficiency test
TESOL	Teaching English to Speakers of Other Languages
UNSW	University of New South Wales
ZPD	Zone of proximal development
3D avatars	Three Dimensional Avatars: where users can take on an avatar (3D persona) and move around the world chatting in 3D worlds or games.

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LIST OF PUBLICATIONS AND PRESENTATIONS

Christensen, M. (2012). Linguistic Scaffolding in Computer Mediated Language Learning: A Japanese language Study. In C. Gitsaki, & R.B. Jr. Baldauf, (Eds.), Future Directions in Applied Linguistics: Local and Global Perspectives (pp. 104-121). Newcastle: Cambridge Scholars Publishing.

Christensen, M. (2012). Aiming for global Japanese education. Paper presented at the Proceedings of International Conference Japanese Language Education 2012 (p. 130). Nagoya: The University of Nagoya.

Christensen, M. (2011). Could Social Network Services be a useful language learning tool? Paper presented at the International Japanese Studies Association of Australia, 4-7 July 2011 Conference. Melbourne: The University of Melbourne.

Christensen, M. (2011). Could Social Network Services be a useful language learning tools? Paper presented at the Postgraduate Conference, 9 September 2011. Sydney: The University of New South Wales.

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Christensen, M. (2010). Impediments to linguistic scaffolding in computer mediated language learning. Paper presented at the International Conference of Applied Linguistics Association of Australia, 4-7 July 2010. Brisbane: The University of Queensland.

CHAPTER 1: Introduction

1.1 Background of this Research

This thesis investigates learning activities used by foreign language learners of Japanese in a Social Network Site (SNS). The driving curiosity underlying this study is vested in a need to understand how the efficacy of online language education utilising a SNS can be improved. Whilst a large and growing body of literature dwells in issues related to online education, it is notable that literature has not yet well traversed what makes effective applications of online education in out-of-classroom contexts with only some recent contributions addressing parts of this concern (see for example, Pasfield-Neofitou, 2012).

Normally, the phrase 'out-of-classroom' may be used to indicate private activities as in the case of Pasfield-Neofitou's work (2012), not associated with an organised program. However, the present study was a carefully planned and managed educational program, explicitly designed for language learning/maintenance, with facilitators who were either teachers or were expected to play some of the roles of a teacher. The program did not constitute a 'classroom' in the physical sense, but it did provide a managed online learning space, which is akin to a virtual classroom[1]. In this thesis, 'out-of-classroom' is used to indicate that the participants were physically outside of their classrooms participating in voluntary extramural activities conducted during the semester break. Furthermore, the activities in which they participated were not part of their degree nor assessed in any way.

Since the early 1990s, computer mediated communication (CMC) gathered special interest in the education sector by incorporating increasingly accessible technologies to enhance learning activities. CMC in this study is defined as any communicative exchange that takes place involving two or more computing devices including email, blog and tools that allow such communications. CMC provides flexibility in time and

[1] The program at the core of this study was not a formal course, in the sense that it was not associated with assessment and certification, but its whole rationale for existence was based on language learning, so it was clearly an educational activity, rather than a non-educational (e.g. leisure) activity. All the participants were associated with the university where this study was conducted, and could be expected to see the activity as an extension of, and/or preparation for their formal studies as is reflected in the statement given to participants that the program was designed to help participants who might otherwise lose contact with Japanese over their summer break.

space, which in turn could provide an opportunity to expand the classroom beyond the physical space of a face-to-face learning environment. For foreign language learners and teachers, especially Japanese language where learners have to master multiple syllabi, the use of CMC provided a number of possibilities. For example, email allowed Japanese language learners to communicate with native speakers, exposing the learners to wide range of communication skills including intercultural communication skills with resultant increased learners' motivation (Kitade, 2006; Maingard & Christensen, 1996; Nakane, Thomson, & Tokumaru, forthcoming; Stockwell & Levy, 2001). Around the late 1990s, Warschauer (2001) found a gradual shift from seeing CMC as a tool to promote language learning to situations where CMC is used to master online communication techniques since online communications *per se* have become valuable skills.

Warschauer (1997, p. 472) discussed 'the power of CMC to encourage collaborative learning in the language classroom', where he recognised five distinguishing features in CMC:

1. 'text-based and computer-mediated interaction;
2. many-to-many communication;
3. time- and place-independence;
4. long distance exchanges; and
5. hypermedia links'

These five features, with emphasis placed on the second feature (many-to-many communication), brought attention to online discussion forums as collaborative learning activities. In recent years, online discussion forums have been noted to 'offer limitless opportunities for communication across linguistic, geographical and cultural borders' (Hanna & de Nooy, 2009, p. 1). Indeed a number of studies conducted in relation to online discussion forums (for example, Arnold & Ducate, 2006; Fitze, 2006; Lee, 2009; Tiene, 2000; Vonderwell, 2003; Warshauer, 1996), examining the benefit of online discussion forums have compared them with face-to-face discussion. Furthermore, with the advancement of CMC tools, a number of tools (such as Learning Management System (LMS), Social Network Site (SNS), chat, and blog) are available for online discussion forums. Studies such as Knutzen and Kennedy (2012) and Carney (2008) incorporated multiple CMC tools in collaborative activities to enhance the learners' learning activities. They reported positive experiences with implementation of these

CMC tools, however, deeper analysis of interactions investigating the mechanisms of collaborations is yet to be discussed.

Among CMC tools in recent years, SNS such as Facebook had vast number of users and growing interests. Reinhardt and Zander (2011) reported that Facebook is currently the world's most popular SNS with four hundred million people classified as active users. The number of active users of Facebook is increasing rapidly by day. CNET reported on January 30, 2013 that Facebook announced 1.06 billion monthly active users were recorded as of December 31, 2012. This figure showed a 25% increase in monthly users from the previous year and 57% growth in mobile monthly users (Tam, 2013). This reflects a large number of interests and users as well as the methods by which these users connect to Facebook, including in educational sectors.

From sociocultural perspectives, Vygotsky (1978) emphasises that the role of social interactions is a core to language learning, social interaction and collaboration are essential to learning, which develops through social relationships. A concept of SNSs emphasises social interactions through social relationships, therefore a SNS may offer an effective platform where language learners can interact to learn a language. However, its efficacy as an educational tool is not yet determined.

Innovation in teaching is an enabling factor for this study since it is based on a reconceptualisation as to what is education delivery. No longer is education provision bounded by the four walls of a physical classroom (Dodd, 2013a, 2013b; Friedman, 2013). Instead, education can be delivered over electronic means that allow student and teacher to be in separate and mobile (at least not fixed) locations. However, before promoting online-based educational activities, an in-depth understanding of what makes online provision efficacious is highly important. With particular importance for this study is the need to understand how such provision can be successful when completed as an out-of-classroom activity designed to support and enhance the face-to-face classes.

A fundamental aspect of any learning is the provision of scaffolding to learners (Vygotsky, 1978; Wood, Bruner, & Ross, 1976). Scaffolding can be defined as any support given to a learner to complete a task, for example, can be provided via online learning activities. An understanding of what influences successful scaffolding in online learning activities is a central objective of this study and, in order to develop that

understanding, the aid of a theoretical frame derived from sociocultural theory is invoked.

The remainder of this chapter provides the reader with a justification for engagement with the research; aim of the study and research questions; an articulation of the chosen methodology and an introduction to the theoretical frame; the plan of the thesis; and, a summary.

1.2 Justification for the Research

Previous studies' foci have been on how researchers and/or teachers incorporate CMC in a class activity. These studies have then examined the use of learners' language. However, we still have little understanding of language learners' metacognitive development or the learning activities as learners participate in online discussion forums in three areas in particular. Three notably under-researched areas are: online discussion forums conducted in out-of-class environments; the impact of a lack of assessment regime on online interactions; and, how diversity in language proficiency levels within student cohorts can influence online interactions. Furthermore, research of learners' interactions in the use of a SNS, as a platform for an online discussion forum in an out-of-classroom environment, is virtually unexplored.

An investigation of learners' interactions in such an environment could enhance our understanding of out-of-class activities. With such an understanding, using an effective online discussion forum could ease the pressures on tertiary language education provision and might be able to promote language education, working towards 21st Century 'global citizenry' (Worton, 2010).

1.3 Aim of the Study and Research Questions

Based on the issues described above, this study had two main interlinking purposes. Firstly, the study's investigation of learning activities used by foreign language learners of Japanese in a SNS focused on four research questions. Secondly, the study investigated and proposed a new model of activity system to assist in conceptualising the learning activities used in a SNS. The four research questions were:

1. How do Learners perceive the role of CMC as a tool in their language learning activities?

2. Can a SNS foster collaborative learning and reflective thinking via Learners and native speakers' scaffolding in an out-of-classroom environment?
3. What factors influence collaborative learning and the provision and take-up of scaffolding
4. In relation to the above questions, what differences are there in different groups arising from level of proficiency?

The first research question aims to identify the participants' awareness and understanding of CMC in general. From sociocultural perspectives, the participants' habits and beliefs can influence their participation on SNS activities, therefore it is important to have clearer understanding on this matter. The result from this research question informs part of the empirical based used to determine responses to the remaining research questions.

The second and third research questions aim to move the focus to gain some understanding on how the learners and native speakers assist each other via a SNS as they partake in discussion forums and collaborate in the learners' learning activities.

The fourth research question aims to provide light on the unknown issue of whether forming groups by level of proficiency band or by mixed proficiency level impacts on collaborative learning and the provision and take-up of scaffolding in a SNS. This aspect of the study provides a contrast to extant studies in that they have focused on a single level of proficiency (Kitade, 2000; Meguro & Bryant, 2010; Stockwell & Harrington, 2003).

The next section provides an outline of the methodology and theory chosen to assist the investigation.

1.4 Articulation of Methodology and Theory Consideration

The study chose to employ a qualitative approach based on a case study specifically constructed for its purposes. Justification and explanation of the chosen methodology is provided in Chapter 3. In order to construct the case study, sixty-five Japanese language

learners and seven native speakers at an Australian university were observed participating in discussion forums based on a commercial SNS. The participants were divided into seven groups: two groups where each learner was currently at an introductory level of competency and five groups where learners' competency levels were mixed. Having two types of groups allowed the study to compare the interactions at the group level where diversity in proficiency levels was present and absent.

The site where the participants were interacting was given the project title *Nihongo4us*. Using *Nihongo4us*, participants accessed SNS tools to communicate naturally in text-based and graphic-based means. They were asked to partake in regular discussion forums and they understood that, whilst there was an absence of an assessment regime, there was also an overriding educational perspective being examined in their use of *Nihongo4us*.

Qualitative data was gathered from multiple sources: interviews; questionnaires; surveys; reflective logbook entries; language proficiency tests; and online data. As a result an empirically rich description of learning interactions is provided at the level of individual learners and in terms of elements of the learning activities as impacted by key factors of: technology (specifically the SNS platform); the learners' perceptions of CMC as a tool of learning, collaborative learning and reflective thinking via Learners[2] and native speakers' scaffolding; provision and take-up of scaffolding; and, learner competency. To derive that rich description, and analysis thereof, the abovementioned research questions were examined through the eyes of sociocultural theory. In particular, in-depth analysis of interactions at the level of individual learner was undertaken from an Activity Theory's point of view.

Vygotsky's notion of sociocultural theory has been recognised as providing a productive framework to explain online interactions and to analyse the quality of online discussion from social and cognitive perspectives (Conole, Galley, & Culver, 2011; Hadjistassou, 2012). This is because sociocultural theory allows us to examine interaction within broad social and cultural contexts (Warschauer, 1997). Sociocultural theory incorporates the importance of input and output in social contexts. Furthermore, Activity Theory (Engeström, 2001; Leont'ev, 1978), from sociocultural perspectives, assists in microgenetic analysis to conceptualise activities.

[2] Definitions are provided in Glossary at the end of thesis.

Activity Theory addresses the issue of individual development, activity and the social context for the purpose of understanding human, purposeful activity based on motives. Vygotsky created the idea of mediation, presented visually in his triangular model designed to represent 'a complex and mediated act' (Vygotsky, 1978, p.40). Researchers (Engeström, 2001; Haneda, 2007; Leont'ev, 1978; Wells, 2002) expanded Vygotsky's triangular model[3] and produced various models of the activity system. The present study also delivers a new model of the activity system which it calls the *Online Joint Activity System* (*OJAS*). In a contribution to theory, this new activity system reflects the interactions over the SNS more closely than pre-existing models by incorporating writers and readers as subjects and identifying topic as one of the constituent components. Activity Theory and the *OJAS* assisted in analysing the observed interactions to understand differences across groups of participants in relation to provision of scaffolding. The contribution of the OJAS is targeted specifically at studies of interactions on online forums.

1.5 Plan of the Thesis

In order to investigate the research question set above, this thesis presents seven structured chapters. Chapter 2 presents a review of the relevant literature in three areas: Sociocultural Theory; studies on CMC; and considerations of Activity Theory. The chapter also presents previous studies' limitations and identifies the gaps in the extant relevant literature. Chapter 3 details the methodological choices made and informs on the design of the study and its data collection methods. This chapter thus describes a three month online SNS site, called *Nihongo4us* specifically designed for this study's data acquisition. The next three chapters focus on the findings and the research questions presented above.

The findings in relation to the first research question are presented in Chapter 4. Those findings relate to how the Learners perceive the role of a CMC as a tool in their language learning activities. From the perspectives of the Activity Theory, the pre-existing beliefs and habits that the Learners have can influence their participation in the SNS-based activities. This chapter also presents the Learners' opinions on *Nihongo4us* as a language learning tool.

[3] Vygotsky's triangular model (Figure 2-1) and overview of Activity Theory are presented in Section 2.4.1.

Chapter 5 presents the second sets of findings with respect to the scaffolding found in the study. The categories of scaffolding are introduced and analysis of those observed scaffoldings is presented. Those findings relate to the second and fourth research questions: whether a SNS can foster collaborative learning and reflective thinking via Learners and native speakers' scaffolding in an out-of-classroom environment; and, the differences between the groups arising from level of proficiency.

A discussion of the findings noted in Chapters 4 and 5 in regards to the third and fourth research questions is presented in Chapter 6. The new model of activity system (the *OJAS*) is introduced in this chapter to assist the analysis of interactions that occurred in the *Nihongo4us* site. Some of the factors that influenced collaborative learning and scaffolding are discussed. Furthermore, the discussion of differences between the groups of varied or equal proficiency levels is presented using the *OJAS*.

Lastly, the conclusion is presented in Chapter 7. The chapter also presents the answers to each of the research questions, the study's contributions to pedagogy and Activity Theory, its limitations and directions of future studies.

1.6 Summary

This chapter has served to introduce the thesis. It provided the background to the study and thus has presented a justification as to why the research is worthwhile. It then presented a brief introduction of the study's chosen methodology and theoretical frame. Beyond that, the chapter has provided a plan for the remaining chapters of the thesis.

Technological advancement in the form of computing devices and Internet usage has brought significant changes to our society. The impact of these changes will be pervasive such that education and its student body cannot avoid consequential change. The findings of the present study might be of assistance in creating a more effective online out-of-classroom learning environment as an extra curricula complement to face-to-face classes. Further, the newly proposed *OJAS* could assist in further understanding of interactions over online discussion forums.

CHAPTER 2: Literature Review

2.1 Introduction

As outlined in the previous chapter, the present study focuses on interactions amongst language learners and native speakers in collaborative activities using a SNS. Therefore, this chapter presents three main areas of background literature: sociocultural theory; relevant studies of CMC; and Activity Theory.

Firstly, this chapter presents a discussion of Vygotsky's sociocultural theory as a theoretical framework (Section 2.2). Vygotsky emphasises that social interactions and collaborations are essential to the learning activities, where learning is determined by social relationships and is mediated by language within the social discourse (Vygotsky, 1978). The notion of the zone of proximal development (ZPD) and of scaffolding are discussed in this study, including the definition of scaffolding, provision and what is to be included in scaffolding.

Secondly, this chapter presents a discussion on collaborative educational activities using CMC (Section 2.3). Within this discussion of CMC as an educational tool, the extant literature investigating effective online activities is presented. As noted in Chapter 1, use of the term CMC is defined in the present study as any communicative exchange that takes place involving two or more computing devices. Therefore, the term CMC includes email, blog, Bulletin Board Systems (BBS), SNSs and other communication tools as well as computer assisted language learning tools.

Thirdly, a conceptual framework for the present study, Activity Theory, is presented (Section 2.4). Activity Theory is chosen as a conceptual framework as it reflects the activities of community of CMC, because Activity Theory assumes that 'the human mind emerges and exists as a special component of human interaction with the environment' (Kaptelinin, 1996, p. 107). The relevant constituent components of Activity Theory are described and discussed. Then in the penultimate section, gaps in the extant literature are identified along with a description of application for the theoretical framework for the present study (Section 2.5). Finally, an overall summary of this chapter is presented.

2.2 Sociocultural Theory

This section presents the core of Vygotsky's notion of sociocultural theory as a theoretical umbrella for the present study. Firstly, the core of Vygotsky's theory: internalisation and ZPD are explained. Then the term scaffolding is explained in relation to second language learning.

Sociocultural theory has been recognised as providing a productive framework to explain CMC interactions and analyse the quality of discussion in CMC from social and cognitive perspectives (Arnold & Ducate, 2006; Conole, et al., 2011; Gebhard, Shin, & Seger, 2011; Hadjistassou, 2012; Warschauer, 1997). This is because sociocultural theory allows us to examine interaction within a broad social and cultural context (Warschauer, 1997).

Sociocultural theory, as developed by Vygotsky (1978), emphasises that social interaction and collaboration are essential to learning, which develops through social relationships. He noted that 'learning is a necessary and universal aspect of the process of developing culturally organised, specifically human, psychological functions' (Vygotsky, 1978, p. 90). In his view, the role of social interaction is a core of learning language; and therefore, you learn about language and learn through language.

Vygotsky (1978) viewed learning as a social process, emphasising dialogue and the various roles that language played in instruction and in mediated cognitive growth. He criticised 'educational intervention that lags behind developed psychological processes instead of focusing upon emerging functions and capabilities' (Vygotsky, 1978, p. 131). Vygotsky (1978) argued that it is crucial to understand how psychological processes are formed and to investigate moment-to-moment changes in the participants' behaviour. He called it microgenetic analysis dealing with the actual processes of interaction between the individual and his or her environment. From Vygotsky's sociocultural perspective, learning and development take place in socially and culturally shaped contexts, which are constantly changing (Palincsar & Brown, 1984; Vygotsky, 1978). From a socio-cultural perspective viewpoint, it is critical to analyse an individual from social, historical, and cultural perspectives. That is, an individual's learning is also analysed from social, motivational, emotional perspectives as well as from the process of identity transformation perspectives. Accordingly, research methods from these

sociocultural perspectives require microgenetic analysis. Activity Theory assists in such microgenetic analysis to conceptualise activities that individuals in a give society take. Discussion on Activity Theory is presented later in Section 2.4 in this chapter.

Vygotsky (1978) argued that learning and cognitive development were culturally and socially based. He saw learning as a social process emphasising dialogues and the varied roles that language plays in instruction and in mediated cognitive growth. In fact many researchers (for example, Aljaafreh & Lantolf, 1994; de Guerrero & Villamil, 2000; Donato, 1994; Ohta, 2000; Takahashi, 1998; Warschauer, 1997) have explored the dialogues between experts and novices, focusing how an individual interlocutor is able to internalise new and jointly constructed knowledge.

Vygotsky's process of internalisation is achieved through interaction in a shared, culturally meaningful context. The external collaborative activity becomes internalised, thus drives individual cognitive growth (Jones, 2001, p. 71). Vygotsky describes this internalisation as the process of learning that takes place in what he describes as the 'zone of proximal development' (ZPD). In other words the ZPD is defined as 'the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers' (Vygotsky, 1978, p. 86). This is described as the differences between 'buds' and 'flowers', and that what one can do with assistance today can be done without help tomorrow (Vygotsky, 1978). Chaiklin (2003) explains that assistance provided in the ZPD refers to the maturing functions that are relevant to the next stage. Considering second language acquisition, Ohta (2001, p. 9) further refined ZPD as 'for the L2 [ed. second language] learner, the ZPD is the distance between the actual developmental level as determined by individual linguistic production, and the level of potential development as determined through language produced collaboratively with a teacher or peer'. This assistance in the ZPD, is only meaningful if it triggered maturing functions so as to transit to the next level.

Aljaafreh and Lantolf (1994) proposed five levels of transition (summarised below) from 'intermental' to 'intramental functioning' in the ZPD, as a way of analysing Vygotsky's theory of transition from interpsychological to intrapsychological function in the ZPD. The five levels of transition described by Aljaafreh and Lantolf (1994, p. 470) are:

> Level 1: 'The learner is not able to notice, or correct the error, even with intervention from the tutor …';
>
> Level 2: 'The learner is able to notice the error, but cannot correct it, even with intervention …';
>
> Level 3: 'The learner is able to notice and correct an error, but only under other-regulation …';
>
> Level 4: 'The learner notices and corrects an error with minimal, or no obvious feedback from the tutor and begins to assume full responsibility for error correction …'; and
>
> Level 5: 'The learner becomes more consistent in using the target structure correctly in all contexts. …'

These five levels represent three general stages of development focusing on interactions: need for intervention, noticing an error and correcting the error. The first stage of development is where the learner needs intervention consisting of Levels 1-3 mentioned above, indicating that the learner must rely on another individual in order to perform a task. The second stage is constituted by partial self-regulation as shown in Level 4 above. That is, the learners are capable of detecting and correcting their own mistakes without outside feedback; however, it is not automatically done. The final development stage is Level 5, where the learners' performance is completely self-generated and corrections are made automatically.

Aljaafreh and Lantolf's descriptions of intervention in the above stages resonate with scaffolding, a term described by Wood et al. (1976). Scaffolding is assistance given to complete a task. According to Vygotsky's theory, during the interactions between novices and experts, dialectic interactions occur. When such interactions occur in the ZPD and scaffolding is provided as a process of negotiation, it promotes understanding, which leads to learning. As Vygotsky describes, this is a process of internalisation.

Stone (1996) argued that scaffolding is a semiotic devise, such as prolepsis, and a metaphor of an absence of specific communicative mechanisms whereby its effects are accomplished. Taking Rommetveit's (1974, 1979) terms of successful scaffolding, which could only happen among trusted situations, Stone (1996) stated that the interactions could not occur between faceless functionaries, as the level of trust would be low. Stone (1996, p. 180) recognised that the scaffolding is 'a much more subtle phenomena' and 'a complex set of social and semiotic dynamics'.

The scaffolding is more than assisting words and metaphor. In order to provide successful scaffolding, one needs to have a comprehensive understanding of the social situations and behaviours where the process takes place. However, Stone's view that successful scaffolding only happens in face-to-face circumstances is rather limited. Under the current proliferation of incorporation of CMC to teaching, it would be worth investigating the feasibility of successful scaffolding in CMC. It is possible to argue that the participants in a SNS share similar interests and trust, which satisfy the minimal set of presuppositions, as Rommetveit's argues. In order to investigate learning activities and learners' behaviour and activities in relation to scaffolding in the ZPD, firstly we need to understand the term: 'scaffolding'. The next section outlines the term scaffolding and categories of scaffolding identified in relevant research.

2.2.1 Term and Categories of Scaffolding

This section briefly discusses the term scaffolding, originally described by Wood et al. in 1976 and then used by other researchers. Following this, the section also presents several studies that categorised the scaffolding.

Wood et al. (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 in the ZPD is frequently referred to as scaffolding. Ohta (1995, p. 96) defines the ZPD as 'the difference between the L2 learner's developmental level as determined by independent language use, and the higher level of potential development as determined by how language is used in collaboration with a more capable interlocutor'. This enabling process is referred to as scaffolding. In support of Ohta's (1995) view, de Guerrero and Villamil (2000, p. 53) defined scaffolding in L2 learning as 'those supportive behaviours, adopted by the more expert partner in collaboration

with the L2 learner, that might facilitate the learner's progress to a higher level of language development'. Scaffolding occurs during a collaborative learning activities, where interlocutors provide prompts, hints, explanations, questions, and suggestions to assist each other in solving a problem. It is not only from experts to novices but novices can also provide scaffolding to experts as Yamamoto (2009) and others (for example, Donato, 2000; Ohta, 1995, 2001; Villamil & de Guerrero, 1996) have found.

Aljaafreh & Lantolf (1994) identified some important characteristics of scaffolding in second language contexts for the effective intervention of a tutor: graduated, contingent, and dialogic feedback. They argued that all types of feedback would be potentially important for learning; however, the level of importance and relevance would depend on the learner's position in relation to ZPD. They scaled the feedback observed in the interaction from implicit to explicit. Their findings in studying how feedback was negotiated in tutor-learner interaction suggest that there are different ZPD for different learners at different stages (so that both implicit and explicit feedback may be necessary depending on to what extent the learner notices an error) and that too much other-regulation may inhibit self-regulation.

Villamil and de Guerrero (1996) conducted a study with 54 Spanish background students learning English working in pairs to revise their writing tasks. Their study identified what kind of social-cognitive activities the students engaged; what kind of mediating strategies they used; and aspects of social behaviour in providing scaffolding. Villamil and de Guerrero's (1996) identified 14 subcategories of scaffolding (as shown in Table 2-1 below). Following Donato (1994), they also recognised requests as part of scaffolding and included categories such as requesting advice and requesting clarification. Following their 1996 study, de Guerrero and Villamil (2000) found that the language learners used a variety of scaffolding in revising a written text. For their analysis they used previously established categories including Wood et al. (1976), Bruner (1978), Lidz (1991), Aljaafreh and Lantolf (1994), Villamil and de Guerrero (1996). The categorisations of scaffolding in these studies are summarised as in Table 2-1 and briefly explained after the presentation of the table below.

Table 2-1: List of scaffolding categorisations

Researchers	Categories
Wood et al. (1976)	• Recruitment • Reduction in degree of freedom • Direction maintenance • Marking critical features • Frustration control • Demonstration
Bruner (1978)	• Reducing the complexity of a task • Getting attention and keeping a child focused • Offering models • Extending the scope • Providing support
Lidz (1991)	• Intentionality • Meaning • Transcendence • Joint regards • Task regulation • Change • Sharing of experiences • Praise/Encouragement • Challenge • Psychological differentiation • Contingent responsivity • Affective involvement
Aljaafreh & Lantolf (1994)	• Construction of a 'collaborative frame' • Prompting or focusing • Indicating • Rejecting unsuccessful attempt in recognising the error • Narrowing down • Indicating the nature of the error • Identify the error for a student • Rejecting unsuccessful attempt of correction • Providing clues • Provides the correction • Provides some explanation • Provides examples of the correct pattern
Villamil & de Guerrero (1996)	• Requesting advice • Responding to advice • Requesting clarification • Responding to elicitation • Giving directives • Making phatic comments • Advising • Eliciting • Reacting • Clarifying • Restating • Announcing • Justifying • Instructing
Jackson, Krajcik & Soloway (1998)	• Supportive • Reflective • Intrinsic
McLoughlin (2004)	• Orientation: Communication of expectation • Coaching • Eliciting articulation • Task support • Expert regulation • Conceptual scaffolding • Metacognitive scaffolding • Procedural scaffolding • Strategic scaffolding

Above Table 2-1 presented the comparisons of categorisations of scaffolding by these researchers. These categorisations share common features recognising the various supportive and reflective nature of scaffoldings, but the target recipients of the scaffolding differ, as explained below.

Wood et al. (1976, p. 99) conducted the study involving three to five year old children, who ‘were tutored in the task of constructing a pyramid from complex, interlocking constituent blocks’. In this experiment, Wood et al. (1976, p. 98) identified six categories of scaffolding: ‘the “scaffolding” process’ as in Table 2-1.

Bruner (1978) observed the interactions between a mother and a child where mother’s verbal efforts to maintain a conversation with a child promoted language acquisition. Subsequently Bruner (1978) characterised five key features of mother’s scaffolding behaviour as shown in Table 2-1.

Lidz’s (1991) scales of 12 component behaviours of adult mediating instruction as scaffolding was incorporated in de Guerrero and Villamil’s (2000) study. Lidz (1991) identified these 12 component behaviours observed in the adults interacting with children learning to master a task. To assist the children to move ahead when they were ready, adults provided support at times and providing encouragement at other times, so that the children could move ahead when they were ready. de Guerrero and Villamil (2000) recognised that this Lidz’s scale could be observed in any type of mediated teacher-learner or learner-learner interaction in the language classroom. Aljaafreh and Lantolf (1994) also categorised the scaffolding in 12 levels as shown in Table 2-1; scaling from strategically made implicit to explicit feedback. Although the categorisations for scaffolding used in Wood et al. (1976), Lidz (1991), Aljaafreh and Lantolf (1994), and Villamil and de Guerrero’s (1996) studies are based on face-to-face interactions, some categories carry relevance for interactions over CMC.

Jackson et al. (1998) developed software of computerised scaffolding called *Guided Learner-Adaptable Scaffolding* (GLAS). They recognised that the critical component of scaffolding was its capability of fading. In order for learners to be able to control the extent of scaffolding they receive to complete a task, they developed learner centered GLAS into their interactive computer based learning tool called *TheoryBuilder*. This allowed the learner to take control over the scaffolding they required. Allowing them to make a decision about the level of guidance needed. Jackson et al. (1998) categorised scaffoldings into three groups as shown in Table 2-1. The last on the list in Table 2-1 presents McLoughlin’s (2004) work. McLoughlin (2004) proposed nine categories of scaffolding allowing for the incorporation of online learning environments, where peer interactions were emphasised.

Each of the seven studies discussed above developed its own scaffolding categorisation respecting the essence of sociocultural theory. On analysis of these categorisations, Nagami (2005) identified and reported four important elements that influence collaborative activities:

- Relationship between the learners;
- Learners motivation;
- Characteristics of tasks; and
- Sufficient time to promote scaffolding

Analysis of scaffolding over CMC without any face-to-face teaching and learning is rare. From a sociocultural perspective, in order to understand the processes of learning, one must examine the cultural, historical and social elements that surround a learner. Therefore, it is essential that categorisations of scaffolding should also reflect these cultural, historical and social backgrounds of a learner in an online learning environment. This would involve, instead of using pre-existing categories of scaffolding, each study should be treated uniquely and created the categories of scaffolding reflecting its unique situation representing the learners' cultural, historical and social elements. The scaffolding in each study should focus on the characteristics of scaffolding occurred within the study and analyse them accordingly, as also seen in Table 2-1. The scaffolding is not only produced by experts to novice learners but also by novice learners to experts, as discussed next.

2.2.2 Provision of Scaffolding

This section discusses the issue of who could provide scaffolding. It is known that so called experts: mother, tutor, teacher and more skilled person could provide scaffolding. However, it has been argued that it is also possible for the novice to provide scaffolding. Furthermore, the language learners could also provide scaffolding to each other in order to complete a task. This section explores the possibilities for both novices and experts to provide scaffolding.

Ohta (1995) analysed an instructional sequence consisting of a pair role-play activity and the teacher-fronted activities. The teacher-fronted activities were as a normal class activity, which incorporated pair work. The learners' pairing varied from day to day,

sometimes from activity to activity. Ohta (1995, p. 116) found that 'peer interaction allowed learners to share their strengths through scaffolding, as learners explicitly helped one another through prompting and error correction'. Similarly, both de Guerrero and Villamil's (1996) and Villamil and de Guerrero's (2000) studies shed some light onto the dynamics of scaffolding in the ZPD among the language learners and they found that the novice learners could provide scaffolding.

Villamil and de Guerrerro's (1996) study with 54 students showed effective scaffolding amongst novice learners. On the other hand, when de Guerrerro and Villamil (2000) focused on only a particular pair in their revision work, they reported that 'it is possible for L2 learners to regress to lower forms, rather than advance in their development, when interacting with a peer who is less knowledgeable in certain aspects and when there is no certainty of the language feature revised' (de Guerrero & Villamil, 2000, p. 61). Therefore, they suggested that it is highly valuable to have a more knowledgeable and confident partner in L2 peer revision. Since the earlier study of Villamil and De Guerrerro (1996) presented novice learners providing scaffolding, it is feasible to assume that some scaffolding, amongst the many types of scaffolding that novices provide, may be ineffective and even cause a learner to regress, whereas some others are effective. Studies presented to date do not extend to identifying the types of scaffolding that are effective and what triggers provision of scaffolding.

Donato (2000) also found that effective scaffolding amongst learners; where learners expanded their own second language knowledge, whilst extending the linguistic development of their peers. This is quite an encouraging finding, although it follows a good old proverb of 'we learn by teaching'. In an appropriate learning environment, learners could provide scaffolding and extend each other's knowledge, as found in Yamamoto's (2009) study. She examined whether novice learners could contribute to experts' maturing function in ZPD. Yamamoto (2009) found that a novice learner contributed to the fellow expert learners by not providing scaffolding in a traditional sense but by eliciting the scaffolding from the group of experts.

The results of the studies mentioned above might be different if the data were analysed from a different viewpoint. Also, the different results in those studies might have surfaced because the effectiveness of scaffolding differs depending on the position of learners' ZPD as Aljaafreh & Lantolf (1994) described. It appears that provision of

effective scaffoldings by novice learners depends on individual learners and on the particular context in which the learners are situated, as well as on the types of scaffoldings.

The question raised here then is whether there is any benefit for more knowledgeable learners to be in collaborative work with novice learners in CMC. For example, what type of scaffolding could a beginner level learner offer to an advance level learner? In order to find an answer to this question, one needs to examine scaffolding amongst learners with a wide range of proficiency levels. However, the participants in the studies mentioned above were recruited from a single language class that they were attending. This meant that the participants were in a similar proficiency level and, to date, there is not a study conducted where learners with a wide range of proficiency levels collaborate with each other to complete a task using a CMC.

In order to examine what triggers peer scaffolding and how it is provided and received, it requires a microgenetic analysis of collaborative activity rather than of the linguistic function of individual learners, as Yamamoto's (2009) study and others demonstrated above. Another issue is what is to be included in scaffolding, as discussed below.

2.2.3 What Is To Be Included In Scaffolding

Previous sections presented the definition of scaffolding and categories of scaffolding. However, how these studies identified the interactions to be 'scaffolding' is not so clear. This section presents a discussion of what should be included in scaffolding in the present study.

If the definition of scaffolding is any assistance given to complete a task in ZPD, not only assistance from a person but also tools and other objects should be included. However, there is a debate about whether scaffolding should include tools and objects that a learner could use to complete a task. For example, if a learner used a dictionary to complete a task, could a dictionary be considered as scaffolding?

Sherin, Reiser and Edelson (2004) discussed this issue in the context of the various definitions that scholars used for scaffolding, in their attempt to develop an analytic framework to guide scaffolding analyses. As Ge and Land (2004) also noted that some scholars (King, 1994; King & Rosenshine, 1993; Palincsar & Brown, 1984;

Scardamalia, Bereiter, & Steinbach, 1984) recognised tools (such as cue cards), techniques used in reciprocal teaching or guided peer questioning as part of scaffolding, because such tools and techniques supported the learners in their learning activities. Ge and Land (2004) discussed two types of scaffolding: hard and soft scaffolding. Hard scaffolding is a support that can be anticipated and planned in advance knowing a student's abilities, whereas soft scaffolding is the dynamic and situational supports provided by a person. Within an interactive activity, question prompts can be hard scaffolding, while dynamic interactions between learner-learner or teacher-learner can be seen as soft scaffolding.

Following Stone's (1996) description of scaffolding as being a semiotic device involving socially complex phenomena, scaffolding in the interactive language learning activities using CMC is even more complex than in face-to-face situations. Therefore, taking the broad definition of scaffolding; any support given to a learner to complete the task, scaffolding would also need to be seen in a broader concept, including all kinds of tools and techniques, as well as hard and soft scaffolding.

Having established the definition of scaffolding to be broader to accommodate the complexity of interactions in CMC, the remainder of this section discusses the relevant studies about skills and some factors that influence scaffolding.

2.2.4 Effective Communication and Learning

MacKnight (2000) argued that online collaborative formats have potential to closely monitor students' critical thinking skills and extension of classroom learning. Nevertheless, studies examining scaffolding that develop critical thinking in foreign language learning over online collaborative activities are rare. 'Designing learner centered scaffolding features for online and Web based courses can provide an effective means of supporting student learning that is both a cost effective and efficient way to manage learning at a distance' (McLoughlin, 2004, p. 4).

Even a well thought online environment cannot guarantee an effective learning activities. This is because not all learners and teachers are equipped with the skills needed to participate in online learning to produce effective learning activities. A range of skills in promoting effective learner use of CMC, include engaging the learner;

managing learner expectations; using strategic questioning skills; listening and providing feedback; giving direction and support; managing discussions; team and relationship building; motivating learners; planning, reviewing and monitoring performance (Kemshal-Bell, 2001). These skills are general skills that are useful in any collaborative learning setting, but become particularly important in online environment. The wide range of skills required for online practitioners and increased interests in virtual teaching is also reflected in a number of journals publishing on special issues in recent years (for example, Journal of Computer Mediated Communication; CALICO; JALT CALL Journal; Language Learning and Technology; Computers and Education; CALL-EJ; and Language@Internet).

MacKnight (2000) argued that online discussion forums would place emphasis on learners' comprehension and knowledge of the elements, such as how to present argument, and how to interact with ideas and each other in a meaningful way. The learners and teachers would need skills to be able to do so, as well as 'skills in creating productive communities of online learners' (MacKnight, 2000, p. 39). Vonderwell (2003) also supports MacKnight's (2000) view that an online discussion forum, that fully supports and provides the teaching and learning environment, would be complex. MacKnight's (2000) findings emphasised the importance for teachers to recognise the group processes and dynamics as well as strategies of how to engage students in effective communication and learning. For example, asking the right question is one of the identified skills to enhance learners' critical thinking (MacKnight, 2000; Thomas & Junaid, 1997). Scholars like MacKnight (2000), Thomas and Junaid (1997) believe that Socratic questioning would prompt critical thinking. 'The level of questions asked influences the depth of thinking that occurs. … (Furthermore), thought-provoking questions require that students go beyond facts and use knowledge … in the exercise of judgment' (MacKnight, 2000, p. 39). Furthermore, Ge and Land (2004) identified the type of questioning as one of the key elements in peer interactions as discussed next.

Ge and Land (2004) studied students' interactions over an ill-structured problem. The students needed to ask for more information to solve the problem. They presented two types of scaffolding techniques: question prompts and peer interactions. Recognising that experts and novices approach problems differently, Ge and Land (2004) recommended that novice learners be provided with expert questions to guide their

thinking during problem solving activities. However, their study could not extend to examine the success of peer learning.

Besides the questioning skills, many factors could influence peer interactions, such as motivation, perception and behaviour, in providing scaffolding. Therefore, any study that investigates scaffolding needs to include cognitive, motivational, and behavioural processes within the social systems where peer interactions take place (Ge & Land, 2004). This is because one of the major characteristics of scaffolding in a collaborative learning activities is that it promotes exploratory learning that allows students to perform beyond the limits of their ability with appropriate assistance from an expert, as is shown in studies such as Donato (1994, 2000), Ohta (1995, 2000, 2001) and Takahashi (1998). Although these studies only focused on the scaffolding in relation to the linguistic abilities, scaffolding is not just about grammar or proficiency in the language but also about enhancement of the learners' critical thinking skill. As Ge and Land (2004) noted, cognitive, motivational and behavioural processes need to be investigated as well.

CMC is a very attractive tool for many educators just like MacKnight (2000) and Vonderwell (2003), who explored the possibilities of collaborative learning using CMC. It provides flexibility in time and space to a learning environment and it is a convenient way to connect with people, who otherwise would have difficulty meeting. It gives educators an opportunity to expand their classrooms and explore the use of a target language or another educational target. However, incorporating CMC into a learning environment is not a simple task, not only at a technical operational level but also from an educator's point of view, seeking to develop cognitive thinking and to enhance the learning activities. Both MacKnight (2000) and Vonderwell (2003) recognised an online discussion forum as a place, where learners' cognitive skills would be challenged in a meaningful way and collaborative activities could take place, if approached correctly. The next section explores the use of CMC as an educational tool.

2.3 Use of CMC As an Educational Tool

This section outlines the range of studies that have used CMC as an educational tool for the purpose of collaborative learning and their findings. The aim of this section is to present the range of studies that have influenced the construction of the present study.

The first two sections present discussions focusing on CMC overall. Then the next four sections focus on more recent CMC such as blogs and SNSs.

2.3.1 Power and Social Relationships

The studies on the use of email to enhance writing in a target language have a long history and resulted in a number of studies over the years (Absalom & Mariolina, 2004; Bloch, 2002; Christensen, 1998; Duthler, 2006; Kitade, 2006; Nakane, et al., forthcoming; Stockwell, 2003, 2004). Email has been proven to be an effective tool for increasing motivation and stimuli in writing tasks (Absalom & Mariolina, 2004; Maingard & Christensen, 1996). However, in order to have a successful email communication with native speakers, the language learners need to acquire certain skills.

Bloch (2002) examined the purpose of his ESL students' emails and use of rhetorical strategies to achieve the purpose of students writing emails. Four areas were identified as a purpose of their emails; 'phatic communication' and 'asking for help' were the main purposes of the emails, followed by 'making excuses' and 'making formal requests' (Bloch, 2002, p. 124). As he revealed the purposes of students' emails, he observed two factors vital for the students' emails to achieve their objectives. One was recognition of power and social relationship and the other was linguistic ability to switch between formal and informal context, as discussed below.

Bloch (2002) observed the power and social relationship between the writer/sender and reader/receiver (Bloch himself as the reader/receiver and the teacher). Bloch (2002) noted that in order to achieve the purpose of the emails, it was important for the writers to be able to freely switch between formal and informal context. However, this is not an easy task for language learners as Nakane et al. (forthcoming) also found. The shift of power and relationship are complex issues for foreign language learners, especially with a language such as Japanese, which has very intricate politeness conventions and multiple levels of formality (from formal to informal expression). Nakane et al. found that the learners found the use of informal or less polite forms was equally difficult to use as more formal forms or politeness. Nakane et al. found that as the relationships within groups developed over time, learners also needed to acquire a skill to modify their politeness. As Bloch (2002) suggested, Nakane et al. also found that it was important for language learners to develop sufficient skills to enable switching between

formal and informal contexts freely, in order to successfully interact with native speakers.

In relation to the power and social relationships between the writer/sender and reader/receiver, Pasfield-Neofitou (2007a) found that assumption of an uneven power relationship affected the role played (leading role of a writer – passive role for a reader) in chat, which affected their turn management. Although some pairs of students showed passive exchanges, Pasfield-Neofitou (2007a) found that chat provided opportunities for reciprocal teaching and learning between native speakers and Japanese language learners. The participants in her study enjoyed the interactions and positive environment of informal language acquisition. This was not surprising since the relationships between the pairs were pre-existing. However, even in this study with pre-existing relationships, the participants' goals were a major factor in shaping their interactions. For example, if a pair's primary goal was language learning, repair was frequently observed, while if the pair's goal was a social chat, repair was not observed. When the pairs did not share the same primary goals, the interactions presented power shift, resulting one of them to be passive. According to Vonderwell (2003), this is because the participants' goal and motivation influence the outcome.

In order to incorporate chat, or other CMC as part of a teaching program or as a language learning tool, some future studies are still required to examine whether the pairs could be formed without a pre-existing relationship. If so, how would they interact with each other and how would they establish a relationship, suitable for a teaching and learning environment. Effectiveness of online activities need to be investigated to examine whether specific factors have been identified to assist in organising effective online based collaborative activities, as presented next.

2.3.2 Investigating Effective Online Activities

CMC offers a flexible learning model, however, flexible learning does not mean that the students could be left to their own devices to learn and to participate in a discussion forum. As Vonderwell (2003, p. 88) noted, 'merely providing discussions or collaborative activities does not mean that students will actively participate in the activity'.

Tiene (2000) compared the students' opinions on face-to-face class discussions and online discussion forums as revealed by a survey questionnaire. The results showed that the students enjoyed the online discussion forums and benefited from participating in discussion forums that continued beyond the classroom with flexible access. Nevertheless, the students in Tiene's (2000) study preferred the face-to-face class discussion. In other words, they would not choose online in lieu of face-to-face discussion but would engage with it as an additional activity to their face-to-face class discussion. Tiene (2000), therefore, sees online discussion forums as a way of enriching a discussion-based learning environment.

One of the attractive features of asynchronous CMC is that it provides opportunities for extra time between the interactions. However, taking the advantage of this extra time and conducting successful collaborative activities using CMC are not a simple task. This section identifies and investigates various factors, relevant to the present study, which can affect online activities. The factors discuss in this sections are: extra time; motivation; role of teachers; dynamics of groups; role of facilitator; discussion topics; online language; and learning other aspects of language.

2.3.2.1. Effect of Extra Time

Asynchronous CMC studies provide extra time between the interactions. In some cases, the extra time was seen as advantageous, and in other cases it was seen as disadvantageous. What happened during the extra time had also been perceived differently depending on the studies. This section discusses the effect of extra time: level of anxiety, enhancement of language skills, time interval between messages and offline communication during extra time.

2.3.2.1.1 Level of Anxiety

Extra time between the interactions in asynchronous CMC can be used to review and revise one's writing at one's own pace. Therefore, learners often felt less anxious or more comfortable participating in such activities compared to face-to-face activities (for example, Kitade, 2000; Stockwell & Harrington, 2003; Warschauer, 1997). However, some studies (Arnold & Ducate, 2006; Strambi, 2004) reported an increase of anxiety.

Arnold and Ducate (2006) conducted a semester-long online discussion forum involving students in two graduate level courses from two universities in the United States of America. The students had a variety of language backgrounds and some were native speakers of languages other than English, studying foreign language teaching methodology. The students engaged in five different online discussions with the topics and assessment set by the teacher. The teachers provided the initial questions for the discussion forums; however, they did not participate in the discussion. Arnold and Ducate (2006, p. 52) found from the survey results that the students felt the 'sense of belonging to a community, which in turn lowered their anxiety and helped them to feel at ease expressing themselves and asking questions'. However, Arnold and Ducate (2006) also received a comment from a student, which alerted them to suggest that the presence of native speakers could cause anxiety in non-native speakers.

Strambi (2004) also found that some students were anxious. Strambi (2004) conducted a one-year study to observe the students' perceptions on a Web-enhanced learning environment, especially in the area of promoting students' positive attitudes. The students were Italian language learners at an Australian university. One introductory level tutorial group was randomly selected and three intermediate and one advanced level students also participated in this study. The Web site was used once a week during their regular contact hours besides students being able to access it in their self-study at any time. Strambi (2004) reported from surveys, focus-group interviews and observational records that although the students were not expected to fully comprehend the materials presented, the students' needs and desires to comprehend fully in order to achieve a satisfactory result caused some students to be anxious and frustrated.

Lee (2009) conducted a two-semester study examining the effectiveness of discussion forums using Blackboard for foreign language teaching methods courses, where novice and expert (experienced high school language teachers) participated in weekly posts. The topics selected for the discussion forums were related to teaching languages directly associated with their textbook readings. The expert also suggested some non-textbook related topics to discuss during the forums. Tien (2000) conducted an online survey study investigating university students' opinions comparing face-to-face and online discussion forums. A two-year study was conducted, administering a survey to five IT courses at the graduate level university program in the United States of America. The survey results presented the students' opinions on online discussion regarding user

friendliness, advantage or disadvantages of online activities, students' writing styles, role of or lack of visual and physical cues and anecdotal reactions, in comparison to face-to-face discussion forums.

Both Lee (2009) and Tiene (2000) found that online communication provided students an extra time to revise their posts and formulate their thoughts in a less stressful situation than a face-to-face discussion forum, and therefore, the extra time reduced the students' anxiety. Furthermore, Lee (2009) found that some students felt less anxious in face-to-face class as a result of getting to know each other through the online discussion forums. On the other hand, Tiene (2000) reported that some students felt more comfortable in online communication due to their lack of confidence in speaking out in a face-to-face environment.

Absalom and Marden (2004) also found the students felt less anxious and produced more writings containing highly personal nature compared to face-to-face communications or more traditional writing exercises. Absalom and Marden (2004) conducted a study involving email exchanges between non-native speakers in their Italian programs at an Australian university. The students' proficiency levels ranged from introductory to advanced. The email participation was a part of an assessment; however, the content of emails was not a part of assessment. The study's emphasis was on the encouragement and commitment to participate and on creativity of expression in email messages, rather than the accuracy of grammar.

In general, language learners become anxious when they have to use foreign languages, especially communicating with native speakers, and using foreign languages in a CMC environment is no exception. Within this context, online communications provided extra time to compose, which reduced anxiety in most cases as discussed above. Furthermore, Abasalom and Marden's (2004) study revealed that students shared more personal information when engaging in online communication than in face-to-face communication. The next section discusses how online communication could not only lower the anxiety but also enhance the learners' language skills.

2.3.2.1.2 Enhancing Language Skills

Some studies found that learners produced more complex sentences due to having extra time to compose their posts. Warschauer (1996) conducted a study comparing his

English as a second language (ESL) students' output between face-to-face and online discussion forums. ELS students with mixed ethnic backgrounds (Japanese, Filipinos, Chinese, and Vietnamese) attended an advanced composition class in Hawaii. Warschauer (1996) found that the students benefited from extra time and produced more complex and formal language in the online discussion forums than during face-to-face class discussions.

Similarly, Fitze (2006) conducted an extended study of Warschauer (1996) with semi-controlled experimental groups, comparing his two groups of ESL students' output between face-to-face and online discussion forums. ELS students' cultural backgrounds were balanced, according to Fitze (2006). The two groups alternated between face-to-face and online discussion forums, discussing a set topic for four weeks. Then he analysed and compared the textual features and participation in the two modes of forums. Fitze (2006) found that the students were able to use better and wider range of vocabulary related to the topics, when they were participating in online discussion forums than in face-to-face. Furthermore, he found that the students expressed more interactively by taking more control of the discourse in online discussion forum. More recent studies focused on academic writing skills and peer interactions, comparing outcomes between face-to-face discussion forums those online, as discussed below.

Cheng (2010) focused on three ESL students with different ethnic backgrounds (Korea, Germany and Puerto Rico) to examine how they interacted and negotiated meaning with their peers using a CMC discussion forum (Blackboard), concerning academic writing in graduate level of teaching ESL course in the United States of America. The aim of the study was to examine the role of CMC in the academic literacy development in these students. Cheng (2010, p. 91) found that CMC provided 'favorable conditions for scaffolding' among second language students sharing their expertise, building on their own and peers' texts, offering feedback and suggestions for peer revisions. Cheng (2010) argued that the students were able to refer back to the relevant messages multiple times, which not only enhanced their understanding of the contents but also provided an opportunity to produce scaffolding for their peers. Cheng (2010) recognised that provision of scaffolding would not happen in face-to-face discussion due to the rapid turn exchanges. CMC provided students the opportunities to rehearse writing and negotiate revisions of writing with peers. As a result, the collective scaffolding at the

CMC discussion forums assisted in the development of the students' academic literacy skills.

Sotillo (2000) also conducted study with university students enrolled in an academic writing course. Twenty-five ESL students from six different language backgrounds formed two groups and discussed assigned readings in face-to-face discussions as well as using an online discussion forum; user-friendly real time *Internet Relay Chat.* During their face-to-face time, the students discussed the readings, negotiating meaning, and evaluating teacher-feedback and peer-feedback, focusing on grammar in their drafts, in small groups. Sotillo (2000) found that online discussion forums provided students with more time to plan their writing and editing with special care taken to their grammar. This resulted in students making longer contributions in online discussion forums. Posing challenging questions related to academic readings allowed the learners to critically think and to carefully craft the responses. This online learning activities assisted students to engage more in rapid exchanges and in turn, students also engaged more in socialising in the face-to-face discussions. Absalom and Marden's (2004) study of Italian learners also found having extra time to compose email enabled the students to think and consult with textbooks and dictionaries; this resulted in producing emails with a higher level of grammatical organisation and more cohesion in their arguments.

The above studies reported that more complex and longer sentences were observed in both ESL and Italian language studies. Similar observations were also made in Japanese studies. Kitade (2006) conducted a study of the task-based email interactions between 24 native speakers of Japanese and lower intermediate Japanese language learners of a university in the United States of America. All Japanese language learners were paired with the native speakers and engaged in weekly email exchanges for five weeks. They were tasked with making a travel plan, in which the pairs had to decide their trip dates, destination, accommodation and activities. In this study, Kitade (2006, p. 321) investigated Varonis and Gass' (1985) process of negotiation: 'trigger', 'signal', 'response' and 'reaction to response', in the email interactions. The negotiation sequence begins with a trigger, which is any unclear utterance, followed by a signal. Signals seek clarifications or confirmations from the original interlocutor. Then the original interlocutor produces a response by repeating the message or producing a modified version. The negotiation process then concludes with reaction to the response. Kitade (2006) found that the participants wrote more complex and longer sentences,

which involved the use of more complicated and explicit signals in CMC interactions than in face-to-face. Kitade (2006, p. 337) found that 'NS [ed. native speakers] responses to NNS [ed. non-native speakers] triggers could provide very high-quality input to learners (e.g. rephrasing, explanations, and examples of usage) due to the availability of sufficient time and the text-based nature of the interactions'.

The abovementioned studies, involving foreign language learners, indicated that the online discussion forums had positive outcomes and, some studies found the online forums enhanced the face-to-face discussions. This was due to students having extra time to process their writings and re-read others' posts, in a less stressful atmosphere. Furthermore, this process produced more complex sentences in online discussion forums than those in face-to-face discussions. However, the extra time also means longer time intervals between the messages, with time delay in receipt of replies. This could present a bigger issue in online discussion forums, especially when involving two or more countries in different time zones, as is discussed next.

2.3.2.1.3 Time Interval Between Messages: Time Delays

Time delays in CMC involving delayed responses, especially in communication between two or more countries, could cause frustration. Kitade's (2006) study, involving Japanese language learners in United States of America and Japanese native speakers in Japan, found both positive and negative effects of time delay.

The participants in Kitade's (2006) study saw extra time as advantageous. The participants were able to comprehend, plan and produce the responses without any restriction and flexible access time was positively convenient for them. However, this also reduced the pressure to reply to signals requiring some action. 'Signals' is the term used in Kitade's (2006) study, as discussed above. Therefore, the participants, especially the language learners could easily ignore or forget to reply to some of these signals. Kitade (2006) found that non-recognition of these signals, where the learners needed to reply, was due to the learners' lack of ability to use negotiation skills, for instance, inability to identify these signals. Kitade (2006) suggested that other reasons such as, learners were incapable to provide responses in Japanese, even if they recognised the signals to which they needed to reply. Some Japanese native speaker participants explicitly indicated the source of trouble in the signaling by copying and

pasting the significant parts of original texts, in order to enhance of receiving responses. In any case, the native speakers did not receive the responses and thus, this was not received favourably.

Meguro and Bryant (2010) were able to overcome the time differences between Japan and the United States of America to minimise the miscommunication by using Skype as well as a SNS. Meguro and Bryant (2010) conducted a case study describing the integration of language exchanges between native speakers of Japanese and Japanese language learners in the United States of America, using Skype and specially created a SNS called *Mixxer*. The aim of Meguro and Bryant (2010) was to prepare the American Japanese language learners for their study abroad program in Japan by increasing their language competency and familiarising themselves with Japanese culture. The interesting approach that Meguro and Bryant (2010) took to attract native speakers for their study, was to make a post calling for volunteers at Mixi; a popular SNS in Japan. Then these volunteer native speakers were invited to join the online discussion forums with Japanese language learners in an American college using *Mixxer*.

Meguro and Bryant's (2010) questionnaire results showed that the Japanese native speaker participants enjoyed the activities and Japanese language learners in the United States of America showed improvement in speaking skills and listening comprehension as well as increased cultural knowledge. Both Japanese native speakers and American Japanese language learners in Meguro and Bryant's (2010) study appeared to be highly motivated, participating in Skype connections in real time. Furthermore, the Japanese native speaker participants were accustomed to using a SNS since Japanese native speakers were the users of a SNS and comfortable at participating in online chat. This indicates that some problems associated with time differences and delay in responses can be overcome with high motivation and familiarity with a SNS. The effect of motivation will be discussed next.

2.3.2.2 Motivation

The level of students' motivation influenced the level of engagement and style of exchange with fellow participants. Absalom and Marden (2004) observed similar results to Stockwell and Levy's (2001) study; normally that the students with low motivation were more likely to produce pro forma style exchanges, strictly staying with suggested

discussion topics. On the other hand, the students with high motivation engaged in more elaborate dyads developing friendships with the partners.

Stockwell and Levy (2001) investigated email interactions between learners of Japanese and native speakers, to determine the factors that contribute to sustaining the interactions. The participants were advanced level learners of Japanese at an Australian university and native speakers at a Japanese university. The participants engaged in exchanging emails over the five-week period, discussing an assigned topic each week, ranging from self-introductions to leisure and socialising. The participants were advised to maintain at least four to five exchanges per week with their partners.

Stockwell and Levy (2001) found that the students with higher proficiency levels were able to sustain the interactions. Similarly, highly motivated students, who actively engaged in interactions with their partners, were able to discuss more than the assigned topics, besides finding common interests to discuss. On the other hand, the students with low motivation did not actively involve themselves and only produced relatively short messages to their partners on teacher's directions. Furthermore, those students with low motivation stayed very close to the assigned topics and often failed to reply to questions prompted by their native speaker partners. Findings of Stockwell and Levy's (2001) study and Absalom and Marden's (2004) study seem to suggest interwoven relationship between students' proficiency level and motivation and the sustainability of their interactions. Therefore, it is advisable for online activities to incorporate provision of scaffolding for students with less language abilities so as to enhance their confidence and raise their motivation, which in turn would enhance their involvement in the online interactions.

Motivation and students' goals are influential factors in a collaborative work as Vonderwell (2003) found in his study. Vonderwell (2003) explored the use of CMC discussion forums, Blackboard, and perspectives of students in an online course. Vonderwell (2003) formed six discussion groups of three to five students with similar specialisation areas, discussing and analysing issues and concerns about using technology and technology integration in education. Vonderwell (2003) used scaffolding techniques and motivated students through email instructions. This study did not have any face-to-face meeting. Vonderwell (2003) made a number of suggestions for organising effective CMC discussion forums as discussed below.

Vonderwell (2003) found that the students, who did not have any contacts with fellow students, felt uncomfortable interacting with the students whom they did not know beforehand. Icebreaker activities, in which the students interact with each other, prior to conducting an online discussion forum, could assist in establishing contacts and an online community. Vonderwell (2003) suggested that such dyads could help students to be comfortable in starting online dialogue for collaborative learning working together to accomplish a goal.

Although the above studies discussed the level of students' motivation as one of the factors that influencing the level of activities, the measurements of motivation were not discussed. Yashima (2002) developed a questionnaire, modifying Gardner's socioeducational model of second language acquisition by expanding the international posture (intercultural friendship, intergroup approach/avoidance tendency, interest in international activities/vocation and interest in foreign affairs). Yashima's (2002) two parts questionnaire contained 33 items examined the relationship between second language learning and second language communication variables, using the willingness to communicate model. Two hundred ninety seven Japanese university students learning English participated in her study and she found that the 'international posture influences motivation, which, [sic] in turn predicts proficiency and second language communication confidence' (Yashima, 2002, p. 63). The questionnaire measuring language learners' willingness to communicate in the target language could be a useful instrument similar to an aptitude test. The participants' motivation on willingness to communicate in the target language could influence interactions in a SNS, where foreign language usage is heavily involved.

This section highlighted the strong relationship between the learners' proficiency level and motivation as well as teachers' timely feedback and motivation. The next section discusses the role of teachers.

2.3.2.3 Role of Teachers

Teachers' involvement in online studies varied from observers to active participants. Vonderwell (2003) found that consistency and timely feedback from teachers seemed to be important to students because the lack of their feedback could affect the students' motivation to participate actively. She stated that

> ‘online instructors need to be careful in structuring a feedback mechanism to encourage student inquiry and collaboration rather than quick, immediate answer to a question that can itself be a barrier for effective student learning. …[Yet at the same time] instructors should be consistent with the amount of time they provide feedback or response to the students. Inconsistency can cause student frustration and decrease their motivation’ (Vonderwell, 2003, p. 88).

On the other hand, Tiene’s study (2000), the teacher did not actively moderate the discussion forums, but he occasionally made posts to clarify some confusion that arose during the session. The survey results showed that students’ comments were supportive towards the online discussion forums. Any inexperience with an online communication or any inconveniences associated with it were not significant impediments to the students. This is not particularly surprising since the students would already have the necessary basic computer skills being graduate level IT students.

The course instructor in Lee’s (2009) study also did not participate in any of the discussions held over the online discussion forums. Instead, special time was devoted to discuss questions raised from the forums during their weekly face-to-face class. The experts (high school language teachers) were providing scaffolding and participating in the discussion forums and acted as the facilitators of the forums. Lee (2009, p. 219) reported that 28% of the students feeling intimidated by the experts because the students ‘were concerned about making meaningless comments on issues that they were not familiar with’. The students felt lack of confidence in offering opinions as they had limited pedagogical knowledge and teaching practice to fully engage in the discussion with the experts. This is similar to those students who lacked confidence in Tiene’s (2000) study and who felt anxious speaking out in the face-to-face class. Lee (2009) suggested an importance of building comfortable relationships, having group members to meet each other to interact so as to promote collaborative online interactions. Comfortable relationships will also reduce participants’ anxiety, which leads to promoting collaborative interactions.

Lee (2008) conducted a peer teaching study to examine how corrective feedback was negotiated through expert-to-novice collaborative interactions using Blackboard. The experts in her study were the advance level and the novice learners were the

intermediate level Spanish language learners. They were assigned to complete the three types of tasks (information gap activities with one possible outcome; goal-oriented activities with one possible outcome; and open-ended question) and the experts were to provide the five-level scaffolding during the interaction. The five level scaffolding used in Lee's study was modified scaffolding of Aljaafreh and Lantolf (1994) previously mentioned in Section 2.2. The experts were given a two-hour training session about five-level scaffolding and instructed to provide assistance to draw attention to concordance, certain copulas and morphosyntax (Lee, 2008). Similarly, the novice learners were told that their expert partners would assist them with error corrections as necessary. Lee (2008) found that open-ended question showed the highest incidences of self-repairs, while goal-oriented activities presented the lowest incidences. She also found that the expert played a crucial role during the collaborative activities. Some novice felt certain frustration with the experts' interventions, whilst others were able to make some improvements. Lee (2008) observed both lexical and syntactic items negotiated through collaborative scaffolding. Furthermore, the novice learners were able to self-repair their errors and incorporate the correct forms in their next turns.

Lee (2008, p. 67) reported that 'the experts played a double role as both teachers and peers' and the novice learners saw the experts as less 'authority figures and more as facilitator'. In other words, the peer teachers in peer teaching are seen as someone who is between a teacher, a facilitator and a peer.

Peer teaching has also been studied in a face-to-face context. Peer teaching conducted in a face-to-face Japanese language classroom has been shown to promote diversity in the types of interactions as well as motivation of novice learners (Thomson, 2008). A peer teaching program called 'Junior Sensei' is a senior course requirement at UNSW, where intermediate level students have an option of becoming regular members of beginner level classes and act as a junior teacher (Thomson, 2008). The observations of the Junior Sensei program found that intermediate level students could not only offer more informed scaffolding than the introductory level learners but also could create a more relaxed atmosphere than the teacher (Thomson, 2008).

As seen in Lee (2008) and Thomson (2008), peer teaching involving more advanced level and introductory level language learners can promote an effective language learning environment by providing scaffolding. However, effectiveness of peer teaching

could depend on the pair as Swain and Lapkin (2002) found. They examined the collaborative dialogues between two novice French language learners in their writing task. In their study, the lower skilled learner (Nina) reported that corrections provided by the more knowledgeable learner were not necessary or changed some of her intended meanings. Therefore, Nina reported that she would have preferred to have someone at about the same level or only a little higher as a partner. She thought the similar level learner would have a better understanding of the words and structures that she used in her writing. The corrections provided by more advanced learners can be too difficult for beginners to understand. At the same time, some advanced learners would not have sufficient linguistic knowledge to adjust the use of words or sentence structures to suit their partner's language level. Therefore, careful consideration is required in pairing the learners so that collaborative work can emerge, as Kitade (2007) recognised. Instead of pairing, if a small group of learners was formed with more diversity in proficiency levels, Nina could have been able to receive and choose a wider range of scaffolding. The peer teachers of mixed proficiency level learners could offer more diversity in interaction than could peer teachers of learners at the same or two proficiency levels.

When students interact with others in a different country with different cultural backgrounds, the teacher's role assumes an added dimension than when the students interact within a class. The teacher's role in the former case could advisably involve working as a go-between so as to assure the students about the content of their posts. Similarly at the other end of the same continuum Arnold and Ducate (2006) demonstrated that a well thought out online forum, involving the participants with similar backgrounds, was able to provide effective activities without a teacher.

Arnold and Ducate (2006) conducted five different online discussion forums with the topics and assessment set by the teachers. Thirty-three students from two universities in the United States of America participated in this study as a part of their degree course. Although the teachers set the topics and assessment guidelines, they did not participate in the discussion in order to give the students the control of the discussion and freedom to discuss the topic. Arnold and Ducate (2006, p. 42) found that 'students not only progressed in their cognitive understanding of the pedagogical topics, but also employed social presence'. The teachers purposely did not participate in the discussion and when this was informed to the participants, the absence of the teachers led the participants to exercise learner autonomy (Arnold & Ducate, 2006).

The Arnold and Ducate (2006) study holds out the prospect that in online discussion forums, provision of opportunities for more equal levels of participation for both teachers and learners, could also foster increased learner autonomy. Although the findings of previous studies did not relate the level of teacher involvement to levels of online activity and student motivation, they provide reason to consider that it could be helpful for students to have a clear understanding of teacher involvement. The degree of online activity thus could depend on how the students and teachers collaborate with each other, rather than the involvement of teachers. This consideration leads to another factor that possibly affects online discussion forums: dynamics of groups, as is discussed next.

2.3.2.4 Dynamics of Groups

Warschauer (1996) found that due to the students' cultural background, some students dominated the discussion more than others during the face-to-face class discussions, whereas in the online discussion forums, more equal participation was observed. Whilst Fitze (2006) found that his two groups had different group dynamics not due to cultural differences but to the characteristics formed by the groups. One group had more orally proficient or outgoing students than the other.

The students of both groups in Fitze's (2006) study had some time to get to know each other before online discussion forums started; therefore, they already had established the group dynamics. One group was more competitive as regards controlling the discussion, while the other group had a more egalitarian approach. These differences were also reflected in the online discussion forums with some variances. That is, the group that showed itself more competitive in controlling the face-to-face discussion presented more equal participations in online discussion. However, the group that showed a more egalitarian approach presented little change in their participation. This showed that the nature of the egalitarian characteristics of the group allowed the equal participation regardless of the mode of discussion forums. On the other hand, the group with more dominance supported Warschauer's (1996) study that online discussion forum encouraged more equal participations.

Another factor that needs to be considered for an effective online activity is involvement of experts within a group. Involvement of experts is important (de

Guerrero & Villamil, 2000; Lee, 2009; Ohta, 2000). However, as Lee (2009) has warned, experts dominating or overloading students with information will see less effective collaborative work.

Pawan, Paulus, Yalcin and Chang (2003) examined interactions between pre-service and in-service teachers using online discussions of three graduate-level language teacher education programs. They found only a small number of participants across three different groups built upon the information they exchanged. Others did not engage in presenting argument or counter-argument in discussion. Pawan et al. (2003) suggested that more detailed study and analysis of interactions is needed to identify the reasons for this difference.

Fitze's (2006) study presented an interesting factor and perhaps an explanation to the query made by Pawan et al. (2003). The participants in Fitze's study had time to get to know each other for some time before the discussion forums took place. Lee (2009) also argued the importance of social connections prior to collaboration activities. Furthermore, Lee (2009) found that the better the interpersonal rapport the group had, the more willing each participant was to share their perspectives, seek help and offer their support. As a result, more scaffolding was provided. Vonderwell (2003, p. 88) also found that 'creating a community of learners can improve student motivation and help facilitate interpersonal/social interaction sought in an online classroom'.

Online collaborative activities such as well-developed discussion forums require strong bonds between participants in order to form an online community, where each member feels comfortable. If this is achieved it will also assist to establish the dynamics of a group. To develop those bonds would require participants to spend some time to get to know each other prior to participating in a discussion forum (Lee, 2009; Vonderwell, 2003). Otherwise, the participants' motivation might be diminished, thus resulting in a lesser extent of discussion or resulting in declining participations.

The facilitators of online discussion forums can also influence group dynamics and development of forums. Hew and Cheung (2008) highlighted the importance of facilitators and identified some techniques that a facilitator should use, as is discussed next.

2.3.2.5 Role of Facilitator in Online Discussion Forums

Hew and Cheung (2008) investigated the roles of students as a facilitator in online discussion forums. Twenty-four post-graduate students participated in a course involving both face-to-face classes and online discussion forums having the same educational learning goals, same discussion topics, and study time as part of normal course requirements. These students were randomly divided into four groups and facilitators were chosen for each discussion topic. Each group had the same online discussion topics lasting for a week and students took turns to facilitate the forum.

The number of discussions threads between the groups presented variety of results. Hew and Cheung (2008) argued that the discussion topics and the role of facilitators were the main factors for these differences. Considering group dynamics could influence the outcome of collaborative activities, the effect of random selection could not be ignored in their performance.

Hew and Cheung (2008) classified the depth of discussion by the length of threads. They (2008, p. 1114) labeled a single post with no replies as 'one-level deep thread' and considered a six-level deep thread as the measure of success: the six levels of posts indicated that a discussion was taking place and that discussion was sustained or extended. Through examination of the discussions, their study (2008) identified seven commonly used techniques capable of enhancing the development of discussion forums.

Furthermore, Hew and Cheung (2008, p. 1120) found that these seven techniques appeared in the 'three critical phases' in facilitating a discussion forum: introduction; engagement; and monitoring phases. Establishing ground rules such as replying within 48 hours as a form of '*netiquette*[4]' was used during the introduction phase, while suggesting a new direction, summarising, inviting people to contribute were used during the final monitoring phase. Table 2-2 describes the relationships between the three phases and seven techniques that students commonly used to facilitate the discussion forums.

The online discussion forums in Hew and Cheung's (2008) study were an extension to the face-to-face interactions and vice versa. Therefore, it is possible that the online

[4] Netiquette is an etiquette practiced over the Internet.

discussion forums received some input from the face-to-face interactions, in comparison to conducting an online discussion in isolation. It would be worthwhile to conduct and observe the interactions of an online discussion forum without any face-to-face contacts in order to understand how the learners assist each other in collaborative activities over an online discussion.

Table 2-2: Pattern of student facilitation techniques (Hew and Cheung, 2008, p. 112)

Phases	**Techniques**
INTRODUCTION	Establish ground rules
ENGAGEMENT	Giving own opinions or experiences
	Questioning
	Showing appreciation
MONITORING	Suggesting new direction
	Personally inviting people to contribute
	Summarising

The seven techniques observed by Hew and Cheung (2008) could be a useful guidance in setting up any future discussion forum. However, Hew and Cheung (2008) did not investigate other patterns or sequences of interactions that possible enhanced the development of a discussion forum. For example, a strong bond between the participants, the length of each post, complexity of posts and depth of arguments also need to be considered. Some of the interactions that were less than six postings could have also been worth examining, not only for the purpose of developing a discussion but also in the search for a reason as to why the discussion was not fully developed. Therefore, in-depth analysis of discussions examining the interactions may contribute to an understanding of the development of online discussion forums.

Hew and Cheung (2008) presented the students' techniques in facilitating a discussion forum assisted the development of discussions. However, the content of topics, as discussed next, could also affect the students in developing a discussion or affect the student's role as facilitator.

2.3.2.6 Discussion Topics

In Hew and Cheung (2008) study, three discussion topics, assigned by the teacher, were interrelated. They found more six-level and deeper level threads during the first topic of

discussion. However, six or more level threads did not occur during the third, the last topic of discussion. Hew and Cheung (2008) explained that the students probably had more to say in the first topic than others. In other words, the students had possibly exhausted what to say because the topics were interrelated, as Lee (2009) found in her study. The discussion topics in Lee's (2009) study were based on content-related themes and the students found discussions to be effective in making connections between theory and practice. Because the students also had a face-to-face session, online discussion forums acted as 'a good warm-up to the class' and enhanced their class discussion (Lee, 2009, p. 218). However, the students also found that when the subject was well covered, the similar opinions were posted and the students tended to be off-task. These studies indicated that the discussion topic selection was crucial for meaningful interaction.

Absalom and Marden's (2004) pedagogical implications for their study on email exchanges included that it was important to construct an activity allowing students to pursue their own topics of interests. Lee (2009) also suggested that allowing students to generate topics and questions based on their interests could lead to active discussions. It is difficult to determine whether the role of facilitator influenced the six level threads or whether the content of the topic influenced the six level threads. This needs further investigation.

Online discussion forums seemed to present two types of posts that influence the level of activity; off the task conversation to build the community and on task posts that motivate students to enhance their cognitive and linguistic learning. Tiene (2000) reported that some students found it difficult to formulate what to say about a discussion topic without getting sidetracked during the discussion. Stockwell and Levy (2001) found that the participants mostly followed the assigned topics; however, they also found a number of interactions outside of assigned topics. Stockwell and Levy (2001) found that the participants who engaged in posts outside of assigned topics and found common interests between the partners, were able to sustain their interactions. Absalom and Marden (2004) also found similar findings, namely that the students who showed willingness to discuss beyond the assigned topics produced higher quality dyads.

The content of discussion topics can affect the participants' level of contribution as Pasfield-Neofitou, Morofushi and Spence-Brown's (2009) study also showed. They

incorporated some activities using a SNS (*Bebo*) into their teaching program. This study involved 162 introductory level language learners, who elected to study Japanese outside of their mainstream programs. Seven teachers were also involved in this study. The learners were asked to upload and submit their profile, their best blog and photo album as part of their assessment tasks. The learners were also encouraged to discuss any issues raised in SNS-based activities in their face-to-face classes.

Pasfield-Neofitou et al. (2009) found that the topics for discussions needed to be interesting as well as being useful language practice. However, there can be a tension between level of learner interest and appropriateness of topic for resultant discussion involving teachers. Arnold and Ducate (2006) also found that the topic influenced the number of dyads. Topics, that presented some issues that the students were able to connect with, expanded to a full discussion. Furthermore, when the participants shared their personal memory of a learning experience in such topics, fellow students asked further questions and some off-task questions.

The discussion topics can also influence the provision of scaffoldings as seen in Cheng's (2010) study. Cheng (2010) found that the students actively participated and provided scaffolding when the discussion topics were closely related to the course tasks. When the teachers broke down the writing assignments into several online discussion forums, the students were able to discuss the issues, rehearse and exchange ideas and feedback, and in turn reflect on their essay and produce comprehensive essays. Furthermore, such discussion forums produced more scaffolding and more interactions. Therefore, Cheng (2010) urged the need not to create CMC activity as an extra work for students to do. Instead, CMC activity such as discussion forums should be built closely around the curriculum with carefully chosen topics, so as to maximise collective scaffolding and to allow students to acquire knowledge and cognitive thinking.

Vonderwell (2003) also found that collaborative strategies and the type of discussion questions (discussion topics) could also influence students' contributions. The discussion question that required the students to research and work collaboratively, allowed students to reflect on the issues being discussed (Vonderwell, 2003). And it could be possible that discussion topics and questions also influence the development of discussion forums.

The content of topics and the manner of their presentation could confuse some language learners. Toyoda and Harrison (2002) created a unique 3D avatars online language learning environment using chat. Their aim was to design a web page for the purpose of discussing intercultural issues with native speakers of Japanese. In their study, multiple topics were discussed over the chat and they were not always presented in a sequence. This style caused confusions to some learners. Similarly, Stockwell (2003) found that the most common cause for premature cessation was multiple topics being covered in a single email. Kitade (2006) also found that the multiple topic in a single email caused confusions and premature cessation of topic threads. One-to-one communication such as chat and email presents different communication styles, strategies and issues from a discussion forum. However, the multiple topics presented in an online discussion forum may also cause some confusions or premature cessations.

2.3.2.7 Investigating Online Language

This section discusses prior CMC studies that examined the use of language in order to identify language features, such as use of abbreviated sentences, multiple topics, negotiation skills, use of conjunctions and a lack of explicitness, which hindered online communication. These features are also relevant to the present study because of a potential impact on interactions in online discussion forums.

Toyoda and Harrison (2002) examined the negotiation of meaning that took place between advanced level Japanese language learners and native speakers of Japanese over a series of chat conversations, they identified some language aspects that were crucial for the communication that were not taught in a normal classroom situation, for example, abbreviated sentences were frequently used by native speakers. It is quite normal and a natural communication style for Japanese native speakers not to complete sentences and to use a word such as *toka* at the end of the sentences. The word *toka* has many meanings depending on the context and this confused some learners. The learners who had less exposure to natural communication with native speakers showed some communication difficulties, as they were not quite accustomed to the abbreviated style of communication.

Stockwell (2003) investigated email interactions between native speakers and Japanese language learners to examine the primary causes of premature cessation of threads.

Forty-eight advanced level Japanese language learners at an Australia university were paired with 34 native speakers of Japanese from a Japanese university. The participants were asked to write at least four to five emails per week for the five-week study period on the set topics. Stockwell (2003) found that learners did not appropriately use conjunctions, thus causing abrupt topic changes, and consequential confusion for the native speakers. The learners also needed to have more expressions and strategies on how to seek further clarification from native speakers.

Other causes for premature cessation found in Stockwell's (2003) study were a lack of explicitness in a request for information, syntactic or pragmatic errors, and repeated requests for information that had already been provided. In further study, Stockwell (2004) found that some learners could not deal with a breakdown in communication with native speakers. This alerted teachers to teach students some strategies to manage such situations.

Similarly, Kitade (2006) found that some questions or confirmations of meaning did not trigger replies in email exchanges. This was because novice learners were not accustomed to some strategies used in CMC, especially in negotiation interactions with native speakers. Kitade (2006) also found that the participants strategically provided signals and responses at the beginning or end of the message to avoid interference with the main topic of discussion. Therefore, Kitade (2006) recommended that learners needed to be accustomed to the negotiation routines in CMC, especially in recognising reply signals, so as to complete the interactions. She recommended that further studies including longitudinal studies were needed to illustrate the communication process of learners with native speakers in CMC.

Discussion forums using CMC involving language learners and native speakers could face similar difficulties with interactions using emails as noted by Stockwell (2003, 2004) and Kitade (2006). These communication strategies could be incorporating in teaching to encourage language learners to fully participate in online discussion forums.

Toyoda and Harrison's (2002) study also gave some insight into language use in chat, to which some learners are probably exposed to outside their classroom. Chat is a popular tool for youth. If language learners were to use chat to practice their language skills outside of their classroom, the teaching and learning of language for inter-cultural

communication also needs to be expanded. Toyoda and Harrison (2002) observed that, in order to be a good communicator using chat and perhaps other CMC tools, learners needed to acquire various skills for negotiation of meaning. Toyoda and Harrison (2002) identified difficulties with negotiation in three levels: word, sentence, and discourse levels. At the word level, the most frequently observed difficulty was related to recognition of the new word, followed by typing errors and misuse of words. At the sentence level, the most frequently observed difficulty was how to comprehend abbreviated sentences, such as incomplete sentences by native speakers not completing a sentence. Other difficulties in the sentence level were inappropriate segmentation and grammatical errors. At the discourse level, they observed sudden topic changes, slow responses and intercultural communication gap caused by cultural differences. Negotiation of meaning at the discourse level became more complex and less transparent. Their findings suggested that 'the higher the level of the negotiation, the less clear it becomes whether the negotiation is successful' (Toyoda & Harrison, 2002, p. 16), therefore, the review of the students' chat logs can offer valuable resource and assist in improving their interlanguage skills.

Kitade (2000) also studied the effect of Internet chat and found that it holds a potential benefit for second language learning, since it can provide self-correction and a collaborative learning environment. Hirotani (2007) focused on learners' errors in building a review process to improve their writings. She used a blog to provide exercise in writing and analysed learners' errors and how they improved their writing after incorporating peer and teachers' reviews. Her study found that learners increased awareness of their writing style and of their own mistakes, had a positive effect on improving learners' writing in Japanese.

Communication skills and strategies in a foreign language could be closely related to development of the learners' first language, as Aoshima and Hosogawa (2007) found. They used blogs to develop interactive writing skills of Japanese language learners at a Korean college and a university in the United States of America. 18 learners formed four groups and exchanged ideas on various aspects of Japanese culture (such as J-pop, news and food) and discussed different views and interpretations of Japanese culture between Korean and American students. One of the interesting findings was that the learners who were well equipped with communication skills in their first language were also able to actively participate in second language discussions. Aoshima and

Hosogawa (2007) possibly raised some awareness of the importance of the development of learners' communication skills in their first languages in order to express their thoughts and opinions freely in their second or subsequent languages. This leads to the next discussion on the importance of metacognitive skills and cultural understanding.

2.3.2.8 Enhancing More Than Just Language Skills

An important part of language study is to enhance metacognitive skills and understanding of cultural aspects of the language that the students are learning. Online discussion forums present the possibilities of such learning to occur. As the Internet is readily accessible these days, the use of public Internet discussion forums brings new dimensions to any potential intercultural learning environment. 'Online public discussion in a foreign language offers the potential for learners to experience cultural difference unfettered by physical location. And it provides a venue for language learners and teachers to focus *not* on language *and* intercultural communication but on language as intercultural communication' (Hanna & de Nooy, 2009, p. 186). This section introduces the studies that explored the possibilities of CMC as a venue for language as intercultural communication.

Kitade (2007, 2008) examined Japanese language learners' metalanguage episodes in offline verbal peer speech and online discussions with their native speakers. Thirty-six exchange students studying Japanese at a Japanese university were randomly paired with their classmates and engaged in a decision-making task with one or two Japanese native speakers using BBS. Kitade (2007, 2008) found that use of BBS could be effective in creating a collaborative learning environment, which not only enhanced the use of language but also developed metacognitive skills.

Furstenberg and Levet (2010) also conducted an online discussion forum but with French language learners at a university in the United States of America and native speakers in France; both within a language class context. The purpose of this study was to produce in depth understandings of the attitudes, concepts, values and beliefs embedded in French culture. They were able to conduct rich discussion forums as the students exchanged their perspectives and tried to understand the point of view of others by sharing their observations and asking and responding to the questions. One of the popular topics discussed was food. The students had uploaded photos to visually

demonstrate their arguments and it seemed the photo assisted both French and American students to engage more actively in discussions. Importantly the roles of the learner and the teacher were intertwined during the forum, encouraging students to extend their knowledge and intercultural skills. A well-structured discussion forum with a teacher equipped to guide students enable them to understand the attitudes, concepts, values and beliefs embedded in cultures. Furstenberg and Levet (2010, p. 315) argued that 'the Silent Language and the Hidden Dimension' was the challenge; however, online discussion forums assisted in making the invisible visible to students.

Previous CMC studies, examining the interactions between native speakers and language learners, are not only important for enhancing an understanding of linguistic skills but also important for developing deeper understandings of different cultures. There are a number of studies, as noted in Hanna and de Nooy (2009) about cultural difference in CMC, which not only explored the cultural differences found in online communication between people with different cultural backgrounds (for example, Aoshima & Hosogawa, 2007; Furstenberg & Levet, 2010; Kitade, 2007, 2008) but also analysed the underlying conceptions of the role of culture in cyberspace. This is because the Internet itself presents a culture of its own (Hanna & de Nooy, 2009).

This is well reflected in Gottleib's research (2010), where she discussed the culture of Japanese mobile phone usage for email. Her research found that culture associated with mobile phone usage is not just about linguistic matters but is also production of 'language play' [5]. Taking advantage of Japanese writing systems and group solidarity, mobile phone users in Japan have produced a new culture in cyberspace, such as *Gyarumoji*[6]. Likewise, one could also expect the existence of new culture in SNS-based communication. If so, creating a language learning environment interacting with native speakers of Japanese using SNSs need special care, especially when involving novice Japanese language learners. Clear guidance to Japanese language learners about such cyberspace cultures and how to navigate through online communication could be more important when the learners interact with native speakers using SNSs. As Pasfield-

[5] Gottleib (2010, p. 395) describes language play as 'bending and breaking the rules of language' [as described by Crystal (1998)] to achieve a desired effect'.
[6] *Gyarumoji* is a style of Japanese writing used in sending cell phone text messages that became popular amongst urban Japanese youth. This is similar to the English phenomenon of SMS language, using shorthand to express themselves. Use of *Gyarumoji* was seen as more informal and therefore a sign of friendship.

Neofitou (Pasfield-Neofitou, 2007d) found, understanding of Japanese cyberspace culture, such as text art, would enhance Japanese language learners' communication skills with their native speakers (chat partners).

The above literature establishes a growing interest in SNS tools as part of a CMC environment. As a result, it is useful to understand a definition and history of SNSs as discussed next before proceeding to discuss evaluations of CMC educational uses.

2.3.3 SNS Definition and Brief History

Before discussing some SNS studies conducted in relation to teaching and learning of languages, it is important to have clear understanding of its definition and background. This is helpful since SNSs are reasonably new and are subject to different definitions across public and research spaces.

Boyd and Ellison (2007, p. 2) defined SNSs as:

> 'web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system'.

Furthermore, Boyd and Ellison (2007) note that the terms *social network site* and *social networking site* are used interchangeably in public discourse. However, they chose to use the term *social network site* rather than *social networking site* in their study, arguing that the term *networking* was used to emphasise initiation of relationship, whereas the scope of their study was not about initiating new relationships but was considering situations where people were communicating with people who were already in their social network (Boyd & Ellison, 2007).

Boyd and Ellison's argument alerts researchers to carefully choose the words that constitute the term and also to exercise care in selecting a definition of a SNS. Currently SNS is loosely defined as 'social network(ing) site', 'social network(ing) service', and 'social network(ing) software'. It is sound to take Boyd and Ellison's definition (2007) for the term 'social network site', where the participants' primary purpose is not to initiate relationships but to collaborate with each other. It is helpful to understand the brief history of SNS to appreciate how each SNS was introduced to the public and used.

The potential for computer networking to facilitate new forms of CMC social interaction was recognised some time ago, when early online services such as LISTSERV and BBS were pioneered. Early social networking on the World Wide Web began in the form of generalised online communities such as Theglobe.com in 1995. In the late 1990s, user profiles became a central feature of SNSs and many sites began to develop more advanced features for users to find and manage friends. This type of newer generation of SNSs began to flourish and MySpace was launched in 2003, Facebook in 2004, and Bebo was re-launched in 2005. Since then Facebook has become the largest SNS in the world attracting 1.11 billion monthly active users around the World (Garside & Rushe, 2013). Now there are many SNSs available worldwide and some are country specific (such as Mixi in Japan, and Cyworld in Korea).

The next section discusses studies reflecting the diversity of various CMC especially those that can create online discussion forums.

2.3.4 Diversity through Combined CMC

As Internet access is becoming more readily available, CMC tools are more accessible. As a result, there is a growing body of literature considering the combination of various CMC for educational purposes including the enhancement of language learners' communication skills. This is open to a wide range of choices such as SNS, blog, Wiki, and Second Life. The aim of this section is to outline some of the recent studies that use CMC for language education. Understanding of various CMC used in language education was necessary in order to choose the appropriate platform for the present study.

Carney (2008) explored the idea of integrating various CMC that were available on the Internet (blog, Wiki, and Skype) as well as homemade student-produced DVD in a collaborative language exchange project between students studying Japanese in the United States of America and students in Japan learning ESL. The project aimed to improve students' communicative language skills and increase opportunities for use of the target language through specific tasks using those three CMC tools. He found that technically based projects came with their fair share of caveats similar to these studies that used one CMC tool. For example, absentee participants; technical glitches; extra time and effort required by teachers; and institutional constraints were also observed in

Carney's (2008) study. However, an advantage of CMC use could be greater than these negative effects; the variety of communication technologies used in Carney's (2008) study provided language learners with many ways to use and interpret the target language and increased understanding of a different culture by communicating with the native speakers (Carney, 2008).

Sato, Fukai and Taguchi (2007) also explored the use of various CMC: Wiki, blog and Podcast, to enhance the cultural understanding of American university students learning Japanese. In the studies of Sato et al. (2007) and Carney (2008), the notable finding was that CMC held a great potential and opportunity for language learning as well as learning of target culture. Knutzen and Kennedy (2012) presented the use of Second Life with Moodle, chat and voice interaction between ESL students and students on a TESOL program. However, these abovementioned studies only reported on the implementation of CMC to their teaching class and did not provide any deep analysis of interactions investigating the mechanism of collaboration.

Harrison, Sanehira, Shimada, Iwasaki, and Bunt (2007) collaboratively examined the use of Web 2.0[7]. They argued that various CMC tools could create Vygotsky's notion of social constructionism. They collected data from learners and teachers of Japanese language at four separate locations (the United Kingdom, Taiwan, and two in Japan). Harrison et al. (2007, p. 149) found that the learners were constructing their own environments through various CMC tools to 'tailor to their needs and goals'. They suggested that further longitudinal studies are needed to understand how the learners constructed their own learning environment and how they learnt in such an environment. Pasfield-Neofitou's (for example, 2007d, 2009a, 2011, 2012) longitudinal study presented some insights relevant to this quest of Harrison et al. (2007).

Pasfield-Neofitou (2011) examined interactions between Japanese language learners and native speakers, comparing the students' use of language across various CMC, such as: chat, blog, SNS, and email. Data was collected from 12 Australian university students and their 18 Japanese friends over four year period. She found that the participants' choice of language varied according to the type of CMC used. Most participants used English on Facebook, email, chat, whereas they used Japanese on blog

[7] Web 2.0 is defined by Harrison, et al (2007) as information tools including such as blog, SNS, Skype, YouTube.

(Ameba Blogs) and Mixi (SNS). Choices of language use were made considering the nature of domain for the particular CMC. For example, Mixi and Ameba Blog are considered to be Japanese domains, as most users of these sites are native speakers of Japanese. Therefore, Japanese language learners would use Japanese at these sites.

Pasfield-Neofitou (2011, 2012) found that learners were exposed to natural authentic communications of native speakers through various CMC tools, which stimulated and motivated learners to use the target language, Japanese. Seeing interactions between the native speakers at first hand, some students saw them as models. It created 'a sense of virtual immersion' (Pasfield-Neofitou, 2011, p. 104). Thus, the SNS provided a new language learning environment in this case, that was sustained by the social interaction of individuals, while email and chat tend to be one-on-one interactions.

The observations made in Pasfield-Neofitou's study highlighted two factors that could possibly provide a learning platform: students see the native speakers' utterances as models; and, SNSs can offer group social interactions, as opposed to a one-to-one interaction. The previous studies in relation to peer teaching presented interactions between advanced level and introductory level language learners can promote effective learning (refer Section 2.3.2.3). Placing these learners and native speakers in a SNS community could possibly expose the learners to more diverse language, where all levels of learner can find their model utterances. Using a SNS as a platform for a collaborative activity, the learners could then benefit from more exposure to the natural authentic communication with native speakers and other peers, whilst all the participants involved in providing scaffolding.

Pasfield-Neofitou (2007a, 2007b, 2007c, 2007d, 2009a, 2009b) has produced a number of reports on interactions between five pairs of advanced learners of Japanese and their Japanese chat partners using chat[8], using data collected as a part of abovementioned study. A series of reports indicated that she observed code switching between English and Japanese in the participants' interactions. The code switching occurred on the bases

[8] Chat application in Pasfield-Neofitou's (2007a, 2007b, 2007c, 2007d, 2009a, 2009b) studies was MSN Messenger, which can be incorporated in SNSs. Chat is one of popular function among the youth, as a private communication channel opposed to a public posts; the status posts in SNS. Therefore, in this section, chat with MSN Messenger was considered as a part of SNS.

of four issues; use of dictionary, orthographic switching[9] skills, the partners' preference, and the learners' linguistic ability to seek assistance in Japanese.

Dictionary usage amongst language learners in Pasfield-Neofitou's (2007d) study brought an interesting insight to how the learners switch between the languages during their interactions with the native speakers. One learner used English words instead of using a dictionary to find the Japanese word for what they did not know in Japanese. On the other hand, another learner reported that she 'relied upon her electronic dictionary rather than asking her chat partner for help with unfamiliar vocabulary because it was "easier"' (Pasfield-Neofitou, 2009b, p. 16). These two learners' actions brought two issues that are worth considering. One is the use of English words in second language interactions, and the other is dictionary usage.

Pasfield-Neofitou's (2007d) study found that the native speaker also chose to write in English when it was easier to convey the meaning, for example, the name of English course written in English rather than in *Katakana*. The act of native speaker using English words to assist the learners to convey the meanings seemed helpful. However, it is also worth noting that some participants would have preferred to keep the message in one language rather than switching frequently, as reported in Pasfield-Neofitou (2007d).

It seems the choice of language used in the interactions serviced a variety of needs; however, every participant may not have received code switching favourably. Therefore, establishing the participants' needs and preference could be important in relation to the use of code switching.

The use of dictionary can be complicated for Japanese language learners as Pasfield-Neofitou (2009b) reported. She reported the use of dictionaries by five pairs of participants mentioned above, together with the data resulting from a survey conducted in 2007 to investigate 82 bilingual Japanese-English paper, electronic and online dictionaries available at the time. Each mode of dictionary (paper, electronic and online) has its advantages and disadvantages. Pasfield-Neofitou (2009b) reported that more than a half of the participants used a dictionary of some form during their chat interactions.

[9] Orthographic switching is where different input methods are used for English and Japanese writing, for example using the Roman alphabet to type Japanese and convert from *Romaji* to *Hiragana* or *Hiragana* to *Kanji* or Japanese to English. Keyboard shortcuts are also possible.

The most preferred dictionaries to use, for among ten participants, were electronic dictionaries, then online dictionaries as the second preference.

Although electronic dictionaries were the most preferred type of dictionary, many learners presented their dissatisfaction in using them. The reason for their dissatisfaction lies in the fact that the operations of such dictionaries varied from model to model. Therefore, for a teacher to provide explicit instructions or incorporate its use in the class to assist learners to learn the effective use of electronic dictionaries was difficult. Furthermore, it is difficult for students to share the information on how to use such dictionaries or to borrow from friends. Electronic dictionaries have their own limitation in providing examples or explanations and often provide more formal words. The helpfulness of electronic dictionaries to navigate the content of chat is diminished since the language used in chat is casual and not listed in electronic dictionaries at least until sometime after those casual terms have first been used. Thus, extending from Pasfield-Neofitou's work it can be concluded that code-switching and dictionary usage are two factors amongst others that enhance, or hinder, native speaker interactions.

Many of the studies reviewed here were conducted as part of a teaching and learning program. This meant that learner participation involved assessment tasks. This could have influenced the outcomes of the learners' interactions because participants' motivation and goals have a direct influence on the outcome (Pasfield-Neofitou, 2007; Spence-Brown, 2007; Vonderwell, 2003). The issues of motivation and outcome will be discussed further later in Section 2.4.2.1 within a discussion of motive in Activity Theory.

The natural interactions between language learners and native speakers participating in a discussion forum to provide scaffolding without any obligation or assessment attached may provide more authentic interactions. As mentioned in Chapter 1, the studies about the use of CMC outside of classes for the purpose of language studies are still underexplored. The CMC research on learning Japanese language as a foreign language is not as extensive as the studies conducted for ESL. The studies for Japanese language as a foreign language in CMC seemed to focus on the language use and implementation of various tools available in CMC and the studies related to SNSs outside of class environment for the purpose of language study are still rare (Pasfield-Neofitou, 2012).

Shifting the focus from varieties of CMC usage, the next section discusses various impacts of SNSs on the learners, such as learners' motivation and language development, and the formation of communities of SNSs.

2.3.5 Impact of SNS on Learners

As discussed in Section 2.3.2.2, activities using CMC had generally enhanced learners' motivation. Mazer, Murphy and Simonds (2007) discovered a positive correlation between teacher self-disclosure, via Facebook, and learners' motivation, affective learning and classroom climate. However, some learners questioned the professionalism of their teachers when the level of self-disclosure did not match the learners' norms.

SNSs have been used in collaborative educational activities as reported by Mills (2011). She found positive learning outcomes from incorporating Facebook usage in her French classes to set up an activity involving creation of a fictional Francophone character. The learners' fictional characters then interacted with each other 'in a global simulation context centered on Parisian life' (Mills, 2011, p. 363). A collective narrative developed as learners created their own characters and they 'engaged in a meaningful online community that allowed them to organize, interpret, and give coherence to their experience' (Mills 2011, p. 363). The learners were not providing scaffolding to each other but they reported that they did pay attention to grammar and word choice to avoid any misunderstandings. Mills (2011) thought that the Facebook project was able to create authentic opportunities for learning and fostered multimodal literacy among the most communicative generation of today's learners.

Pasfield-Neofitou et al. (2009) also found that activities using a SNS (Bebo) had some positive impact on their Japanese language learners, such as increased vocabulary; improved typing skills; stimulated learners to use CMC as learning tools; and heightened their motivation to read more. They emphasised the importance of developing learner autonomy in out-of-class situations as well as within the classroom situation. Further, Pasfield-Neofitou et al. (2009) identify some factors worth considering for future studies, such as: the choice of CMC; the roles of teachers and learners; the balance of feedback and corrections; and, choice of discussion topics. Those recommendations were not unique to their study as other previous studies (for example, Absalom and Marden, 2004; Cheng, 2010; Vonderwell, 2003) mentioned in

Section 2.3 also made similar recommendations. In summary, recommendations were that:

- the selected CMC tool(s) should be familiar to the participants and easy to use;
- a teacher should not be bound to the role of 'teacher' especially in SNSs where the emphasis is on social interactions;
- a discussion topic should be attractive to the participants to be able to discuss; and,
- whilst there is a need to provide feedback and correction to the learners, there is also a need to consider the learners' feelings as this is done in a public domain.

Building on prior studies, Reinhardt and Zander (2011) investigated the impact of learner awareness of SNSs use in order to enhance learners' language skills. Eleven participants were intermediate level speaking-listening-reading English learners with varied backgrounds in nationality, age and first language. Reinhardt and Zander (2011) found that SNSs promoted interactions among learners and developed learner's cultural awareness. However, they also found learner resistance in use of SNSs as an educational tool, amongst students with Chinese background, on three counts:

- when it conflicted with their home discourses;
- when cultural differences were significant; and,
- when there were access difficulties.

There is not an equivalent study of Reinhardt and Zander (2011) conducted in regard to Japanese language learners. As Japanese language learners, not only in Australia but also world wide, have varied backgrounds to nationalities, age and first language, it is possible that some could resist use of SNSs as an educational tool. Whether other English learners or Japanese language learners have similar resistance to use of SNSs is yet to be determined. Reinhardt and Zander's sample was small that their findings cannot be generalised; nevertheless, it is important to be aware of possible resistance against SNSs as an educational tool.

Lam (2012) incorporated use of Facebook beside the Moodle (online learning platform) in her course where students submitted individual and group case study. The students received peer feedback and answer quizzes using Facebook. The teachers used

Facebook answering any students' queries or to update student news or for supplementary resources. Lam (2012) conducted a survey, testing interaction, communication, social relationship, participation against students' motivation in learning, and examining the effect of Facebook over student motivation in learning. Lam (2012) found that while the teachers' role was as facilitators and intermediaries between students and resources on the use of Moodle, teachers needed to be more interactive and show their involvement using Facebook to motivate students. The more actively teachers participated in the Facebook social environment, the closer the relationship between teachers and students were, so that in turn, the more motivated students were in learning. As a result, in regard to the introduction of Facebook as a platform for establishing social relationship, Lam's (2012) study showed the social relationship benefit had significant positive influence on student's motivation in learning. However, reluctance to use Facebook existed amongst teachers. Perhaps, this supports Reinhardt and Zander's (2011) views on cultural differences or conflict with the home discourses, as teachers in Lam's (2012) study were also of Chinese background; the study was conducted with students and teachers of University of Hong Kong. Students' motivation seemed closely related to the interactions. In other words, engagement in SNSs is closely related to the development and maintenance of communities based around the chosen SNS. The literature related to the issue of SNS communities is discussed next.

2.3.6 Communities of SNS

The understanding of SNS community and its function has two important relations to the present study. One is, as Vonderwell (2003) and others (e.g. Fitze, 2006; Lee, 2009) recognised, a strong bond between the participants within a community could enhance an online discussion forum. The other is, a community is recognised as one of the constituent components in an activity system, as discussed later in this Chapter. It is important to understand the community of SNSs and its characteristics. This section presents the studies of SNSs in relation to the communities of SNSs.

Hargittai (2007) studied the demographics of SNS users to understand who uses SNSs and who are likely to use what types of SNSs, focusing on Facebook, MySpace, Xanga, and Friendster. She administered a survey to 1,060 students aged 18 to 19 at the University of Illinois and found that there were no differences in the use of SNSs across

race or ethnicity. However, Hargittai (2007) found differences in choices of SNSs related to student's background, for example, the level of parents' education influenced the choice of a SNS. The students who had at least one of their parents with a graduate degree were more likely to use Facebook, Friendster or Xanga. Hargittai (2007) also warned that because certain types of people could be attracted to unique features of SNSs, researchers need to be cautious in generalising findings to other SNSs. Ota (2011) also found some characteristics in SNS users in Australia, as described next.

Ota (2011) studied the characteristics of communities formed in Mixi and Facebook focusing on how Japanese language learners use these sites to achieve benefits for their language learning. The frequency of post and categorisation of each post were analysed amongst four communities within the SNSs identified by Ota (2011). She found that each site was used differently according to their purposes and that each community presented pre-existing factors and purposes. As a result, she argued that for language learners to select a community, the learners needed to understand the characteristics of each SNS and needed to select the SNS appropriate for their requirements. The difficulty arising from this is that even 'though the nature of SNSs is to socialise, the nature of a particular site and the tone of interactions between the community members is not obvious prior to becoming a member of the particular SNS community.

Ota (2011) also reported that SNSs could promote peer assistance because of the nature of the sites regarding the gratification of social needs and the provision of anonymity to at least a certain degree. She also found that some evidence of peer support both linguistically and emotionally on these sites. Ota (2011) concluded that SNSs provided a portal for second language learners to access other information and sources. However, Ota's (2011) study was conducted with four specific communities on two SNSs. In order to explore the possibilities of SNSs as a platform for language learning, future studies would require much broader communities and with more in depth analysis.

Previously mentioned studies such as Kitade (2007; 2008), Carney (2008), Pasfield-Neofitou (2007a, 2007c, 2007d, 2009a, 2009b, 2011) and Pasfield-Neofitou et al. (2009) presented evidence about a positive effect of collaborative work using CMC. However, they also found certain issues that need to be dealt with when setting up collaborative work in CMC. The next section outlines the methodologies and theoretical framework used in the previous studies.

2.3.7 Methodological Considerations

This section briefly discusses some of the methodologies used in previous CMC studies. In particular, data gathering methods and the length of studies are of interest since various methods of data gathering in prior studies assisted in the framework of the present study and alternative lapse periods for the present study raised important methodological considerations.

2.3.7.1 Data Gathering

This section presents various methods to gather data including close observation of the interactions used by the CMC studies mentioned in this chapter.

Lee (2009) used a reflective logbook with a set of five questions to help the students to evaluate their own learning. This also helped Lee (2009) to retrieve some insightful information on the students' learning and thoughts during the online activities. Furstenberg and Levet (2010) also recommended the use of a reflective logbook to evaluate the students' level of engagement. Keeping reflective logbook helped Furstenberg and Levet (2010) to assess students' abilities to reflect and evaluate as the logbook provided some valuable insight.

A number of researchers used multiple data gathering methods to increase their validity and reliability; for example, Lee (2009) used a voluntary post-program survey with a five point Likert scale and a post-program interview for deeper understanding of the interactions. Questionnaires or surveys were popular instruments used in previous studies to measure the participants' satisfaction and cognitive benefits (for example, Arnold & Ducate, 2006; Bentley, Selassie, & Shegunshi, 2012; Cheng, 2010; Furstenberg & Levet, 2010; Kitade, 2000, 2008). Follow up interviews are well-recognised as providing quality data (Neustupný, 1990) and are used by many researchers (for example, Cheng, 2010; Ding, 2009; Kitade, 2008; Pasfield-Neofitou, 2007a, 2011, 2012).

As the previous CMC studies used various methods for data gathering, the length of the studies has also varied, as is discussed next.

2.3.7.2 Length of CMC Studies

The variation of study length has been significant, with the shortest being two days (Vandergriff, 2006) and the longitudinal studies being three to four years (Bentley et al., 2012; Pasfield-Neofitou, 2012). However, the majority of studies were conducted within a semester (12 – 13 weeks) because they were conducted as a part of their teaching program. Thus, a length of the present study to be 13 weeks would be comparable with the majority of studies.

The variety of methodological considerations in the relevant prior literature is perhaps an outcome of the variety in theoretical frames adopted in that literature. Whilst diversity of theoretical frames is a sign of a vibrant and active academic discipline, it does cause difficulty in collating findings from the resultant body of literature. Lee (2009) noted that CMC research findings so far are inconsistent and inconclusive due to the use of different theoretical frameworks within a variety of instructional contexts. In part this observation serves to highlight the need for careful consideration of appropriate theoretical frames for any research and so the next section considers the prior literature's use of one choice of theory, which the present study asserts, is relevant to its purpose (that assertion is made in Section 2.5 below).

2.4 Activity Theory

Conole et al. (2011) provide a meta-analysis of theoretical frames used in studies of networked learning. They review four frameworks (Community of Practice; Communities of Inquiry; Activity Theory; and Actor-Network Theory) and conclude that these frameworks could only provide a partial solution and not a comprehensive holistic description. They argued that the distinctive feature of SNSs in comparison to previous technologies is the importance and influence of the network in shaping user interactions and activities. Arising from this is the need to use a theoretical framework that provides focus on user behaviour. Activity Theory, which is discussed in this section, provides that focus.

Activity Theory assists in microgenetic analysis from sociocultural perspectives (discussed in Section 2.2) to conceptualise activities. 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. As Basharina (2007) noted, Activity Theory is also relevant in understanding Vygotsky's process of internalisation (refer Section 2.2). Kuutti (1996, p. 25) defined Activity Theory as 'a philosophical and cross-disciplinary framework for studying different forms of human practices as developmental processes, with both individual and social levels interlinked at the same time'. Activity Theory provides a helpful tool to visualise the provision of scaffolding since it facilitates an understanding of the relationship of consciousness and practical social activity, whereby an activity is the most fundamental concept. It helps to visualise the subject's purpose and consciousness in interactions with the subject's society and it 'provides a coherent account for processes at various levels of acting in the world' (Kaptelinin & Nardi, 2006).

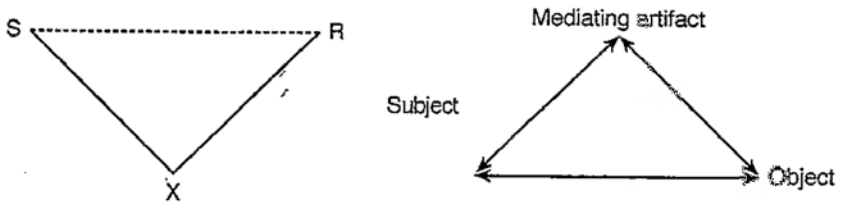
This section presents firstly a brief overview of Activity Theory and then a number of key constituent components of the activity system. Lastly, the several models of activity systems as a conceptual tool are discussed

2.4.1 A Brief Overview of Activity Theory

Activity Theory and several models of activity systems can be useful for microgenetic analysis of online SNS interactions.

Vygotsky created the idea of mediation, where he developed a triangular model to describe the connection between stimulus (S) and response (R) to guide an action, which is called 'a complex and mediated act' (Vygotsky, 1978, p. 40). Thus Vygotsky's idea of cultural mediation of action is 'commonly expressed as the triad of subject, object and mediating artifact' (Engeström, 2001, p. 134) as shown in Figure 2-1.

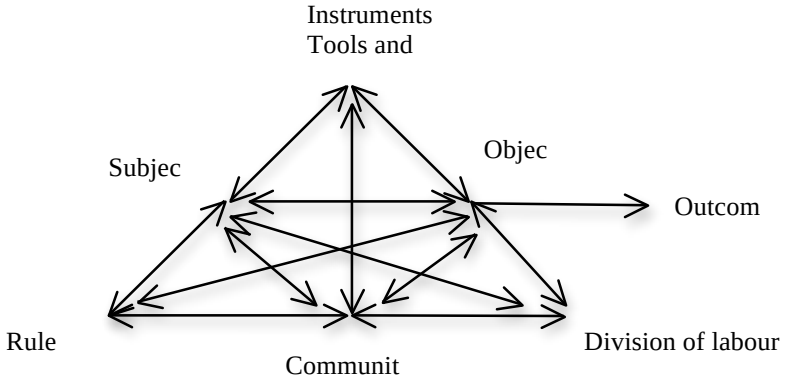
Figure 2-1: Vygotsky's model of mediated act and its common reformulation (Engeström, 2001, p. 134)



This triangular model of 'a complex and mediated act' was subject to further development into Activity Theory by Leont'ev (1978) and Engeström (2001).

According to Engeström (2001), Leont'ev stressed the differences between an individual action and a collective activity; however, he did not graphically develop his model. On the other hand, Engeström (2001, p. 135) developed an explicit visual model of the structure of a human activity system as shown below:

Figure 2-2: The structure of a human activity system (Engeström, 1987, in Engeström 2001, p. 135)



2.4.2. Key Insights of Activity System

In order to establish a common understanding for the function of the activity system, this section presents certain terms related to the constituent components used in the activity system (as seen in Figure 2-2), which are defined and discussed. It is important to have clear and common understanding of some of the key components of the activity system. The existence of several ways to interpret these key components can be confusing and misleading. This section will provide the fundamental perspectives necessary for the analysis and discussion found in the following chapters. Firstly, motive and object are described, then mediating artifacts. Thirdly, contradiction is explained and lastly, the concept of boundaries is introduced.

2.4.2.1. Motive and Object

Motive is a crucial factor in shaping each activity. Kaptelinin and Nardi (2006, p. 59) described motive as 'an object that meets a certain need of the subject'. Edwards (2005, p. 52) explains that 'the object is what is been worked on, i.e. it is not the objectives'. Leont'ev (2009, p. 98) describes the relationship between object and motive as follows:

> 'the object of an activity is its true motive. It is understood that the motive may be either material or ideal, either present in perception or existing only in the imagination or in thought.'

Leont'ev (2009, p. 99) argues, furthermore,

> 'the concept of activity is necessarily connected to the concept of motive. Activity does not exist without a motive… Similarly, just as the concept of motive is related to the concept of activity, the concept of purpose is related to the concept of action'.

However, this concept of object of an activity and true motive raises questions. Kaptelinin and Nardi (2006) raised a question in relation to the advantages in having a second concept to mean the same as the motive. As a result, the concept of the object of activity appears to duplicate the meaning of the concept of motive in Activity Theory. Vygotsky (1978) believed that the initial motive of an activity determines the outcome. Therefore, different learners having different motives while participating in the same activity could treat the activity differently and produce different outcomes.

Adapting Vygotsky's stance, Gillette (1994) argues that the studies need to take into account the learners' initial motive and social histories forming their goals. She cautions against making an assumption that language learning strategy training will automatically lead to better language learners. Gillette (1994, p. 212) argued that 'successful language learning depends on an individual's willingness to make every effort to acquire an L2 rather than on superior cognitive processing alone'. Spence-Brown (2007) also found that some learners engaged less authentically in interaction to gain better assessment marks, demonstrating that the learners' motives affected their actions in an interview project. The study cautioned fellow teachers to be aware of a potential negative impact on learning caused by an assessment task which would require learners to take a risk producing an authentic engagement; they may strategically decide to avoid such risks that would jeopardise their assessment prospects.

Pasfield-Neofitou (2007a, 2007b, 2007c, 2007d) studied the interactions between advanced level Japanese language learners and Japanese native speakers, using chat, MSN Messenger. She also found initial motive influenced the chat interactions. These studies showed that the different learners' initial motive had important consequences for their behaviours, producing different learning outcomes.

Engeström's activity system helped to visualise how the subject's needs transform to a motive under the influence of social and historical factors in an activity, as shown in Spence-Brown's study (2007). In such cases a motive could be understood as a factor that drives the subject to undertake an activity, producing an outcome. According to Leont'ev (2009), it is possible to have multiple motives for any particular activity. In any collaborative activity, different motives of different individuals then work in a single activity or in a collection of individual activities.

The next section describes another key constituent component: the notion of mediating artifacts.

2.4.2.2 Mediating Artifacts

The relationship between subject and object is negotiated by mediating artifacts. Prenkert (2010, p. 652) defined the mediating artifacts as 'the tools, signs, and instruments used by a subject to interact with an object'. In other words, mediating artifacts are closely related to scaffolding. Engeström (1999, p. 381) included 'both external implements and internal representations such as mental models' within mediating artifacts. Engeström's notion of mediating artifacts would help clarify the debate on what to be included in the definition of scaffolding as raised by Sherin et al. (2004), discussed in Section 2.2.3. For example, common tools, such as dictionaries, calculators and computers and diagrams, tables and figures to help the readers' comprehension, should be recognised as mediating artifacts. These tools would be considered as external mediating artifacts in the activity system, being recognised as a component that could help the subject to produce an outcome.

Saye and Brush (2002) and Ge and Land (2004) discussed hard scaffolding and soft scaffolding. Hard scaffolding is static support that can be anticipated and planned in advance through knowing learners' prior abilities. Hard scaffolding can be conceptual, metacognitive and/or strategic. On the other hand, soft scaffolding is a person who

provides spontaneous dynamic and situational supports to a learner. Soft scaffolding, therefore, is an interaction between people such as a novice and an expert, fulfilling an important gap in hard scaffolding.

Encompassing both hard and soft scaffolding, mediating artifacts in an activity system will include any tools, signs and instruments with which a subject will interact to produce an outcome. Language learners would be likely to use dictionaries, Internet search engines and other tools for their studies and for when they are participating in an online activity in the language that they are learning.

When any of the constituent components in the activity system produces different driving forces, a contradiction occurs as explained next.

2.4.2.3 Contradiction

Activity Theory is a dialectical theory; therefore, the dialectical concept of contradiction plays an important part in the Activity Theory. This is because in Activity Theory, contradictions are the driving force for motive to transform into an object of an activity to produce the outcome (Engeström & Sannino, 2010). Kuutti (1999, p. 34) defined contradictions as ‘a misfit within elements, between them, between different activities, or between different developmental phases of a single activity’. Engeström (2001, p. 137) described contradictions as ‘historically accumulating structural tensions within and between activity systems’. Contradictions can give an impression of negative connotations, however, in Activity Theory, they are seen as innovators and drivers of change and development. Engeström (2001, p. 133) calls the contradiction a ‘driving force of change’.

Engeström (1987, 2001) identifies four levels of contradictions in a network of activity systems as follows:

1. Primary contradictions appear within each constituent component of the activity system;
2. Secondary contradictions occur when there is tension between one element (old element) and another (new element) within the activity system;

3. Tertiary contradictions appear when the object/motive of another more culturally advanced activity system is introduced into the central activity system;
4. Quaternary contradictions occur as the constituent components of the central activity system clashes with any of those of neighbouring activity systems, for example, between the division of labour of the central activity system and the rules component of another activity system.

The research on collaborative work using SNSs or CMC in relation to Japanese language learners with an activity system as an analytical tool is scarce. Pasfield-Neofitou (2007a) and Spence-Brown (2007) studies, mentioned previously, used the concept of Activity Theory but did not report their data in detail using activity systems. However, reading the results of Pasfield-Neofitou's study, contradictions as seen to have appeared. For example, an unequal division of labour, which caused a participant to take a 'relatively powerless role of listener or reader and the other, speaker or writer' (Pasfield-Neofitou, 2007a, p. 158). Contradictions in participants' computer skills, uneven power relationships and the nature of relationships were observed in her study. More detailed analysis using an activity system could reveal more information on these contradictions and provide insights into the interactions including how they affected the outcome of the activity. However, Pasfield-Neofitou's (2007a) focus was on linguistic functions; therefore, she examined the interactions using conversational analysis to find linguistic functions and interactional features such as repair, turn management and code switching.

Hadjistassou (2012) observed contradictions among ten advanced learners of ESL in an activity, where they posted their essays and exchanged feedback online. She noted that 'online transactions are defined, structured around, and performed within contradictory historically afforded values through which students shape their online exchanges, feedback discourse, and learning' (Hadjistassou, 2012, p. 382). And she found in her online study three instrumental contradictions that students encountered while participating in the online feedback transactions and drafting process.

Using Activity Theory, Basharina (2007) also found cultural contradictions among ESL learners from Japan, Mexico and Russia in a collaborative work conducted using

WebCT bulletin board. She found intra-cultural, inter-cultural and technology-related contradictions. She linked these contradictions to various factors, such as: clash of curricula and interactive learning paradigms; cultural differences in use of computer; level of available resources in the participants' countries; and, teachers' mediation.

The next section describes the notion of boundaries that affect the activity in the activity system. The boundaries, especially cross-boundaries, are relevant in quaternary contradictions for learners with mixed backgrounds participating in a collaborative activity such as SNS-based discussion forums.

2.4.2.4 Boundaries

This section briefly describes the notion of boundaries that is relevant to the present study.

In Activity Theory, boundaries could carry potential for learning (Akkerman & Bakker, 2011). Boundaries can be described in relation either to people or objects. In relation to people, Akkerman and Bakker (2011, p. 139) defined as 'sociocultural differences that give rise to discontinuities in interaction and action'. Therefore, boundary crossing indicates how people enter onto territory with which they may lack familiarity and face the challenge of negotiating and combining the available elements from different contexts to manage the situation. 'Boundary-crossing competence' is 'the ability to manage and integrate multiple, divergent discourses and practices across social boundaries' (Akkerman & Bakker, 2011, p. 140). In relation to objects, boundary objects indicate 'how artifacts can fulfill a specific function in bridging intersecting practices' (Akkerman & Bakker, 2011, p. 134). Boundary objects are flexible and address multiple perspectives.

The descriptions of boundaries, both people and objects, are ambiguous in nature. However, Akkerman and Bakker (2011) reviewed the past literature and identified four mechanisms for learning at the boundary: identification; coordination; reflection; and transformation. However, there is relatively little study conducted to examine what makes successful boundary crossing. In society generally, it is getting more common to have people working in cross boundary situation; therefore, Edwards (2012) explains the needs to understand the notion of boundary crossing and examine what influences the boundary crossing. This is especially important as the concepts of boundary crossing

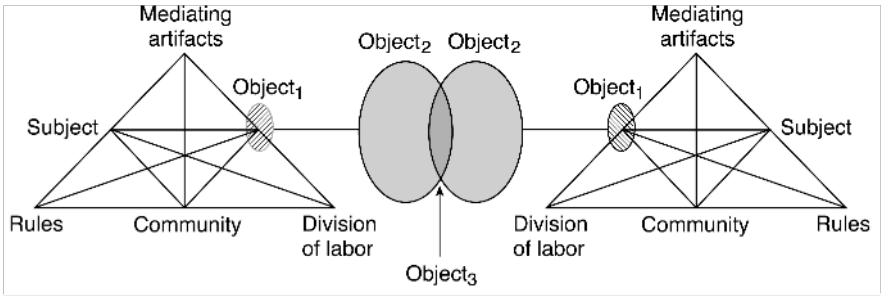
and knowledge sharing in networks of activity transform the outcome (Daniels, 2008). Such understanding will help to structure more effective collaborative activities.

Activity Theory and some of the key terms were explained above. The next section presents three models of activity systems that could assist in analysis of interactions at SNSs.

2.4.3 Various Models of the Activity System

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'. Considering various researchers' theories such as Wertsch (1991), Russell (1997), and Engeström (2001, p. 197) expanded his basic model (Figure 2-2) and included minimally two interacting activity systems shown as below (Figure 2-3):

Figure 2-3: Two interacting activity systems as minimal model for the third generation of Activity Theory (Engeström, 2001, p. 135)



This later model helps to create an understanding of five principles of Activity Theory:

1. 'A collective, artifact-mediated and object-oriented activity system, seen in its network relations to other activity systems, is taken as the prime unit of analysis';
2. 'An activity system is … a community of multiple points of views, traditions, and interests';
3. 'Activity systems take shape and get transformed over lengthy periods of time';
4. When the activity system adopts a new element from the outside, it could lead to contradictions, which generate conflicts but also produce innovative attempts to change the activity; and

5. ‘Activity systems move through relatively long cycles of qualitative transformations’; that is, ‘a full cycle of expansive transformation may be understood as a collective journey through the *zone of proximal development* of the activity’ (Engestöm, 2001, pp. 136-137)

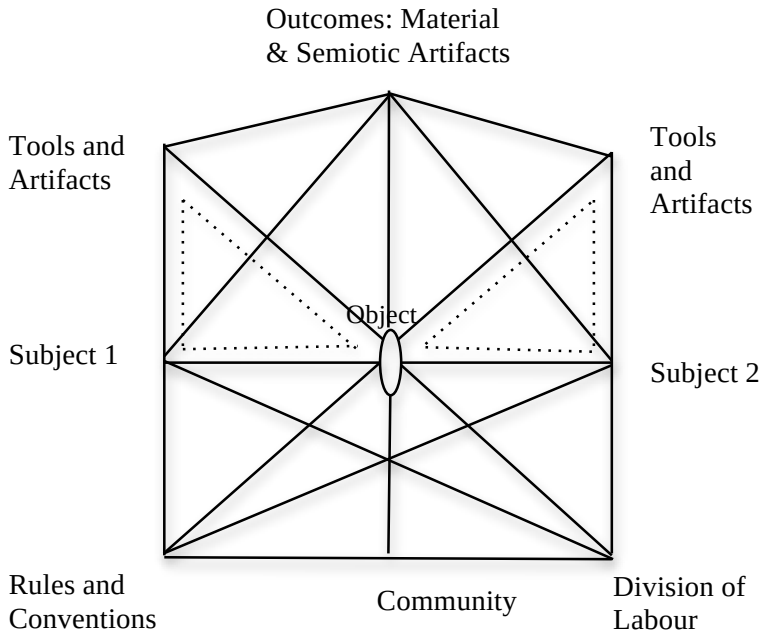
These five principles of Activity Theory explain the intricacy of an activity built upon the social cultural historical context. An activity is motive driven and constitutes an object, subject, mediating artifacts and subordinate units of analysis of actions and operations (Leont'ev, 1978). The relationship between subject and object is mediated by mediating artifacts, the relationship between subject and community is mediated by rules, and the relationship between object and community is mediated by the division of labor. Through this process an object is transformed to the outcome.

Asynchronous online discourse can be analysed using techniques such as Conversation Analysis and Critical Discourse Analysis. Engeström (1999) argues, however, that any of these analyses examines the interactions and language functions of the particular utterances but does not give overall pictures of the interactions. On the other hand, Activity Theory provides ‘attention to the intertwining of instrumental-productive and influence-power aspects of communication’ (Engeström, 1999, p. 165). This is because ‘an activity [in the Activity Theory] is the minimal meaningful context for undestanding individual actions’ (Kuutti, 1996, p. 28).

Contemporary interpretations of Activity Theory recognise that all activity systems are heterogeneous and multi-voiced, and so may contain conflict and resistance as well as cooperation and collaboration (Lantolf, 2006). Lantolf and Thorne (2006) argue that contradictions within and between activity systems drive development and activity systems do not operate independently; instead, multiple activity systems influence the activities under investigation.

Wells (2002) adapted and extended Engeström’s (2001) activity system model considering the interrelationship between various dimensions of, and their transformation in, ongoing joint activity systems as shown in Figure 2-4.

Figure 2-4: Modified joint activity system (Wells, 2002, p. 59)

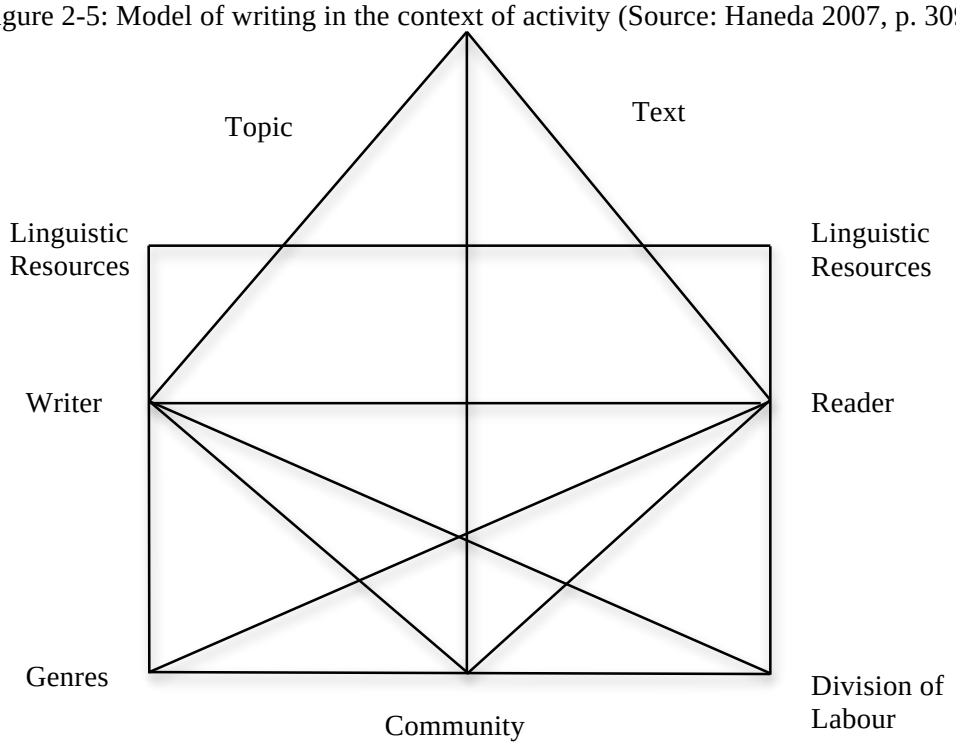


Well's model of a joint activity system is an extension of Engeström's (2001) model and it should be seen as dynamic and evolving with time. In Figure 2-4, each subject's activity is represented by a small dotted triangle (with the subject, mediating artifacts, and object forming the three apexes). A motive and each subject's goal-oriented actions as seen in Figure 2-2 and 2-3 are compelled to perform an activity. In Figure 2-4, the larger triangle and the individual triangles jointly transform the object to an outcome. Figure 2-4 represents each force equally contributing to the activity. However, the various elements may not always be equally contributing. For example, tools and artifacts may not transform an object into an outcome. Furthermore, the subjects, who act on the same object, may not interpret the given object in the same way because of a different status in the division of labour. In the above figure, the subjects share the same rules and conventions, being members of the same community.

These activity systems focus on how individuals act within a collective activity system across time allowing some organisational changes. Language learners participating in SNS-based forums belong to various communities and their activities are influenced by the rules set by these communities. Well's 'two subjects' concept seems to represent a SNS-based forum more accurately than Engesröm's (2001) model; however, to reflect an activity in a forum, one cannot ignore the relationship between a topic and a text. The subject in such a forum can be seen as reader and writer since each participant who is a subject in the activity system holds both of these two roles at any one time, as

Haneda (2007) has described. She extended Well's joint activity system model and incorporated topic and text in a diagram as is shown in Figure 2-5. Haneda (2007) identified the relationship between the relevance of topic to the writer and text produced and subsequently to the reader.

Figure 2-5: Model of writing in the context of activity (Source: Haneda 2007, p. 309)



However, Haneda (2007) restricted the tools and mediating artifacts to be just linguistic resources. The participants in SNS-based forums will be using a wide range of tools and mediating artifacts, such as computer equipment itself, Internet search engines and YouTube. The tools and mediating artifacts for online forums will not be limited to linguistic resources. Furthermore, the exact involvement of the topic and text are not very clear in Figure 2-5, because they have been placed outside of triangles. The rules have been replaced by genres, as Haneda (2007) found genres influenced the topic and subsequently influenced the texts. However, Engeström's view is that rules play an important role in the activity system. In any activity formed in a society, whether that is a SNS or a classroom, rules play an important role and rules will influence a participant's action and the outcome. Therefore, an activity system model cannot ignore the existence of rules. Nevertheless, the above activity system models in all combinations would be useful tools to examine interactions of language learners in a SNS.

Section 2.4 described the Activity Theory, key components of activity system and some models of activity systems that were developed to visually represent the Activity Theory. The next section presents how the previous studies lead to the present study, by highlighting the gaps that were identified in the literature presented in this chapter. It also presents Activity Theory as the theoretical framework to be used for the analysis of the present study.

2.5 Application of Theoretical Framework to the Present Study

Previous studies' foci have been on how researchers and/or teachers incorporate CMC in a class activity. These studies then examine the use of learners' language. However, we still have little understanding of language learners' metacognitive development or the learning activities as the learners participate in online discussion forums in three areas in particular. Three under-researched areas are: online discussion forums conducted in out-of-class environments; lack of assessment regime; and, diversity in the language proficiency levels. These three areas are inter-related as is explained next.

The majority of previous CMC studies observed interactions that were conducted as part of class activities. Being within a classroom context, these studies observed situations in which activities and participation were part of an assessment regime. This could present different interactions and outcomes as Spence-Brown (2007) found. Furthermore, since classes are formed on the basis of competency or age (where age is taken as a proxy for competency), these studies have not been able to consider the impact of interactions between learners of varying language proficiency. Studies on scaffolding, examining the interactions between novice and experts' out-of-class environment devoid of assessment, are thus not found in the extant literature. A study involving more diversity in the language proficiency levels of participants could present different interactions and provision of scaffolding, especially where the interactions are not assessed.

Some studies examining interactions between Japanese language learners and native speakers in CMC, including SNSs, have been reviewed above. However, studies focusing on factors that influence scaffolding amongst Japanese language learners and

native speakers are rare (see for example, Pasfield-Neofitou, 2012; Ota, 2011). A much needed study is, for instance, a study examining how experts and novice language learners can enhance the learners' linguistic skills, whilst exchanging ideas on cultural topics, using a SNS.

Because studies of SNS as a learning tool to enhance collaborative work involving native speakers and Japanese language learners were scarce, the previous CMC studies in this area were discussed in this chapter to inspire the foundation for setting up the present study.

The aim of the present study is thus to investigate the learning activities used by foreign language learners of Japanese in a SNS. The present study will investigate the following three gaps found upon reviewing the relevant literature:

1. whether a SNS is a tool to foster collaborative learning out-of-classroom environment;
2. factors that influence provision of scaffolding; and
3. differences in grouping of different levels of proficiencies

In order to conduct research designed to address the abovementioned gaps in the literature, an apt theoretical frame is required. As noted in the literature review above, a sizable body of work in related fields has deployed sociocultural theory as a suitable 'umbrella' theoretical frame. Sociocultural theory emphasises that language develops through social relationships (as described in Section 2.2) and conceptualises social interactions as being a core of language learning. As Saville-Troike (2006) notes, social context and social experience in second language learning should be recognised as important factors for successful language learning. A SNS, where social interactions and collaborations are observed, is a site built upon a community, recognising the importance of social relationships. To a certain extent, SNS also relies on a social network focusing on social relationships and interactions. In other words, as Harrison et al. (2007) described, a SNS can be best understood through Vygotsky's social constructionism. Recognising this, the present study aspires to explain the actions taken by an individual within the complexity of social interactions of SNSs, by using sociocultural theory's perspectives.

A collaborative work using a SNS as a discussion forum, where both the learners and the native speakers exchange opinions as well as helping each other to express

themselves, could be seen as providing scaffolding in the ZPD. The concept of sociocultural theory matches with a feature of SNSs where natural communication occurs in a social environment and is facilitated by dialogues, and where learning takes place.

Scaffolding in the present study is broadly defined as any assistance given to complete a task. Therefore, both soft and hard scaffolding are included in the present study. Stone (1996) recognises scaffolding as a complex set of social and semiotic dynamics, which integrates with interpersonal relations and social values. It is important to understand the situations and behaviours within a social background where scaffolding is built upon a community with each participant having a role.

Given the recognition of sociocultural theory as a foundation from which understanding can be developed, it is apparent that a more finely grained analysis would require a more detailed theoretical frame. The relationships of community, division of labour and rules, which are described in Engeström's (2001) activity system(s), are apt means of deriving that more detailed analysis since they are also reflected in a SNS. As Vonderwell (2003) discussed, understanding of students' expectations and motivation, which could be influenced by the characteristics of a community, might hold the key to the outcome of a discussion forum as well as the provision of scaffolding. This study explains how collaborative activities in a SNS might be understood by using activity system(s), because as discussed above, activity system(s) examine each constituent component that facilitates or constrains opportunities for collaborative work (activities).

The concept of contradictions is vital for understanding participants' engagement in the activities and this forms a central feature of activity system theory. Exploration of factors, such as the participants' action whether to provide or not to provide any scaffolding and the participants' input in discussion forums, provides some insightful understanding, which could enhance future collaborative activities using a SNS.

2.6 Summary

This chapter began by reviewing sociocultural theory, the main theoretical umbrella, that facilitates understanding of the extant relevant literature and it discussed the notion of scaffolding. Following this, relevant research into CMC, including SNSs, was

discussed. The findings in these studies showed some potential for SNSs as a learning tool, especially to foster a discussion forum but do not address that collaborative learning in an out-of-classroom context. An online discussion forum could enhance learners' language skills, however, there have not been enough studies conducted to understand how provision of scaffolding can be done efficaciously; in particular, the provision and taking up of scaffolding by Japanese language learners. The previous studies of CMC (for example, Meguro & Bryant, 2010; Stockwell & Harrington, 2003), where native speakers of Japanese and language learners participated in collaborative work, provided insightful information on factors that influence scaffolding in CMC. These studies also assisted to form a foundation for design of the present study.

Following a review of CMC studies, the literature on the conceptual model, Activity Theory, was introduced as a framework for the present study. Key concepts within activity system(s), such as motive, mediating artifacts, contradictions and boundaries were discussed and illustrated in relation to SNSs. The chapter concluded with the application of the theory to the present study, and with identification of the gaps in the research requiring investigation. The next chapter, Chapter 3, describes how the study was implemented.

CHAPTER 3: Methodology & Research Design

3.1 Introduction

This chapter outlines the research design, methodologies for data collection and data analysis used in the study. It begins with an outline of the research paradigm then follows a rationale for study design before presenting a description of the research site. Following that, in Section 3.5, a synopsis of the procedural framework for the study is presented. Participant descriptions are then provided before presenting an overview of the activities each participant had been asked to undertake. Lastly, the data collection and analysis methods are discussed before the chapter concludes with a summary.

3.2 Research Paradigm

The paradigm in which the present study exists is derived from the qualitative researcher's general beliefs as to how a phenomenon at the core of this research should be studied.

Qualitative research is defined as 'an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The qualitative researcher builds a complex, holistic picture, analyses words, reports detailed views of informants, and conducts the study in a natural setting' (Creswell, 1998, p. 15). Qualitative researchers stress the socially constructed nature of reality (ontology), the intimate relationship between the researcher and what is studied (epistemology), and the situational constraints that shape inquiry (methodology) (Denzin & Lincoln, 2003). The researcher's ontological, epistemological, and methodological premises are a basic set of beliefs that guide action in qualitative research, namely, a paradigm. From this perspective, the paradigm that dominates the present study as a piece of qualitative research is dependent upon an ontology (framework) that specifies the epistemology (a relationship between a researcher and the known) in its methodology (specific ways) (Denzin & Lincoln, 2003).

The present study resides within a constructivist paradigm of a qualitative study as Denzin & Lincoln (2003) suggest above. Furthermore, 'the constructivist paradigm assumes a relativist ontology (there are multiple realities), a subjectivist epistemology

(knower and respondent concrete understandings), and a naturalistic (in the natural world) set of methodological procedures' (Denzin & Lincoln, 2003, p. 35).

Qualitative research within the linguistic discipline may employ five main methods; observation, interviewing, fieldwork, discourse analysis and textural analysis (Leont'ev, 1978; Travers, 2001). Research questions and paradigms project strategies of inquiry that lead to specific methods of collecting and analysing empirical materials. In this piece of research, the first research question examines learners' opinions on the role of CMC in their language learning activities and so it requires interviewing and/or surveying learners. The other three research questions examine learner interactions within a SNS, which was established specifically for this research. The activities in which the participants engaged, are explained later in this chapter in Section 3.7. The data elicitation and the methods of analysis are also explained later in this chapter in Sections 3.8 and 3.9.

The present study is investigating how the learners' interactive collaboration occurs and what factors influence the occurrence or otherwise of scaffolding in a SNS. These exploratory research questions examine contemporary events where the relevant behaviours cannot be manipulated and so lead to a case study as a research strategy (Merriam, 1998; Yin, 2009). This is recognition of the argument that 'case study is not a methodological choice but a choice of what is to be studied' (Denzin & Lincoln, 2003, p. 134). The focus of the study is on 'the process rather than outcomes', 'context rather than a specific variable', and 'discovery rather than confirmation' (Merriam, 1998, p. 19). 'A case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident' (Yin, 2009, p. 18)

The present study provides a qualitative report on a case study, which had seven smaller groups; each group is considered as an embedded unit of analysis. In structuring the groups, five variables (gender, age, proficiency levels, level of Japanese language course at the university, and experience in Japan) were used to allocate Learners so as to control for those variables. The allocation of Learners to groups is described in this chapter.

The present study's methodology is predominantly observational in that it is seeking explanations and descriptions of what happens in a SNS in regards to scaffolding. Brown (2004) argues that observational research findings are considered to be strong, in terms of validity, because observational research allows collection of in-depth information about a particular behaviour. However, observational research also has its disadvantages in relation to external validity and reliability.

Yin (2009) described external validity or generalisability as being where the findings of a study can be generalisable beyond the immediate case study. Burns (1997, p. 383) argued that 'external validity is not of great importance' for a case study, as 'the emphasis of the case study is on the characteristics of the particular case'. This is because a case study's observational findings may only reflect a unique population; hence, it is difficult to generalise. Furthermore, the focus of a case study is in-depth understanding and not generalisation. Although the participants of the present study represented a variety of backgrounds, the participants were drawn from one institution. Therefore, they were likely to present a unique set of characteristics such that the findings of this study cannot be generalised.

'Reliability refers to the extent to which research findings can be replicated' (Merriam, 1998, p. 204). Merriam (1998, p. 205) recognised the problem of reliability in social sciences 'because human behavior is never static'. Reliability in a case study is 'more focused on dependability that the results make sense and are agreed on by all concerned' (Burns, 1997, p. 382). Having peer observations, cross judgments, or the long-term observations can strengthen reliability; however, the present study was conducted by a single researcher therefore, peer observations or cross judgments were not possible. However, in order to strengthen internal and external validity, multiple data collection methods were used involving questionnaires, interviews, surveys, tests and written logbooks. Thus, each source of data assisted in establishing a chain of evidence with more accuracy than would have been available from observing one source only, such as online interactions. The multiple data sources facilitate triangulation and so contribute to verification and validation of qualitative analysis by

- 'Checking out the consistency of findings generated by different data collection methods; and
- Checking out the consistency of different data sources within the same method' (Burns, 1997, p. 325).

These additional sources of evidence will help to reduce the impact of implicit assumptions or incorrect identification of the case resulting from any pre-assumption or subjective interpretation of strands of observations. In these additional sources of evidence, the subjects' interpretations of the interactions were sought in order to improve the research's internal validity.

In case studies, dependability has a more intense focus than does reliability, therefore Burns (1997) explains that a case study should involve triangulation and its documentation should be explicit. In this study, triangulation arose from its data collections and was implemented in its analysis with explicit explanation as provided in this chapter.

The following sections of this chapter describe the rationale for the study design, description of research site, the procedural framework, participant description and data elicitation.

3.3 Rationale for Study Design

A distinctive feature of the present study is that it has attempted to isolate the research from the institutional pressures of concurrent studies, in order to examine more authentic interactions. That is, participants in this research did not perceive it as part of the teaching-learning-assessment regime in which their formal studies are undertaken. As discussed in Chapter Two, previous relevant studies were designed within exsiting courses so their participants were assessed on their participation, which might have affected the outcomes of interactions (Pasfield-Neofitou, 2007; Spence-Brown, 2007). Also, the participants were from the same class or same year (for example, Arnold & Ducate, 2006; Fitze, 2006; Kitade, 2000, 2006, 2007, 2008; Stockwell, 2004;), which might have restricted the provision of scaffolding. In contrast, the present study is designed to examine the impact of group dynamics such as having or not having different language levels in a group. The study was designed to investigate two introductory level groups and five mixed level groups. Learners from the introductory level the advanced level were allocated evenly to the mixed level groups so that the average of Japanese proficiency across the five mixed level groups would be similar. Therefore, the level of Japanese competency should not have effected the amount of discussion.

Another aspect of competency difference, which was controlled in the present study, was that related to the teaching experience of native speaker participants. One or two Japanese native speakers were allocated to each group. Among seven native speakers, four of them were studying or had studied teaching Japanese as a foreign language in an Applied Linguistic course. The other three native speakers had little to no experience in teaching Japanese as a second language. The four native speakers with teaching experience were paired with those without and were expected to assist the latter.

The SNS for the present study was designed carefully incorporating all the matters discussed in Chapter 2 regarding previous studies of CMC. In order to observe interactions for mixed levels and for a single level of proficiencies, the volunteer participants were called from all levels of Japanese studies at University of New South Wales (hereafter, UNSW) in Sydney Australia. However, the study could not be based on naturalistic observations because the observed interactions were from the virtual learning environment, which was created by the researcher with all the volunteers from UNSW. As Brick (2011) discussed, SNSs can be utilised to present opportunities for learners to achieve greater control over their own learning activities. The following describes the choice of research site and time frame for the present study.

Many SNSs are available on the Internet with the more famous ones being those such as Facebook, Bebo, and Mixi. Amongst the currently available SNSs, the present study needed to offer a safe and secure environment that was also friendly and stable without any technical problems displaying Japanese fonts. The three major sites mentioned above were visited and tested for these requirements during the initial phases of the present study[10] in early 2009. The following sections discuss the outcomes of the tests to provide the reasons for choosing Bebo site for this study, while rejecting the others.

Mixi, used mainly in Japan, is a popular SNS for Japanese. However, the language of site management is Japanese and it requires higher level of Japanese language than beginners' level to navigate and customise the site. Thus Mixi was regarded as unsuitable for the present study where the majority of the participants were the learners of Japanese including introductory level.

[10] It is acknowledged that the use and popularity of various SNS change rapidly over time. This influences their market share and uptake rates but that consideration was not incorporated in the present study.

Reinhardt and Zander (2011) reported that Facebook is currently the world's most popular SNS with four hundred million people classified as active users. The number of active users of Facebook is increasing rapidly by day. CNET reported on January 30, 2013 that Facebook announced 1.06 billion monthly active users were recorded as of December 31, 2012. This figure showed a 25% increase in monthly users from the previous year and 57% growth in mobile monthly users (Tam, 2013). This reflects a large number of interests and users as well as the methods by which these users connected to Facebook. The strong interests to use Facebook offer both advantages and disadvantages for the present study. The advantage of using Facebook is user-friendliness and high probability that the participants are familiar with the use of Facebook. However, for the present study's purposes, Facebook would be probably the least secure site; because of its popularity many participants of the present study had a pre-existing Facebook page, which could easily be linked with the outside world regardless of its privacy setting options. Facebook contents are often reported in newspapers, and used by police and even in courts. This university based research study needed in accordance with ethics protocols, a site open only to the participants in order to protect their confidentiality.

Furthermore, the language settings of users' pages within Facebook are an individual choice. That is, one can set his/her own page in Japanese, however, that does not necessarily mean it is reflected on other participants' pages. The purpose of the present study required the pages to be uniformly seen by all participants and to be seen in Japanese. Facebook functions seemed to be limited than those of Bebo's. Thus from these viewpoints, Facebook was not chosen as the research site.

Bebo is a popular site in English speaking countries (mainly in Europe), though with significantly fewer users than Facebook (Tam, 2013; Worthen, 2010). Since it gained its following before the time when Facebook achieved world-wide dominance, the use of Bebo minimises the chance of study participants using pre-existing pages.

It is relatively easy to customise Bebo pages using varieties of SNS tools and applications, for example changing backgrounds; displaying free-hand drawings; uploading photos and videos; polls, and games. Bebo has many options where the participants can create discussion threads. This provides increased options to use different SNS tools for different discussion purposes, for example one tool can be used

for discussion about language structures, while another tool used for culturally based topic discussion.

There seemed no technical problems in Bebo during an evaluation prior to the present study in 2009. Some prior studies (Nakamura & Fukui, 2009; Pasfield-Neofitou, 2008; Pasfield-Neofitou, et al., 2009; Pasfield-Neofitou, Spence-Brown, Morofushi, & Clerehan, 2012) have used a *Bebo* site in Australia and successfully incorporated it in their Japanese teaching; therefore, the site has already proved to be stable with Japanese fonts and being used in Australia. Consequently, *Bebo* was chosen as a site for the present study for a number of reasons: ease of use; participants were less likely to have an existing *Bebo* page; display of Japanese fonts; and availabilities of various SNS tools.

The online discussion activities for the present study were conducted during Australian university holidays within the semester break. These out of normal semester times were chosen with the expectation that participants' involvement in the experiment would not be confounded by concurrent (and potentially competing) studies. It was also hoped that participants would be motivated by their desire to maintain currency in their learning of Japanese even though their formal studies were in abeyance for their end of year and the semester break. Additionally, since this research project is partly motivated by an interest in understanding out-of-classroom learning without face-to-face teaching, conduct of its experiments in non-teaching periods was calculated to provide greatest replication of conditions holding relevance to out-of-classroom learning.

3.4 Research Site

The site for the present study was given the name '*Nihongo4us'* and was created specifically for the present study within the Bebo SNS with the reasons discussed above. Like most SNS, many SNS tools were made available on the Bebo site: About Me, Timeline, Blog, Whiteboard, Photos, Video Box, Friends in Common, Friends, Quiz, Poll, Lifestream, Say Entry, and Chat[11]. Among these SNS tools, Whiteboard, Comments and Blog were suitable for posting opinions, as these SNS tools allowed for building up discussion and collaborative work. For *Nihongo4us*, participants used the following SNS tools set by the researcher with the specific purposes shown in Table 3-1. However, the use of some SNS tools below was left up to each participant's choice. The

[11] The 'Chat' function was not used for this research because within the Bebo Social Network Site it does not keep records of the chat communications.

SNS tools commonly used by all the participants are marked with an asterisk (*). A sample of the *Nihongo4us* site pages is shown in Appendix 1; an example of the *Nihongo4us* profile pages is reproduced below[12] in order to show the various SNS tools (Figure 3-1) used in the study and referred to frequently in Chapters 5 and 6. The numbers used in the first column of Table 3-1 correspond to the superimposed numbers shown in Figure 3-1 in order to illustrate the tools used at the *Nihongo4us* site.

Table 3-1: SNS tools used at the *Nihongo4us* site and their purpose

Tools		Purposes used for the *Nihongo4us* Session
1	About Me*	To post a self-introduction and individual profile
2	Say Entry	To post an announcement.
3	Comments*	To post opinions about the discussion forum posted at the Whiteboard.
4	Timeline	To post events in a calendar format, for example when the participant should take the lead for a discussion is shown here.
5	Whiteboard*	To post a leading discussion question for the discussion forum.
6	Quiz	To post sets of quiz questions.
7	Photos	To post any photos to share with the group.
8	Poll	To take votes on a matter, for example whether to close the discussion forum during Christmas/New Year holiday.
9	Video	To post any video clips to share with the group and to enhance their discussion forum
10	Blog*	To post corrections or comments on other members' Japanese.
11	Lifestream	To show a summary of most recent postings on one's page.

[12] Where pictures and/or participants' names appeared on *Nihongo4us* site extracts in this thesis, they have been obscured or nom de plume names and other pictures are used in order to protect the participants' identities in accordance with Ethics approval for the study (refer Appendix 2).

Figure 3-1: Examples of ‘Profile Pages’ at the *Nihongo4us* site

3.5 The Summary of Timeline

The following schematic in Figure 3-2 is a summary of the activities that took place for the present study. The present study is divided into three sessions: Pre-session; *Nihongo4us* Session; and Post-session. Pre-session was conducted prior to signing up at the Bebo site as a pre-requisite before joining the *Nihongo4us* site. The Post-session was conducted after closing the *Nihongo4us* site.

Figure 3-2: Session timetable

Pre-session	October & November	• Call for volunteers • Orientation for all participants • Questionnaire (see Appendix 3) • Meeting with native speakers • Interview (see Appendix 4) • Signing Consent form • SPOT: Japanese proficiency test • Delivered Handbook

↓

Nihongo4us Session	Set up Stage end of November to early December[13]	• Log in to Bebo: *Nihongo4us* site • Link with each participant • Set up their own page (Appendix 1) • Upload their self-introduction • Post comments on other members' self-introduction • Nominate a week to be a discussion leader

↓

Nihongo4us Session	Weekly Activities early December to end of February	• Post a discussion topic when being a leader • Contribute to the discussion and make suggestions • Complete weekly reflective logbook (see Appendix 5)

↓

Post-session	February and May	• Survey (see Appendix 6) • Interview (see Appendix 7) • SPOT: Japanese Proficiency Test

[13] The *Nihongo4us* site was open to all the participants on 23 November 2009 and each participant accessed and linked with each other. The individual participants' starting dates were different and the starting dates for the first discussion also differed among the groups.

Data were collected during the university holiday from the end of November to the middle of February (a 13 week period). The participants used *Nihongo4us* to freely discuss topics in Japanese and the consequential data gatherings are explained later in Sections 3.8 and 3.9.

3.6 Participants

Participants for the present study were all volunteers and either current students or graduates from the UNSW: 65 Japanese language learners (Learners) and seven native speakers. These 72 participants were divided into seven groups – two groups at an introductory level (IG#1 and IG#2) and five groups at a mixed level in Japanese proficiency (MG#1 - MG#5). Each group was allocated one or two native speakers[14]. This section aims to provide sufficient detail on the participants (Learners and native speakers) so as to place in context the observations of interactions in their use of *Nihongo4us*. The recruitment of the participants, the detailed backgrounds of the participants and grouping of those participants are discussed in this section.

3.6.1 Participants Recruitment

In order to gather the participants for the present study, a call for volunteers was advertised during regular classes at all levels of Japanese studies at UNSW. To gather the native speakers of Japanese, UNSW International Student Services sent an email to UNSW international students advertising a call for volunteers. No limitations were placed in terms of the number of volunteers, age, background or their abilities in learners' Japanese language or computer skills. However, if the Learners decided to volunteer in the present study, a requirement was that they participate in the orientation and initial interview session[15]. A small financial incentive was promised to those who completed their participation in this research. Participants were promised a $20 book

[14] The researcher is a native speaker but in this study she was not a participant but an observer therefore she was not included in the number of participants (nor in the native speakers). As an observer, the researcher did not make any post in relation to the Learners' language. However, the researcher made posts limited to one or two posts per discussion topic. The researcher composed the post carefully so that the post would not be considered as scaffolding. In the data analysis, the researcher's posts were excluded.
[15] Native speakers were also encouraged to attend the orientation to meet the Learners, however, one native speaker could not attend on the day with his misadventure. Therefore he was interviewed and briefed over the phone.

voucher upon completion of *Nihongo4us*. This had School and University Ethics Committee's approval[16] and is a common practice at the university.

3.6.2 Background of the Learners

The nationalities of the participating Learners varied so did their length of prior study of Japanese (each Learner's background is detailed in Appendix 8). 14 Learners were born in Australia and 51 Learners were born outside of Australia. Of these 51, 16 were from the People's Republic of China and 14 were from Hong Kong. Thus, the majority of Learners were ethnically Chinese but the range of nationalities and cultures represented in the study was quite wide, as is summarised in Table 3-2 below. In total there were Learners from 14 different nations participating in the study.

Table 3-2: Learners' nationality

Nationality	No. of Learners	Nationality	No. of Learners
Chinese	16	Taiwanese	3
Australian	14	Malaysian	2
Hong Kong	14	Filipino	1
Japanese[17]	3	Indian	1
Korean	3	Vietnamese	1
Singaporean	3	Kuwaiti	1
Indonesian	2	Italian	1

That the majority of the Learners were born outside of Australia is not an uncommon phenomenon in Australia. According to the latest available census data (2006) (Australian Bureau of Statistics, 2011), 46% of Sydney's population is born outside of Australia. Within this demographic context, UNSW records (unpublished internal statistics) showed that a relatively high percentage of students born outside of Australia studied Japanese. Specifically, in 2009, while 32% of students enrolled in UNSW's School of Languages and Linguistics were born outside of Australia, the figure leaped to 65% for those enrolled in Japanese Studies. Though they come from among this

[16] Prior to commencing the study, human ethics approval was sought from, and granted by, the UNSW Human Research Ethics Committee (refer Appendix 2), and formal permission to recruit learners and native speakers and to implement the study at the institution was obtained. In the present study, following the UNSW's Ethics Committee's privacy rules, nom de plume names are used instead of the participants' real names.

[17] The three Japanese Learners were Japanese citizens but had grown up outside Japan in households where Japanese was not the first spoken language; consequently they were students of Japanese language at the time of the study. However, two of these Learners were heritage Learners as they had some exposure to Japanese at home. The term 'heritage learner' is described in the Glossary.

cohort, it is notable that 76% of the Learners who participated in the present study were born outside of Australia – slightly higher than the general population of students in Japanese Studies. This meant that the present study gathered more Learners who were born outside of Australia and that the majority of the Learners were also speaking a language other than English at home (51 Learners out of 65). Thirty-eight of those were Chinese speakers. Twenty-eight of these Chinese speakers did not use English at all at home, while 28 out of 65 Learners used both their parents' mother tongue and English at home. Among the Learners, there were three heritage background learners, who had one or both parents being Japanese.

The length of formal study of Japanese ranged from one year to ten years. Twenty-five Learners had studied Japanese prior to the university. Twenty-nine Learners were overseas students who have spent on average of three years in Australia (ranging six months to ten years) at the time of participating in *Nihongo4us*. Forty-three Learners (66%) have experienced time in Japan either traveling or studying. Some spent only a week, while others stayed for a longer period up to a year on an exchange program.

Learners' age ranged from 18 to 50 and the average age of each group was in low 20s. Three mature aged students aged above 30 were born outside of Australia.

3.6.3 Background of Native Speakers

Seven native speakers (three males and four females) participated in the study. They were all born in Japan with both parents being Japanese nationals and six of them grew up and received undergraduate education in Japan.

Four native speakers were enrolled in the Master of Applied Linguistics at UNSW (refer Table 3-3), specialising in teaching Japanese as a foreign language and teaching Japanese as a tutor at UNSW. Another two native speakers also had some tutoring experience outside of UNSW's Japanese course. One native speaker did not have any formal tutoring experience.

Three native speakers, who preferred to work with another native speaker, were paired with others, who had more experience in teaching Japanese as a foreign language (refer Table 3-4). The experienced native speaker, who was assigned to the second group, was considered as a partner and how they worked together was left up to the individuals

involved. Two native speakers, who wished to work alone (Kubota and Fujii), were given a group of their own (refer Table 3-4).

Table 3-3: Background of native speakers and group(s) allocated

Group	Names	Gender	Age	Year at UNSW	Course studied at UNSW	Place of birth and early childhood
IG#1 (MG#1)	Suzuki	Male	33	3	Master of Applied Linguistics	Tokyo
IG#2 (MG#2)	Takahashi	Female	22	1	Master of Applied Linguistics	Shiga
MG#1	Nakamura	Female	39	2	BA Social Work	Tokyo
MG#2	Hayashi	Male	33	2	PhD Politics	Tokyo
MG#3	Kubota	Female	NA	1	Master of Applied Linguistics	Tokyo
MG#4	Fujii	Male	25	6	Bachelors of Engineering and Science	Chiba
MG#5 (IG#2)	Nakagawa	Female	34	2	Master of Applied Linguistics	Chiba

Table 3-4: Group allocation

Group	Main Native Speaker	Partner Native Speaker
IG#1	Suzuki	
IG#2	Takahashi	Nakagawa
MG#1	Nakamura	Suzuki
MG#2	Hayashi	Takahashi
MG#3	Kubota	
MG#4	Fujii	
MG#5	Nakagawa	

The details of the native speakers together with their assigned group are as follows:

Suzuki

Suzuki (33 years old) had completed his Master of Applied Linguistics at UNSW just before participating in *Nihongo4u*s. During his study, he had worked as a tutor assisting UNSW first year Japanese classes. Because of his experience as a tutor, he was assigned to one of the introductory level groups

(IG#1) as well as assisting Nakamura (the native speaker for MG#1), who did not have teaching experience in Australia.

Takahashi

Takahashi (22 years old) had come to Australia four months prior to *Nihongo4us*, to study for a Master of Applied Linguistics at UNSW. She had participated in a study abroad program as part of her undergraduate study and had studied in the USA for a year.

She was assigned to the second introductory level group (IG#2) but also to assist Hayashi (the native speaker for MG#5; one of the mixed level groups). Having two groups to monitor and being a new arrival to Australia, Nakagawa was paired to assist Takahashi monitoring IG#2 if need be. As the session progressed, Nakagawa was quite busy with her own group, and Takahashi felt that she was comfortable enough to manage IG#2 herself, so they mutually agreed that Takahashi would manage IG#2 herself and she would keep a minor role of monitoring MG#2.

Nakamura

Nakamura (39 years old) came to UNSW to study for a Bachelor of Arts, Social Work. She was born and grew up in Tokyo, Japan, and had migrated to Canada some years ago. Although she had worked in the Japanese advisory section in the Department of Education in Canada, she had no teaching experience in Australia. Therefore, Suzuki was paired with Nakamura and assigned one of the mixed level groups (MG#1).

Hayashi

Hayashi (33 years old) was in the third year of his PhD program at UNSW and was living in Canberra. He was unable to physically attend the orientation as he had misadventure on the day but participated by phone. Therefore, he had no face-to-face contact with the participants. As Hayashi had no teaching experience, Takahashi was paired to monitor the mixed level group (MG#2) with him.

Kubota

Kubota (age not available) had completed the first year of her Master of Applied Linguistics program at UNSW. She came to Australia three years prior to participating in *Nihongo4us* and had been studying the teaching of foreign languages at another university. She had some teaching experience including teaching Japanese as a foreign language to students ranging from school age to university age. She was assigned to the mixed level group (MG#3).

Fujii

Fujii (25 years old) came to Australia at the age of four, and was educated in Australia. He was brought up as a bilingual speaker attending Japanese language school on the weekend, whilst attending local Australian schools. He also had work experience in Japan for a year. He had just completed his Bachelor of Engineering and Science. He had no formal teaching experience but had previously helped his fellow UNSW students studying Japanese. He was assigned to the mixed level group (MG#4).

Nakagawa

Nakagawa (34 years old) had completed her Master of Applied Linguistics at UNSW just before *Nihongo4us*. During her study, she had worked as a tutor assisting UNSW first year Japanese classes. She was assigned to the mixed level group (MG#5) and also to assist Takahashi (IG#2) if need be.

3.6.4 Grouping of Participants

Seventy-two participants (65 Learners and seven native speakers) were divided into seven groups as described in the beginning of Section 3.6. This section identifies the distribution of gender and proficiency level of the participants (Table 3-5 and 3-6) and group configuration (Table 3-7).

Table 3-5: Distribution of gender and Japanese language courses

	Native Speakers	Japanese Language Learners (Learners)					
		Sub-total	Japanese Language Courses at UNSW				
			Not yet enrolled	1st year	2nd year	3rd year	4th year and above
Male	3	20	1	7	1	8	3
Female	4	45	1	19	9	12	4
Total	7	65	2	26	10	20	7

Table 3-6: Comparisons of proficiency levels

	Introductory Level		Intermediate Level		Advance Level
Japanese Course level at University of New South Wales (UNSW, *782)	1st year	2nd year	3rd year	4th year	4th year and above
Japanese Language Proficiency Test (JLPT)	↑ N5	↑ N4	↑ N3	↑ N2	

At the completion of 1st Year course at UNSW, it is expected that most students reach Level N5[18] of the Japanese Language Proficiency Test (JLPT) administered by the Ministry of Education through the Japan Educational Exchanges and Services (JESS) and Japan Foundation (The Japan Foundation & The Japan Educational Exchanges and Services, p. 2010), although the UNSW courses do not follow the curriculum set by the test. Most students, who take the JLPT at the end of 4th year or higher level for the purpose of seeking a job that might require higher levels of Japanese, take N2.

[18] JLPT was established in 1984. The four level structure of JLPT was reviewed in 2009 and consequently revised and a new level was introduced in 2010, so that examiners can select a more suitable level. Some of the participants for the present study had sat for the old JLPT in 2009. However, to gain a general understanding of the participants' proficiency levels in a simple way, the present study used the current structures of JLPT: N1 level to N5 level (N1 being the most advanced level). www.jlpt.jp/e/reference/pdf/powerpoinslides_e.ppt.

Table 3-7: Configuration of each group in the session

Group	No. of Learners	No. of Native Speakers	Male	Female	Average of SPOT (/60)	Japanese language courses				
						Not yet* enrolled	1st year	2nd year	3rd year	4th year and above
IG#1	11	1	3	9	37	0	11			
IG#2	11	2**	2	11	40	1	10			
MG#1	9	2**	5	6	50	1	1	2	4	1
MG#2	9	2**	4	7	53	0	1	2	4	2
MG#3	8	1	3	6	51	0	1	2	4	1
MG#4	9	1	4	6	54	0	1	2	4	2
MG#5	8	1	3	6	54	0	1	1	5	1
Total	65	7	24	51	49	2	26	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 present study.
** The second native speaker was assigned to assist the first native speaker (refer to Section 3.6.3)

Table 3-7 shows that member characteristics in terms of gender, language competencies, and number of participants were evenly distributed in the two categories of groups (Introductory and Mixed). Furthermore, using the information obtained from the questionnaires and the pre-session interviews along with SPOT[19] scores and university course levels, Learners were carefully allocated to groups, as demonstrated above, to achieve balance in gender, proficiency levels and prior social interactions between the participants, since these elements were identified in previous studies as being factors influencing results. For instance, each participant had the opportunity to advise the researcher whether they were comfortable to engage in discussion with a non-acquaintance or preferred to be placed with friends. As previous CMC studies found, participants who knew each other showed mutual support and were more likely to provide scaffolding (Arnold & Ducate, 2006; Lee, 2009).

[19] The Simplified Proficiency Oriented Test (SPOT) (Kobayashi, Ford, & Yamamoto, 1996) was administered to determine each Learner's Japanese proficiency level. Use of SPOT is discussed in Section 3.7 and 3.8.

There were three groups (one introductory level and two mixed level groups) where two native speakers were allocated. In relation to the third research question: what factors influence provision and take-up of scaffolding, this allowed the study to observe:

- whether there were any differences in having two native speakers to a group; and
- whether there were any differences among a group with a native speaker with teaching experience.

3.7 Activities Undertaken

The procedures of the present study are described in three stages: prior to the *Nihongo4us* Session; during the *Nihongo4us* Session; and post-session. The detailed descriptions of activities involved in each stage are discussed in this section.

3.7.1 Activities Prior to the Nihongo4us Session

A face-to-face orientation was conducted prior to commencement of the *Nihongo4us* Session at the end of November. This orientation had a number of objectives for the present study. During this orientation, all the participants (native speakers and the Learners) were briefed about the nature of this research and what they were expected to do. Each participant completed a questionnaire [20] (Appendix 3) compiled and administered by the researcher.

The orientation's main focus was to provide guidance to all participants. This guidance provided information that would be needed for the successful implementation of an out-of-classroom program to a group of participants. Important in this guidance was information on the respective roles of the participants' (as a learner, as a native speaker, as a provider of scaffolding and as a moderator), the operation of *Nihongo4us* and appropriate communications etiquette to be observed by all participants. As a complement to the briefing provided at the orientation, a handbook describing the nature of the present study, general rules, expectations, how to join the site, activities, schedules, description of the weekly reflective logbook (Appendix 5) and the researcher's contact details was distributed to each participant via email prior to starting the *Nihongo4us* Session.

[20] The questionnaire was adapted to the purposes of this study from an instrument developed by Yashima (2002).

However, two hours orientation program could not be executed exactly according to the plan, due to problems with a pre-booked university room, as the result that available time was less than an hour. The computers in the room were also not functioning, therefore, the participants were not able to see the *Nihongo4us* site and learn how to use each of the tools at first hand during the orientation.

Participants had an opportunity to meet one another to get to know each other. However, this session was also forced to be very brief. Nevertheless, the time the participants spent together probably acted as an 'icebreaker' when they started to communicate online. Lee (2009) found in her study that a face-to-face meeting prior to ACMC usage promoted more collaborative interaction and increased students' stimulation and personal and emotional connection to each other. It would have been desirable to reschedule the orientation, however, for all 72 participants to meet again was not possible. Instead of rescheduling the orientation, part of an hour of scheduled semi-structured interview time was used to brief about the present study and the *Nihongo4us* site.

During the interview, the participants were also given time to ask any questions they had regarding the activities and this study, and further details about the participants were also obtained, including what they wished to gain from the three month *Nihongo4us* Session. Each native speaker was interviewed individually and the researcher explained the role of a native speaker as a facilitator of assigned group. The Learners stated that their aim was to practice Japanese by participating in the discussion forums. As much as the Learners were responsible for contributing to a smooth running of the *Nihonggo4us*, the native speakers were the facilitators of their groups. The Learners were encouraged to provide scaffolding, especially correcting each other's mistakes where possible. The native speakers were also encouraged to participate and help the Learners to practice and learn Japanese by making corrections as much as possible. These roles of participants were explained to all the participants at the interview.

These interviews were audio-recorded using a digital recorder, whilst the researcher took notes; both the recording and note taking were conducted with the consent of participants. The SPOT (Kobayashi, et al., 1996) was also administered during the

interview to determine each Learner's Japanese proficiency level. A post-participation SPOT was also administered at the end of *Nihongo4us* Session.

Defining and measuring language proficiency is always controversial; however, the SPOT has the advantage of being a widely used and readily available measure of proficiency. Students are required to identify a single phonetic letter to complete a sentence by listening to a recorded audio at a natural speaking speed. Kobayashi et al. (1996) claim that in order to correctly complete the SPOT tasks, students must use their listening, reading, and writing skills. SPOT takes about 15 minutes to administer and it is available for researchers to use free of charge[21]. Alternative test instruments, such as The American Council on The Teaching of Foreign Languages (ACTFLE) Oral Proficiency Interview (OPI) (Makino, 1991) and the Japanese Language Proficiency Test (JLPT) administered by the Japanese Government, are time consuming to administer and financially unviable for the present study. The SPOT data, both pre- and post-session, were important input to this research. The SPOT results were used as one indicator for group selection as well as to show any change in each participant's Japanese proficiency.

The questionnaire (Appendix 3), administered during the orientation, elicited data in two areas. Part one covered the Learners' personal information such as their country of origin; native language; language spoken at home; length of study in Japanese; study program at UNSW; and, experience of visits to Japan. Part two, in four sections of the questionnaire asked about Learners' motivation towards studying Japanese and their study habits; reasons for studying Japanese; their attitude towards Japanese and global issues; and their use of various media in their study of Japanese outside their formal classes.

Questionnaires are a time efficient means for collecting a relatively large amount of information that could be processed relatively easily and quickly. However, the disadvantages of questionnaires are that respondents may omit or misunderstand questions and that they may misrepresent themselves. In order to avoid misunderstanding and misrepresentation, the abovementioned semi-structured interviews assisted in further understanding the characteristics of each participant.

[21] Researchers need to receive approval to use it from the creators of the SPOT.

In addition to the abovementioned orientation and the interview, the native speakers had a casual meeting to acquaint each other and to be briefed again on their roles as well as to clarify any questions they might have had regarding their roles and tasks for the study. Their roles were facilitators or moderator at times when required and to provide scaffolding. A separate handout for native speakers, illustrating the role of native speakers especially during the set up stage, was also prepared and distributed at this meeting. As de Laat, Lally, Simons and Wenger (2006) suggested, another SNS (called the helpline *Nihongo4us*), where the native speakers could discuss any issues related to *Nihongo4us*, was created. The aim of this site was to assist native speakers by providing a forum where they could help each other. A copy of the handbook and information about the Learners (names, their Japanese language level and email addresses) were also emailed to each of the native speakers.

3.7.2 Activities During the Nihongo4us Session

During the first few weeks, each participant set up their own home page (Appendix 1) as their first activity. The layout of each participant's home page was intended to follow the same format. The participants were able to use various tools available at *Nihongo4us*; however, in order to avoid any confusion, the participants were encouraged to arrange the common core tools as shown in Figure 3-1 (in Section 3.3). Participants familiarised themselves with the various tools on the site and posted their self-introduction. They uploaded an ID-photo of their own choice.

The next set task, after they organised their homepage and uploaded their self-introduction, was to read each other's self-introduction and make comments in the 'Comments' section. This task had two main objectives: for each participant to become acquainted with the others; and for each participant to further familiarise themselves with the various tools.

If participants found any misused words, *Kanji* in a fellow participants' post or anything about which they were not sure, they were asked to post suggestions/questions in the 'Blog' section. Blog section was used for this purpose in order to distinguish these posts from posts made for discussion forums.

Organisation of the discussion forums involved each Learner to nominate a week to be a discussion leader. Being discussion leaders meant that they were responsible for choosing a topic to discuss, starting a discussion thread, and facilitating the discussion forum in that nominated week. This approach had three purposes. One was to make the topic interesting to participants by letting them chose a topic. As some previous studies found, topic content could influence the online interactions. A topic chosen by the participants might attract more discussion threads than topics chosen by a researcher or from a textbook. The other purposes were to assure every Learner's involvement in the discussion forums and to distribute the role of facilitator evenly within a group, rather than relying on a native speaker. Details of schedules for participants' activities and time line were described in the handbook.

The Learners kept a weekly reflective logbook (hereafter, logbook) to reflect on their learning and experience of the *Nihongo4us* Session. The pro-forma copy of a logbook with its ten questions that prompted Learner responses was distributed to the Learners (refer to Appendix 5). The logbook entry was sent to the researcher via email at the end of each week. The logbook entry was used by the Learners for their self-evaluation and reflection on their learning, which was found to be useful by some previous studies. For example, Lee (2009) argued this was an important process for language learning in order to foster learners' autonomy. Furstenberg and Levet (2010) also found the learners' logbook provided valuable sources of information to assess their abilities as well as to evaluate their engagement with activities. Mahn (2008) found that keeping a journal increased the frequency of posts and also the journal provided access to the learner's inner speech. With a clear goal and an opportunity to reflect on their learning, students can be provided with important practice in learning languages, leading to higher motivation and review of the student's own learning process (Lee, 2009).

The logbook entries were utilised in several ways by keeping records 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 source of data for qualitatively analysis. The logbook entries were also later used during the post-session interviews for any clarification and further discussion to understand participant's perceptions.

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

3.7.3 Activities at Post-session

A survey[22] and a post-session interview were conducted. The survey was emailed to all the participants and completed surveys were also returned by email. The post-session interview was necessary to seek further insights into their thoughts on their experience with *Nihongo4us*. However, not all the participants, who completed the *Nihongo4us* Session, were able to return the survey or attend the post-session interview. The only method available for the researcher to communicate with the Learners was via email; this proved to have its limitations. By the end of the *Nihongo4us* Session, when the survey and a call for post-session interview was posted, a number of Learners did not reply. Possible reasons for this can be that some Learners had graduated, discontinued or completed their Japanese studies, or simply lost their interest in this activity.

An hour interview was scheduled for each of the willing participants at the university and at their convenience. It had three stages: post-session SPOT test; semi-structured interview; and, reflection on the participants' comments on *Nihongo4us*. The post-interview session had a number of purposes:

- to clarify any ambiguous communication that had occurred during the session;
- to investigate whether any participants had changed their learning styles;
- to identify any impact on the participants after participating in *Nihongo4us*; and,
- to examine any changes in participants' language competency level

Next section summaries data elicited from these activities conducted in three stages for the analysis of this study.

[22] The survey instrument (Appendix 6) was adapted to the purposes of this study from an instrument used by Arnold and Ducate (2006).

3.8 Data Elicitation

Data for the present 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. In particular, the present study aimed to collect data that was capable of extracting from participants:

- pre- and post-study attitudes;
- pre- and post-study Japanese language competencies; and,
- learning interactions during the study

Table 3-8 provides an overview of the study's data sources and the timing of data collection.

Table 3-8: Overview of data sources

The Pre-session:	Pre-session interview[23] (Appendix 4)
	Questionnaire (Appendix 3)
	SPOT
The *Nihongo4us* Session:	Weekly reflective logbook entries (Appendix 5)
	Online discourses
The post-session:	Survey (Appendix 6)
	Post-session interview[24] (Appendix 7)
	SPOT

The pre-session provided three sets of data for the present study: questionnaire results, interview data and SPOT results. Collectively, these provide an understanding of participants' backgrounds prior to participating in *Nihongo4us*. These data assisted in distributing the Learners to groups as described in Section 3.6.4. These data also assisted in understanding of the Learners' prior habits and thoughts on use of CMC, allowing the data to be compared with the Learners' thoughts at the post-session.

During the *Nihongo4us* Session, each participant's logbook entries made on *Nihongo4us* were collected for data analysis. Collectively, these logbook entries constituted a journal for each participant over the length of the *Nihongo4us* Session.

[23] Pre-session interviews were conducted on 19th – 23rd October; 12th-13th November; 16th -17th November 2009.
[24] Post-session interviews were conducted 24th-26th 29th, and 30th March 2010.

This assisted in qualitative data analysis with a range of aspects that were related to the research questions.

All discussion entries made at the site by each participant were electronically saved as well as printed for data analysis, with one exception relating to one discussion for one group. There was one technical problem where the threads of the first discussion held in MG#5 were removed from the Bebo server and could not be retrieved. The participants and the researcher were not aware that the section they had used to post their opinions was not the designated place ('Lifestream') for the discussion forum and when the maximum number of postings was made in that section, the postings were removed automatically. Therefore, the number of postings made by MG#5 in this thesis only reflects what the researcher was able to retrieve from the site and subsequently save.

At the end of the *Nihongo4us* Session, a survey was distributed electronically and the resultant data was analysed. A post-session interview and SPOT test were also conducted and used as data sources. The interview was semi-structured in order to allow further discussion of comments made in the survey and logbook entries; this assisted in the development of more accurate understandings of the Learners' opinions and thoughts arising from participation in *Nihongo4us*. As Neustupný (1990) demonstrated, follow-up interview data is valuable for any qualitative research. In the present study, the value lies in that data providing vital clues to understanding the participant's learning activities and how they provided/accepted scaffoldings.

3.9 Methods for Data Analysis

The data analysis for the present study consisted of three stages. Firstly, the pre-session questionnaire and the post-session survey data together with information acquired at the interviews were analysed to understand Learners' opinions about the role of a CMC tool in general in their language learning activities. Secondly, scaffoldings posted in the *Nihongo4us* Session were identified and categorised. Thirdly and lastly, all the data (questionnaire, online data, interviews, logbook entries, SPOT results, and survey elicited as described in this chapter) were examined together in details in order to analyse how the scaffoldings were provided and how the discussion forums in each group at the *Nihongo4us* site developed in light of Activity Theory discussed in the

literature review. The details of analysis will unfold as the data is presented in the following chapters.

3.10 Summary

This chapter has outlined the study's research design by firstly discussing the research paradigm guiding the study. Secondly the choice of SNS research site and *Nihongo4us* was described. Following this, the background information of the participants and the activities conducted in this study in three stages were described. This demonstrated the use of multiple sources of data collection methods allowing a researcher to triangulate interpretations, which improve the reliability and validity of the data and findings (Burns, 1997; Yin, 2009).

The next three chapters describe the findings of this study.

CHAPTER 4: Learners' Opinions on CMC

4.1 Introduction

Following form the previous chapter, in which the methods of this study and data elicitation were described, this chapter describes the findings of the study in relation to the Learners' opinions on CMC. This chapter examines the first research question: how do learners perceive the role of CMC as a tool in their language learning activities? In particular, it aims to understand how Learners' views of CMC, as out-of-classroom language aids, have been affected by their experience of use of CMC. Thus the chapter discusses the findings based on data gathered in three stages: before, during, and after the Learners' experience of the *Nihong4us* Session as described in Chapter 3.

Prime sources of data for seeking answers to the first research question are the questionnaire, pre- and post-session interviews, the logbook and the survey. The questionnaire focused on how the Learners used CMC prior to participating in *Nihongo4us*, while the logbook focused on their thoughts about the *Nihongo4us* Session. This will move the focus from CMC to a more narrow focus on the SNS, *Nihongo4us*, in order to understand the Learners' opinions about the activities presented at the *Nihongo4us* site. The survey results focused on *Nihongo4us* as a whole and reflected on the activities therein. This chapter describes findings based on analysis of these data sets and discusses Learners' thoughts of CMC and *Nihongo4us*[25].

This chapter firstly describes the Learners' opinions prior to participating in *Nihongo4us.* This will present the overview of the Learners' views on CMC and how they had been using CMC in their language study so far. Secondly, the results of SPOT proficiency tests are presented to discuss any changes in Learners' performances against their participations in *Nihongo4us*. Following this, a discussion of Learners' opinions on *Nihongo4us* is presented in two parts, Learners' positive and negative feedback, in order to understand their opinions of the role of *Nihongo4us* as a language learning tool. Lastly, this chapter presents a summary of findings regarding the Learners' opinions on CMC and *Nihongo4us* as a language tool.

[25] The quotes from the Learners' logbook entries and comments in the survey are presented without modification in the thesis.

4.2 Choice of Out-of-class Activities

Learners' exposure to Japanese language and culture are no longer limited to the classrooms or the society in which they physically live, but is extended to various sites and forums on the Internet. The questionnaire and pre-session interviews revealed that the Learners were utilising various media to enhance their Japanese competency outside of the classroom. The Learners' frequency of use of each media is summarised in Table 4-1. A six-point Likert scale from 'never' (0) to 'everyday' (5) was employed.

Table 4-1: The Learners' prior use of each media for Japanese Study (N=65)

Media\ Frequency	Everyday	Often[26]	Sometimes	Seldom	Thinking about it	Never	Average[27]
	5	4	3	2	1	0	
Games	2 3%[28]	10 15%	13 20%	14 21%	13 20%	13 20%	2.0
Movies (including DVD/TV drama/*Anime)*	21 32%	20 30%	15 23%	9 13%	0	0	3.8
Music	29 44%	17 26%	12 18%	6 9%	1 1%	0	4.0
Books/ Magazines/ Newspapers/ *Manga* and other written media	9 13%	4 6%	26 40%	18 27%	6 9%	1 1%	2.7
Email/Chat/ Mobile Text/ SMS	2 3%	5 7%	18 27%	18 27%	8 12%	14 21%	1.9
Computer based learning tools, online dictionary etc	18 27%	18 27%	17 26%	9 13%	1 1%	2 3%	3.5
Participate in CMC sites, blogs, SNSs etc	13 20%	8 12%	9 13%	16 24%	8 12%	11 16%	2.5
Use Internet other than above	10 15%	8 12%	13 20%	4 6%	8 12%	22 33%	2.1

As Table 4-1 shows, 21% of Learners had not used Internet based communication, such as email and chat for the purpose of learning Japanese outside of their classes. Only 3% used some form of Internet based Japanese communication everyday while 7% did so a few times a week. Overall, Table 4-1 shows little use of Internet based communication outside of classes for enhancement of Learners' Japanese language proficiency. The most frequently used media was music, averaging 4.0; i.e. 'often'. The second most frequently used activity was watching DVD, TV drama and *Anime*, averaging 3.8; close to 'often'. This was followed by computer based learning tools, such as an online

[26] 'Often' indicates 3-4 times a week, 'Sometimes' indicates once or twice a week, 'Seldom' indicates once or twice a month

[27] Average indicates the average frequency of use. 'Thinking about it' refers to an absence of prior use but a positive feeling towards possible use of the tool. In calculating the average frequencies of use, 'Thinking about it' has been given a weight of 1 and 'Never' a weight of 0.

[28] All the percentages in the thesis is calculated and presented as the rounded down number.

dictionary, average of 3.5, being between ‘sometimes’ and ‘often’. All Learners used the Internet to watch TV dramas, *Anime* and Japanese movies (also in DVD format) to varying degrees.

Almost all Learners used movies and music to varying degrees of intensity with the intention of enhancing their language abilities; this contrasts with the results of a larger survey conducted by (Northwood & Thomson, 2012). They administered a questionnaire to Japanese language learners at four universities in Sydney, Australia, and found that the learners watched Japanese DVDs and listened to J-pop more frequently than they undertook other productive activities (such as writing emails to Japanese friends or seeing a teacher about Japanese study). Some of them did so for pure entertainment purposes and not necessarily as a part of their language learning. Northwood and Thomson’s (2012) participants came from a larger pool of students, while the present study only surveyed those who volunteered to engage in an online learning project. This voluntary nature might be the reason why the Learners in the present study seemed to recognise use of the abovementioned tools as being part of language learning.

Jacob in his first year[29] of Japanese Studies, who participated in the present study, commented that he was not an active participant on Facebook although he regularly checked it. On the other hand, he said he loved *Anime* and watched them on the Internet every day. He commented that if the Internet were gone, he would ‘not know what to do’ (Jacob, pre-interview). Hannah, in her third year of Japanese Studies, commented that she watched Japanese TV drama regularly and she would like to ask a native speaker about some of the words used in the drama that she could not understand (Hannah, pre-interview). Victoria, in her fourth year of Japanese Studies, commented that she regularly visited a few Japanese sites related to pop culture and listened to Japanese music over the Internet everyday (Victoria, pre-interview).

The Learners who accessed Japanese media made a conscious decision to choose Japanese audio and/or Japanese subtitles so that they could hear Japanese native speakers and also practice reading Japanese. For example, Danielle in her second year of Japanese Studies, would watch *Anime* and TV dramas with audio in Japanese and

[29] ‘First year’ means a Learner had just completed their first year of Japanese Studies at UNSW at the time of this research.

subtitle in Chinese, while listening to J-pop music in Japanese (Danielle, pre-session interview). Isabelle in her second year of Japanese Studies would watch TV dramas and other TV shows in Japanese audio and subtitle in Chinese or English, while Jack in his fifth year of Japanese Studies would have both audio and subtitle in Japanese (Isabelle, pre-session interview; Jack, pre-session interview). These Learners' choices of audio and subtitle would depend on their proficiency level in Japanese. Similarly, many of them would choose *Anime*, TV dramas or variety shows rather than *Manga*. The Learners made these choices, because *Manga* on Internet[30] that the Learners had access to was often written in English and not in Japanese. As a result of using such resources as online *Anime*, TV dramas and *Manga*, some Learners do learn new words and expressions including Japanese characters (*Kanji*) therefore, the Learners recognise these online activities as learning opportunities.

Pasfield-Neofitou (2012) also found that the choice of CMC tools had direct impacts on students' motivation, and that the students in her study had been engaging in using these tools since their schooling. The Learners in this study were comparable to those in Pasfield-Neofitou (2012). She also found that those who had studied Japanese at high school showed that their interest in J-pop stimulated them to study and continue to study Japanese.

The real question here might be to what extent the Learners see these resources as a language learning tool. A similar issue was raised as a discussion topic during the *Nihongo4us* Session, revealing that there was a genuine inquisitiveness from the Learners about the influence of J-pop on their mastering of Japanese language. The opinions of a relatively small number of Learners (seven participants in IG#2) indicated that the effect of *Anime* and J-Pop might vary depending on the Learners' levels of proficiency. As the Learners progressed in their studies, they recognised that the casual forms of expression used in *Anime* might not be appropriate for them to use in certain situations, hence it is necessary to consider the context of a communication in which they need to use Japanese. From that point of view, these Learners seem to consider watching *Anime* as a pure entertainment or just as an activity where they can expose themselves to authentic Japanese sounds, rather than as a learning tool.

[30] With the increase of popularity towards *Manga*, Japanese *Manga* is now available on the Internet in its original form. However, many Learners in this study accessed *Manga* prior to the time when the original was not accessible.

Other frequently mentioned usage was Internet shopping (such as *Rakuten*) and watching variety shows. Some Learners used Japanese shopping sites specific to technical products to purchase the latest games and computer parts. Other Learners used Japanese sites to organise their holiday in Japan. These sites are written only in Japanese and can be very complex with many *Kanji* characters involved. However, the Learners reported that they managed to use these sites with a great sense of achievement. These sites provide authentic activities conducted in Japanese where the Learners can use both receptive and productive skills.

The choices of media were purely based on the Learners' individual interests and did not reveal any systematic learning strategies or programmed motivation deriving from prior formal studies. For example, some Learners enjoyed watching TV drama instead of watching *Anime* or listening to Japanese music but these interests seemed unrelated to their studies. From the interviews, it became clear that the Learners' usage of these media expanded as their interests grew deeper. If Learners became fond of a particular artist, through listening to Japanese music, they might join a blog site or use *Twitter* to communicate in either Japanese or another language with other fans. This encourages the Learners to study Japanese further, as well as gaining up-to-date information on the artist and exposing themselves to some aspects of Japanese culture. For example, Isabelle, in her second year of Japanese, had been translating a Japanese pop-star's video clips and films from Japanese into English. As she started to study Japanese, she joined the Fansubbing[31], thinking that this would give her a good opportunity to practice her Japanese. She said that it exposed her to various kinds of Japanese language beyond that shown in her textbooks (Isabelle, pre-interview; the *Nihongo4us* post, December 15, 2009).

However, not everyone is as active as Isabelle in writing activities. As the results of the questionnaire revealed, the Learners engaged more frequently in receptive activities such as listening to J-pop music and watching TV drama and *Anime* than in productive activities such as writing (for example, email and SMS). This result is consistent with the findings of Northwood and Thomson's study (2012). There are a few possible reasons for the Learners to be more engaged in receptive activities than in productive

[31] Fansubbing or Fansub is short for a fan-subtitling where a group of fans present subtitles for the foreign films or TV drama/programs. It is managed by group of fans; therefore, it is not paid work.

activities. One such reason, as discussed below, would be that the Learners have limited access to Japanese communities where they could make a post in Japanese at ease.

Some Learners reported (in the questionnaire) that they neither have Japanese friends nor join any chat forums that are conducted in Japanese. If they do not have any Japanese friends or Japanese communities to tap into that require the Learners to write in Japanese, they are not likely to engage themselves in these activities. As noted in Ota (2011), some Learners might find that chat forums, which were targeted for native Japanese speakers, would be rather intimidating to join.

The present study also found differences between the junior Learners (e.g. introductory level Learners) and the senior Learners (e.g. intermediate or advanced level Learners) in their use of CMC. The senior Learners had an advantage of not only the language ability allowing them to use the Internet to read newspapers or magazines but also had contacts with native speakers. Some of the senior Learners, who had attended a study abroad program, had wider contacts with native speakers than the juniors who just started to learn Japanese. Therefore, these senior Learners used blogs, SMSs, SNS and Skype to communicate with native speakers. Similar to Pasfield-Neofitou's participants in her study (2011, 2012), the senior Learners have established their own community with native speakers. On the other hand, the junior Learners reported that they do not have any contacts with native speakers, even if they wish to have such contacts. Establishing such contacts without attending a study abroad program seemed a little difficult (according to the results of questionnaire). There are social clubs at the university but time constrains and other commitments prevent many of them from attending. They also reported that they often felt that they did not know how to approach Japanese students casually, when they saw Japanese students on campus. It seemed that the Learners needed to overcome linguistic barriers as well as psychological and social obstacles to establish some contacts with Japanese native speakers.

A second possible reason for the predominance of receptive use of Japanese by Learners is that productive activities would consume more time and energy than receptive activities. Compared to listening to music or watching TV drama, writing activities in a foreign language do take far more energy and time. Thirdly, the learners may be concerned about making mistakes in their writing for emails and forum posts. A

fear or a lack of confidence might prevent them from making posts as their post would be permanently broadcasted at the sites, even if they might be spared from any loss of face as foreigners or non-native speakers (Pasfield-Neofitou, 2011).

These findings follow previous studies such as Pasfield-Neofitou (2007a, 2012), Tudini (2003), and Herrington and Stadden (2000) claiming that the learners are keen to use Internet communication tools for authentic interactions for learning, yet it seems difficult for the Learners to formulate the writing activities for a learning purpose. It seems that they needed more encouragement and confidence as well as help in finding online communities where they would feel comfortable in making posts.

As an alternative solution to this, some Learners (for example, Victoria and Isabelle) had used multilingual sites, such as Lang8[32], to practice their Japanese outside of the classroom by communicating with native speakers and other Japanese language learners. This site is for language learners, therefore, they might be less concerned about their mistakes. However, some Learners might still not be comfortable to join a public discussion forum in Japanese. As Ota (2011) reported, learners should carefully choose their CMC communities where they could practice Japanese, because each CMC community has its own purpose, made up by specific people. Any Internet site, especially SNSs, will have a specific audience and purposes. The Learners need to make a choice about a suitable site to practice their Japanese and without extra effort they will find this process difficult to achieve.

Danielle, in her second year of Japanese Studies, said that she seldom uses Facebook. Her reasoning for this was because it did not enhance her Japanese language skills as the use of Japanese on these sites is very casual, using abbreviations and improper grammar (Danielle, post-interview). This feeling of Danielle's is similar to those students in Toyoda and Harrison's (2002) study, where casual forms and abbreviated sentences in chat caused some confusion.

It seems that the Learners use various media to enhance their language skills. However, not all Learners combine their activities using these media with specific learning techniques (such as taking notes or making a list of words) in order to expand their vocabulary. They use online activities because they enjoy doing so, as was also seen in

[32] Lang8 is a multilingual site where members make a post in a language of their choice and native speakers or advanced language learners of peer members will make corrections.

Northwood and Thomson's study (2012). These activities also give the Learners some common topics to talk about with their classmates in their Japanese classes. The Learners in the present study saw these receptive activities as part of language study and they participated in these activities with pleasure. These receptive activities offer pleasure and learning at the same time. For the Learners to engage in productive activities using Internet based communication outside of their classes, they might need to be more motivated as well as having initial contacts to online communities.

This section presented the Learners' opinions on CMC as language tools and the Learners' habitual use of these tools. The next section presents a discussion arising from two SPOT tests.

4.3 SPOT Results

As described in Chapter 3, SPOT (Japanese language proficiency test) was administered twice; once before the Learners participated in this study, and again at the completion of the *Nihongo4us* Session. All 65 Learners participated in the first SPOT and 18 Learners participated in the second SPOT test. Table 4-2 presents the average of tests results per group. Table 4-3 presents the two SPOT test results of 18 Learners who completed all the activities in this study and participated in the post-session interviews.

Table 4-2: Group average of SPOT results

	At Commencement of *Nihongo4us*		At Completion of *Nihongo4us*		Change from Pre-session to Post-session results
Groups	No. of Learners	Pre-session Average	No. of Learners	Post-session Average	
IG#1	11	37	3	46	+9
IG#2	11	40	4	45	+5
MG#1	9	50	3	48	-2
MG#2	9	43	2	59	+16
MG#3	8	51	0	n/a*	n/a
MG#4	9	54	4	57	+3
MG#5	8	54	2	56	+2
Average of Whole Group	65	49	18	51	+2

*No Learners from Mixed Group 3 participated in the post-session activities (post-session interviews and SPOT)

Table 4-3: SPOT results of the Learners who completed the activities (N=18)

Groups	Learners/ Average	Pre-session	Post-session	Groups	Learners	Pre-session	Post-session
IG#1	Jacob**	27	37	MG#2	Rose	55	59
	Grace	36	42		Dominic	57	59
	Maddy	59	60		**AVERAGE**	**56**	**59**
	AVERAGE	**41**	**46**	MG#3	N/A		
IG#2	Emma	55	60	MG#4	Austin	54	58
	Marian	53	55		Nicky	55	58
	Cory*	27	22		Liz	57	57
	Charlotte	45	46		Jasmine**	46	56
	AVERAGE	**45**	**46**		**AVERAGE**	**53**	**57**
MG#1	Tom	58	60	MG#5	Victoria	54	59
	Jack	59	59		Isabelle**	40	53
	Danielle*	27	25		**AVERAGE**	**47**	**56**
	AVERAGE	**48**	**48**	**Average of Whole Group**		**48**	**51**

* Learner SPOT result fell in second test.
** Learner SPOT result increased by more than 10 points in second test.

As Tables 4-2 and 4-3 present, the averages of post-session SPOT results have increased across the groups, compared to those of pre-session. No Learners from MG#3 participated in the post-session interviews; therefore, SPOT results for these Learners were not obtained. The only group that showed a lower average result was MG#1; however, as shown in Table 4-3, the Learners in MG#1 who completed all *Nihongo4us* activities (that is, excluding the discontinuing Learners) averaged the same SPOT result of 48 in their pre- and post-session tests. The SPOT results of individual Learners in Table 4-3 appeared to reflect the degree of activeness of each Learner. Only two Learners recorded lower SPOT results in their second test and neither were active participants: Cory had made only four posts and his SPOT result fell by five points, whilst Danielle made only one post and her SPOT result fell by two points. On the other

hand, all three Learners, who increased their SPOT results by at least ten points, actively participated. For example, Jasmine, Jacob and Isabelle kept vocabulary and grammar notes. However, it is not claimed here that the SPOT result change was dependent on Learner activity in *Nihongo4us*; for example, Charlotte in IG#2 and Liz in MG#4 were also active participants, who kept notes; but, their SPOT results did not change beyond one point. Similarly, not all active Learners participated in the post-session interviews and the second SPOT test; therefore, those Learners' SPOT results could not be presented here to provide a more comprehensive analysis. However, with four exceptions (Jacob, Cory, Jack, and Liz), Tables 4-2 and 4-3 indicate that generally Learners who completed the *Nihongo4us* Session had increased their SPOT results.

The next sections present Learners' opinions on *Nihongo4us* in two parts, positive feedback and negative feedback.

4.4 Learners' Opinions on Nihongo4us

This section moves from the discussion on CMC in general to describe the Learners' opinions specific to the *Nihongo4us* Session. This is done to determine the extent to which the *Nihongo4us* Session fostered collaborative learning. Firstly, this section presents an overview of three data sets elicited from the study: logbook entries, survey and interviews[33]. An overview of these raw data sets is described in Section 4.4.1. Secondly, Section 4.4.2 presents the Learners' positive opinions on *Nihongo4us* and some positive outcomes observed as a result of participating in *Nihongo4us*. An issue of time delay had both positive and negative effects. This will be discussed as the last item of positive effects (Section 4.4.2.7), presenting both positive and negative effects arising from time delay. Thirdly, the negative effects are discussed in Section 4.4.3 before presenting the summary of this chapter.

4.4.1 Response Rates and Raw Data Overview

During the 13-week *Nihongo4us* Session, the Learners kept a logbook entry once a week to reflect on their activities. The Learners' participation in the logbook entries varied. Primarily that variation is due to personal circumstances and the fact that the numbers of discussions observed in the *Nihongo4us* Session varied between groups

[33] The quote from these data are in their original forms.

over the full *Nihongo4us* Session. As a result, some Learners did not submit a logbook entry regularly. It is also pertinent to understand that this study was conducted with volunteer participants and that it was not part of the Learners' university study. Therefore, the logbook entries were not an assessment item. Learners were given reminders of the request to record a logbook entry although such reminders seemed to have limited influence since the logbook entry rate did not fluctuate when reminders were issued. The number of logbook entries received was small (169 in total) and ranged from 12 to 39 across the groups, as shown in Table 4-4 below. Thirty-eight Learners submitted logbook entries at some point during the *Nihongo4us* Session. Twelve Learners regularly submitted logbook entries and some provided detailed information. The number of Learners who participated had fluctuated during the discussion forum stage. Therefore, the median number of Learners is presented in Table 4-4 to provide a more accurate understanding of the central value without the outlier numbers affecting the average.

Table 4-4: The weekly logbook entries per group (N=38)

Groups	No. of Learners during the set up stage	Median No. of Learners during discussion forums	No. of Learners who submitted the logbook entries			**Total No. of entries**
			None	Less than 6 entries	7 entries or more	
IG#1	11	3	5 45%	6 54%	0 0%	12 7%
IG#2	11	6	4 36%	5 45%	2 18%	39 23%
MG#1	9	4	4 44%	4 44%	1 11%	19 11%
MG#2	9	5	4 44%	3 33%	2 22%	26 15%
MG#3	8	3	2 25%	6 75%	0 0%	13 7%
MG#4	9	5	3 33%	4 44%	2 22%	37 21%
MG#5	8	3	5 62%	1 12%	2 25%	23 13%
Total	65	5	27 41%	29 44%	9 13%	169

Table 4-4 shows differential rates of engagement with submitting logbook entries. As will be discussed later (refer Chapters 5 and 6), not all groups reacted consistently during the *Nihongo4us* Session and its activities. Regarding the logbook submissions, IG#1 and MG#3 can be seen to have had lower interests than other groups, as no Learners from these two groups submitted more than seven entries and the total number of submissions for both groups were the two lowest in the study.

The logbook entries were based on ten open-ended questions. This section focuses on responses to questions 3, 5 and 7 that sought Learners' opinions and feelings about the activities presented on the *Nihongo4us* site (refer Appendix 5). These three questions were:

- Do you think the use of *Nihongo4us* allowed you to interact and collaborate with your fellow students of Japanese in a meaningful way? How?
- How did *Nihongo4us* enhance your understanding of Japanese language?
- How has your participation in *Nihongo4us* changed the way you think about Japanese language tasks?

The excerpts of these responses are used in the following sections, discussing positive and negative opinions on *Nihongo4us*. Table 4-5 presents a summary of the most commonly mentioned comments.

Table 4-5: Summary of most commonly mentioned comments (N=38)

	No. of Learners who made that comment
Learnt new *Kanji*/ Vocabulary	27 (71%)
Produced grammar notes/Learnt new grammar	26 (68%)
Struggled to digest the post	16 (42%)
Improved reading	14 (36%)
Importance of native speakers	9 (23%)

Table 4-5 shows that many Learners thought that they had learnt new *Kanji* and grammar during the *Nihongo4us* Session. They produced variants of grammar notes; some used *Excel* and some wrote on a notebook. Nine Learners commented on how important it was to gain native speakers' inputs, reflecting the degree of activity (or inactivity) of native speakers.

At the end of *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. Responses in the first section of the survey were answered using a scale of 1 to 4: 4 being 'strongly agree' and 1 being 'strongly disagree'. Table 4-6 below presents a summary of the first section of the survey results.

Table 4-6: Results of first section of the survey in the general overviews (N=20)

Survey Item		Strongly Agree	Agree	Disagree	Strongly Disagree
1	I enjoyed the discussion on Nihong4us	7 (35%)	12(60%)	1 (5%)	0
		95%		5%	
2	I have learned things in the discussions that I would not have figured out on my own.	3 (15%)	12 (60%)	5 (25%)	0
		75%		25%	
3	The discussions on Nihongo4us gave me the opportunity to ask questions that I would not have asked in class.	3 (15%)	9 (45%)	8 (40%)	0
		60%		40%	
4	I would enjoy participating in such a computer-based learning tool like Nihongo4us for Japanese again.	5 (25%)	13 (65%)	2 (10%)	0
		90%		10%	
5	The process of talking/writing through topics helped me to understand Japanese better.	5 (25%)	13 (65%)	2 (10%)	0
		90%		10%	
6	Chatting with other students helped me to look at topics from perspectives that I would not have considered on my own.	7 (35%)	7 (35%)	5 (25%)	1 (5%)
		70%		30%	
7	Nihongo4us provided less anxiety and a more relaxed environment than I usually experience in my classroom.	3 (15%)	10 (50%)	7 (35%)	0
		65%		35%	
8	I would have liked a face-to-face class better than Nihongo4us.	1 (5%)	14 (70%)	5 (25%)	0
		75%		25%	
9	I would have preferred to chat, on the Nihongo4us, only with people whom I had classes before.	0	4 (20%)	9 (45%)	7 (35%)
		20%		80%	
10	I hope to keep in touch with one or more people from Nihongo4us.	3 (15%)	13 (65%)	4 (20%)	0
		80%		20%	
11	I experienced a sense of community with the other students in my group using Nihongo4us.	1 (5%)	10 (50%)	7 (35%)	2 (10%)
		55%		45%	
12	Nihongo4us gave me some ideas for my approach to studying Japanese.	4 (20%)	9 (45%)	7 (35%)	0
		65%		35%	
13	The time I spent participating in this exercise during this summer holiday would have been better spent studying Japanese in a conventional classroom approach.	0	7 (35%)	9 (45%)	3 (15%)
		35%		60%	
14	Compared to past periods where I had a break from studying Japanese (e.g. holidays), I now feel better prepared to continue my Japanese studies with less ‘catch up’ needed.	1 (5%)	13 (65%)	6 (30%)	0
		70%		30%	

From the responses on the first section of the survey, as seen in the above Table 4-6, 95% (35% strongly agree and 60% agree) of the Learners enjoyed the discussion on *Nihongo4us*. This was also reflected in the result that 90% of the Learners would like to participate in it again if available in the future. Some of the reasons for this high level of satisfaction were reflected in the responses:

- 75% (15% and 60%) of the Learners thought that they had learnt things in the discussions that they would not have figured out on their own; and
- 70% (35% and 35%) thought that in their discussion, *Nihongo4us* helped to look at topics from different perspectives.

Although 75% (5% and 70%) of the Learners responded that they would prefer a face-to-face class, 60% (15% and 45%) responded that *Nihongo4us* gave them an opportunity to ask questions that they would not have asked in a class. Furthermore, 90% (25% and 65%) of the Learners agreed that the process of talking/writing through topics helped the Learners to understand Japanese better. 70% (5% and 65%) of them felt that they were better prepared for the university semester after the *Nihongo4us* Session. These results indicate that the ideal situation for the Learners seemed to be an activity such as *Nihongo4us* to be incorporated into a face-to-face program. This is consistent with finding from Tiene's study (2000), offering opportunities to learn the language in a flexible way.

The above survey results were consistent with reflective comments made in Learners' logbook entries. Furthermore, at the post-session interviews, 13 out of 18 Learners said they felt that they would like to have a site such as *Nihongo4us* as a part of their language study. The face-to-face situation is not replaceable; however, the fact is that the class hours of language study at university have been cut back despite of 84% of respondents stating that they wanted more hours of face-to-face class (questionnaire results). Therefore, the Learners are keen to have a language learning site, such as *Nihongo4us*, incorporated into their language program. Isabelle in her second year, from MG#5, commented:

> 'definitely recommend. And I would advocate CMC. … As long as you have a computer in your home, you are pretty much set up. You can go on (to visit the site) anytime you want and something that very viable. I

> think in terms of language learning one way you can go if you can't go face-to-face talking or learning …' (Isabelle, post-session interview).

Jack, an advanced Learner in MG#1, also commented that:

> 'a site like Nihongo4us is necessary for learners to continue practicing Japanese. Even if students who studied from the first year all the way to their fourth year, sometimes they can not keep up with the content. The university classes are only five hours, so we need to think how we can practice Japanese at home…' (Jack, post-session interview).

As some Learners come to the end of their university degree, they are not quite sure how they can keep practicing their Japanese, let alone improving their Japanese skills. They would appreciate an Internet forum where they can continue to learn the language. A forum, such as *Nihongo4us*, would suit their needs because it offers a flexible time and place for learning and practicing their Japanese language while they can also expand their knowledge and understanding about Japan and the Japanese culture.

Whilst Table 4-6 and the above comments show a general overview of the Learners' feelings and opinions towards the *Nihongo4us* Session, the result do not reflect the individual Learners' feelings and opinions when viewed on a group basis. Therefore, the survey results' four scales were used to determine the Learners' strength of agreement; 'strongly agree' was given a value of +2, 'agree' was given a value of +1, 'disagree' was given a value of -1 and 'strongly disagree' was given a value of -2. This calculation was conducted so as to incorporate differences in the Learners' feelings as expressed in their choice of each scale per group, in order to determine the differences between the groups and level of proficiencies. Table 4-7 presents the results of the first section of the survey with scales per group. Taking into consideration that the number of the Learners fluctuated during the discussion forum stage, the median number of participants was used in the same way as the logbook entries in order to calculate the response rates of each group (the response rates are shown as percentage in Table 4-7).

Table 4-7: Results of the first section of the survey with scales per group (N=20)

Survey Item		IG#1 (N=3) 100%	IG#2 (N=4) 66%	MG#1 (N=4) 100%	MG#2 (N=2) 40%	MG#3 (N=1) 33%	MG#4 (N=4) 80%	MG#5 (N=2) 66%
1	I enjoyed the discussion on Nihong4us	+1	+5	+9	+3	+1	+7	+2
2	I have learned things in the discussions that I would not have figured out on my own.	+1	+3	+1	+2	+1	+4	+2
3	The discussions on Nihongo4us gave me the opportunity to ask questions that I would not have asked in class.	-3	+1	+5	+2	-2	+3	0
4	I would enjoy participating in such a computer-based learning tool like Nihongo4us for Japanese again.	+1	+6	+6	0	+1	+4	+3
5	The process of talking/writing through topics helped me to understand Japanese better.	+2	+6	+2	+2	+1	+5	+1
6	Chatting with other students helped me to look at topics from perspectives that I would not have considered on my own.	-2	+4	+1	+2	-1	+7	+3
7	Nihongo4us provided less anxiety and a more relaxed environment than I usually experience in my classroom.	-1	+6	+1	0	-1	+4	0
8	I would have liked a face-to-face class better than Nihongo4us.	+1	+2	+2	+2	-1	+4	0
9	I would have preferred to chat, on the Nihongo4us, only with people whom I had classes before.	-2	-3	-3	-2	-2	-5	0
10	I hope to keep in touch with one or more people from Nihongo4us.	+1	+3	+5	+2	-1	+4	+3
11	I experienced a sense of community with the other students in my group using Nihongo4us.	-2	+1	+1	+2	-1	+4	0
12	Nihongo4us gave me some ideas for my approach to studying Japanese.	+3	+4	+4	0	+1	+4	0
13	The time I spent participating in this exercise during this summer holiday would have been better spent studying Japanese in a conventional classroom approach.	-1	-3	-3	-1	n/a[34]	0	-2
14	Compared to past periods where I had a break from studying Japanese (e.g. holidays), I now feel better prepared to continue my Japanese studies with less 'catch up' needed.	+1	+4	+4	+2	-1	+2	+3

[34] The Learner did not complete this section.

Table 4-7 (Survey item 1) shows that the groups with the strongest sense of enjoyment were IG#2, MG#1 and MG#4. The groups that had more discussion forums and engaged in most interactions presented (refer Appendix 9; IG#2 and MG#4) higher positive scores in response to survey items 2, 5 and 6: 'I have learned things in the discussions that I would not have figured out on my own'; 'the process of talking/writing through topics helped me to understand Japanese better'; and 'chatting with other students helped me to look at topics from perspectives that I would not have considered on my own'.

The groups that had the highest proportion of inactive participants (IG#1 and MG#3) showed a higher level of anxiety (refer survey item 7 in Table 4-7), while the groups that had a number of active discussion forums (IG#2 and MG#4) showed lower level of anxiety. Dominic, a graduate who participated in MG#2, commented during his post-session interview that he felt uneasy as he waited for his fellow participants to reply (Dominic, post-session interview). He also shared his similar feeling on survey about providing corrections to fellow Learners:

> 'I attempted at giving an answer to a group member's query but there wasn't any input from her or anyone else, so I don't know she received it positively or not' (Dominic, survey).

As seen in these Dominic's comments, inactivity from fellow participants might also have caused the level of anxiety to rise in IG#1 and MG#3.

The sense of anxiety (or its absence) noted above may also be related to issues of community. The most anxious groups, IG#1 and MG#3, showed negative scores in survey items such as 'the discussions on *Nihongo4us* gave me the opportunity to ask questions that I would not have asked in class' and 'I experienced a sense of community with the other students in my group using *Nihongo4us'* (survey items 3 and 11). Furthermore, Table 4-6 shows 80% of Learners responded that they would like to keep in touch with their fellow Learners and 55% of Learners felt a sense of community (survey items 10 and 11). Both of those results indicate some sense of belonging to a group. Table 4-7 further indicates that the groups that hold more discussion forums (IG#2, MG#1, MG#4 and MG#5) showed higher scores indicating friendship. Consistent with Arnold and Ducate's (2006) findings, Table 4-7 suggests that the sense

of belonging lowered the level of anxiety, which in turn assisted Learners to express and ask questions at ease. Both IG#1 and MG#3 indicated a lesser sense of community, which in turn increased the level of Learners' anxiety leading the Learners' uneasiness in asking questions. The link between friendship/sense of community and the development of discussion forums with the provision of scaffolding will be further investigated in next chapters.

Using the abovementioned three data sources, the following sections discuss the Learners' positive feedback (Section 4.4.2) and negative feedback (Section 4.4.3) in relation to *Nihongo4us*. As will be seen in Chapters 5 and 6, these opinions of the Learners are helpful in understanding the factors affecting the development of discussion forums and the provision of scaffolding.

4.4.2 Positive Feedback

This section discusses the positive feedback reported by the respondents. The comments, that reflected both positive and negative feedback, such as time delay (refer 4.4.2.7), are discussed at the end of this section where both sides of the Learners' opinions are considered.

4.4.2.1 Interactions and collaborations

As discussed earlier, the choice and use of CMC outside of classroom largely depend on Learners' interests. As is illustrated in Jim's comment below, the Learners would be happier, if they could expose themselves to Japanese language in pleasurable ways and in a natural setting, whilst they attempted to improve their listening and reading skills and learn something about Japanese culture. In week 3 Jim, an advance Learner who had completed his undergraduate program of Japanese Studies, noted:

> 'I came to acknowledge the importance of BBS (Bulletin Board System) and the Internet as a new, emerging method of discourse. Although I took some university courses this year for which we had to discuss issues in Japanese over a BBS, I found it quite superficial at times because some of the topics were so sophisticated that I could not connect on a personal level to them, and so writing anything at all could get very difficult. However, Nihongo4us is more casual and approachable in both

> its form and the tasks that it requires us to complete, which I found more beneficial in terms of our study' (Jim, week 3 logbook entry).

Jim was of the opinion that one can learn a lot more from fellow language learners:

> 'I have used Mixi for a few years so am used to writing diaries and commenting on other people's pages, however that has mainly been with native Japanese people. So far Nihongo4us has reaffirmed the belief that actually practicing the language with other students of Japanese is one of the better methods of improving proficiency, because we can acknowledge our own mistakes as well as those of our peers and thus learn from them' (Jim, week 1 logbook entry)

Ashley, in her first year, commented in her week 2 logbook entry that:

> '… in reading others posts and viewing the manner in which they are interacting … it truly does appear that this is allowing meaningful interaction in Japanese with other students' (Ashley, week 2 logbook entry).

In week 3, she further noted:

> '… to talk about similar interests with the other candidates[35] made for some very satisfying interaction. … even though …having some small difficulty trying to convey our feelings exactly, we were all able to make ourselves satisfactorily understood' (Ashley, week 3 logbook entry).

Rose, in her fourth year, commented in her week 5 logbook entry that:

> 'since started participating in Nihongo4us realised that Japanese language tasks aren't quite so difficult or tedious if you can discuss them with your peers (or even if they are not quite the same age as you, it's easy to forget the age of people on the Internet and so even more experienced 'sempai' figures become less daunting to talk to)' (Rose, week 5 logbook entry).

Charlotte, in her first year, commented in her week 10 logbook entry:

> 'Interactions are very important in the learning progress of a language. Nihongo4us had provided such platform to enhance and strengthen interactions activities between students. Besides textbook learning, such

[35] Meaning other participants.

> interaction seems to be necessary for effective learning of any languages' (Charlotte, week 10 logbook entry).

As the Learners discussed and exchanged ideas about a wide range of topics, Marian, in her first year, commented in her week 2 logbook entry:

> 'it made me realize that I [sic] after a certain amount of time, what we study won't be restricted to Japan-related topics, that we might branch out into other fields of interest such as world events' (Marian, week 2 logbook entry).

These Learners' positive comments in their logbook entries are consistent with the survey responses discussed above. These positive results largely reflected successful developments of discussions held in groups. Though some possible factors that may have influenced the development of discussion forum will be discussed in Chapter 6, one prominent factor that should be noted here was the level of difficulties that the Learners faced, both in terms of linguistics and topic content. Some topics were challenging and something that the Learners had not worked on before. Therefore, the Learners were challenged in many ways. Nevertheless, they saw these challenges as positive and reported the positive feedback examined in the next section.

4.4.2.2 Challenge

The topics that the participants discussed included those, which they normally don't see in textbooks. The Learners were therefore challenged with the need to express themselves about what they knew independent of their textbook knowledge. If they did not have enough knowledge about the content or grammar, they needed to find information using the Internet, which required them knowing where and how to search for the information over the Internet. Such search often required use of Japanese. Marian, an introductory level Learner, made the following remark that reasonably summarises most of the Learners' feelings on this issue:

> 'Forcing myself to write in Japanese has meant that I had to use all the grammar that I have learned and apply it to the sentences I wanted to write. Even though we haven't learned a lot of grammar, with some creativity, they can express a surprising amount of things' (Marian, week 1 logbook entry).

Another first year Learner but in a different group to Marian commented in her logbook that:

> 'I felt particularly challenged when reading comments left by other members. I felt like I was lagging behind in knowledge of Japanese … So that was a little off-putting, but I'm learning more Japanese that way' (Grace, week 4 logbook entry).

However, it was not only the introductory level Learners who felt this way; for example Kerry, in her second year, and Rose, in her fourth year, also commented that they faced similar challenges:

> 'My understanding of the Japanese language was enhanced by making mistakes and getting my mistakes corrected.
> Nihongo4us forced me to express things I had never tried to say before in Japanese. By doing so I made lots of mistakes. Thanks to the corrections of my mistakes I find that I remember more and hopefully I won't make that mistake again in the future' (Kerry, week 3 logbook entry).
> 'it is enhancing my ability to both communicate in that language and also how to communicate in that language' (Rose, week 8 logbook entry).

The Learners' logbook entries and also post-session interviews confirm that these opinions were shared among the Learners, as they had to find a way to express themselves with their limited knowledge of Japanese.

Jasmine, a Learner of Chinese background and in her first year, commented on how *Nihongo4us* changed her approach to Japanese language tasks:

> 'learning a language needs persistence and hard work. Nihongo4us taught that I need to be persistent when learning Japanese' (Jasmine, week 10 logbook entry).

Nihongo4us helped Jasmine read articles and realise that she had to change her way of writing (which was dominated by her native Chinese writing technique) if she wanted to improve her Japanese (Jasmine, week 10 logbook entry). Learners with a Chinese language background might have an advantage regarding the recognition of *Kanji*[36], yet this also can pose challenges because Japanese *Kanji* are not always exactly the same as

[36] Chinese speakers can frequently guess meanings of Japanese *Kanji* due to the oldest *Kanji* having been borrowed as logographs from Chinese; meaning and stroke order (for correct writing) are thus common to Chinese and Japanese but the Japanese pronunciation differs to Chinese.

Chinese logographs; the same character may carry different meanings in Japanese and Chinese, and the pronunciations are distinct. Some Chinese background Learners used Chinese *Kanji* by mistake thereby confused the fellow Learners. The sentence structures are also different as Jasmine recognised.

In the process of composing what the Learners wanted to express, they sometimes translated sentences from their first language to Japanese. Sometimes they used online translation software for assistance, sometimes they used dictionaries in either online or paper versions or both. They knew the limitation and inaccuracies of some online translations. Nevertheless, online translations could still give the Learners some assistance. Making a post at *Nihongo4us* is not like completing language exercises in a textbook. Learners were required to compose a post, which was new and challenging to them as Marian, in her first year, discovered. She commented in her week 6 logbook:

> 'I have to keep reminding myself that there is a lot of subtleties with Japanese, that straight translation may lead to negative connotations with certain phrases' (Marian, week 6 logbook entry).

Dominic, a graduate, recognised the wide range of proficiency levels in his group. This presented another challenge to the Learners to compose a post that is easy for everyone to understand. He made a comment in his week 7 logbook entry:

> 'writing up a response that you think is easy to understand by other group members is a challenge in itself' (Dominic, week 7 logbook entry).

These Learners' logbook entries represented how the Learners had to communicate with each other and negotiate meanings using knowledge they possessed sometimes exploring the use of language that was beyond their knowledge and sometimes adjusting the level of language to accommodate their audiences' needs. The present study was not conducted as a part of the Leaners' academic program. Therefore, the Learners' outputs/activities were not assessed. This perhaps allowed the Learners to freely explore their language abilities in producing the posts. Spence-Brown's study (2007, p. 12.10) found that 'framing and associated motivation had important consequences for behaviour, and consequently for opportunities for learning'. Spence-Brown (2007, p. 12.2) defined 'framing' as 'the process by which individuals orient to a task and perceive or engage with it as an activity'. If there was assessment conducted on their posts, the Learners might not have challenged themselves to the extent described

here, since they may have confined their language and expression to matters about which they were certain so as to avoid a perceived risk of losing marks. An interesting comparative study in the future might be proposed here to examine the effect of assessment on learners' posts (refer Chapter 7).

In the present study, the Learners challenged themselves with their limited knowledge of expressions and grammar, some Learners discovered new strategies and acquired new skills in writing. In the short time given to this study, it was not possible to determine whether these skills enhanced their Japanese academic writing. However, the Learners learnt new vocabulary, new *Kanji* and improved their confidence as discussed next.

4.4.2.3 Vocabulary and Kanji

Learners frequently made comments in their logbook entries that they had learnt new *Kanji* and new words, as outlined in Table 4-5. Twenty-seven out of thirty-eight Learners commented that they learnt new *Kanji* and improved their vocabulary. Twenty-six Learners reported that they also learnt new grammar and some kept notes on the grammatical structures that they had learnt. Ashley, one of the first year Learners, summarised the situation well in her logbook entry:

> 'Now that I am encountering new *kanji* frequently I find that I am having to go to the dictionary less frequently. My vocabulary is constantly expanding, and I have spent this week personally going over some grammar points that I felt I was shaky on' (Ashley, week 4 logbook entry).

Jasmine, in her first year, also made a comment about learning new vocabulary in her week 1 logbook entry:

> 'It gave me an opportunity to talk to real Japanese people and students who are learning the language. Through the various conversations we've made, I learned how to use Japanese words in context and dialogues. This is better than learning new vocabularies [sic] from a dictionary which doesn't really tell you how to use the word' (Jasmine, week 1 logbook entry).

As Jasmine commented above, she had learnt a large amount of vocabulary each week by participating regularly in *Nihongo4us* and this helped her to read Japanese articles. She reported in the post-session interview that she compiled 'very very thick notebooks' of vocabulary by the end of the *Nihongo4us* Session as she wrote down everything new to her (Jasmine, post-session interview).

Not only the first year Learners, who reported to have learnt new expressions and *Kanji*, but second and third year Learners also reported the similar thoughts. Isabelle, in her second year, also reported about her improved reading:

> 'I think I can read Japanese more fluently than I have been before; I took out a 2008 February edition of Seventeen JP magazine just the other day, and I was able to read more from it than I had before' (Isabelle, survey).

The fact that Isabelle was able to read the Japanese magazine more at ease was brought about by the combination of exposure to varieties of Japanese and to a large amount of vocabulary during *Nihongo4us* as well as a year of study at the university.

Liz, in her third year, commented in her week 3 logbook entry that:

> 'With the corrections made by other group members and also by observing how they express themselves, I've been able to continue to have exposure to and absorb speech patterns' (Liz, week 3 logbook entry).

Austin, in his second year, commented in his week 9 logbook entry that:

> 'The more Japanese I read from native speakers like Fujii san and Aya san, the more I realize how many fillers I don't know. … just another word I added to my vocabulary but is not stuff I learn from a text book. …' (Austin, week 9 logbook entry).

The Learners were constantly exposed to new words, expressions and *Kanji* by reading lengthy posts made by the fellow participants. The Learners were challenged but stimulated at the same time to learn the naturally occurring, authentic expressions used by the native speakers and others. This exposure naturally led the Learners to improve not only their reading comprehension skills, as mentioned by the Learners (e.g. Jasmine and Isabelle), but also reading speed and typing speed. As the SPOT results showed in Tables 4-2 and 4-3, the Learners, who participated actively, increased their scores.

4.4.2.4 Increased Speed of Reading and Writing

Fourteen Learners made logbook entries that they were able to read faster towards the end of the *Nihongo4us* Session. In addition, some Learners at least felt they were not overwhelmed by lengthy passages and that they were able to manage reading long passages to completion. Sixteen Learners commented how initially they struggled to read and understand the posts at the beginning of the *Nihongo4us* Session. However, as they progressed, some Learners were able to skip the words that they did not understand but learnt to construct the gist of the meaning by reading through the whole post. Thus they felt that they had acquired a foundation for skim reading skills during the *Nihongo4us* Session.

Austin in his second year timed how long he took to read a post and noted that his reading speed increased. This action was triggered by him noticing the fact that he was no longer feeling a burden to read long posts in Japanese and was able to read through the posts with increased understanding as the session progressed. Of course the length of each post was not the same, nor was the degree of difficulty of the content, so it is not possible to reach definitive conclusions as to the speed of reading or comprehension skills, as remarked by this Learner in his logbook entries (Austin, weeks 9, 10 and 11 logbook entries).

A third year student, Nicky, commented that her typing speed improved over the *Nihongo4us* Session, as did her reading speed (Nicky, post-session interview). The fact that some Learners were able to read longer posts without being emotionally drained and to understand the posts more than when they initially started, showed some potential for *Nihongo4us* to be a language learning tool and thus perhaps some future studies might be useful where language acquisition and speed of reading can be tested.

Although the Learners felt challenged, they noticed that they made some progress in certain skills. The survey results present that 95% of the Learners thought they enjoyed the discussion and 80% of them wanted to keep in touch with the participants. These results indicated that the *Nihongo4us* Session offered the Learners supportive positive learning environment, which is presented in the following section.

4.4.2.5 Positive Collaborative Learning Environment

Thirty-five of the 38 Learners who presented logbook entries[37], commented that *Nihongo4us* allowed them to interact and collaborate with others in a meaningful way. In this collaborative activity, they learnt new skills in three ways:

- reading postings made by others;
- reading corrections made by the native speakers; and
- expressing themselves in their postings.

They also learnt more about various aspects of Japanese culture from different people's points of view. For instance, Nicky noted during her post-session interview that her experience of the *Nihongo4us* Session helped her to understand the concepts of an intercultural communication unit that she was studying at the time of the post-session interview (Nicky, post-session interview). These comments were consistent with the survey results shown above (refer the survey results survey items 1-6).

The survey results showed that 70% of the Learners thought they were better prepared for their Japanese Studies in the coming semester. The Learners, who participated in the post-session interviews, also confirmed that their first Japanese class when they returned to the University was much easier than in previous semesters because they had been regularly using Japanese and engaged in discussions during the *Nihongo4us* Session. They were able to retain basic Japanese grammar, reading and writing skills during their summer holiday (non-teaching) period. Victoria, who had been learning Japanese throughout High School, and who is now at an advanced level of Japanese at UNSW, recalled that she had forgotten how to write *Hiragana* over one of her past long holiday periods. However, this time she was very active during the *Nihongo4us* Session and therefore, she had no difficulties understanding the lectures on her first day back at UNSW (Victoria, post-session interview).

The atmosphere of *Nihongo4us* was relaxed and provided sufficient time to compose replies. This made the Learners feel less nervous than in a face-to-face interaction with Japanese guests in class. This was also represented in the survey results (refer Table 4-6; survey item 7) and was also commented by some Learners in their logbook entries (for example, Marian week 1 logbook entry; and Jasmine, week 1 logbook entry). Table

[37] The remaining four Learners noted that *Nihongo4us* did not help them to interact and collaborate with others in a meaningful way.

4-7 indicates that the groups that exhibited less anxiety (IG#2, MG#1 and MG#4) also had Learners who felt they had more opportunities to ask questions (survey item 3). However, the groups that showed higher levels of anxiety (IG#1 and MG#3), showed a negative response to survey item 3 (not providing opportunity to ask questions during the *Nihongo4us* Session). The relaxed atmosphere could not only reduce the level of anxiety but also could provide an avenue to network in the Japanese learning circle.

As the survey results showed, 80% of the Learners wished to keep in touch with people from *Nihongo4us*. This was also reflected in Sarah's logbook. Sarah in her third year commented:

> 'It is a good idea to be connected with students from different levels, we can help each other in learning Japanese. Also, it is always good to get to know other Japanese students to expand our network in the Japanese learning circle and come to understand each other's journeys in learning Japanese' (Sarah, week 1 logbook entry).

Sarah's comment also showed an effect of having a mixed group. The advantage of being in a mixed group was that the Learners had an opportunity to expand their network beyond their classmates but also to see different levels of posts made by the participants who were at a different level of proficiencies. A range of language structures presented at *Nihongo4us* showed what both junior and senior Learners achieved to do in their own levels. Seeing how the senior Learners wrote sometimes in a blogging way, sometimes using a polite form talking to the native speaker, the junior Learners found role models to look up to. At the same time, seeing the junior Learners' posts reminded the senior Learners of their past level, recognising their progress, and encouraged them to keep going.

As the Learners sought more exposure to Japanese outside their classroom, they came across new expressions. Sometimes they knew how to use these new expressions but sometimes they did not. During the *Nihongo4us* Session, some Learners took opportunities to try using those expressions that they learnt outside of the classrooms. For example, Victoria, a fourth year student, used various J-pop Internet sites once a week for the purpose of reading Japanese, but she could not understand fully what had been posted because there were too many instances of slang and newly-created sub-culture words known as 'vogue-words' (*Ryukougo*) (Victoria, post-session interview).

Such postings were often related what had been said or done recently and reported via mass media, therefore, it was difficult to understand without the first hand knowledge of the incident which triggered these postings. Victoria reported that she probably understood about half of the contents in such sites (Victoria, post-session interview). During the *Nihongo4us* Session, there was a discussion about 'vogue-words' and gender-based language. Victoria used some of them in the discussion. She commented at the post-session interview that these words seemed easier to use even if she was not quite sure how to use them. She was very grateful for the corrections she had received from the native speaker during the *Nihongo4us* Session, because her Japanese friends would help her if she would struggle to express herself but they would not make any corrections. *Nihongo4us* assisted her to learn how to use some of these words correctly.

Emma, who had not yet commenced her Japanese Studies at UNSW, also took advantage of opportunities to ask questions. She commented in her week 6 logbook entry:

> 'Nihongo4us actually gives us an opportunity to practice Japanese. It is meaningful in that it gives you a chance to familiarise yourself with structures and allow you to ask questions that are perhaps not on materials taught in class. ……I received extremely interesting and helpful replies from the teachers, and I'm very happy to have received this kind of response' (Emma, week 6 logbook entry).

As Emma was proactive in learning Japanese during the *Nihongo4us* Session, she even set up a Blog section to ask questions as extra activities that were not related to the discussion topic. She was also active in providing scaffolding[38] to her group members. Her logbook entries suggested that there was a strong connection between the degree of participation and helpfulness of the native speakers, and Learner motivation. This connection will be further investigated and discussed in Chapter 6.

Positive atmosphere encouraged Learners to express themselves, using new expressions and new structure. Such atmosphere also enabled the Learners to feel free to ask questions about Japanese language and culture. By doing so, some Learners were able to gain some confidence in using Japanese.

[38] Data and discussion on scaffolding is presented in Chapter 5.

4.4.2.6 Gaining Confidence

Another positive effect that *Nihongo4us* provided to the Learners across different levels was that the Learners gained confidence. As they challenged themself in using Japanese to present their opinions to others, they gained confidence in using Japanese. Charlotte, in her first year, commented:

> ‘the native speakers provided confidence to us that we can make mistake and it will be corrected. Therefore we are not afraid to express ideas and comments’ (Charlotte, survey).

Austin, in his second year, made a comment in his week 2 logbook entry:

> ‘I'm already liking it more and more. I’m already trying to find ways I can make posts (on pictures of things I do) or something that will allow more potential discussion. The first week I was actually saddened because I felt hopeless in how long it took for me to formulate my ideas but I'm gradually gaining more and more confidence (albeit online)’ (Austin, week 2 logbook entry).

Rose, in her fourth year, also commented:

> ‘I gain confidence just from the knowledge that people have understood my Japanese, especially to the point where they too can respond to it’ (Rose, survey).

Learners gained not only confidence but also sense of accomplishment as they participated in *Nihongo4us*, as Emma, who was not enrolled in Japanese Studies, commented in her week 8 logbook entry:

> ‘… initially daunting looking phrases becoming understandable after one breaking it down to sections also provides one with a sense of accomplishment’ (Emma, week 8 logbook entry).

The sense of confidence and accomplishment were built upon the facts that the Learners received encouragement from not only peers but also from native speakers. The absence of a time restriction on the Learners allowed them leisurely construct their thoughts and this might also have contributed to the Learners gaining some confidence. However, the time issue has produced some controversial arguments as discussed in Chapter 2 and the present study also gathered both positive and negative feedback, as presented below.

4.4.2.7 Effect of No Time Restriction

Having no time restriction in both reading and writing means possible delay in response time. This has both positive and negative effects in the interactions as often discussed in previous studies (for example, Arnold & Ducate, 2006; Lee, 2008, 2009; Meguro & Bryant, 2010; Sotillo, 2000; Tiene, 2000) as this study also found. The positive factor is giving the Learners some extra time to look up dictionaries to understand the fellow Learners' posts as well as to compose their own posts, and to think more deeply into a topic. Having this extra time also reduces the pressure, thus reducing the Learners' anxiety.

Rose, in fourth year, commented that it was fun to lead a discussion group in Japanese and somewhat easier than doing so face to face, because the increased time available before composing a reply acted to reduce perceived pressure (Rose, week 6 logbook entry). Ashley, first year of Japanese, also commented that:

> 'I think that the extra time spent thinking and writing in Japanese is the best way Nihongo4us is enhancing my understanding' (Ashley, week 4 logbook entry).

Allowing a learner time to rethink and check their contributions to, and understanding of, a discussion enhances their knowledge of Japanese language. Sotillo's study (2000) found that learners' outputs in asynchronous discussions were lengthy and syntactically more complex than those in synchronous discussions. The present study's objective was not about comparing syntactical complexities between asynchronous and synchronous discussions; however, the study did find the postings were lengthy and complex (refer Chapter 5, Section 5.3 and Appendix 9). As Ashley's statement above confirmed, the asynchronous mode gave the Learners more time to think in order to organise their thoughts and to produce more complex sentences.

The survey result also showed 65% of the Learners felt less anxious in the discussion group than in the classrooms. This result also supports studies of Kitade (2000) and Warschauer (1997). They discussed that asynchronous computer mediated communication (ACMC) removes the pressure of requiring an immediate response and allows the learners to think of their response. Therefore, they found that ACMC could

lower students' anxiety and increase their motivation, whilst also increasing cognitive growth.

Previous studies have also found that (Arnold & Ducate, 2006; Strambi, 2004), time delay in response caused some concerns and frustration. However the causes of concern in previous studies were different in nature to the present study. A few participants travelled long distances during their extended summer holiday; time delay in their responses was inevitable. However, the longer the participants took to reply to a forum, the less participation was observed in a discussion. Less active interactions seemed to cause the participants to lose motivation to make a post. This was reflected in the first year Learner, Grace's logbook entry:

> 'Sometimes it takes several days for people to reply, myself included. I haven't interacted much with others because of that' (Grace, week 4 logbook entry).

A regular prompt reply from the participants, especially from a native speaker, seemed to help the development of a discussion and kept the participants' motivation and interest in making posts at the *Nihongo4us* site. On the other hand, irregular inputs from a native speaker seemed to negatively affect the development of a discussion forum. This is consistent with Vonderwell's (2003) finding. The inputs from a native speaker and the development of a discussion forum will be further discussed in next two chapters.

Whilst the Learners enjoyed participating in *Nihongo4us*, they also reported that their participation required patience and persistence. This resulted from the *Nihongo4us* platform, as structured by Bebo, being overly complex. The next section presents the negative feedback on *Nihongo4us* as a site as well as in general.

4.4.3 Negative Feedback

The feedback received for the present study was gathered from comments in the survey, logbook entries and post-session interviews. This meant that majority of data available here was mainly from the Learners who completed the *Nihongo4us* Session. The Learners who discontinued or who did not submit the survey might have stronger views or more suggestions than those presented here. Only a few logbook entries were

submitted from the Learners who did not complete the *Nihongo4us* Session. Being mindful of non-participation bias, where it was appropriate, discontinuers' logbook entries are also included in this section.

4.4.3.1 Technical Problems

Twelve out of twenty returned surveys reported that some Learners had experienced various difficulties with Bebo as a platform for *Nihongo4us*. These comments may be summarised as follows:

- the availability of too many SNS tools was confusing;
- the SNS tools for the discussion forums were too complicated;
- the inconsistency in the layout of the participants' homepages caused confusion; and
- the lack of a notification when someone makes a post caused confusion and problems.

Victoria, in her fourth year, noticed that time lapse was caused by some technical problems at the site:

> 'I seem to have a lagging problem with seeing comments and past actions done on Bebo. Sometimes I post comments, and they are not refreshed (they won't show up) in my homepage (as well as the place where I'd commented) until a day later, or sometimes I see things in my home page, but can't find them in my profile. This is making interaction a bit difficult as I can't be sure if the comment has been made, or if there's an error; as well as I can't be sure where to reply back since I can't see the actual comment from others' (Victoria, week 2 logbook entry).

As nobody else reported a similar difficulty experienced by Victoria, it was difficult to know whether technical delay was unique to Victoria (perhaps due to her Internet connection) or a general problem on the Bebo site. It seems that the reason for time delay is not simply based on global time differences but based on more complex mixed factors such as computer associated technical issues and the Learners' language ability.

Victoria commented in her survey that:

> 'Bebo is a rather inconvenient site to use; it has too many unnecessary functions and non-user-friendly interface' (Victoria, survey).

Tom, who had not yet commenced his Japanese Studies at UNSW but had studied four years at high school, reported that:

> 'Bebo is slightly harder to use than other sites such as Facebook' (Tom, week 10 logbook entry).

Tom seemed to be technically capable with computers as he built his own computer as a hobby and to play computer games. Therefore, it might be possible that some other Learners, who were more novice computer users, would have felt lost in navigating Bebo: the *Nihongo4us* site. The complexity of Bebo was due to the availability of a number of tools. This originally was considered to be an advantage but it also came to be recognised as a disadvantage as the session progressed. The complexity cast some doubt on Bebo as an appropriate site to use for a discussion forum.

The common comments received about Bebo being an unsuitable platform to use for a discussion forum, are illustrated in the following:

Dominic, (a graduate Learner) commented;

> 'The site's format/layout is not very appealing and it gets in the way of learning. The comments[39] section holds all the discussions and this makes it hard to backtrack' (Dominic, survey)

Isabelle, in her second year, suggested that a site such as Lang8 had a better discussion forum layout.

Liz, in her third year, suggested using 'a more forum-like discussion section rather than in the comments section of a person's page would be neater and easier to navigate through' (Liz, survey).

Tom made a comment in his logbook:

> 'I think using a forum board (using some sort of MSN groups system or a custom-coded bulletin board system) layout may have helped discussions continue on as the threads would have been much more visible. Writing on people's profile pages and the reply button sending it to that person's page

[39] 'Comments' is one of SNS tools provided in Bebo site. As discussed in Chapter 3, the 'Comments' was one of the SNS tools used by the participants to post their opinions in regards to a discussion topic.

also compounded the confusion of Bebo's layout' (Tom, week 11 logbook entry).

Emma, who had not yet commenced her Japanese Studies at UNSW but had studied five years at high school, commented that:

> 'the "comments[40]" section is not really an ideal place for anything other than the main discussion topic' (Emma, week 4 logbook entry).

Emma extended her thoughts on this in week 11 and commented:

> 'I think this project would have been more successful if it uses a forum-like format, or even SNS sites that focus more on "communities" … such as Livejournal. … This way everyone only need to check one place to see new updates … that would have promoted more activity' (Emma, week 11 logbook entry).

Each group had used different SNS tools for discussion forums (refer Table 3-1 for the tools used at *Nihongo4us* and its purpose). The most common set up was as follows:

- a discussion topic was uploaded in the section called the 'Whiteboard' of a discussion leader's homepage; and
- the participants made a post in the section called the 'Comments' in a discussion leader's homepage.

The participants could only access fellow participants' pages within their own group. Each participant was responsible for setting up his or her own page following the instructions provided by the researcher. The layout of the homepage was also specified, for example what tools to be used and positions of these tools in the homepage. These instructions were provided so that each homepage had unified layout and main tools used for the discussion forums were easily identified in each homepage. However, the unified layout did not occur with some participants. Therefore, some Learners were confused as Austin, in his second year, commented in the survey:

> 'As much as I appreciate people personalizing their web-page as they see fit. One thing I really hated about Bebo was the inconsistency with the website. Everyone changed everything to where they wanted, and I found

[40] 'Comments' in this statement is as described as in Table 3-1. However, in Emma's group the 'Comments' tool was also used for general chat purpose. Therefore, the threads of chat and discussion were mixed in the section under the 'Comments' tool,

> this very difficult to adjust to, especially considering the fact that it was in Japanese …' (Austin, survey)

Emma also commented in her week 3 logbook entry that

> 'Bebo being everywhere and everyone feeling a bit lost …' (Emma, week 3 logbook entry)

When someone makes a post or updates their status on Facebook, Facebook will automatically notify the people, who are linked as friends, by sending a notification email. Bebo also has this service but as an option. This meant each participant had to activate this service at his/her homepage setting, had she/he wanted to be notified. The participants, who used SNS prior to participating in the present study, had been using Facebook. Those participants were accustomed to Facebook's automatic notification emails with a website link where the post was made. Jacob said during the post-session interview that he missed this automatic notification service, because this service made it easy for him to reach a new post (Jacob, post-session interview).

Bebo's notification service seemed unreliable as confirmed by four Learners and the researcher. Victoria commented that she had set this service up and received emails during the first few days but after that she did not receive any notifications (Victoria, post-session interview). Nicky, in her third year, commented that she forgot to check the site every so often. She did not realise any emails were sent to her, because she did not open her university email account to check the mails (Nicky, post-session interview). This was an extreme case, however, without any reminder, it was easy for busy participants to forget to participate. Not having any face-to-face contact or set time for the participants to participate is one of the drawbacks of online communications. It is very difficult to keep in touch with the participants and motivate them.

Another technical issue with Bebo was that carriage return was automatically placed after you made a post. Dominic, a graduate Learner, commented in the survey:

> 'anything you write up might look neatly formatted on your computer, but it might look really messy on others' (Dominic, survey).

The text before uploading that you see on your computer was different once it was uploaded. Austin, in his second year, commented in the survey that: 'splitting a sentence automatically was annoying'. For him to read the posts naturally and he had to cut and paste the text onto a Microsoft Word document so as to repaginate the text. He was

rather annoyed as this took extra time and effort, which he commented that he should not have to do (Austin, post-session interview).

This was problematic especially for Japanese language Learners, because Japanese scripts have no spaces between the words unlike in English. Splitting words or phrases at the wrong place would cause confusion to some Learners, especially to the Learners whose proficiency levels were low. The Learners needed to identify a set of characters as a word in order to look it up in a dictionary for its meaning. If they could not identify the word because the word was split, they would have difficulty comprehending a sentence. Tom commented that:

> ‘due to the nature of the Japanese script having no spaces at all, it isn’t visually appealing and neither inviting. The popular Japanese language learning websites out there are mostly in English. They are very easy to use and the results are quick’ (Tom, week 10 logbook entry).

Tom’s comments indicate the reasons why English and Romanaisation of words are heavily used in Japanese language learning websites. It is also true that many of these sites are targeted at beginners. However, another possible reason could be that many of those web sites might not be sufficiently user friendly to recognise Japanese words and phrases.

These various technical difficulties hindered the participants’ regular participation, affecting the uploading of a topic for discussion and reducing the number of participants in any consequential discussion. In spite of the fact that a pilot test was conducted prior to the study, some technical difficulties were observed. The observation of those difficulties can offer some useful suggestions for future studies, which will be discussed in Chapter 7.

4.4.3.2 Topics Not Uploaded

For the present study, the Learners were asked to choose a discussion topic of their interest. As in previous studies, such as Lee (2009); Pasfield-Neofitou et al. (2009), and Vonderwell (2003); well-crafted topics and questions by fellow students have been found to stimulate discussion forums. However, it seems that the above various technical difficulties contributed to delay the Learners in not just posting a comment to a discussion topic but also in uploading a topic question itself. This did caused a more significant problem because without a discussion topic, the discussion could not be started, as was seen in Emma's comment:

> 'it was a pity that the discussion [topic] was posted rather late' (Emma, week 7 logbook entry).

She further made a comment:

> 'a one week discussion was rather fast speed for some especially during summer holiday when students are working and busy generally' (Emma, week 9 logbook entry).

Considering technical problems mentioned before and the Learners' busy schedules, as Emma commented, if a topic was posted late and/or the Learners' responses were late, one week to discuss the topic was not long enough.

When there was no topic, the discussion forums could not function. This caused a considerable frustration for active Learners. Kerry, in second year, suggested:

> 'May be instead of leaving the freedom to students to pick the topics, there should be a more structured weekly schedule, so that if no one comes forward to 'chose and lead the topic', the other participants can still participate' (Kerry, survey).

Jack, graduated after completing his fifth year in Japanese Studies, suggested:

> '… have predetermined suggestions for discussion topics, making it clear where the discussion will take place each week (i.e. on which person's page)' (Jack, survey).

During the *Nihongo4us* Session, some Learners discontinued for various reasons and some notified the native speaker or the researcher but some Learners became inactive without any indication. It is not uncommon to lose some volunteer participants in such situations. However, this led to a low number of participants in some groups. Sixty-five

Learners were carefully distributed to seven groups, however, 39 Learners completed the *Nihongo4us* Session. Instead of merging groups during the *Nihongo4us* Session, the groups remained as originally constituted and the *Nihongo4us* Session continued. A merger of some groups might have produced more interactions because there were enough participants. However, if some groups were merged, the proficiency levels, gender and students background would not have been distributed evenly amongst the seven groups. It would also have affected the analysis of interactions, as some participants would be new to the group and some not. Nevertheless, the low number of continuing participants in some groups deserves mention as is provided next.

4.4.3.3 Low Number of Participants

As the session progressed, some groups had a low number of active participants. This meant that only limited ideas were exchanged in these groups' discussion forums. The active Learners wished that everyone would be more active and make regular posts. This became an important issue for the Learners as they recognised that by reading each other's posts they had learnt so much, as previously mentioned in the positive feedback noted in this chapter. Kerry commented in the survey regarding the most valuable part of *Nihongo4us* as being:

> 'the first week … when I felt everyone was participating and that I've learned new expressions the most, by reading at each other's comments'

Kerry also commented in the survey that the least valuable part of *Nihongo4us* was:

> '… when no one was participating, no one came forward to chose a topic and lead the conversation. …' (Kerry, survey).

Charlotte commented in her logbook that

> 'it's difficult when the forum is not active' (Charlotte, week 9 logbook entry).

Isabelle commented in logbook entry:

> 'more and more are not responding to the discussion, and makes it harder for us to interact and collaborate together properly' (Isabelle, week 11 logbook entry).

Furthermore, she commented in week 12:

> 'it would most probably be a good tool (Nihongo4us) if there were more participants' (Isabelle, week 12 logbook entry).

Victoria, who was in the same group as Isabelle, expressed similar frustration as she enjoyed reading different people's viewpoints about the topic but she could not.

> 'it was a bit disappointing that the discussion was somewhat stalled due to only three members participating' (Victoria, week 7 logbook entry).

Sebastian, in another mixed group, commented:

> 'once a few people were inactive, it slowed the entire thing down for me. The group was only small, so once 4 or so people stopped posting regularly, there wasn't much in the way of discussion going on, and my motivation to continue disappeared. I believe it would be best to have either larger groups, or just to befriend everyone participating in the program. That way discussion would be constant …' (Sebastian, survey)

Rose also suggested keeping everyone in one big group, with separate pages for topics where people could visit in order to discuss (Rose, survey). Whilst Rose's suggestion is an interesting approach, the sense of community might not be as strong as could be achieved in the formation of groups. The survey results showed that 55% felt a sense of community and 80% hoped to keep in touch with the fellow participants. Some Learners felt a sense of positive experience in spite of the low number of participants, as seen in Jack's comments in the survey regarding the most valuable part of *Nihongo4us*:

> 'I felt that the sense of community allowed me to connect with fellow learners of Japanese and find out more about them' (Jack, survey).

The sense of community was an important factor for discussion forums as will be discussed in the following chapters.

Tom, who had not yet commenced his Japanese Studies at UNSW but had studied four years at high school, commented in the survey:

> 'the somewhat detached nature of some of the participants was discouraging, but after figuring out who was 'in for the long run' and who was not, it was much easier to direct the discussion and keep it going' (Tom, survey).

Yumi, in her first year, participated in a mixed group and commented in her logbook:

> 'E-learning exercises such as this one will work if all students are eager to participate. Without enthusiasm it would be hard to get students to learn through this way since it requires self-discipline and motivation' (Yumi, week 3 logbook entry).

In order to participate in an online activity, the Learners were required to understand the nature of community as well as self-discipline and high motivation. The reasons why some Learners not necessarily discontinued but became inactive, were not clear as they did not submit survey nor participated in the post-session interview. However, some Learners made comments about difficulties in Japanese language level and this might provide some explanations as presented below.

4.4.3.4 Difficulties with Japanese

Jasper in his first year was in IG#1 and commented that it took him 15 minutes just to look up all the new words in a post so he could understand it (Jasper, week 3 logbook entry). This was not just a vocabulary issue but also the difficulty with the use of *Kanji*. Use of *Kanji* is a complex issue. Some Chinese background Learners were able to use *Kanji* readily as discussed before (refer Section 4.4.2.2). For some cases, the Learners might have simply cut and pasted the words to their homepages from a web site, such as actors' names, titles of movies and music. In other cases, the Learners used online translation, perhaps another cut and paste job.

It seemed that the Learners did not use an online translation service for complete sentences but limited it to words or phrases to be translated. Therefore, the use of online translation services might have contributed to the number of complex *Kanji* used in *Nihongo4us* by simply cutting and pasting it to their posts. In fact, complex *Kanji* were used by many but some struggled to understand their meaning. Without knowing pronunciation of words written in *Kanji*, the Learners had difficulties looking up the meaning of the words in a dictionary. However, it is easier to type the words in *Kanji* regardless of correct use of *Kanji* as explained by Grace, a first year Learner participating in IG#1:

> 'When typing in Japanese, the computer tends to automatically change some of the hiragana into kanji. The problem with this is that when I read other member's profiles it was difficult to understand and there was no hiragana next to it. This was a bit frustrating and I felt lost' (Grace, week 2 logbook entry).

Similarly, Sebastian also in his first year but in a mixed group, commented in the survey:

> 'There were a lot of kanji I didn't know. It would take maybe 20 minutes to decipher one person's message! If it were possible to have a hiragana reading in brackets following kanji not learnt in the first year, it would be really helpful' (Sebastian, survey).

Some native speakers and some Learners used *Hiragana* next to *Kanji* (this act is called *Furigana*) to show its reading. However, other Learners did not favourably receive this act as they tried to challenge reading *Kanji* but *Furigana* only became distracting. Dominic commented that 'writing the reading of kanji's should be discouraged' recommending the use of *Rikai-chan*[41] instead (Dominic, survey).

A free online software package, *Rikai-chan*, was introduced to the participants and they were encouraged to use it at the *Nihogo4us* site. However, not everybody used it. Some did not want to change their Internet browser as *Rikai-chan* only works with Firefox, Thunderbird and Seamonkey. It seemed an introduction of any computer applications needed more than recommendation in order for Learners to use them. This will be discussed in Chapter 7, Section 7.3.1.

The Learners might have been exposed to recognising *Kanji* during the *Nihongo4us* Session, but handwriting of *Kanji* was not reinforced. Victoria, in fourth year, found writing *Kanji* difficult during the first week back after the holiday, as she was too accustomed to typing them with a computer (Victoria, post-interview). The computer gives various options for *Kanji* according to what has been progressively typed and users can select the *Kanji* needed from the interactively generated list. This assists in generating recognition skills, but it does not enhance *Kanji* hand-writing skills; which are best developed by the practice of writing *Kanji* physically with a pen and paper.

The use of Kanji or vocabulary was not the only difficulties that the Learners had to overcome. Some advanced Learners took consideration of their junior Learners' feelings in relation to the complexity of sentences, and the length and provision of scaffolding, as seen in Learners' comments below.

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[41] *Rikaichan* is free software that can be downloaded as an add-on function to Firefox, Thuderbird and Seamonkey. By hovering the mouse over a word, it functions as a dictionary. It gives detailed information about individual *Kanji* and the word meaning.

Dominic, a graduate who was in a mixed group, made the following comments encouraging the juniors and at the same time showing some concerns:

> ‘I think lower level students tend not to bother to read anything too long. To them it looks difficult even though they probably could understand it if they’d just give it a try. Getting those students to step out of their skin is like trying to get a horse into water. Nihongo4us probably appears to them a real Japanese forum/website, which isn’t a bad thing but it’s difficult to attract participation’ (Dominic, week 9 logbook entry).
>
> ‘I refrained from correcting mistakes because I want (sic) to avoid looking strict on my juniors’ (Dominic, survey).

Dominic’s first comment probably explains some Learners’ inactive behaviour during the *Nihongo4us* Session. The lengthy posts might have been overwhelming for those students, especially the introductory level Learners who discontinued. Dominic participated in *Nihongo4us* as a *Senpai* (senior) as he had already graduated. In support of Dominic’s second comment above, his post-session interview also revealed how he was careful in making a post considering the feelings of *Kohai* (junior), especially when he was providing scaffolding because he remembered how he felt as a student. The whole discussion was conducted in Japanese (except some in IG#1) and the participants were encouraged to use Japanese. Use of English was not forbidden. In fact, English usage was rather encouraged if it was needed to remove confusion. However, in reality, not many participants used English at all. The fact that there was hardly any English used seemed to discourage others to use it. The participants felt rather proud to accomplish communicating completely in Japanese (for example, Danielle, post-session interview).

Like writing *Kanji*, not every aspect of language learning could be covered in discussion forums using a SNS. As the Learners recognised, a single tool would not be sufficient for practicing all aspects of Japanese, as discuss next.

4.4.3.5 Extra Activities

Although the Learners seemed not to have enough time to fully participate in *Nihongo4us*, some Learners expressed that they would have liked more variety of activities. Jasmine, in her first year, who participated in a mixed group, made a

comment that she would have liked some variety in the communication such as audio chatting or video sharing. Her reasoning was that she was less motivated towards the end as the communication method was always the same. Charlotte, also in her first year but participated in an introductory group, commented that *Nihongo4us* could provide reading and writing exercise but listening exercise needed other methods.

One obvious negative feature of activities using a SNS, such as *Nihongo4us*, would be the difficulty to encourage and organise aural exercises. There was not a set time for the participants to be online. Not everyone would have audio equipment for their computers enabling the recording of their voices. Some participants were overseas; therefore, time zone differences needed to be considered. If the participants were able to find a mutually convenient meeting time, oral communication would be possible by using Skype.

Some participants did post videos and music, which would act as some aural exercise. However, some groups (IG#1 and MG#3) did not have any videos or music posted and so they were deprived of aural activity. Rose, in fourth year, commented in the survey that she did not use Video Box or Photo tools on purpose because she does not like posting a photo of herself. Yet she thought both Photos and Video Box would be good tools to enhance a point of view in a discussion or to introduce oneself. On the other hand, Charlotte in the IG# 2 posted many photos during her discussion session to show what she did on her trip overseas. She did not make a direct reference to those photos but a few comments were posted. During the *Nihongo4us* Session, she also uploaded interesting videos, which also attracted a few comments from the participants. Thus, it is apparent that the Learners had not reacted uniformly to the opportunity to avail themselves of extra activities. This in itself is an interesting observation to which the discussion will return in the following chapters where the sense of community is discussed.

4.5 Differences in Learners' Motivation

Interesting patterns of Learner behaviour can be related to observed differences in their motivations as revealed in the questionnaire. The questionnaire results measuring Learners' motivation and desire to learn Japanese indicated that the group of Learners who completed the *Nihongo4us* Session showed higher motivation and desire to learn

Japanese than the group of Learners who discontinued (refer Items 12, 15, 16, 18 and 22 in Table 4-8). However, desire to learn independently was stronger in Learners who discontinued (refer Items 14 and 17) and these Learners engaged more frequently in receptive activities.

No differences were observed between the Learners who completed and who discontinued in relation to their involvement with productive activities such as email or blog. However, the Learners who completed *Nihongo4us* showed more frequent use of computer based learning tools such as online dictionaries (refer Item 52). As the Learners experienced the challenges and difficulties in reading and writing posts, the knowledge and skills to use online dictionaries might have assisted them to complete the *Nihongo4us* Session. Table 4-8 presents the differences between the Learners who completed and those who discontinued in relation to relevant parts of the questionnaire discussed above.

Table 4-8: Differences in questionnaire responses between Learners who completed *Nihongo4us* and those who discontinued

	Item No.	**Issue covered by the item**	**Completed Agreed* (N=39)**	**Discontinued Agreed* (N=26)**
Motivation to study Japanese	12	Study harder than classmates	66%	53%
	13	Think of words/ideas during the class	92%	88%
	14	Would have study Japanese by own if not taught at USNW	97%	100%
	15	Spend long hours studying Japanese	69%	50%
	16	Try hard to learn Japanese	92%	69%
	17	After graduate, continue to study Japanese	92%	100%
Desire to learn Japanese	18	Do the assignments as soon as get it	61%	53%
	19	Read Japanese newspaper/magazine	56%	53
	20	During the class, absorbed in the study	82%	80%
	21	Want more lesson hours	84%	80%
	22	Should be taught more widely at high schools	87%	80%
	23	Found Japanese more interesting than other subjects	97%	96%
Use of Media	**Item No.**	**Frequency of use of the Media**	**Completed Agreed** (N=39)**	**Discontinued Agreed** (N=26)**
	45	Games	30%	50%
	46	Movies (including DVD/TV drama/*Anime)*	82%	92%
	47	Music	87%	92%
	48	Written media	64%	57%
	51	Email/Chat/Mobile Text	33%	46%
	52	Computer based learning tools, online dictionary etc	92%	65%
	53	CMC sites, blogs, SNS	46%	46%

* Figures shown in this table are combined results of Strongly Agree and Agree
** Figures shown in this table are combined results of 'Everyday', 'Often' and 'Sometimes' to indicate their usage.

4.6 Summary

This chapter presented the Learners' opinions on CMC in general, prior to participating in the present study, then their opinions on the *Nihongo4us* Session are presented in two parts: individual Learners' positive feedback, and negative feedback.

The Learners were using various CMC tools in an out-of-classroom environment. In particular, they participated in receptive activities (such as watching TV programs and listening to J-pop music) as part of their language study and did so with pleasure. The activities were chosen purely based on their interests. On the other hand, there seemed to be a gap between what the Learners wished to do and what they did in proactive activities (such as email and chat). This gap was largely due to a lack of accessibility of online communities, where native speakers participated. This was more so for the junior Learners and those Learners who had not participated in a study abroad program. The senior Learners and the Learners, who had participated in a study abroad program, had wider contacts with native speakers. Therefore, they used more proactive CMC tools. These tools offer the Learners pleasure and learning at the same time. For the Learners to use CMC tools outside of their classes, they might need to be more motivated and to have interests aligned with the CMC tools as well as having initial contacts in the online communities.

The Learners enjoyed participating in the *Nihongo4us* Session. The study received a number of positive opinions as well as negative ones from the Learners. However, this data presented in this chapter is subject to a non-participation bias, therefore feedback, especially the lack of negative feedback, should be treated with this bias in mind. The findings of the Learners' opinions of *Nihongo4us* can be summarised as follow:

- Learners would prefer face-to-face classes with an online activity, such as *Nihongo4us*, to be incorporated in their formal study program as an additional activity. Ideally they would prefer having a face-to-face session to discuss the issues raised in *Nihongo4us* to enhance their learning. The reasons being that some Learners: could not absorb information unless it was explained to them face-to-face; found difficult to express their feelings and thoughts by writing only in Japanese, without receiving some simultaneous help; and, wanted to discuss language usage more in depth in a classroom situation.
- Learners were exposed to large amounts of new vocabulary and *Kanji*. They were able to read and write faster and they challenged themselves to express their feelings beyond their

comfort zone, which in turn meant that those Learners gained more confidence in expressing themselves in Japanese.

- Learners enjoyed the flexible learning and learner friendly and supportive atmosphere of *Nihongo4us* which enabled some of them to collaborate and ask questions of each other.
- Although language acquisition was not part of the present study's focus, a small sample of SPOT results revealed that some active Learners increased their proficiency levels, and survey results indicated that the Learners were of the opinion that they were better prepared for their Japanese studies.
- Having no time restriction to compose their thoughts allowed the Learners more freedom to explore their writing ability. However, delayed responses might be easily extended to no responses and also lead to some anxiety to the fellow participants.
- Some technical problems of the *Nihongo4us* site were discussed, such as too many SNS tools available at the site caused some confusion; the inconsistency in the layout of the participants' homepages; the lack of notification of posts; and, repagination for Japanese fonts.
- A number of inactive participants and some technical problems in some groups hindered the development of discussion forums by not having a discussion topic uploaded.
- Some Learners suggested that more learning activities be included in the site, such as quizzes or speaking and listening exercises

Many Learners saw the potential of what they could do with a SNS, such as *Nihongo4us*. However, there are still improvements to be made in organising such a site. Such improvements might be those that could engender increased incidence and efficacy of scaffolding and would do so by understanding the dynamics of scaffolding in the circumstances of out-of-classroom learning promoted through a SNS.

The next chapter discusses the findings in relation to scaffolding observed during the *Nihongo4us* Session, addressing the remaining Research Questions:

> ‘Can a SNS foster collaborative learning and reflective thinking via Learners and native speakers’ scaffolding in an out-of-classroom environment?’;
>
> ‘What factors influence collaborative learning and the provision and take-up of scaffolding?’; and
>
> ‘In relation to the above questions, what differences are there in different groups arising from level of proficiency?’

CHAPTER 5: Scaffolding

5.1 Introduction

The previous chapter described the Learners' usage of CMC in general and their opinions about the *Nihongo4us* Session. Understanding the learner's use and thoughts about CMC, which reflects their social and historical past, was important from the perspective of Activity Theory because it may have affected the Learners' performance on *Nihongo4us*. The Learners' feelings and thoughts on *Nihongo4us*, as described in the previous chapter, presented positive and negative feedback, which suggests possible contradictions. Understanding of the Learners' feelings and their feedback together with the mechanisms of contradictions assist in analysing the interactions observed during the *Nihongo4us* Session. This in turn sheds light on the extent of collaboration in *Nihongo4us*; providing answers to the research questions.

This chapter presents, in three parts, the scaffolding found in this study. Firstly, this chapter describes three categories of scaffolding: Linguistic; Content; and Navigation Scaffolding. Linguistic and Navigation Scaffolding were further categorised into smaller units, identified as scaffolding strategies. Secondly, this chapter presents an overview of posts made on the *Nihongo4us* site, with attention drawn to the scaffolding. The number of scaffolding found in this study was presented in three stages of *Nihongo4us*: set up stage; during the discussion forums; and outside of the discussion forums. The scaffolding found at each stage was presented with the total number of posts and participants per group. This information will assist in understanding how the scaffolding is situated amid the overall activity of the *Nihongo4us* Session. Dividing the presentation into three stages, rather than one overall view, will provide a more thorough understanding of the development of the *Nihongo4us* Sessions. Lastly, this chapter examines any differences found in the provision of scaffolding in each category, as occurred in the seven groups.

The findings presented in this chapter will assist to develop an overall view of the interactions and scaffolding that were observed in each group. This will lead to the next chapter's discussion about the possible causes of differences observed across the seven groups.

5.2 Categories of Scaffolding

The scaffolding, as described in Chapter 2, is any assistance given to complete a task. When the scaffolding is provided as a process of negotiation in ZPD, it promotes understanding, which leads to learning. The scaffolding, in the present study, is broadly defined as any assistance given to a participant during the *Nihongo4us* Session. However, it is not possible to discuss whether specific scaffolding instances had a subsequent learning impact on the Learners. In order to examine the acquisition of words or sentences, which the Learners encounter in the *Nihongo4us* Session, a longitudinal study, longer than the duration allowed for the present study, would be necessary. The focus of the present study was not about how the scaffolding helped the Learners' language acquisition. Instead this study is concerned with what factors influenced the provision of scaffolding and whether or not a SNS, such as the *Nihongo4us* site, could provide a platform where participants provide each other with mutual scaffolding.

As discussed in Chapter 2, scaffolding categories should reflect the interactions and the unique environment where these interactions occurred. This study was not conducted in a face-to-face classroom but on an online discussion forum using a SNS. Therefore, scaffolding previously identified in face-to-face interactions or combined with face-to-face and online interactions are not as applicable to this study. From this perspective, new categorisations of scaffolding were created, building upon the previous studies and incorporating new categories to reflect this unique environment rather than using the previously defined categories reflecting a different environment.

Scaffolding identified at the *Nihongo4us* site included 'asking for clarification' and 'requesting actions' as previously recognised as forms of scaffolding by other scholars (Donato, 1994; Gagné & Parks, 2013; Khatib & Safa, 2011; Lantolf & Appel, 1994; Storch, 2007). Furthermore, scaffolding identified at the *Nihongo4us* site embraced not just linguistic categories of scaffolding, such as grammar corrections, but also other categories: content and navigation scaffolding. Content Scaffolding allowed the participants to help each other understand the content of a discussion topic. This could be approached, for example, by simply providing a photo or URL to assist the participants' understanding on the content. Navigation Scaffolding was related to technical matters such as computer features and usage of online tools. Accordingly,

three main categories of scaffolding were identified: Linguistic; Content; and Navigation. Linguistic and Navigation Scaffolding were further categorised into smaller subcategories as scaffolding strategies, as illustrated in Table 5-1 below before detailed descriptions of each category are explained.

Table 5-1: Categorisation of scaffolding

Category of Scaffolding	Scaffolding Strategies	Description	Example
Linguistic Scaffolding	Eliciting Explanations	Asking questions and seeking explanations	• What does this mean? • What is it in English? • How do you read this kanji?
	Providing Corrections	Providing corrections with/without explanations	• I think you meant to say 言う通り[as being said] (correction made in regards to spelling) • 日本語勉強はじめた理由→日本語「の」勉強「を」はじめた理由 [reasons for studying Japanese] (addition of missing particles)
	Asking for Clarifications	Asking questions to clarify something	• 「発売開始」はゲームや本だけですか。映画が発売開始と言えますか？[Is the expression hatsubai kaishi only used for games and books? Can it be used for movies to say it's started screening?] • 「見た」ということはアニメですか？[When you said you watched, do you mean it was Anime?]
	Requesting Actions	Making requests to another participant e.g. grammar check	• 「・・トピックの返事をチェックしてもよろしでしょうか？Casual を練習したいけれど、正しいかどうか分からないです。」[Could you please check my reply to the topic? I want to practise the plain form but I'm not quite sure whether it is correct.]
	Providing Answers	Responding to a question/ clarification	• 「文の最後で」は「at the end of the sentence」です。['bun no saigo de' means at the end of the sentence.]
Content Scaffolding	Summarising/ Developing Discussions	• Helping participants to understand the content • Suggesting another point of view to the discussion	• So far John said xyz and Mary said xyz… • I agree with John but I could see another point of view such as …
Navigation Scaffolding	Asking Questions	Asking questions regarding some computer tools and housekeeping matters	• How do you change the background picture? • I couldn't read your posting as it came through as gibberish characters.
	Making Suggestions	Making suggestions regarding technical and housekeeping matters	• There is no leader next week, would you like to be a discussion leader? • Change the set up by going to setting → privacy ···
	Providing Answers/ Confirming	Confirming some matters either in relation to computer tools, including housekeeping matters	• I've changed it. Can you see it now?

5.2.1 Linguistic Scaffolding

Linguistic Scaffolding is defined as assistance given to the participants to accurately express what they mean. This can include making linguistic suggestions or corrections on sentences, phrases, or on Japanese characters (*Hiragana*, *Katakana* and *Kanji*). Within Linguistic Scaffolding, five scaffolding strategies were identified, as shown in Table 5-1 above including corrective feedback. These subcategories of scaffolding: scaffolding strategies reflected the majority of participants' scaffolding strategies as identified during the *Nihongo4us* Session within the Linguistic Scaffolding category.

Two distinct types of scaffolding strategies for asking questions were found at the *Nihongo4us* site. The first, 'Eliciting Explanations', relates to a linguistic matter, and thus, Linguistic Scaffolding. The second, 'Asking Questions', relates to a technical or house keeping matter, hence, Navigation Scaffolding. These two scaffolding strategies are distinct. The first, 'Eliciting Explanations' in Linguistic Scaffolding, is concerned with question regarding the terms and use of language, such as, asking about different expressions. Where as the second, 'Asking Questions' in Navigation Scaffolding, is only concerned with the usage of different tools, for example, how to change a background picture available on the *Nihongo4us* site (refer to Section 5.2.3). An example of 'Eliciting Explantions' is provided in Excerpt[42] 1:

[42] In this thesis, excerpts from the online posts, using Japanese and/or English, are reported exactly as they were posted at the *Nihongo4us* site without change except where some parts of the post were omitted by the researcher (marked by ≈). The excerpts in this thesis also provide the Romanised version of the original text, that is a transliterated form in phonetic orthography using English alphabets. Additionally, English translations are provided beneath these excerpts, as the original posts were mainly in Japanese. The English translation for each post was made as closest as possible to its original text including any mistakes and nuances, as long as the meaning was not going to be further distorted beyond the meaning expressed in the post.

Excerpt 1:

Line 1	Feb. 6 Victoria @Victoria's WB 7-3	≈[43] ちょっと聞きたい事があって、「なぜ好きだ？」と「どうしてすきなの？」違いますね。英語でどっちも'why do you like them'ですが、やはり日本語で違う気持ちが出て、その気持ちは何でしょうか。 ≈ chotto kikitai koto ga atte, '*naze sukida?*' to '*doshite suki nano?*' chigaimasune. Eigode docchimo 'why do you like them' desuga, yahari nihongo de chigau kimochi ga dete, sono kimochi wa nan deshooka. ≈ I'd like to ask a question, what are the differences between '*naze sukida?*' and '*doshite suki nano?*'? They both get translated as 'why do you like them' but there are some different feelings in these two. What are these different feelings?

The participants used various strategies to post corrections. Some had an indirect approach and others took a direct approach by posting a correction beside the original post or an extract. Sometimes corrections were accompanied with further grammatical explanations, and other times the corrections alone were posted. In the present study, all such instances were categorised as 'Providing Corrections'; to keep the categorisations consistent. Excerpts 2 and 3 present examples of 'Providing Corrections' scaffolding with two different styles of correcting: indirect approach and direct approach, both without any further explanation as to the grammatical mistakes.

[43] ≈ indicates that parts of the text from the original post have been omitted.

Excerpt 2:

Line	Dec. 2	私も、宮崎駿の映画が大好きな~　^ ^
1	Isabelle @Nakagawa's Comments 5	
		Watashi mo Miyazaki Haruo no eiga ga daisukina ~ ^ ^
		I also love Haruo Miyazaki's movies ~ ^ ^
2	Dec. 2 Nakagawa @ Isabelle's Comments 9	♥映画が大好き「だ」な～ですね ^ ^ いいですよね～
		Eiga ga daisuki 'da' na~desune ^ ^ iidesu yo ne~
		It's I love the movies ~ [adding the verb ending to the sentence] ^ ^ It's good isn't it~

Excerpt 3:

Line	Dec. 10	ニッキーさんのページに出したコメントの添削：
1	Fujii @Liz's Comments 8	ニッキーさん、始めまして｛x、初めまして 0｝。 ｛コメントが｝遅れて、すみません。 ニッキーさんの写真はペッパランチで取りましたね｛撮ったものですよね？｝。私もあそこで食べたことがあります～ これから、どうぞよろしくお願いします！ コメント：全体的に問題なし。ただ、マイナーな漢字の間違いがあっただけ
		Nikkii san no pe-ji ni dashita komento no tensaku: Nikkii san, hajimemashite {x, hajimemashite o [correction on the choice of *Kanji*]}. {komento ga} okurete, sumimasen. Nikkii san no shashin wa peppa ranch de torimashita ne {totta mono desu yo ne?[correction on the choice of *Kanji*]}. watashi mo asokode tabeta koto ga arimasu~ Korekara, doozoyoroshiku onegaishimasu! Komento: Zentaiteki ni mondai nashi. Tada, mainaana *Kanji* no machigai ga atta dake.
		Correction for the posting made at Nicky's page: Hi Nicky. How do you do [*Kanji* usage was corrected]. Sorry for my late {comment}. You've taken the photo at Pepper Lunch, didn't you? [corrected *Kanji* usage for 'taken the photo'] I've also eaten there~ Nice to meet you! Comment: Generally no problem. Just a miner mistakes

using wrong *Kanji*.

When a correction was made without any explanation, a Learner occassionaly took the intiative to ask a further question or seek a further explanation. This was categorised as 'Asking for Clarifications', separate from simply asking a question as in 'Eliciting Explanations'. This distinction was important as it recongised a participant's further initiative. Furthermore, identifying the extent of collaboration fostered by *Nihongo4us* is one of the foci of the this study.

Following Excerpt 3 above, the correction by the native speaker, Fujii, prompted Liz to ask a further question about the usage of the word, '*toru'*, as shown in Excerpt 4. This scaffolding strategy was classified as 'Asking for Clarification'. Fujii in Excerpt 3 corrected one *Kanji* in Liz's post; *Kanji* '*toru'* as in taking a photo. There are quite a number of homophones, where the words share the same procnunciation but are represented by different *Kanji* for different purposes. '*Toru*' is an example of this. The correction in Excerpt 3 prompted Liz to ask a further question about *Kanji*, namely whether this *Kanji* '*toru*' is exclusively used to express taking photographs.

Excerpt 4:

Line		
	Dec. 10	添削ありがとうございました！
1	Liz @ Fujii's Comments 13	「撮った」は写真を撮るときだけ使いますか。 Tensaku arigato gozaimashita! 'Totta' wa shashin wo torutoki dake tsukaimasuka. Thank you for the corrections! '*Totta* [using this kanji]' can be only used in relation with the taking photos?
2	Dec. 11 Fujii @Liz's Comments 12	写真、ビデオ、あと映画を撮るというように使います。 それ以外は違う漢字になりますね；） Shashin, bideo, ato eiga wo toru toiuyo ni tsukaimasu. Sore igai wa chigau kanji ni narimasune;) You can use [this kanji for] taking photos, video, and movie. For others, use different kanji ;)
3	Dec. 11 Liz @Fujii's Comments 17	はい，分かりました〜 説明ありがとうございます！

Hai, wakarimashita~
Setsumei arigato gozaimasu!

Yes, I understand ~
Thank you for your explanation.

The *Kanji*, especially homophones, are difficult for Learners to master. As Learners noted in the previous chapter (for example, Jim and Kerry), learning by mistakes might be the best way to learn. If so, the interactions between Liz and Fujii, in Excerpt 4, are good examples of where the scaffolding was well provided, meeting the Learner's need when they required help. The Learner, in this case Liz, had benefited by acquiring this knowledge of which *Kanji* to use for which occasion.

Some Learners posted a request, for example, asking a native speaker to check the grammar of their post. This scaffolding strategy is classified as 'Requesting Actions'. All the participants were encouraged to discuss uncertain expressions and post any corrections or ask further questions. When the Learners were in doubt, they sought assistance by asking native speakers to check their grammar. This did not happen very frequently. However, it is important to recognise such occasions by separately categorising them.

Excerpt 5:

Line	Dec. 2	≈
1	Maddy @Suzuki's Comments 4	先生、よっかたら私の自己紹介を check してくれませんか。 まちがってるところをおしえて下さい。どうもありがとうございます。 ≈ Sensei, yokattara watashi no jikoshookai wo check shite kuremasenka. Machigatteru tokoro wo oshiete kudasai. Doomo arigatoo gozaimasu. ≈ Teacher, would you mind checking my self-introduction? If there are any mistakes, please let me know. Thank you very much.
2	Dec. 2 Suzuki @Maddy's Comments 5	マディさん、じこしょうかいはとても上手です。グラマーのまちがい（mistakes）は下です。 二年前、シドニーにべんきょうするために行きました。⇒ 二年前、シドニーにべんきょうするために来ました。（Because you are living in Sydney, 'come' is better

in this sentence.)
がんばってください。

Madi san, jikoshookai wa totemo jyozu desu. Guramaa no machigai (mistakes) wa shita desu.
Ninenmae, shidoni- ni benkyo surutame ni ikimashita ⇒ ninen mae, shidoni- ni benkyosuru tame ni kimashita. (Because you are living in Sydney, 'come' is better in this sentence.)
Gambatte kudasai.

Dear Maddy, your self-introduction is very well written. Below is some grammatical mistakes.
I went to Sydney to study two years ago ⇒
I came here to Sydney to study two years ago.
(Because you are living in Sydney, 'come' is better in this sentence.)
Good luck.

Providing an answer to a participant's question, that was not related to a correction, was categorised as 'Providing Answers' as seen in Excerpt 6.

Excerpt 6:

Line		
1	Dec. 12 Maddy @Suzuki's Blog 1-2	「日本に住みながら」でいみはなんですか。 英語で「To live/stay for a long time in Japan」 ですか。 'Nihon ni suminagara' de imiwa nandesuka. Eigo de 'To live/stay for a long time in Japan' desu ka. What does 'Nihon ni suminagara (while living in Japan)' means? Does this mean 'to live/stay for a long time in Japan' in English?
2	Dec. 2 Suzuki @Maddy's Comments 9	「日本に住みながら」は、while living in Japan です。 'Nihon ni suminagara' wa while living in Japan desu. 'Nihon ni suminagara' means while living in Japan.

5.2.2 Content Scaffolding

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. One type of scaffolding strategy, 'Summarising/Developing Discussions' has been identified. The nature of 'Summarising/Developing Discussions' is to assist participants to understand the topic that the group is discussing and to encourage them to express their opinions.

Content Scaffolding in the present study is adapted from the point of view of the soft scaffolding (described by Saye and Brush (2002) discussed in Chapter 2), that is to lead the discussion and suggest another view point. In the groups where the discussions were successfully active and continued till the end of the session, native speakers and/or the topic leader often summarised the other participants' points of view that were posted, before presenting his/her own views. This was categorised as Content Scaffolding as it appeared to help the participants gain a further understanding of what the others were saying in relation to a topic. This help was seen to be different from Linguistic Scaffolding.

Excerpt 7 presents an example of the Content Scaffolding, 'Summarising/Developing Discussions' found at the *Nihongo4us* site. This excerpt was taken from MG#1, during the topic 5 discussion forum. The group was discussing the meaning of some Japanese lyrics, because the discussion leader (Tom) found it difficult to understand the meaning behind some Japanese lyrics. He wanted to know whether other participants had similar experiences and hear their thoughts on Japanese lyrics. In order to help fellow participants, he posted a link to the website so that others could listen to the relevant song. Without this link, it would probably have been difficult to understand the intention of the discussion leader and to participate in this discussion.

Excerpt 7:

Line	Jan. 15	≈
1	Tom	聞いている音楽の中で変な歌詞があるですか？
	@Tom's	≈
	WB 1-1	ええぇ、きっかけとなった曲はこれでした
		http://www.nicovideo.jp/ ≈
		≈
		≈
		Kiiteiru ongaku no naka de henna kashi ga arudesuka?
		≈

E E e, kikkake to natta kyoku wa koredeshita
http://www.nicovideo.jp/ ≈
≈

≈
Have you found any strange lyrics in music that you are listening to?
≈
WWwell, The music that triggered my questions was this
http://www.nicovideo.jp/ ≈
≈

5.2.3 Navigation Scaffolding

Navigation Scaffolding is defined as the assistance given to participants regarding the navigation of the SNS tools available at the *Nihongo4us* site. This includes the use of a computer and housekeeping matters; all of which assist with the smooth operation of the *Nihongo4us* Session. 'Housekeeping matters' includes, organising a discussion leader and notifying participants regarding a discussion forum. Three different types of scaffolding strategies were observed within the Navigation Scaffolding: 'Asking Questions'; 'Making Suggestions'; and 'Providing Answers/Confirming'. 'Making Suggestions' was distinguished from 'Asking Questions' as this intervention did not necessarily trigger an answer or action from the fellow participants. On the other hand, 'Asking Questions' was directly involved the anticipation of receiving an answer. As discussed previously, questions regarding SNS or Internet tools were categorised as 'Asking Questions' in Navigation Scaffolding, and is dictinctly separate from the 'Eliciting Explanations' in Linguistic Scaffolding.

The following excerpt (Excerpt 8) illustrates the distinctions amongst the three types of scaffolding strategies within the Navigation Scaffolding. At the initial stage of setting up their own homepages and uploading their self-introductions, some participants' homepages were not uploaded correctly. This prevented the other members in the same group from seeing their homepages. In such cases, the fellow participants helped each other by providing technical instructions. For example, in Excerpt 8, Isabelle and Nakagawa made separate posts advising the relevant participant, Harry, that his self-introduction was not visible. This followed a number of posts asking how to upload the homepage correctly. The initial post made by Isabelle (Line 1) was categorised as 'Asking Questions'. Nakagawa's post (Line 2) was categorised as 'Making Suggestions'. Once Harry uploaded the self-introduction, Isabelle confirmed that Harry's self-introduction was now visible (Line 5), this was classified as 'Providing Answers/Confirming'.

Except 8:

Line		
1	Dec. 3 Isabelle @ Harry's Comments 2	へロ~　ハリーさん　^ ^　君の自己紹介はどこですか？よくハリーさんが知りたいから、見たいだな～ Helo~ Hari- san ^^ kimi no jikoshookai wa doko desuka? Yoku Hari- san ga shiritai kara, mitaidana~ Hello~ Harry^^ Where is your self-introduction? I want to see it because I want to know more about you ~
2	Dec. 6 Nakagawa @ Harry's Comments 3	ハリーさん、自己紹介（じこしょうかい）をもっと書（か）いてくださいね Hari- san, jikoshookai wo motto kaite kudasaine. Harry, please write more of your self-introduction.
3	Dec. 7 Harry @Nakagawa's Comments 11	あああああ　(T^T) Profile layout　セッティングをするんだ。。今気付いた。。ごめん　>。<　一周間前に出来たのにD; A a a a a (T^T) Profile layout setting wo surunda .. ima kizuita .. gomen >.< isshuukan mae ni dekita noni D; Ah~~~(T^T) Need to set the profile layout. I just realised. Sorry >.< I could have done that a week ago D;
4	Dec. 7 Harry @ Isabelle's Comments 19	>。>　Display の設定がしなかったから皆は見えないこと。。。今気が付いた遅いけど　結構書いた >。< >.> Display no settei ga shinakatta kara minna wa mienai koto … ima kiga tsuita osoikedo kekkoo kaita >.< >.> It's bit late but I've just realised that everyone could not see mine because I didn't set my display (correctly). I wrote fair bit. >.<
5	Dec. 7 Isabelle @ Harry's Comments 4	あはは！良かった！今はハリーさんのプローファイル自己紹介が見えた！私も日本料理を作るが好きです！ え～いいな、来年は日本で留学すること。 Aha ha! Yokatta! Ima wa hari- san no purofairu jikoshookai ga mieta! Watashi mo nihon ryoori wo tsukuru ga suki desu! E~ iina, rainen wa nihon de ryuugaku suru koto. aha ha! That's great! Now I can see your self-introduction on your profile! I love making Japanese food as well! Oh~ aren't you lucky that you are going to study abroad to Japan next year.

The following two sections present in two parts the findings in regards to scaffolding strategies in the present study. Section 5.3 presents firstly an overview of posts in order to gain an understanding of activities across the seven groups during the *Nihongo4us* Session. Secondly, the scaffolding strategies found across the seven groups are presented three different stages: set up stage; discussion forums stage; and outside of discussion forums. Section 5.4 presents the scaffolding strategies in three categories across the seven groups. Examining scaffolding strategies from two different approaches; Sections 5.3 and 5.4 allows for observations and reports on the effect of different stages in the provision of scaffolding and the differences between the groups. Discussions of these findings are presented in the next chapter.

5.3 Overview of Posts

Six hundred and ten scaffolding strategies in total were observed in over 1500 posts made during the *Nihongo4us* Session. Just under half of these scaffolding strategies were Navigation Scaffolding (275 scaffolding strategies, 45%), closely followed by Linguistics Scaffolding (256 scaffolding strategies, 41%). Content Scaffolding (79 scaffolding strategies) was 12% of the total. Native speakers provided just over half of the scaffolding in each of these categories. Appendix 9 presents: details of the numbers of scaffolding per category found in each group per discussion topic, with the number of participants; the number of posts; and the average number of characters posted during each discussion forum[44].

Table 5-2 below presents the brief summary of interactions during the *Nihongo4us* Session. The number in the parentheses indicates the scaffolding strategies produced by the native speakers. Three Learners did not sign up to Bebo, even though they participated in the pre-session interview. Some Learners became less active during the discussion forums which caused the number of participants to fluctuate. Table 5-2 also shows the number of participants at the beginning of the set up stage on the left hand side of the arrows. The average actual numbers of participants, during the discussion forums, are shown on the right hand side of the arrows. The average number of participants during the discussion forums was calculated with the number of actual

[44] Two different tools were used to hold a discussion forum. One was at the 'Comments' and the other used the 'Whiteboard'. If there were any scaffoldings or comments that related to the topic using other tools (such as Blog, Photo or Mail) were also included. However, any posts made that were not related to the topic of a discussion were counted as posts made outside of discussion forums.

participants who made post at each discussion forum. Some groups produced multiple types of scaffolding strategies in a single post. Therefore, in these instances, the number of total posts made in a group might not always correspond with the total number of scaffolding strategies.

Table 5-2: Summary of interactions during the *Nihongo4us* Session

No. of	IG#1	IG#2	MG#1	MG#2	MG#3	MG#4	MG#5	TOTAL
Participants (NS)	12 → 4 (1)	12 → 6 (2)*	10 → 4 (2)*	10 → 5 (2)*	9 → 3 (1)	8 → 5 (1)	8 → 4 (1)	69 → 31 (7)
Average No. of Participants during the discussion session	4	6	4	5	3	5	4	4
Posts (by NS)	141 (28)	340 (56)	147 (47)	174 (71)	139 (37)	285 (66)	284 (108)	1510 (413)
Topics discussed	6	8	9	8	3	8	10	52
Linguistic Scaffolding (by NS)	16 (8)	68 (34)	9 (2)	28 (18)	15 (11)	56 (18)	64 (48)	256 (139)
Content Scaffolding (by NS)	0	7 (2)	6 (2)	14 (12)	0	30 (7)	22 (17)	79 (40)
Navigation Scaffolding (by NS)	16 (11)	44 (17)	30 (18)	21 (13)	18 (13)	63 (31)	83 (42)	275 (145)
TOTAL SCAFFOLDING (by NS)	32 (19)	119 (53)	45 (22)	63 (43)	33 (24)	149 (56)	169 (107)	610 (324)

* The second native speaker was assigned to assist the first native speaker (refer to Section 3.7.3)
NS = Native Speaker

Table 5-2 indicates that approximately one third of total posts made contained some scaffolding strategies. Many of the native speakers' posts contained scaffolding strategies, comparatively the majority of the Learners' posts did not contain scaffolding strategies. Both the Learners and native speakers were able to provide scaffolding in all three areas except IG#1 and MG#3. These two groups did not provide any Content Scaffolding, although the average number of Content Scaffolding across the seven groups was ten.

The larger numbers of Navigation Scaffolding indicates that the groups had some technical problems during the *Nihongo4us* Session. However, this number is also indicative of the number of posts made during the set up stage which involved organising discussion leaders. This will be further discussed in the next section (Section 5.3.1). Provision of scaffolding did not seem to differ between the two types of

proficiency level, introductory and mixed, but rather the differences occurred across the seven groups (for example, differences were observed between MG#3 and MG#5). The lesser number of Linguistic Scaffolding did not mean that fewer mistakes were found in the posts, as not every mistake was identified or corrected by the participants.

With the exception of MG#3, the groups were able to discuss topics on a regular basis during the 13 weeks of the *Nihongo4us* Session. As seen in the list of topics discussed during the *Nihongo4us* Session (included in Appendix 9), a total of 52 topics, in a wide range of subjects, were discussed. The commonly discussed topics concerned food and Japanese language studies. As the table in Appendix 9 shows, some topics gathered more interest than others judging from the number of posts being made.

Table 5-2 indicated that in regards to the number of posts, topics and scaffolding, no differences were observed between introductory level groups and mixed level groups. IG#2 made more posts than any other group. Furthermore, the Learners in introductory level groups provided as much Linguistic and Navigation Scaffolding as much as those in the Mixed Groups. Every group except IG#1 and MG#3 were able to provide Content Scaffolding. It seemed that their proficiency levels did not hinder Learners from participating in the *Nihongo4us* Session. In summary, differences appeared to be across the seven groups and were not solely based on the group's language proficiency levels.

The following sections present the summary of activities during the *Nihongo4us* Session per group in three different stages: set up stage; during discussion forums; and outside of discussion forums.

5.3.1 During the Set Up Stage

During the two to three weeks of the set up stage, participants contacted each other and made posts commenting on each others' self introductions, as described in the previous chapter (Chapter 3, Section 3.7.2). The duration of the set up stage varied, depending on the time needed for the participants to be linked as 'friends' to join the site. The numbers of scaffolding observed during the set up stage are shown below in Table 5-3.

Table 5-3: Summary of interactions during the set up stage

	No. of Participants	No. of posts	Average no. of posts per person	Average no of character posted	No. of Linguistic Scaffolding	No. of Content Scaffolding	No. of Navigation Scaffolding
IG#1	12	69 (10)	5	92	9 (4)	0 (0)	10 (7)
IG#2	12	118 (21+3)[45]	9	118	13 (6+1)	0 (0)	24 (13)
MG#1	10	52 (11)	5	135	4 (0)	0 (0)	11 (8)
MG#2	10	74 (20+10)	7	162	13 (3+3)	0 (0)	18 (9+1)
MG#3	9	83 (6)	9	139	0 (0)	0 (0)	6 (3)
MG#4	8	116 (35)	14	158	33 (13)	4 (2)	33 (15)
MG#5	8	121 (28)	15	81	9 (7)	0 (0)	27 (12)
TOTAL	69	633 (144)	9	126	81 (37)	4 (2)	129 (68)
Total No. of Scaffolding (by Native Speakers)					214 (107)		

The number of participants in the above table indicates those who uploaded their self-introduction in order to introduce themselves to their assigned group. However, some Learners only made one or two posts, while others were more interactive. The number of participants in the above table includes all the participants regardless of the number of posts they made during the set up stage. The Learners who made few posts during the set up stage did not continue to participate in the next stage.

The number of posts and the average number of characters posted per post in the group during the 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 in those measures were observed across the seven groups, therefore, factors beyond language competence might have caused those differences. Those factors are discussed in the following chapter but in order to establish the background for the discussion, this section identifies where differences were observed between groups with respect to the number of posts and instances of scaffolding.

[45] Where two native speakers were assigned to a group and if both native speakers made posts, their posts were counted separately. The principal native speaker's posts were shown first and then the partner native speaker's posts in the parenthesis.

Table 5-3 indicated that the differences appeared to be across the groups, showing the different dynamics of each group. The learners in the introductory level groups wrote as much as some of the Learners in the mixed level groups. However, compared to other groups, MG#5 had frequent but relatively short, posts during the set up stage. MG#2 had lengthy posts but less frequent, while MG#4 had more frequent and relatively long posts. IG#1 had shorter and less frequent posts than those in IG#2.

During the set up stage, both the native speakers and the Learners, except for 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. Also during the set up stage, the Learners had to nominate their discussion week, as described in Chapter 3 Section 3.7.2. Therefore, during the set up stage the Navigation Scaffolding, including housekeeping scaffolding in order to organise the discussion leaders, was observed frequently. In other words, the groups, that discussed these housekeeping matters, presented the higher number of Navigation Scaffolding.

Forty-one percent of total posts (633 of total 1510 posts) were made during the set up stage. Across seven groups, 34% to 59% of the total number of posts was made during the set up stage. This means that interactions at the *Nihongo4us* site seemed heavily weighted towards the set up stage; the number of posts for some groups declined as they moved to the next stage: discussion forums. Chapter 2 presented the importance of establishing community at an early stage of discussion forums while the participants were getting to know one another through interaction.

Vonderwell (2003) had suggested that a strong bond between the participants assists in building online community. Though measuring ‘the strong bond’ might be difficult, various pieces of evidence that constitute ‘bonding’, in online interactions among group members, could be considered. For example, the number of posts and the number of participants, who made initial contact and received replies from fellow participants, can be measured as indicating the level of connection. Similarly, depth of interaction might

be measurable, following Hew and Cheung (2008), as discussed in Chapter 2, by counting the number of posts that make up a thread.

All Learners, who participated in the *Nihongo4us* Session and continued beyond the set up stage, had made posts to interact with the fellow participants during the set up stage. Similarly, all native speakers except the one in MG#3 had interacted with Learners. Kubota, the native speaker in MG#3, made six posts in total during the set up stage. Three of those were 'Making Suggestion' scaffolding strategies (Navigation Scaffolding). Three others were directed to the particular Learners; two replies and one requesting Jim to be a leader on a given topic in the following week's first discussion forum. These posts indicated that Kubota tried to be a facilitator, however she did not request others to be leaders or suggest topics during the session. Table 5-4 presents the number of threads produced in each group. A thread consists of the post(s) within the same topic. Therefore, a thread could be just a single post, or could involve multiple posts when multiple participants join in a conversation.

Table 5-4: Number of threads with the number of posts

Groups	No. of posts making up a thread						Total no. of threads
	1	2	3	4	5	6 or more	
IG#1	17 (50%)	9 (20%)	2 (5%)	2 (5%)	1 (2%)	3 (8%)	34
IG#2	10 (27%)	9 (25%)	1 (2%)	3 (8%)	2 (5%)	11 (30%)	36
MG#1	4 (23%)	7 (41%)	2 (11%)	1 (5%)	1 (5%)	2 (11%)	17
MG#2	20 (48%)	14 (34%)	6 (14%)	1 (2%)	0 (0%)	0 (0%)	41
MG#3	9 (32%)	6 (21%)	4 (14%)	3 (10%)	3 (10%)	3 (10%)	28
MG#4	6 (23%)	8 (30%)	3 (11%)	2 (7%)	0 (0%)	7 (26%)	26
MG#5	2 (8%)	3 (13%)	5 (21%)	4 (17%)	2 (8%)	7 (30%)	23

A single post indicates that no reply was generated. An unusually high number of single posts were observed in MG#2. This was because two native speakers each made separate posts, contacting a learner who did not reply (refer Table 5-3). Two-post threads involving two participants indicate that a reply was produced to the original post. 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, as shown in Table 5-4 above. 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

analysing Japanese culture or language. The interactions were based on common interests held by the participants. Nevertheless, if we were to measure the depth of interaction by the length of a thread, as defined in Hew and Cheung's (2008) study, at least six posts were required to develop a discussion. From this perspective, the fact that MG#2 did not generate any threads longer than four posts indicates that the participants in MG#2 did not actively participate in the interactions. In contrast, IG#2, MG#4 and MG#5 showed a much higher percentage of longer interactions. Therefore, members of these groups seemed to be more actively involved in interactions. Similarly, Learners in MG#3 were relatively active in their interactions with each other. However, some Learners were more involved than some native speakers in interactions, as discussed next.

Table 5-5 below presents the percentages of native speakers' posts within the total number of threads. The percentages were used to visually present the ratio of posts between Learners and native speakers in each group, indicating the activeness of the native speakers.

Table 5-5: Number of threads and involvement of native speakers in each group

Groups	Total no. of threads	Percentage of native speakers' posts
IG#1	34	14%
IG#2	36	20%
MG#1	17	21%
MG#2	41	40%
MG#3	28	7%
MG#4	26	30%
MG#5	23	23%

The percentage of native speakers' posts indicated that the native speakers of IG#1, and MG# 3 (Suzuki and Kubota respectively) did not interact with the Learners as much as the native speakers in other groups. MG#2 did not produce any threads consisting of more than five posts, and the native speakers (Hayashi and Takahashi) made 40% of the total posts. The opposite phenomenon was observed in MG#3, where the Learners were actively involved in interactions, while the native speaker, Kubota, made 7% of the total posts. Two native speakers were allocated to MG#2, while MG#3 had one. Therefore, the number of native speakers would be one of the causes that have made some

differences. However, the number of native speakers assigned to each group cannot fully account for this big difference in figures for the native speakers posts - 40% in MG#2 and that of 7% in MG#3.

Similarly, two native speakers (Nakamura and Suzuki) were allocated to MG#1. However, Suzuki (also the native speaker in IG#1) did not make any post to MG#1 during the set up stage. Therefore, the figure produced in MG#1, as in Table 5-5, was by one native speaker (Nakamura & Fukui). A single native speaker was allocated to all other groups, and produced 14% to 30% of the total posts. The average of native speakers' posts across the seven groups was 24%. Therefore, it is fair to characterise the number of interactions made by Kubota in MG#3 as minimal.

Having two native speakers in a group did not distinguish from others, other than MG#2 produced higher number of single entry threads, because not every partner was active. The native speakers with teaching background seemed to have little effect on the number of posts produced in a group. However, the native speakers' background did influence the outcome as this will be discussed in Chapter 6.

The role of native speakers seemed to be an important factor influencing the Learners actions in the next phase of the *Nihongo4us* Session. As Kubota said in the post-session interview, she was not involved in the conversations with the Learners during the set up stage. Later during the discussion forums, Kubota felt a lack of bonding and dysfunction within the group. Kubota only made three posts to communicate with two Learners during the set up stage. The other three posts related to housekeeping (Navigation Scaffolding), organising the first discussion forum. She did not indicate any specific reasons for not participating during the set up stage other than to say 'just being busy' (Kubota, post-session interview). At the post-session interview, she did not indicate why she only contacted two Learners and did not connect with the rest of the participants.

It was worthy to note that one of the two Learners (Kerry and Jim) that Kubota contacted during the set up stage continued to participate in all three discussion topics. Jim only participated in the first discussion topic, as he was nominated to be the leader on a topic suggested by the native speaker. However, he continued to make occasional posts outside of discussion. The Learners in MG#3 did not partake in the post-session

interview. Therefore, this study cannot access the reasons and feelings of the Learners during the *Nihongo4us* Session to provide any explanation for what triggered the transition from the active interactions they had during the set up stage to the less active interactions during the discussion forums. However, this study might be able to provide some plausible reasons by analysing the interactions of other groups.

The level of activity in a group is reflected by the numbers of posts made, including scaffolding posts. MG#4 was the only group that produced all three categories of scaffolding during the set up stage. Other groups produced the Linguistic and Navigation Scaffoldings but not the Content Scaffolding. The Content Scaffolding was provided to discuss and enhance the nature of the topic. During the set up stage, the Learners in MG#4 used the opportunity to consult with a native speaker (Fujii), asking whether the topic question was appropriate or not.

According to the Learners during the post-session interviews, choosing a discussion topic was not a simple task (Tom, post-session interview; Jacob, post-session interview). Pasfield-Neofitou et al. (2009) suggested that the topic should be something that the fellow learners would be interested in and able to discuss. Therefore, the Learners in this study also searched for topics that were suitable and interesting for fellow participants. Because one Learner is interested in a topic does not mean that others will also be interested in that topic. Seeking advice from a native speaker on how to approach a topic prior to their discussion forum was one way for the Learners to receive some assurance about the topic. This action itself was scaffolding. In the case of MG#4, Fujii responded with the possible phrase to use as a title for the topic. One Learner (Liz) was worried about the fact that some other Learners might not have enough exposure to Japanese and Japanese society to discuss the topic (the politeness issues in Japanese), Fujii also commented that he would support the discussion if the participants found it too difficult to discuss. In this instance, Fujii provided psychological assistance as well as supporting and encouraging Liz.

On this occasion, the discussion did not start till week 4 but Liz had already thought about the topic and started to organise her thoughts on the topic as early as the set up stage. This example showed the *Nihongo4us* site provided a platform for Liz to be able to discuss matters with a native speaker and sought reassurance about her opinion. It also showed the Learner’s thought process in organising a discussion forum.

The groups that had more interactions with the native speakers during the set up stage were also the ones with more active discussion forums. The next section presents the summary of activities during the discussion forums.

5.3.2 During Discussion Forums

The following Table 5-6 represents a summary of interactions during discussion forums. The median number of participants and posts is shown in Table 5-6 (more detailed table in Appendix 9). In order to achieve a more accurate understanding of the central conclusions, a median was used to ensure extreme outliers did not skew the summary. The number of posts made in a topic can be used to measure the development of a discussion forum. Likewise if there were more threads within a discussion forum, that would also indicate the complexity of discussions; therefore, indicating that the forum was more extensive.

Table 5-6: Summary of interactions during the discussion forums

	No. of discussions held	No. of Posts	Median no. of Participants	Median no. of posts	No. of Linguistic Scaffolding	No. of Content Scaffolding	No. of Navigation Scaffolding
IG#1	6	45 (14)	4	7 (2)	7 (4)	0 (0)	0 (0)
IG#2	8	156 (18+2)	7	19 (2)	37 (16+1)	4 (0+1)	12 (2)
MG#1	9	65 (12+5)	5	7 (2)	5 (2)	6 (1+1)	5 (2)
MG#2	8	83 (26+9)	6	9 (3)	13 (9+3)	14 (10+2)	2 (2)
MG#3	3	40 (23)	4	13 (6)	11 (7)	0 (0)	5 (5)
MG#4	8	110 (18)	6	12 (2)	21 (5)	18 (4)	8 (6)
MG#5	10	119 (58)	4	10 (5)	49 (38)	22 (17)	13 (7)
TOTAL	52	618 (185)	39	618 (184)	143 (85)	64 (36)	45 (24)
AVERAGE	7	154 (26)	5	88 (26)	20 (12)	16 (5)	6 (3)
Total No. of Scaffolding (by Native Speakers)					252 (145)		

The number of discussion forums held over the 10 - 11 weeks period (2 - 3 weeks were used for the set up stage out of a total 13 weeks) 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 to discuss. The discussion forums were held over

the Internet; therefore, the site was available to the participants at all times, offering a platform very different from attending a class. This meant that even if the group had decided that they would not upload a new topic during the Christmas holiday, the participants were free to make posts on any of the discussion forums previously held within the group. Nevertheless, they could expect some delays in getting replies till the Christmas/New Year holiday period was over. The number of topics any group discussed during the *Nihongo4us* Session depended on whether or not the group took a week off.

As presented in Table 5-6, the variation in the total number of topics discussed across the groups cannot be attributed just to the one topic of the holiday week. This was because some groups did not have any discussion leaders in some of the weeks, or a discussion leader did not upload a topic. In other cases, some groups were able to organise a substitute discussion leader and a topic.

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 and therefore, fewer posts made. Furthermore, these two groups did not develop discussion forums as much as the other groups. The total number of posts made during this stage was comparable to that of the set up stage. In some groups (IG#1, MG#1, MG#2, MG#3 and MG#5), the number of participants gradually diminished to half or less. The possible reasons for this will also discussed in next chapter.

However, the results indicate that fewer participants in a group did not necessarily mean that the group could not develop a discussion forum. Although the Learners commented that they wished there had been more participants in their group (as discussed in the previous chapter), the low number of participants (an average of four for the whole *Nihongo4us* group - refer Appendix 9) during the discussion forums did not necessarily hinder the number of posts made. The median number of participants for both MG#3 and MG#5 was four, but MG#5 discussed nearly three times as many topics as MG#3. From Table 5-6, it is not clear what influenced these differences. Closer analysis of the interactions was needed to understand what factors influenced the discussion forums and provision of scaffolding. These factors are discussed in the next chapter.

Furthermore, Table 5-6 indicated that Suzuki and Kubota, the native speakers in IG#1 and MG#3 respectively, made more posts during the discussion forums than at the set up stage, however, this did not increase the number of participants or posts. The number of native speakers' posts during the discussion forums did not seem to influence the number of Learners' posts.

Furthermore, the proficiency level of Learners did not influence the number of posts made in the discussion forums. It seemed the greater or lesser number of participants or the Learners' proficiency levels did not hinder the development of the discussion forums. The next section presents the results of interactions observed outside of discussion forums.

5.3.3 Outside of Discussion Forums

The study observed that a number of posts were made outside of the discussion forums. The contents of posts in this section were not related to the discussion topics. These posts included season's greetings and birthday greetings to a fellow participant. Some were also related to housekeeping matters and some were questions from Learners, regarding Japanese language and culture in general. Also included in this section were belated responses to posts made during the set up stage, continued beyond the first two or three weeks of the *Nihongo4us* Session. Table 5-7 presents the summary of activities held outside of discussion forums.

Table 5-7: Summary of interactions outside of discussion forums

	No. of Participants	No. of posts	Average no of character posted per post	No. of Linguistic Scaffolding	No. of Content Scaffolding	No. of Navigation Scaffolding
IG#1	3	27 (4)	147	0 (0)	0 (0)	6 (4)
IG#2	11	66 (12)	181	18 (10)	3 (1)	8 (2)
MG#1	6	30 (19)	118	0 (0)	0 (0)	14 (8)
MG#2	6	17 (6)	173	2 (0)	0 (0)	1 (1)
MG#3	3	16 (8)	359	4 (4)	0 (0)	7 (5)
MG#4	6	59 (13)	113	2 (0)	8 (1)	22 (10)
MG#5	4	44 (22)	99	6 (3)	0 (0)	43 (23)
TOTAL	39	259 (84)	177	32 (17)	11 (2)	101 (53)
Total No. of Scaffolding (by Native Speakers)				144 (72)		

The posts made in this category were usually short and similar in style, as seen in online conversations such as chat, except in the case of MG#3. Table 5-7 reveals that MG#3 made unusually lengthy posts in this section. This is because during the final discussion (week 13) the native speaker (Kubota) made four posts, which were corrections on four Learners' self-introductions. Because these corrections were not related to the discussion topic and they were posted well after the original posts were made, they were counted as posts made outside of the discussion forums.

Some Learners took the *Nihongo4us* Session as an opportunity to ask various questions regarding expressions and Japanese culture. These posts attracted the Linguistic and Content Scaffolding. A number of Navigation Scaffolding Strategies were observed outside of discussion forums. Because some Learners became inactive, the group had to re-organise discussion leaders. These housekeeping matters observed between discussion forums were categorised as Navigation Scaffolding Strategies. Even after two or three weeks, some Learners had problems navigating the site. In such occasions, the participants helped each other and these posts were also counted as Navigation Scaffolding in the table above.

The participants also used various SNS tools available on the site. For example, some participants uploaded photos and videos with and without captions. The majority of these photos and videos were uploaded randomly, just as a way of sharing their interests

with fellow participants. Sometimes these other participants showed interest and made responding comments. If the comments were made in the 'Comment' section of the participants' homepage rather than tagged on the photo itself, they were included in the above table. Only two Learners (Charlotte in IG#2 and Austin in MG#4) uploaded photos that related to their discussion topics. These photos attracted direct comments. However, it is difficult to determine whether the photos were the sole cause in enhancing the discussion or not for the purposes of the current study.

5.4 Overview of Scaffolding

The above sections presented overviews of the scaffolding along with the overall posts made in the three stages during the *Nihongo4us* Session. Examining the numbers of posts at the different stages did not seem to show any differences between the introductory level groups and mixed level groups. The differences seemed to extend across the groups. However, when posts were examined against each scaffolding strategies, differences between the proficiency levels appeared in Linguistic Scaffolding: 'Requesting Actions' strategies. To aid the discussion of this observation, Table 5-8 presents a summary of scaffolding strategies found in each group. The numbers in the parentheses indicates the scaffolding provided by the native speakers. Additionally, the number of scaffolding strategies per discussion topic in each group is presented in Appendix 10.

Table 5-8: Summary of scaffoldings found in each group

	LINGUISTIC						CONTENT	NAVIGATION				TOTAL
	Eliciting Explanations	Providing Corrections	Asking for Clarifications	Requesting Actions	Providing Answers	**Total**	Summarising/ Developing Discussions	Asking Questions	Making Suggestions	Providing Answers/ Confirming	**Total**	
IG#1	3 (0)	7 (7)	0 (0)	4 (0)	2 (1)	16 (8)	0 (0)	2 (0)	7 (7)	7 (4)	16 (11)	**32 (19)**
IG#2	11 (2)	33 (22)	6 (1)	4 (0)	14 (9)	68 (34)	7 (2)	8 (1)	18 (11)	18 (5)	44 (17)	**119 (53)**
MG#1	1 (0)	7 (2)	0 (0)	0 (0)	1 (0)	9 (2)	6 (2)	8 (6)	9 (7)	13 (5)	30 (18)	**45 (22)**
MG#2	4 (1)	21 (17)	1 (0)	0 (0)	2 (0)	28 (18)	14 (12)	7 (1)	7 (5)	7 (7)	21 (13)	**63 (43)**
MG#3	3 (0)	9 (9)	0 (0)	0 (0)	3 (2)	15 (11)	0 (0)	3 (0)	12 (12)	3 (1)	18 (13)	**33 (24)**
MG#4	9 (0)	25 (16)	4 (0)	0 (0)	18 (2)	56 (18)	30 (7)	13 (2)	27 (22)	23 (7)	63 (31)	**149 (56)**
MG#5	9 (0)	46 (45)	7 (1)	0 (0)	2 (2)	64 (48)	22 (17)	18 (8)	35 (24)	30 (10)	83 (42)	**169 (107)**
TOTAL (by Native Speaker)	**40 (3)**	**148 (118)**	**18 (2)**	**8 (0)**	**42 (16)**	**256 (139)**	**79 (40)**	**59 (18)**	**115 (88)**	**101 (39)**	**275 (145)**	**610 (324)**

Table 5-8 showed that the native speakers in each group, except IG#2 and MG#4, produced about half of the total scaffoldings or more. 'Providing Corrections' was the most common occurring scaffolding, whilst 'Requesting Actions' was the least common category of scaffolding (refer Appendix 10 for more detailed data of each scaffolding strategy per topic per group).

5.4.1 Linguistic Scaffolding

This section describes the findings of Linguistic Scaffolding by examining the scaffolding found in each of the five scaffolding strategies: 'Eliciting Explanations'; 'Providing Corrections'; 'Asking for Clarifications'; 'Requesting Actions'; and 'Providing Answers'. As seen in Table 5-8, other than 'Providing Corrections', the Learners produced the majority of scaffolding strategies in Linguistic Scaffolding.

The most frequently used Linguistic Scaffolding by every group was 'Providing Corrections' (55% of Linguistics Scaffolding in total). This was to be expected, as one of the objectives for the Learners participating in this study was to practice their Japanese with the mistakes to be corrected by the fellow participants. MG#5 provided the highest number of 'Providing Corrections', closely followed by IG#2. Nakagawa,

the native speaker in MG#5, provided almost all the corrections, while Takahashi, native speaker in IG#2, provided 66%. The Learners in IG#2, MG#1, MG#2 and MG#4 were able to provide 30% – 70% of 'Providing Corrections'. The Learners in IG#1 and MG#3 did not produce any 'Providing Corrections' to fellow participants. Again, the language competencies did not seem to be the major factor that influenced the provision of scaffolding, other than in the case of 'Requesting Actions'.

The 'Requesting Actions' prompt by the Learners was found only in the introductory level groups. For example, Grace, a Learner, made a request to Kylie, a fellow Learner to use *Furigana*. The other requests were from several Learners seeking corrections on the posts that they made. Some were directly addressed to the native speakers (Suzuki or Takahashi) and others were to all participants in the group. These actions might be a reflection of the nature of introductory level learners. The introductory level language learners generally lack confidence and they feel as though they could not fully correct their own sentences. This seemed to accord with the notion of ZPD (Vygotsky, 1978) and Aljaafreh and Lantolf's (1994) five levels of transition in ZPD (as discussed in Section 2.2). The introductory level groups in this study initially needed assurance and guidance from the native speakers. However, as the Learners progressed in ZPD level, the need for intervention becomes less (Aljaafreh & Lantolf, 1994). This might explain why the introductory groups produced 'Requesting Actions' and not the mixed level groups.

Many Learners, at all levels valued, the native speakers' inputs. Victoria, in her fourth year, commented on the survey:

> 'The most valuable part of Nihongo4us would be the fact that there was a Sensei/Native-speaker in the group, because I was able to obtain corrections and actually learn from this exercise' (Victoria, survey).

Isabelle in her second year also expressed the importance of the native speakers' inputs:

> 'Indispensable. I think even an advanced speaker of the language would look up to a native speaker due to their experience and depth in the knowledge of the language. A native speaker would have been brought up in the language and would definitely know how to correct certain nuances only a native speaker can pick up on' (Isabelle, survey).

Jasmine in her first year commented that the most valuable part was the corrections she received, as she was able to not only recognise her mistakes but also learnt better and natural expressions from the corrections.

The Learners value the corrections and inputs, especially from native speakers. The Learners in IG#1 and IG#2 seemed to show more desire to receive corrections. Whereas, the introductory level Learners in the mixed level groups were quite satisfied with the amount of corrections they received. This is because they were able to receive scaffolding from advanced Learners as well as the native speakers. When the introductory level Learners in the mixed level groups received replies from the fellow senior Learners, they considered that their meaning had been conveyed; hence the replies seemed to act as scaffolding and there was no need to produce 'Requesting Actions' scaffolding strategies.

Other than 'Requesting Actions' occurring only in the introductory level groups, the differences in providing Linguistic Scaffolding appeared to be across the groups rather than based on the proficiency levels. IG#2 provided as much Linguistic Scaffolding as mixed level groups did, whereas IG#1 did not. 'Providing Corrections' gave the Learners an opportunity to extend their learning of Japanese, as Liz, in her third year, commented in her logbook entry:

> 'Practice and trying to correct others was particularly helpful, as it provides a different perspective and means that I have to think more carefully about what I may be commenting on. As they say, one of the best ways to remember something is to teach someone else' (Liz, week 11 logbook entry).

However, correcting fellow Learners' was not always simple due to their ability of language and mixed emotions, as Victoria described:

> 'Unless when [sic] I am the leader of the discussion, I generally don't correct when I find mistakes. This is largely because of my personality where I would hate it if I correct someone, and yet my correction was incorrect. … Also, I find it awkward to be correcting others, when I feel that I have no right to do so. It is true that my level of Japanese is higher than most that are in my group, and hence it would be somewhat alright to correct others … however, I don't want to appear as pushy or

> commanding, and hence, I don't tend to correct when I see mistakes. One last reason for not correcting is also because no member corrected other's Japanese …' (Victoria, survey).

Jack also shared the similar feelings with Victoria. Jack, who graduated after completing his fifth year in Japanese Studies, commented on his survey:

> '… if a fellow student made multiple mistakes in a single post, it would not be constructive to provide a correction of every single one in my reply, which could be discouraging. As such I tried to avoid this and pick only one error to correct per post. I generally dislike correcting people for fear that I could be wrong myself!' (Jack, survey).

From these senior Learners' comments, it is clear that 'Providing Corrections' scaffolding strategies was not always straightforward. It appears that these Learners, whilst learning Japanese they learnt Japanese culture of politeness, humility and respecting seniors. Therefore, many Learners were reserved in 'Providing Corrections', especially in the presence of native speakers.

5.4.2 Content Scaffolding

One of the advantages for Learners in having a non-assessable online forum such as *Nihongo4us* is that the participants can freely discuss any topics of interest. During the *Nihongo4us* Session, the participants exchanged perspectives and tried to understand each other's point of view in a constant and reciprocal process of inquiry. Participants shared their observations, asked and responded to questions, made hypotheses, raised objections and reconsidered the issues. In doing so while they provided each other with a wealth of cultural information, in their search for more expanded and in-depth understanding of Japanese culture and its language. Sometimes even the native speakers were enlightened by the Learners' comments.

Although individual group differences are noted, it appears that generally the introductory level groups produced less Content Scaffolding than mixed level groups in general. Table 5-8 revealed that MG#2, MG#4 and MG#5 produced more than other groups. Content Scaffolding is not about explaining the meaning of a word. Content Scaffolding as defined here is the help provided by the participants to understand the

discussion topic and the nature of their arguments. Therefore, it can also be argued that the group, that produced more Content Scaffolding Strategies, discussed the topics that were more complex topics. For example, 'Why is Japanese culture so popular overseas?[46]' would require the participants to process their thoughts more than the case of replying to a topic such as 'What is your most memorable moment from your Japanese classes?' The latter question would only require recounting of personal experiences[47].

The groups that had a discussion topic requiring a recount of their personal experiences did not produce any Content Scaffolding (that is IG#1 and MG#3). Perhaps the nature of such topics did not require Content Scaffolding (refer Appendix 9 for the list of topics). For instance, topics discussed in IG#1, such as 'what sorts of food do you like/don't like eating?', were relatively simple and similar to those discussed in the Japanese classes (Jacob, post-session interviews). Therefore, the Learners did not require any assistance in understanding the content. Topics in MG#3, such as 'what was your most memorable moment from your Japanese classes?', only required the Learners to reflect on their past experience. Again, the Learners did not require any content assistance to help retrieve their memory. These topics did not prompt the Learners to ask further questions aimed at eliciting opinions. Hence, the provision of Content Scaffolding did not occur in these situations.

The above findings support MacKnight (2000) and Vonderwell's (2003) arguments that Learners and native speakers such as those in IG#1 and MG#3, need the skills to enhance their discussion forums with Socratic questionings in order to promote critical thinking. The groups, that were able to extend their discussions, did so through thought-provoking questions on a well-chosen discussion topic. This enabled the Learners to, as MacKnight (2000) noted, go beyond mere facts and use their prior language knowledge. Thought-provoking discussion topics, such as 'do you think the distinct differences between male and female genders are lessening?' attracted more participants and more posts in MG#5. Both native speaker and Learners presented arguments and questioned the complex concept of femininity and masculinity (Appendix 9). Some examples of Content Scaffolding strategies are presented below.

[46] Topic 2 in MG#4 had four Content Scaffolding strategies.
[47] Topic 1 in MG#3 had no Content Scaffolding strategies.

Scaffolding strategies used in Content Scaffolding summarised the fellow participants' opinions or provided a further explanation or presented another way of tackling the discussion topic. A good example is Excerpt 9 (MG#5, Topic 5) which discussed the topic highlighted above, regarding the differences between male and female. In Excerpt 9, Nakagawa, a native speaker, provided Content Scaffolding by summarising the topic and providing a trigger point for further argument.

Excerpt 9:

Line	Jan. 12	
1	Harry @Harry's WB 2-1	ディスカッション〜〜〜 ≈ 今の日本の女の子は男の言葉を使っていると聞きました。そして、世界中ではユニセックスの服飾は前より流行っていると思います。≈ ≈ この時代には男女の区別がなくなっていると思いますか。この現象が現る理由は何だと思いますか。 Disukasshon ~~~ ≈ Ima no nihon no onna no ko wa otoko no kotoba wo tsukatteiru to kikimashita. Soshite, sekaijyu dewa unisekkusu no fukushoku wa mae yori hayatteiru to omoimasu.≈ ≈ Konojidai niwa danjyo no kubetsu ga nakunatteiru to omoimasuka. Kono genshoo ga arawaru riyu wa nandato omoimasuka. Discussion~~~ ≈ I heard that Japanese girls these days use boys' expressions. Also, I think that unisex clothing and accessories are more popular than ever before around the World. ≈ ≈ Do you think these days it is difficult to tell the differences between males and females? What do you think the cause of these phenomena?
2	Jan. 24 Nakagawa @ Harry' WB 2-3	≈ 私も「男性が女性化し」て、「女性が男性化」しているという意見（いけん）に賛成（さんせい）です。 ただ、この問題（もんだい）を考（かんが）える時に難しいのが、何が“女性（男性）”や“女性（男性）らしい”かということだと思います。 ≈ ≈ Watashi mo 'dansei ga jyosei-ka shi' te, 'jyosei ga dansei-ka' shiteiru toiu iken (iken) ni sansei (sansei) desu. Tada, kono mondai (mondai) wo kanga (kanga) eru toki ni

muzukashii no ga, naniga “jyosei (dansei)” ya “jyosei (dansei) rashii” ka to iu koto dato omoimasu.
≈

≈
I also agree that ‘male is becoming feminine’ and ‘female is becoming masculine’.
However, when you debate this kind of a topic, the difficult issue is what is “female (male)” and what is “feminine (masculine)”.
≈

As a result of miscommunication, Harry uploaded the male-female topic earlier than the due date (the discussion was due to start on January 22)[48]. However, the Learners did not make any posts till after the native speaker, Nakagawa, made the abovementioned post (Line 2). This post by Nakagawa seemed to encourage the Learners to make posts. As a result, this topic attracted 17 replies. Perhaps because Nakagawa’s post elaborated the topic question and gave the Learners scope for argument, the Learners were able to participate freely in this discussion. In other words, Harry’s discussion topic question in Line 1 ‘do you think these days it is difficult to tell the differences between males and females?’ was expanded by Nakagawa’s post in Line 2 ‘“male is becoming feminine” and “female is becoming masculine”’. Providing vocabulary to express these phenomena (Line 2) probably assisted the Learners in making posts. Furthermore, Nakagawa presented the Learners with a sharp stimulus by raising the question ‘what is female (male) and what is feminine (masculine)’ to provide reasons for their views on these phenomena. The group then became aware that they needed to argue their thoughts on feminine and masculine. In MG#5, Line 2 acted as Content Scaffolding as it provided a starting point for the Learners to present their arguments.

Examples of Content Scaffolding that assisted the discussion forums occurred where the native speakers provided summaries or rephrased the Learners’ opinions. For instance, when MG#5 discussed the topic 5 (as presented above), the participants made lengthy posts ranging from 161 to 903 characters; averaging 361 characters per post. As discussed in the previous chapter, some Learners simply found reading these lengthy posts challenging enough, but on top of this, they needed to compose replies to these complex posts. The Learners with mixed level proficiency had to overcome the difficulties in understanding new vocabulary whilst also grasping the ideas being presented by fellow participants. Many of these posts had difficult *Kanji* and

[48] The group was participating on other discussions during 11 January to 17 January (topic 4) and 17 January and 21 January (topic 6).

grammatical mistakes adding another level of challenge for the Learners. Therefore, during a discussion, it was helpful to read a post summarising other participants' opinions, as seen in Excerpt 10.

Furthermore, reading fellow participants' opinions was important as it seemed to assist Learners to build their own argument, regardless of whether they agreed or disagreed with the opinion that they had read. For example, Victoria noted in her logbook entry:

> '… the discussion question for this week was a challenge for me because I didn't know how to answer even though it was an interesting discussion topic… it was interesting to read everyone's opinions, because mine was rather different from their opinions' (Victoria, week 8 logbook entry).

Excerpt 10 presents an example in which Nakagawa provided summaries of Learners' opinion to help participants. This excerpt is part of the interactions where the group discussed the differences between femininity and masculinity (following Excerpt 9).

Excerpt 10:

Line	Jan. 26	
1	Nakagawa @Harry's WB 2-8	ビクトリアさんは、男性化や女性化じゃなくて、性別のバリアが消（き）えてきて、服にも固定観念がなくなってきたって意見ですよね？ ハリーさんは男性らしさ、女性らしさの一般的（いっぱんてき）なことがあるという考えですね。でも、それが何かが難しいということですよね。 というのも、ハナさんはハリーさんが思う、女らしいには当（あ）てはまらないんですね。 ≈ Bikutoria san wa, dansei-ka ya jyosei-ka jyanakute, seibetsu no baria ga ki (ki) etekite, fuku nimo koteikannen ga nakunattekitatte iken desuyone? Harii san wa dannseirashisa, jyoseirashisa no ippanteki (ippanteki) na koto ga aru toiu kanngae desune. Demo, sore ga nanika ga muzukashii toiu kotodesuyone. Toiunomo , Hana san wa Harii san ga omou, onnarashii niwa a (a) te hamaranain desune. ≈ Victoria's opinion is that it's not the issue of masculine and feminie but the stereotype in clothing is disappearing because the barrier between male and female is lifting, isn't it? Harry thinks there is a general understanding of manly and lady like. But it is difficult to understand somewhat what that is. Because there are people like Hannah, who presented herself not fitting into Harry's descriptions of lady like. ≈

The Learners at all levels were also able to provide Content Scaffolding. For example, Isabelle, in MG#5 during the abovementioned discussion topic, made a post that included YouTube links. One link was a music clip, showing male singers who looked like women. The other link was to a TV program, showing high school male students wearing girls' clothes. They were not transvestites but boys just being rather 'girly', wearing make-up and jewellery. The latter YouTube link was based on a TV show featuring a competition to see which contestant looks most like a girl. These links were used to strengthen Isabelle's arguments, which turned out to be plausible.

Similarly, the introductory level Learners (IG#2 and MG#4) were also able to provide Content Scaffolding, contributing to the development of discussion forums as well as outside of discussion forums. However, it seemed that provision of Content Scaffolding was not a simple task. Not every group could produce Content Scaffolding nor did every topic prompt it, even in cases where the Learners might have benefited from receiving Content Scaffolding. The provision of Content Scaffolding seemed influenced by the nature of the discussion topic. However, it proved a complex matter to achieve the right timing and provision of summaries, so as to prompt further questions. In other words, summarising the participants' opinions could have assisted the fellow participants' understanding, however, it did not necessarily trigger others to make follow-up posts. Therefore, a strategy such as summarising might not always have an effect in developing a discussion. Other factors, such as the role of participants and the degree of community seemed to be influential. A closer analysis of interactions is required, which will be discussed in the next chapter.

5.4.3 Navigation Scaffolding

Navigation Scaffolding occurred where the participants helped each other to solve the technical problems regarding the SNS tools available on the *Nihongo4us* site. Navigation Scaffolding also includes housekeeping scaffolding strategies, such as organising a discussion leader or announcing the next discussion leader. Three types of Navigation Scaffolding strategies were identified: 'Asking Questions'; 'Making Suggestions'; and 'Providing Answers/Confirming'. 'Asking Questions' in Navigation Scaffolding refers to the technical questions about the *Nihongo4us* site. Answering such questions is categorised as 'Providing Answers/Confirming'. 'Making Suggestions' is

where a participant suggests that a fellow participant to do something. Confirming or responding to such a suggestion is categorised as ‘Providing Answers/Confirming’.

Two hundred and seventy five Navigation Scaffolding strategies were found amongst 610 scaffolding (45%). Mixed level groups produced more Navigation Scaffolding than the introductory level groups. MG#5 had a technical problem during their first discussion forum; hence the group had a high incidence of Navigation Scaffolding. The numbers of Navigation Scaffolding strategies found in each group are presented in Table 5-8.

The native speakers, as leaders in their assigned groups, predominantly produced ‘Making Suggestions’, which were related to housekeeping matters, as the native speakers took the leadership in their assigned groups. Therefore, native speaker’s domination in providing ‘Making Suggestions’ was an expected outcome.

The Learners at all levels produced a number of ‘Asking Questions’ and ‘Providing Answers/Confirming’. This was also quite understandable considering the nature of Navigation Scaffolding, involving asking and answering technical questions. The fellow participants were quite well equipped in answering such requests. They did not need the native speakers’ level of linguistic proficiency to answer the questions and to assist their fellow participants. The number of posts in these two scaffolding strategies reflected the dynamics of each group. In other words, the group, that had more proactive Learners, produced more scaffolding related to ‘Asking Questions’ and ‘Providing Answers/Confirming’.

Upon examination of each group’s dynamics, the groups that provided more scaffolding appeared to have had more extensive discussion forums (IG#2, MG#4 and MG#5). However, the simple provision of Navigation Scaffolding did not increase the level of discussion. Many factors seemed to be intertwined in influencing the provision of scaffolding and the development of discussion forums. The next chapter discusses the possible factors and how they influenced each other.

5.5 Summary

In the design of this study, careful consideration was given to many of the factors discussed in Chapter 2, which could influence the provision of scaffolding. For example,

the balance of gender, social connections of the participants, and the language proficiency level of the Learners were considered in forming groups. However, due to withdrawal of some Learners, the number of Learners in each group and perhaps the distribution of Learners across the groups changed and might not have been as balanced as they were initially. The number of Learner withdrawals was not anticipated and was out of the researcher's control. The Learners' opinions presented in the previous chapter indicated that they would have appreciated more involvement and active participation from the fellow Learners. This is probably the case for all seven groups. In spite of that, the above findings showed that the small number of participants did not seem to hinder the provision of scaffolding or development of discussion forums.

Previous studies of Ohta (1995) and Donato (2000), which found that novice learners were able to provide scaffolding, were both conducted in face-to-face environments. Lee's (2009) study used Blackboard discussion forums but the learners also had access to face-to-face class activities. However, the Learners in this study only had access to online discussion forums. Nevertheless, the present study also found that the Learners were able to provide all three categories of scaffolding to fellow Learners.

The number of scaffolding strategies found in each group varied, yet examination of the numbers, as presented in this chapter, could not determine the cause of the variation. Other than 'Requesting Actions' being observed only in the introductory level groups, the above findings do not seem to indicate any obvious set patterns across all groups or any differences between introductory level and mixed level groups. Instead, differences appeared to exist across the groups; for instance IG#1 produced significantly fewer incidents of scaffoldings than IG#2. The discussion forums in IG#1 did not develop as extensively as in IG#2 either. Similarly the mixed level groups presented different results across the groups. These differences seemed related to the regular provision of scaffolding strategies. The more the scaffolding strategies were provided, the more active the group was. Similarly, as native speakers made regular posts and provided regular scaffolding strategies, the Learners responded actively and contributed in providing scaffolding strategies. Another significant contribution to these differences seemed to lie on the level of interaction during the set up stage. The groups that had more participants involved in longer threads during the set up stage were able to extend their discussion forums and provided more scaffolding strategies.

The findings of this chapter indicate that differences might arise from the depth of interactions made during the set up stage. However, the various sources of data could not provide any explanation of how these interactions might have influenced the provision of scaffolding or the development of discussion forums. The next chapter discusses how these differences occurred by analysing the interactions during the *Nihongo4us* Session using the Activity System discussed in Chapter 2. Furthermore, the next chapter discusses the factors that might influence the provision of scaffolding, in order to seek an answer to the second, third and fourth research questions:

- Can a SNS foster collaborative learning and reflective thinking via Learners and native speakers' scaffolding in an out-of-classroom environment?
- What factors influence provision and take-up of scaffolding?
- In relation to the above questions, what differences are there in different groups arising from level of proficiency?

CHAPTER 6: Discussion

6.1 Introduction

Previous chapters have identified the findings of the study. Chapter 4 presented the findings about the Learners' thoughts on CMC and their usage. This was important because the Learners' attitude might have affected how they participated in this study. Chapter 5 presented the findings in relation to scaffoldings and found no differences in interactions between the proficiency levels. Instead, the differences appeared to be across the groups. This chapter discusses possible reasons for these differences across the groups, using a newly created activity system called the Online Joint Activity System (*OJAS*). The discussion begins by introducing this new activity system.

Chapter 5 identified that the set up stage played an important role in the development of discussion forums; therefore, this chapter examines the contradictions observed at each constituent components of the activity system during both the set up stage and the discussion forums. Then the penultimate section presents the groups' differences between the proficiency levels. The conclusions will be presented in Chapter 7.

6.2 Online Joint Activity System

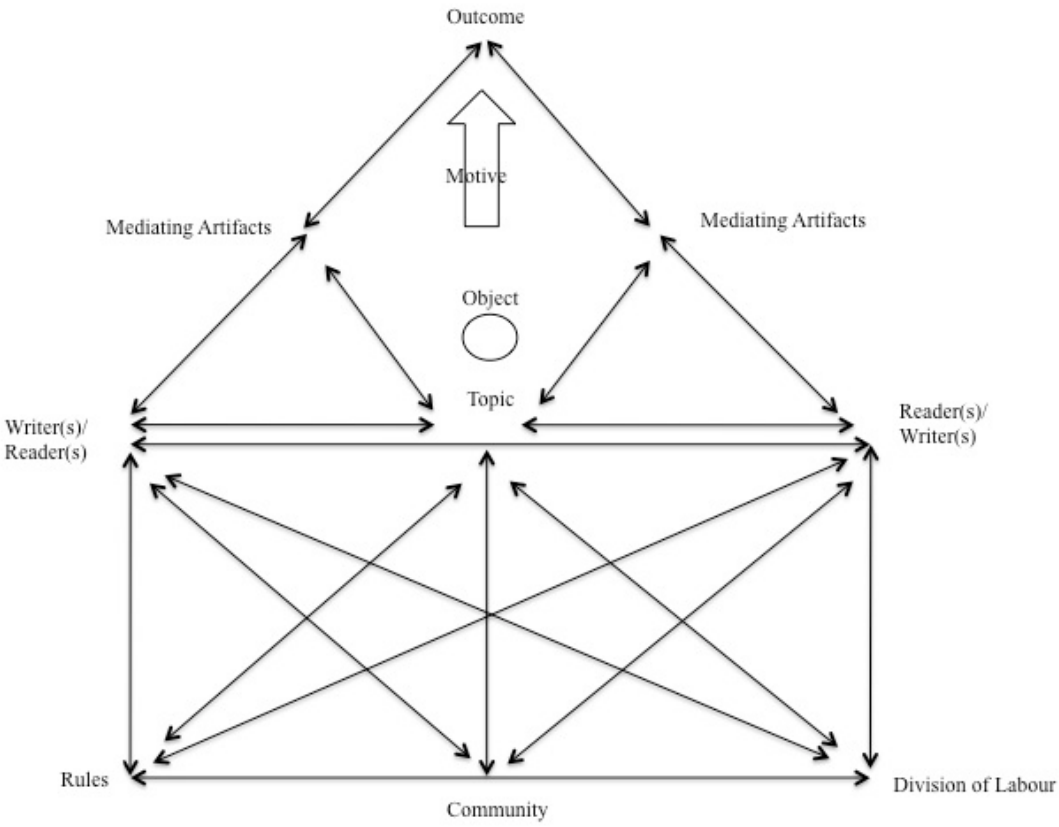
The online environment and the participants' use of scaffoldings can be examined by using various activity system models (as discussed in Chapter 2). This section firstly introduces a new activity system model created to reflect the activities presented in the *Nihongo4us* Session and so with applicability to other online out-of-classroom learning situations.

The interactions at the *Nihongo4us* site were not constructed by a single subject's entry but by multiple members of each group. Examining a single entry in isolation against the rest of the participants or native speakers would not give a true picture of what was happening. Instead, it is necessary to examine the whole sequence of actions that transforms one 'idea' as expressed at the *Nihongo4us* site. Wells' (2002) activity system model, which involves two separate subjects interacting within the activity system, provides visual understanding of partial interactions at the *Nihongo4us* site. Similarly, Haneda's (2007) model (refer Chapter 2), representing a writing activity, clearly identified two separate subjects: one as a writer and the other as a reader and this could

be used to reflect clear positions of the participants at the *Nihongo4us* site. However, neither of these models can accurately represent activities performed at the *Nihongo4us* site, because as described in Chapter 2, key components (for example, motives, rules, community, and mediating artifacts) must also be included in the activity system.

A joint activity system variant which presents a combination of Wells' (2002) and Haneda's (2007) models based on Engeström's (2001) activity systems, can be used to describe the interactions at the *Nihongo4us* site; it is illustrated below in Figure 6-1: the Online Joint Activity System (*OJAS*). The *OJAS* reflects online communications recognising that all participants in such environments are both reader(s) and writer(s). Therefore, the *OJAS* demonstrates clearly the positions of *Nihongo4us* participants.

Figure 6-1: Online Joint Activity System Model (*OJAS*)



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 online translation services. The written 'text' under the 'topic' then produces 'outcomes'. The topic can be seen as an 'object' in the *OJAS*. However, 'object' in an activity system is in a constant state of transition and construction, as the

activity progresses. Therefore, ‘topic’ in the *OJAS* is classified as one of constituent components of the activity system.

The ‘reader(s)’ receive the writer’s text and become a ‘writer’. Both ‘reader’ and ‘writer’ follow the rules set in order to participate in the interactions at the *Nihongo4us* site. Each reader and writer has the same division of labor: that is, the role of a participant in *Nihongo4us* to provide scaffolding; and to make posts in a discussion forum and to interact with each other at the *Nihongo4us* site. At times, a participant becomes a discussion leader, and then additional division of labor occurs, as the leader is required to upload a discussion topic and to chair the discussion forum. The native speakers, as ‘writers’ and ‘readers’ also had to ensure the smooth running of their group during the *Nihongo4us* Session and provide scaffolding as they saw fit.

The participants in each group created their groups’ unique ‘community’. At the same time, the online community beyond each group exists within the cultural background of UNSW and can be described as a part of UNSW, in which this study was situated. The summary of each constituent component for the *OJAS* can be described as follow:

- Writer: the participants who wrote posts
- Reader: the participants who read posts
- Object: the texts, generated at the *Nihongo4us*, which sometimes were manipulated and transformed; as discussed in Chapter 2, ‘object’ can be a changeable and constantly reproduced purpose of the activity system
- Motive: force that determined the outcome and was the result of interactions within the activity system
- Outcome: to make posts at the *Nihongo4us* site in general; to discuss topics presented in the forums in Japanese; to provide scaffolding; to improve the Learners’ Japanese; to gain some knowledge about Japanese culture and to extend the circle of Japanese friendships via fellow Learners and native speakers; furthermore, for some native speakers, to practice their teaching skills, as they were studying to become Japanese language teachers
- Mediating Artifacts: the computers; mobile media devices (such as iPad, mobile phones); the Internet; SNS tools that were available at

the *Nihongo4us* site; online services (such as online dictionaries, *Rikaichan* and the language translation services); and references (such as printed dictionaries, grammar books, lecture, notes textbooks, and electronic dictionaries)

- Community: each of seven groups participating in the study form a separate online community; each community comprise the Learners and native speakers, who partook in the study; the participants in each group became members of the community
- Rules: set instructions covering explicit and implicit conventions and norms of acceptable and appropriate online behaviours for participating in *Nihongo4us*
- Division of Labour: roles of Learners, native speakers, discussion leaders, participants (both as a group or as individuals)

The above constituent components present the central activity system; the *OJAS*. However, this central activity system can be influenced by the neighbouring activity system especially associated with community, rules and division of labour.

The participants, both the Learners and the native speakers, had pre-associated neighbouring activities that can affect their actions in the *OJAS*, because the neighbouring activities had a cultural historical influence over the participants. For instance, the participants were already associated with other communities, prior to the *Nihongo4us* Sessions, as: a community of students at UNSW; the UNSW Japanese Studies community; and, the community of staff at UNSW. These precursors of communities are a part of the neighbouring activity systems that could influence the *OJAS*, which in this study is centrally located.

For example, all participants, except three native speakers (MG#1, MG#2 and MG#4) and two Learners (IG#2 and MG#1) who were yet to start their Japanese programs at UNSW, belonged to the pre-existing community of UNSW Japanese Studies. UNSW Japanese Studies is an academic program offered at UNSW and so its community can be described and characterised by two types of communities: one is a staff based community; the other is a student associated community. Each of these communities has its own characteristics and can be described by a separate activity system. These

pre-existing communities in the neighbouring activity systems also intermittently affected the participants' motive and outcome in the central activity system.

Similarly, sets of rules in each of these neighbouring activities could be seen to influence the rules of the central activity system. For example, there could be rules set by: the UNSW Japanese Studies community and UNSW as an Institution; Internet access regulations set by the government where the participants were located; and/or, Internet download rules set by the provider's contract that binds an individual participant.

The neighbouring activity systems in relation to division of labour, arising from the prior associations of Learners and the native speakers, could also influence the division of labour of the central activity system. These neighbouring activities have historical cultural values, which seemed to influence some participants' performance during the *Nihongo4us* Session, as is discussed further in this chapter. Using the model of *OJAS*, the next section presents an overview of the observed contradictions in constituent components that affected the online interactions.

6.3 Visual Overview of Influencing Factors

The *OJAS* illustrated in Figure 6-1 demonstrates a well-balanced activity system where no contradictions occurred at any of its constituent components. These constituent components were required for readers and writers to produce the outcomes and if any contradictions had occurred those outcomes would have been affected. This section presents a visual overview of the identified contradictions that might have affected the development of the *Nihongo4us* discussion forums. As will be seen in Chapter 5, understanding the differences between the successful groups (that is, those who facilitated development of discussions and provided scaffolding) with the not-so-successful groups, it the key to understanding the dynamics of the out-of-classroom online learning environment in this study. For description of that comparison, including what had led to differences, it is important to appreciate the workings of the *OJAS*. .

Respecting the importance of influence that the neighbouring activity systems brought to the central activity system, as discussed above, Figure 6-2 below includes visual representations of pre-existing rules, the community, and the division of labour. Each of these pre-existing factors represents two types: one based on the Learners' and the other

based on the native speakers' pre-existing neighbouring activity systems. All of these pre-existing neighbouring activity systems are associated with the participants' historical cultural backgrounds.

If contradictions occurred at every constituent component, the appearance of Figure 6-1 would become similar to that of Figure 6-2 below. A contradiction, as discussed in Chapter 2, is a tension within and between activity systems. The contradiction is not necessarily negative but it is an important 'driving force of change' (Engeström, 2001, p. 133) in Activity Theory. The appearance of a contradiction is shown as a line crossed by symbol in Figure 6-2 below.

Figure 6-2: Possible contradictions at the *Nihongo4u*s site

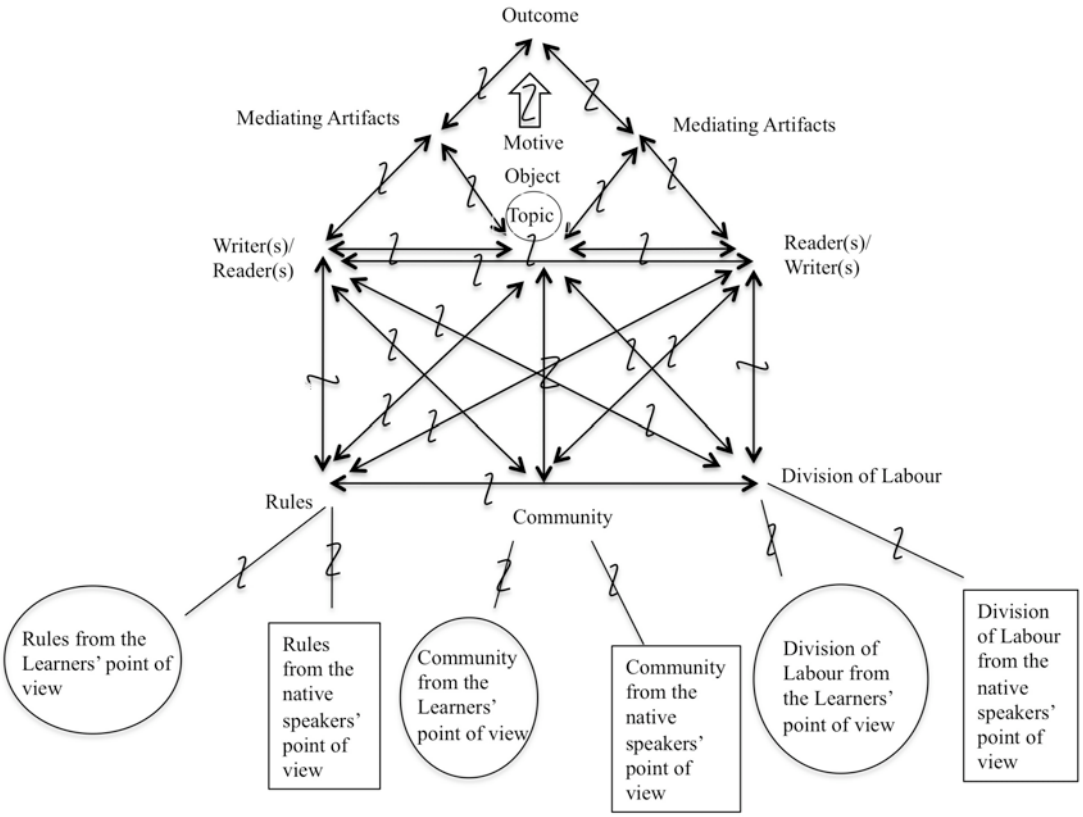


Figure 6-2 represents all the possible contradictions appearing in each constituent component in the *OJAS*. Figure 6-2 also demonstrates possible contradictions influenced by the neighbouring activities in relations to rules, community and/or division of labour. These neighbouring activity systems can clash from time to time with the central activity system of *Nihongo4us*, hence causing contradictions. For example, the Learners were exposed to the set rules of the UNSW student community

and the Japanese Studies community at UNSW, which could influence their actions at the *Nihongo4us* site. Similarly, some native speakers were tutors at UNSW, belonging to the community of staff members of UNSW, and, the Learners saw them as tutors therefore the Learner's understanding of those native speakers' actions could be influenced by their respective backgrounds.

There are four levels of contradictions as described in Chapter 2. Not all levels of contradictions appeared during the *Nihongo4us* Session but some levels of contradictions were observed at each of the constituent components. These contradictions will assist in providing some explanations for the different outcomes across the groups. For example, the contradictions could offer some explanations as to why IG#1 and MG#3 could not develop their discussion forums as much as did the other groups.

In the following sections, the *OJAS* is used to explain issues discussed in the previous chapter.

6.4 Set Up Stage

The previous chapter presented the number of posts and scaffolding found during the *Nihongo4us* Session in three different stages: the set up stage, during discussion forums and outside of discussion forums. The differences in the provision of most of the scaffolding seemed to appear across the groups rather than in accordance with the proficiency levels. The previous chapter also indicated that the interactions during the set up stage might have influenced the development of discussion forums. This section discusses the interactions during the set up stage and compares those interactions across the groups using the *OJAS* in order to find the factors that influenced the development of discussion forums and provision of scaffolding.

Contradictions appeared in division of labour, rules and mediating artifacts, all of which had some influence on the process of establishing the *Nihongo4us* group community. These interrelated contradictions affected the motivation of the participants, which then affected the outcome. Although these contradictions were interrelated and influenced each other, as seen in the *OJAS*, they are presented separately in the following sections for purposes of analysis.

6.4.1 Division of Labour

Four levels of contradictions were observed in relation to the division of labour: the primary contradiction, where the contradiction occurred within the division of labour; the secondary contradiction, where the contradictions occurred between the other constituent components of the central activity system; the tertiary contradictions, where the historical cultural background of some native speakers influenced the central activity system; and the quaternary contradictions, where the central activity system clashed with the Learners' and native speakers' activity systems. This section presents these four levels of contradictions, some of which were interrelated.

Firstly, the primary contradictions that were depicted within the division of labour, related to the expectations, in each participant's mind, about the roles of the participants. The role of each participant was described during the orientation, pre-session interview and in the Handbook distributed prior to the *Nihongo4us* Session. The participants' role was to make posts at the *Nihongo4us* site, to provide scaffolding, and to partake in discussion forums. In practice, the individual expectations seemed to vary slightly, as some participants expected regular replies from the fellow members, especially from the native speakers, while others did not. The participants' views on the online communications differed because their past experiences presented different expectations for the current study. As a result, the contradictions were observed. These primary contradictions could have been avoided by providing more explicit and more rigid rules regarding time frames for replies and for the amount of scaffolding. This will be discussed in the next chapter.

The different expectations also caused a number of secondary contradictions where one element or another produced tension within the *OJAS*. The writer for example expected a reply from a reader or readers, but when a reply was not forthcoming, this caused tension. Furthermore, failure to reply also caused a contradiction to the rules, because no reply was seen as not participating. Not replying to a post resulted in a single post entry; this did not assist in bonding each others' relationship within a *Nihongo4us* community. These primary and secondary contradictions are featured in the bottom half of the *OJAS* (the rectangular shaped part of *OJAS*), as indicated by the arrows in Figure 6-1. These contradictions affected the motive of the *OJAS*, then the outcome, resulting

in fewer posts and scaffolding. The effect on the motive was not only as results of first and secondary contradictions but also as a result of tertiary contradictions.

The tertiary contradictions were embedded in the situation in which this study was conducted. The participants' role also included provision of scaffolding as much as possible and in particular, the native speaker(s) in each group were to check and provide scaffolding and facilitate the site. The Learners' expectation of corrections by native speakers was natural as they viewed themselves precisely as the Learners. They knew that the native speakers were encouraged to post corrections, while partaking in the discussions. Even though the present study was not a part of their formal language program, the Learners expected to receive more corrections from the native speakers, as was evident in their logbook entries, survey and post-session interview responses. Emma expressed her expectations of the native speakers in her logbook entry as follows:

> 'Perhaps this might be draining on the teachers, but I do think it'd be a good idea if the teachers are actively correcting anything they see as funny (that is, not correct Japanese), because if I don't know any better and I see someone saying something in a way that's wrong with no-one correcting them, I would take that as correct and learn it' (Emma, week 1 logbook entry).

As Emma's logbook entry showed, Learners saw the native speakers as teachers. Emma was not alone in this attitude, as other Learners across all seven groups also addressed the native speakers as sensei (teacher). Whilst Emma had not been exposed to the native speakers as tutors prior to her involvement in *Nihongo4us*, her reaction was even more prominent amongst Learners who had prior exposure to the native speakers as their tutors. This reaction was evident in the number of 'Requesting Actions' Linguistic Scaffolding strategies observed in IG#1 and IG#2, where the Learners requested corrections from the native speakers. Additionally, when the native speaker was not active in participation, quaternary contradictions were observed.

The quaternary contradictions occurred as Learners' motivation in the central activity system clashed with the division of labour of native speakers, which was influenced by the separate activity system of the native speakers. No reply or a considerably delayed reply by the native speakers lowered the Learners' motivation as noted in the survey

comments below. Lowering the Learners' motivation affected the motive: motive of discussing Japanese and Japanese culture at *Nihongo4us*. A Learner from IG#1, Grace, wrote the following response to the survey question which asked: 'what comments do you have regarding the role of the native speakers of Japanese in *Nihongo4us*?':

> 'well, I don't really know. During the first month of *Nihongo4us*, they didn't really provide us with any feedback. After that I wasn't really motivated anymore and then they decided to read and check comments for mistakes' (Grace, survey)

During the post-session interview, Grace elaborated on her written comment and said:

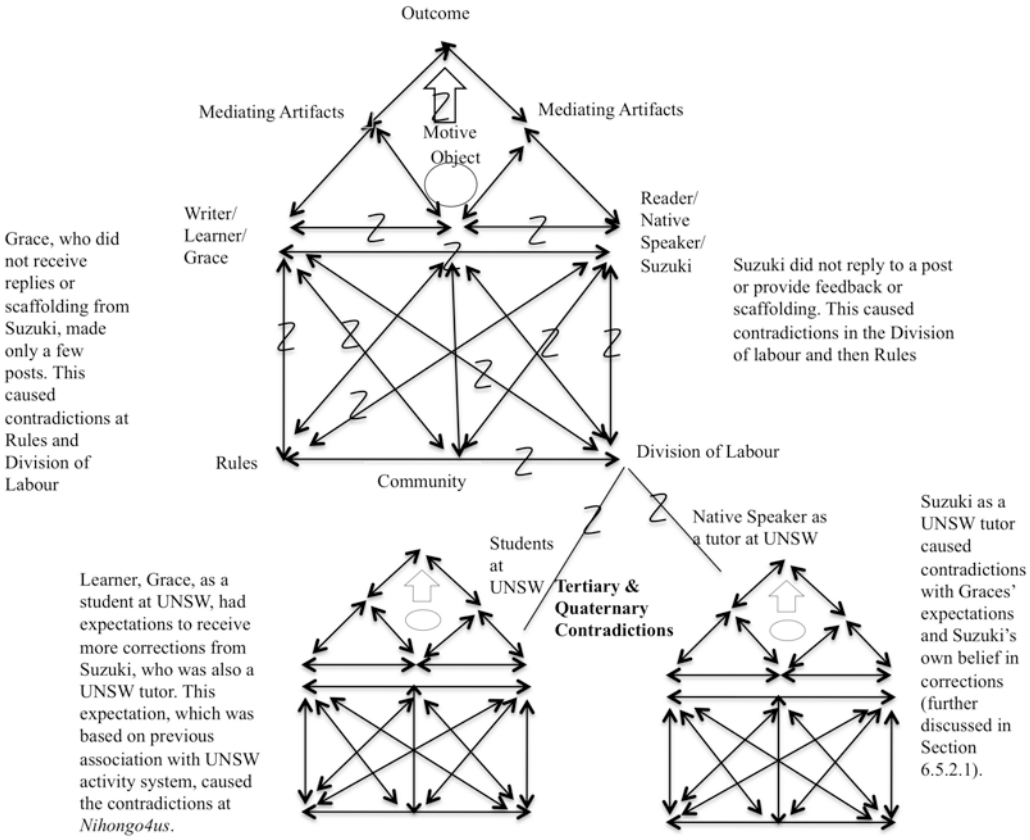
> ' … there weren't many corrections so no one really knew whether we were doing right or not. Needed to be corrected more often. After, I thought he was checking but I was already put off. It took so long for him to reply' (Grace, post-session interview)

Jacob in IG# 1 also commented during the post-session interview that he would have made more posts if the native speaker was posting more corrections and led the discussions more actively.

The post-session interviews with three Learners from IG#1 revealed that the Learners had to ask the native speaker, Suzuki, to check their posts so that they could receive some feedback and corrections. The Learners expected that Suzuki would post corrections more readily and regularly as well as contribute to the discussions. Suzuki took a rather passive stance during the *Nihongo4us* Session. Suzuki commented at the post-session interview that at the beginning he was not looking at the site as frequently as he had planned to do. This was also the case for MG#3, as Kubota also did not interact with the Learners or provide any Linguistic Scaffolding during the set up stage.

In summary, the abovementioned four levels of contradictions can be depicted in Figure 6-3 below, using Grace's outcome in IG#1 as an example.

Figure 6-3: The *OJAS* of IG#1



When the native speakers in IG#1 and MG#3 did not interact or provide scaffolding as the Learners had anticipated, this lack of action and interest from the native speakers constituted a contradiction within the division of labour. This contradiction not only affected the division of labour but also affected the community, producing secondary contradictions; thereby affecting the members of the community ability to have a close relationship to create a supportive online learning environment. The contradiction observed in the division of labour (not interacting with the fellow participants), was a violation of the norm which in turn produced a further contradiction in rules which is discussed next.

6.4.2 Rules

No instances were observed where the participants abused the site by posting inappropriate videos or photographs or phrases. Rules regarding the use of socially appropriate language and behaviour were followed well by all the participants. However, one of the contradictions that occurred under the rules was that not all the participants replied back to the posts, as discussed above. This triggered both primary and secondary

contradictions, as rules, division of labour and community were interlocking with each other.

Each participant was to make contact and interact with the others during the set up stage, getting to know one other similar to an icebreaker sense. However, some participants did not reply to posts or participate in the interactions. This could be seen as a violation of the norm, regardless of the causal reasons.

A general understanding in netiquette is to reply to emails or postings within 24 hours or within 48 hours (for example, Hew & Cheung, 2008; Tuffley & Griffith University, 2009). Although UNSW does not outline specific timeframes, it encourages prompt and timely feedbacks for all online activities (Teaching and Learning Unit of University of New South Wales, 2013). Some participants might have had no such awareness or understanding of netiquette. For those participants, any replies later than these timeframes might have caused disappointment or feelings of rejection by the fellow participants.

Jim, an advanced Learner who had completed his undergraduate program of Japanese Studies, had prior experience in an email exchange program with overseas students. In that program, Jim was asked to reply to all emails within 48 hours of receipt. He commented in his logbook that this might be ‘a bit of a task when writing in a second language’ (Jim, week 3 logbook). In the same logbook, he commented further about his view of netiquette:

> ‘I realised that interaction over a BBS-type medium relies heavily on all parties contributing and participating regularly. When speaking face-to-face, we don’t have to wait long for a response, but it could be a few days before a reply comes on a BBS. There is also the “netiquette” of waiting for someone’s reply before posting anything new’ (Jim, week 3 logbook).

Intricacies of timing in the netiquette are expressed in Jim’s comments from a writer’s, and then reader’s, point of view. Jim felt anxious, as he became a reader waiting for replies, once he made a post. Dominic, a graduate, reported in his post-session interview that he also felt anxious as he waited for a reply from Rose (a Learner) after suggesting a correction to her. He was concerned whether he had offended Rose by correcting her,

and whether Rose and others understood what he was saying. Dominic felt relieved when Rose made the post thanking him and made further comments on the issue (Dominic, post-session interview). Dominic saw himself as an advanced level learner and during the interview he revealed that he had spent extra time in constructing sentences so that everyone, including the introductory level Learners, could understand. For Dominic, after taking extra consideration towards his fellow Learners, the waiting time caused him to be anxious.

Suzuki's first post in MG#1 was made during the fifth discussion. The topic leader (Tom) greeted and welcomed Suzuki to a group and replied to Suzuki's comments. Tom also directed a question to Suzuki, however no reply was posted. During the interview, Tom commented that the 'no reply' from Suzuki did not bother him as he was used to seeing 'no reply' incidences in other SNSs. The Learners' reactions to 'no reply' seemed to differ depending on their past experiences with SNSs.

As seen in Table 4-1, 28% of the Learners had not used SNSs in Japanese before. Their exposures to other SNSs prior to *Nihongo4us* could have influenced the Learners' feelings when they did not receive replies, as the Learners seemed to have different expectations as to how participants interacted over the SNSs. The Learners in IG#1 preferred Suzuki to be more active in replying and posting feedback, causing contradictions at the division of labour, as discussed previously. However, these contradictions could also be related to the Learners' prior exposure to SNSs, which in turn revealed different expectations about rules. In other words, the neighboring activity, with which the participants had associated previously, influenced the central activity causing quaternary contradictions.

These contradictions in rules affected the division of labour and in turn affected the community, which will be discussed later in Section 6.4.5. These contradictions, due to each participant having different views on netiquette, could be reduced, if all online activities provided explicit rules about the appropriate timeframe in which the participants should reply and about the minimum number of scaffolding strategies and interactions that the participants should provide.

The lack of interaction occurred not only from native speakers but also from fellow Learners. Some Learners did not reply to posts. The reason for this is not entirely clear

as not every Learner participated in the post-session interview but some cases were related to technical issues, as is discussed next.

6.4.3 Mediating Artifacts

The participants had access to a number of mediating artifacts such as Internet, online tools, as well as printed resources and electronic dictionaries. This section discusses three prominent mediating artifacts that caused contradictions: the layout of Bebo, notification service from Bebo and *Kanji*.

Most Learners were familiar with Facebook and held an account. Those, who were familiar with and regularly used Facebook, found the Bebo (*Nihongo4us*) site layout to be confusing because the site had too many optional tools. In spite of the fact that an email was sent explaining how to set the layout of the participant's home page, the Learners set their own layout as they wished. This confused some Learners because the location of various tools available at the *Nihongo4us* site appeared differently, depending on how the participants organised their homepages; for example, as is shown below with Kylie's homepage in Figure 6-4 and Charlotte's homepage in Figure 6-5[49].

As is shown in Figures 6-4 and 6-5, Kylie had placed Whiteboard and Blog above Comments, all on the right hand side, while Charlotte had Games, Whiteboard and Comments on the right hand side and Photos, Videos and Blog on the left hand side. Additionally, the fonts, backgrounds and designs of these tools were different across participants. As many posts were made during the *Nihongo4us* Session, the participants needed to scroll through the resultant screens in order to find the relevant tools that they needed to access. This process became time consuming and confusing if the participants' homepages were not identical.

[49] Figures 6-4 and 6-5 present modified Learners' homepages to protect the identities of participants by deleting their names and identification photos. The excerpts of their homepages presented here are only a small sample of their original pages.

Figure 6-4: Modified Kylie's homepage

Figure 6-5: Modified Charlotte's homepage

Unified homepages could have been better organised if the planned orientation was implemented, and if the participants practiced using the Bebo site and set up their homepages together at the orientation. The variety of tools available at the site, intended to provide a variety of options, caused confusion for some Learners' active participation.

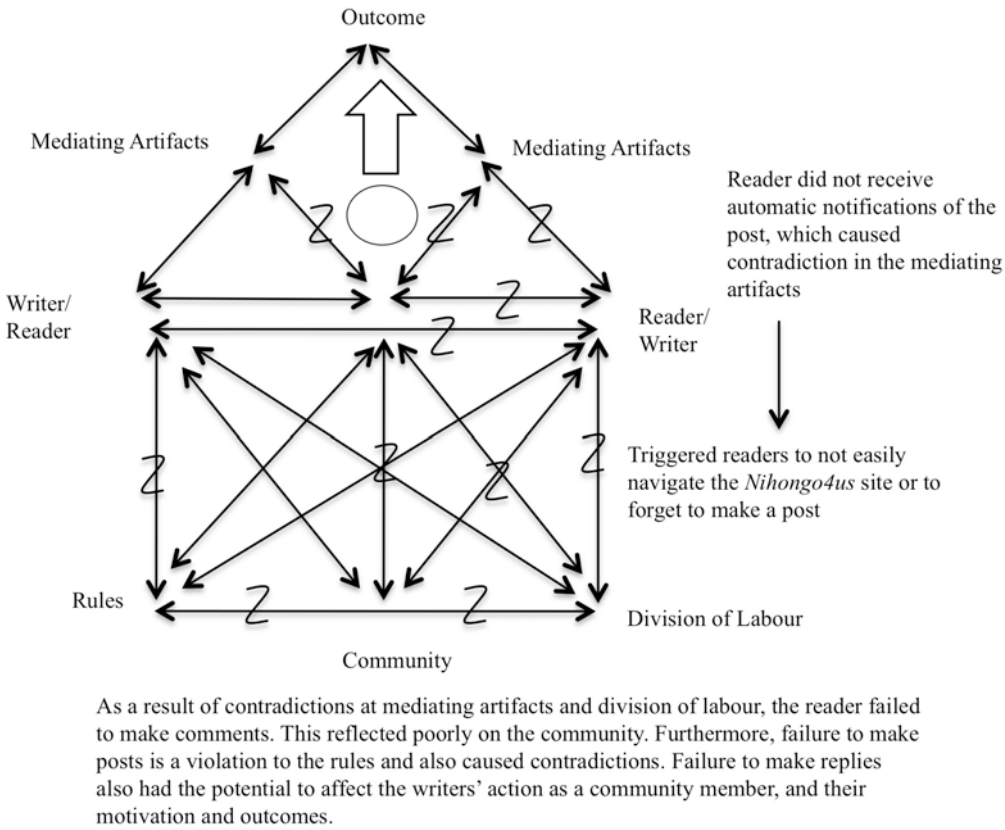
This highlighted the importance of the successful execution of the orientation's 'hands-on' session.

Some Learners also commented about the lack of an automatic notification service from Bebo. This function is automatic with Facebook and lets the user know when and where a person made a post. However, this function was optional with Bebo and the participants needed to set it themselves. The Learners who regularly used Facebook relied on this service so much that when they did not receive any automatic notification, they easily forgot to check the *Nihongo4us* site. This caused contradiction within the mediating artifacts.

Some Learners said that they received emails at the beginning but after a while they did not receive any notification. So they assumed that no one made posts even when this was not the case. This caused some confusion and frustration amongst the Learners. They could not tell who made a post, nor when or where, the post was made. The participants had to open the homepages of each member to find the new posts. To some Learners, this was too tedious and time consuming. Unfortunately, as a result, some Learners became passive participants. This contradiction that occurred within the mediating artifacts affected the Learners so as to cause secondary contradiction in the division of labour; leading a role of passive participants.

If a participant did not visit the sites regularly, it became difficult to navigate through the posts that they had not read. Therefore, they experienced increased difficulties in joining the conversations and the extent of that difficulty increased further with periods of longer inactivity. The more accustomed Learners were with Facebook and thereby relying on an automatic notification system, the higher the probability that they would forget to check the *Nihongo4us* site. This meant that those Learners were irregularly active at the site and resulted in the production of more contradictions as seen in Figure 6-6 below.

Figure 6-6: The *OJAS* affect of no automatic notifications to the Learners



The third set of contradictions was related to *Kanji*. Some participants readily used *Kanji*. Some Chinese-background Learners sometimes used Chinese *Kanji* and thereby confused their fellow participants. These incidents often triggered a little discussion, which provided a good learning opportunity to recognise the differences between Chinese ideograms and Japanese *Kanji*.

Many *Kanji* were used at the site, especially for the names of Japanese pop stars and titles for TV dramas, *Anime*, and *Manga*. This occurred particularly in participants' self-introductions, as the Learners indicated their hobbies and their likes. Some of those were the results of 'copy and paste' from other Internet sites. It would have been possible for Learners to produce *Kanji* by 'copy and paste' after an Internet search, such as Google, to find the appropriate *Kanji*, however, there would have been far too many names for the Learners to check in this way.

The Learners occasionally used *Furigana*, while some native speakers used *Furigana* regularly. The survey results, logbook entries and post-session interviews indicated that the senior Learners preferred not to have any *Furigana*, as they wanted to practice

reading *Kanji*. From their point of view, if *Furigana* were used, they would see the *Furigana* and thereby, defeat the purpose of their learning exercise. The senior Learners preferred to use free plug-in software, such as *Rikaichan*, which allows Japanese learners to look up the meaning and reading of *Kanji* by highlighting the words. However, this software is only available on certain Internet browsers, such as Firefox (refer footnote 37 in Section 4.4.3.4). Therefore, the participants, who used *Safari* or other Internet Browsers that do not support *Rikaichan*, did not have this facility. Difficulties in reading *Kanji* that participants had not yet learnt hindered some Learners' progress and suppressed motive to pursue discussion forums at the *Nihongo4us* site.

The solution to overcoming difficulties in reading *Kanji* is not as simple as installing Firefox and *Rikaichan*. As Pasfield-Neofitou (2009) noted about the use of electronic dictionaries, the Learners would also need assistance in how to use *Rikaichan*, especially the introductory level Learners. Some Learners would be hesitant to switch Internet Browsers. So an introductory workshop to introduce Firefox and how to use *Rikaichan* would have been desirable. This would have allowed all levels of Learners to be able to navigate *Kanji* effectively without hindering their learning experiences and ability to interact with each other in Japanese (as long as they restricted themselves to using Japanese *Kanji*, not Chinese *Kanji*).

The variety of reactions that the Learners experienced in relation to mediating artifacts (as presented above) affected the division of labour and the Learners' motive, which in turn influenced outcomes, as is always the case in the *OJAS*. In the case of *Furigana* usage by the native speakers in their role as a writer, this caused contradiction with the senior Learner readers, who did not wish to have *Furigana*. The contradictions occurred within the mediating artifacts, as not all participants were able to or happy to use *Rikaichan*. Hence the issues associated with *Kanji* continued to produce further contradictions, which affected the senior Learners' motive whilst causing a loss of interest and in some cases, possibly ending up with fewer posts.

The next section discusses establishment of the characteristics of community during the set up stage.

6.4.4 Community

Secondary and tertiary contradictions observed in the community appeared to be influential towards a group establishing an online environment. Each participant was the member of the community, contributing to forms and the *Nihongo4us* group community. Through these interactions, the participants either created a supportive online environment or failed to do so. The contradictions in rules and division of labour indicated lack of interactions, affecting the community and thereby producing secondary contradictions. Tertiary contradictions were also observed, where the historical cultural background of some native speakers and Learners influenced the central activity system. This section presents these interrelated contradictions and discusses how these contradictions affected the motive and the outcome.

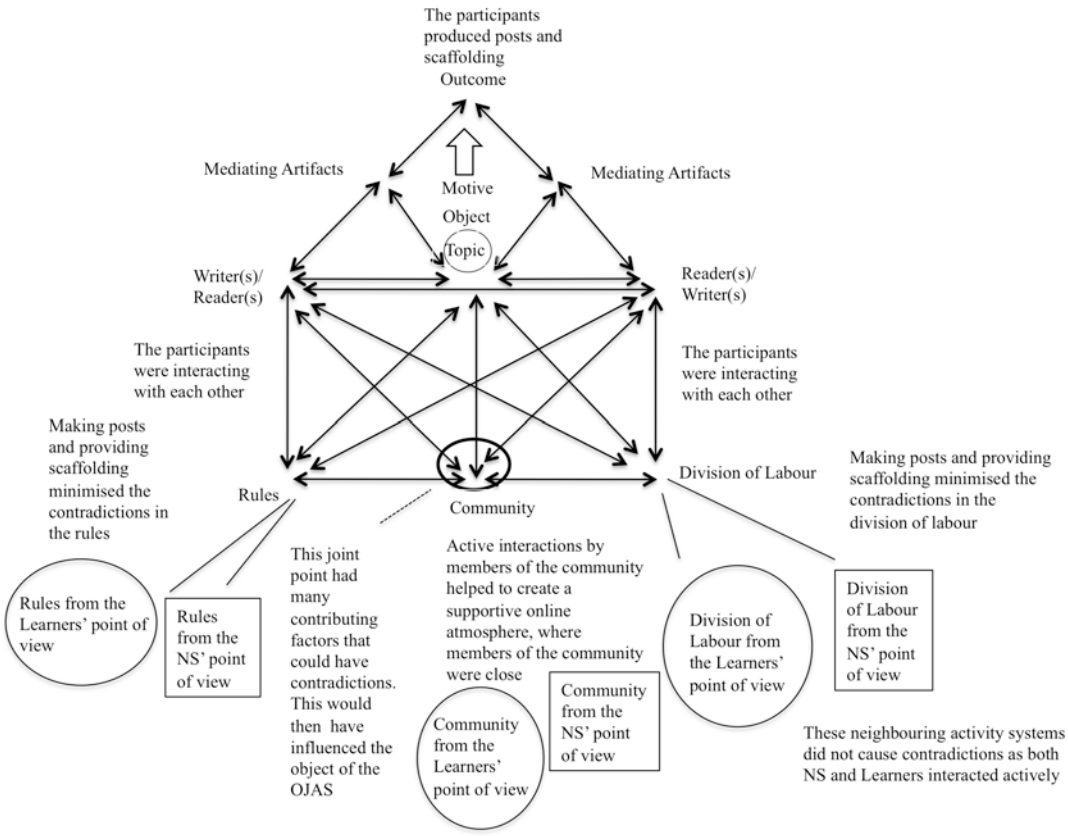
Instances where the native speakers were not actively involved in interactions, and where some Learners produced no replies, affected the community. These instances sent a message to some participants that others were not interested in talking to the group. This hindered the bonding of the participants in the community. The lack of interactions presented the contradictions in rules and division of labour as discussed above. The lack of provision of scaffolding also triggered contradictions. These interconnections of rules, division of labour, mediating artifacts and community, produced secondary contradictions as is illustrated with an example drawn from IG#1 and shown in Figure 6-3.

If the native speakers interacted actively with the Learners sharing their personal views and providing scaffolding regularly during the set up stage, the Learners responded with active participation. These interactions assisted in establishing a strong bond between the participants in a community. The characteristics of such a community can be described as supportive and close. The group dynamics in a community to create a supportive online environment require the members of the community to interact and thus not cause contradiction in rules, or division of labour. The Learners needed to feel comfortable in the community to provide scaffolding, especially Linguistic scaffolding so as to produce the desired outcome. Without the supportive close online environment, the community could cause secondary contradictions to the rules and the division of labour.

The pre-existing communities, in which the participants were already related, influenced the community of the central activity system. The historical cultural background of pre-existing rules and division of labour of native speakers and the Learners influenced the community in the central activity system as a member of the community was influenced by these neighbouring activity systems.

Figure 6-7 below assists visually to illustrate these intricacies of interwoven relationships in the *OJAS*, working together to create a supportive online environment, where the participants are closely interacting in the community.

Figure 6-7: Community working together to create a supportive online environment



Extending the understanding of various contradictions which affected the creation of a supportive online environment, the next section presents how such an environment can be measured and discusses which groups were able to establish a supportive online environment; it does so by first considering the set up stage.

6.4.5 Overview of the OJAS During the Set Up Stage

The sections above described the contradictions that were observed in each constituent component. This section presents how these constituent components collectively influenced the outcome of the activity system.

The study identified three ways to quantitatively measure how well the groups made the connections to establish their supportive online communities: the number of longer threads and single entry posts; the number of scaffolding strategies provided; and the participants' feelings reflected in the survey results and logbook entries. The results of these quantitative measures reflected the characteristics of each community as discussed below.

6.4.5.1 Long Threads and Single Entry Posts

The nature of a SNS, as the name suggests, is a site that offers a social network. In order to establish a supportive, friendly, close SNS environment, the participants needed to interact with each other. A proxy measure of the support and the closeness of the community can be derived from the number of posts and the threads containing multiple posts and multiple participants during the set up stage. These interactions would indicate that participants were actively participating to get to know each other at the early stage, assisting to establish a group. Therefore, the study found that rich and engaging interactions reflected in threads containing multiple posts and multiple participants would be a sign of a healthy community[50]. Table 5-4 indicated that IG#2, MG#4 and MG#5 produced longer threads than the other groups and had multiple participants interacting in a thread, as discussed in Section 5.3.1. These groups fulfilled the first criteria in establishing a supportive, close SNS environment. In such an environment, the community could resolve the contradictions that appeared in the constituent components of their activity systems.

On the other hand, a number of single entry threads were observed in IG#1 (50%) and MG#3 (32%) (refer Table 5-4). An absence of replies seemed to indicate a lack of

[50] If multiple posts and multiple participants were observed during forums, they could indicate that discussion took place. Likewise, single posts only could be seen as evidence of discussion not taking place.

desire to interact and a writer could feel rejected by the person or the group. Hence, the number of single entry threads hindered to establish a supportive online environment.

IG#1 also presented shorter (refer Tables 5-3 & 5-4) and less 'chat' style posts in comparison to other groups. Furthermore, IG#1, MG#1, MG#2 and MG#3 also produced few to no threads consisting of more than six posts, whilst IG#2, MG#4 and MG#5 produced 26% to 30% of posts containing threads with more than six posts. Multiple participants were also involved in these threads in MG#4 and MG#5, indicating the close interactions within those groups. These interactions in IG#2, MG#4 and MG#5 seemed to assist in establishing the friendly atmosphere and a tighter community.

Amongst the interactions observed, those with the native speakers presented some importance. As Vonderwell (2003) and Mazzolini and Maddison (2003) found, those native speakers, who made infrequent posts or showed inconsistency in making posts, produced a negative influence on the Learners. In other words, a lack of interactions from the participants, especially from the native speakers, triggered the contradiction in community, which hindered the participants from forming a supportive online environment. The present study also supports the findings of Vonderwell (2003), and Mazzolini and Maddison (2003) regarding native speakers' infrequent posts. The Learners in the groups that received less contribution from the native speakers (IG#1 and MG#3; refer Table 5-5) also became passive and presented less interactions, thus preventing them from developing thriving online discussion forums.

This study supports the findings of Lee (2009) and Vonderwell (2003) in relation to the importance of prior interactions amongst the participants before starting the discussion forums. The interactions during the set up stage were seen as interaction prior to the discussion forums, their function similar to that of an icebreaker session. The importance of these interactions was not simply to get to know each other but to create a supportive online learning environment. The fact that forty one percent of the total posts were observed during the set up stage also supports the importance of the interactions. These icebreaker interactions were important foundation for the next phase: the discussion forums.

6.4.5.2 Number of Scaffolding Strategies Provided

Both Navigation and Linguistic Scaffolding were observed across the groups; however, the amount and types of scaffolding strategies reflected the dynamics of the group.

The level of friendliness was evident in the number of instances of Navigation Scaffolding where the participants helped each other to set up their homepages and to organise the schedule of discussion forums (Table 5-3). For example, the Learners in MG#3 interacted actively during the set up stage.

In terms of interactions between Learners and native speakers some contrasts emerged. In a group such as MG#3, where Learners were active, the only scaffolding observed was a Learner's call for help and the native speaker's suggestions. Henry, a Learner in his first year, seeking for technical help, made four Navigation Scaffoldings ('Asking Questions' scaffolding strategies). Unfortunately, Henry did not receive replies to any of his posts; therefore, no scaffolding was provided to assist his call for help. The native speaker or other Learners could have assisted or at least replied to Henry; however, nobody did. Nevertheless, Henry was able to find the solution himself and set up his homepage. He then made contact with each Learner and some of these interactions gathered six posts. However, his motive could not be sustained in this community due to Internet access becoming progressively difficult for him while in China.

Henry's experience with his group members seemed rather unfriendly, unsupportive and unhelpful compared to the experiences in other groups, in which the calls for help were always attended to or at least generated a response from fellow participants. This is evident in Table 5-8, which reveals that the number of 'Asking Questions' scaffolding strategies together with the number of 'Providing Answers/Confirming' scaffolding strategies confirmed the two-way interactions involved in helping each other to navigate the site (Table 5-8 and Appendix 10).

These two-way interactions of Navigation Scaffolding strategies present evidence of groups' communication levels because they also showed how well and how openly the group communicated to organise the schedule of discussion forums. The groups that openly communicated, where each member contributed in scheduling the discussion forums at the *Nihongo4us* site, had a clear understanding of schedules. This clear understanding helped the community to run the forums smoothly at the next phase. The

groups that showed close interactions to organise the schedule were IG#2, MG#2, MG#4 and MG#5.

Similarly, the number of Linguistic Scaffolding instances presented in Table 5-3 indicated how both the Learners and the native speakers interacted with group members in assisting their Japanese. A higher number of 'Eliciting Explanations' and 'Asking for Clarifications' scaffolding strategies in Linguistic Scaffolding, as presented in Table 5-8, indicated that the participants were comfortable in asking for further clarifications and seeking more explanations from each other (Appendix 10). Equally the number of 'Providing Answers' scaffolding strategies was important because it indicated that these questions were answered. The groups, that produced these scaffolding strategies, were IG#2, MG#2 and MG#4. The Learners in MG#4 produced the most amongst these groups.

At least those Learners in MG#4, who were able to ask and receive answers, felt that the community and the learning environment were friendly. MG#4 produced 33 scaffolding strategies in Linguistic Scaffolding and native speakers produced 13 of those 33 scaffolding strategies. The native speaker, Fujii, produced the majority of 'Providing Corrections' scaffolding strategies, yet the Learners provided the majority of 'Providing Answers' scaffolding strategies. The group was able to collaborate and assist with each other's needs. Jasmine, in her first year in MG#4, shared her feelings about participating in *Nihongo4us* as a novice member of this mixed level group and about how her fellow participants provided scaffolding:

> 'When I first started chatting with my group mates, I felt my Japanese was not good at all. Actually there is a big gap between me and my friend [sic] since I only finished 1b and they are in much higher level than me. In many situations, I cannot express myself and I don't really understand what others are talking about. But my group mates (especially Fujii san and Aya san) helped me a lot by using simple Japanese to explain the things I do not understand, instead of using plain English, which I really appreciate. Chatting entirely in Japanese can be very challenging, especially when you have to understand the comments made by group mates and reply to them. I find this challenging and also quite interesting' (Jasmine, week1 logbook entry).

As seen in Jasmine's comment, she saw the fellow participants as 'friends' and 'group mates' even if she had not had any contacts with them prior to *Nihongo4us*. MG#4 was able to establish a supportive atmosphere where the community members were able to collaborate and provide a learning environment; as a result the group held eight discussion forums. Minimum contradictions were observed in rules and division of labour as the community members worked together to solve problems and produce the outcomes. On the other hand, during the set up stage, MG#3 did not produce any Linguistic Scaffolding and 'Asking Questions' scaffolding strategies in Navigation Scaffolding were left unanswered. MG#3 showed a lack of action and interest from the native speakers and the Learners could not establish a supportive, close online learning environment; as a result, the group held only three discussion forums. The provision of scaffolding during the set up stage played an important role for the development of discussion forums. These different outcomes of MG#4 and MG#3 will be further discussed in this chapter.

6.4.5.3 Participants' Feelings

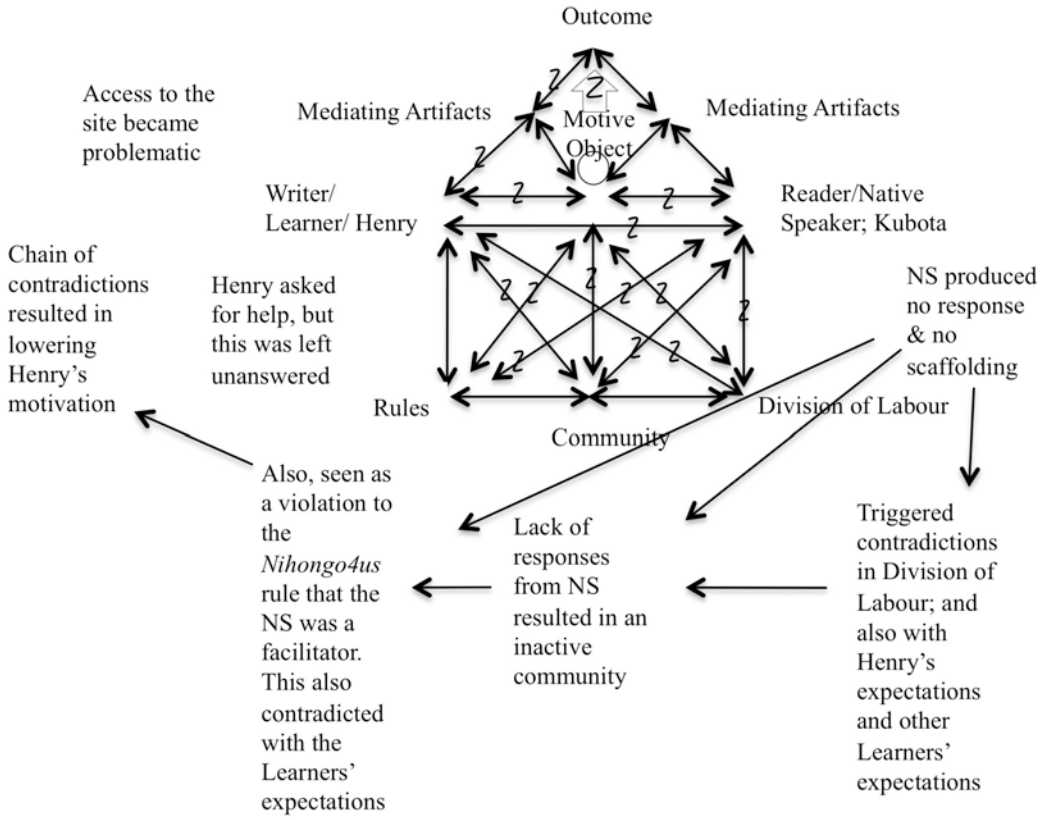
The survey results also assist in measuring the level of friendliness. Although the survey was conducted at the end of the *Nihongo4us* Session, the results indicated the dynamics of each group and the Learners' feelings, which appear to have persisted from the set up stage. Whilst tempering this with the note that the survey results are subject to survivor bias, Table 4-7 reveals that the Learners in certain groups showed stronger levels of enjoyment and comfort in their assigned groups. MG#4 showed the strongest sense of community, while others showed a stronger desire to keep in touch with fellow participants. Their desire to keep in touch and their sense of community were both good indicators about the Learners' sense of comfort and close relationship with fellow participants.

The survey results also indicated that the Learners in MG#1 showed the highest positive indicators in these items (Table 4-7) in spite of the fact that the number of scaffolding strategies (Table 5-8) and the development of discussion forums appeared to be less than other groups such as IG#2 and MG#4. Section 6.5.5 will present the factors that hindered the development of discussion in MG#1.

6.4.6 Summary of Set Up Stage

This section illustrates the contradictions observed in the activity system during the set up stage, using MG#3 to show the effect of contradictions for the outcome to post and provide scaffolding. The groups that were well connected during the set up stage were able to establish a supportive online environment. In particular, IG#2, MG#4 and MG#5 presented the number of long threads that showed active interactions amongst the participants, establishing their strong bond as a group. As presented in Section 5.3.1, the balance of active interactions by all the participants, especially involving the native speakers and native speakers' provision of scaffolding, was an important factor in forming a supportive online learning environment. This was due to the relationship between the Learners' expectation and the native speakers' action as discussed previously (Section 6.4.1). When the Learners' expectations of being corrected by the native speaker did not meet the reality, contradictions occurred. Similarly, if the native speakers did not interact with the Learners, contradictions occurred as shown in the *OJAS*, which affected the outcome of *Nihongo4us*. Any contradictions that occurred in relation to division of labour affected community. As an example, the interactions between Henry and Kubota, the native speaker in MG#3, can be visually summarised in the *OJAS* below (Figure 6-8), to demonstrate their relations and the contradictions in the activity system.

Figure 6-8: The *OJAS* of MG#3



The next section discusses how the abovementioned contradictions that were observed during the set up stage, affected formation of a strong bond between the members of community. Of particular interest is how contradictions in various constituent components of the *OJAS* impacted on the discussion forums.

6.5 During the Discussion Forums

This section discusses the contradictions that appeared during the discussion forums. In large part, these contradictions were triggered as a flow-on from contradictions that had occurred during the set up stage. Some contradictions continued to appear after the set up stage, which became secondary contradictions, while some were a new level of contradictions. This section presents firstly contradictions that occurred in regards to the community. Then, those in relation to division of labour, rules, mediating artifacts and topic are discussed.

6.5.1 Community

The groups that were able to establish a supportive online environment during the set up stage, produced a number of discussion forums regardless of the number of participants. The number of the Learners decreased after the set up stage and continued to decline for some groups. Most groups experienced fluctuations in the number of active participants during the discussion forums. This is understandable given that the study was conducted without any course requirements during the major holiday seasons and given that the majority of participants were quite busy, either travelling or working.

Over the length of the session, IG#1, MG#3 and MG#5 had a median number of only four participants each, which was the lowest in the study. Other things being equal, a low number of participants may damage the ability of a group to hold extended discussion forums. During the set up stage, all the Learners in MG#5, who could not continue, notified the group or the researcher before they discontinued. The reasons varied from sickness, to work commitment and Internet issues. However, the study could not verify the reasons why many Learners became inactive in other groups.

The outcomes of these three groups were quite different. The most notable differences were observed between MG#3 and MG#5. MG# 3 held three discussion forums with 40 posts in total, while MG# 5 held ten discussion forums with 119 posts in total. In the case of MG#5, the smaller number of participants did not necessarily limit the number of discussion forums held. However, for the small number of participants to continue to have extended discussion forums, they needed strong community, as well as avoidance of contradictions in other interrelated constituent components in the *OJAS*.

Vonderwell's (2003) statement about creating a community to improve learners' motivation and to facilitate interpersonal/social interaction in online discussion forums was reflected in IG#2, MG#4 and MG#5. These groups were well connected and identified as groups that were able to establish an online learning environment. Both native speakers and the Learners in those groups interacted with each other, sharing their thoughts and providing scaffolding as required after the set up stage. Hence they were able to produce a number of intense discussions and the Learners also provided scaffoldings during the discussion forums. One of the reasons that MG#5 was able to conduct active discussion forums, even if the number of participants remained small,

was that their group showed a willingness to collaborate in the activities to achieve a common goal. For example, when MG#5 needed to re-organise the discussion leaders and the schedules, the Learners happily volunteered and took the leadership. The native speaker took the overall facilitator's role and the Learners responded to calls for help by becoming weekly discussion leaders on multiple occasions. They were able to communicate openly and made flexible adaptations to the situation resulting from the close interactions during the set up stage.

Similarly, MG#4 manifested a strong bond among its members; for example, the participants welcomed back fellow Learners when they rejoined the discussion forums after having a computer problem or after coming back from their holidays. IG#2 also presented closer relationships among its members valuing their friendships; this was shown in the fellow Learners' exchange of birthday greetings during the *Nihongo4us* Session. The groups that presented supportive communication, showing some connections with the fellow participants, generated a number of discussion forums with some depth in what they discussed. Such groups also provided more scaffolding to each other than did other groups. The study thus supports Lee's (2009) findings that the better the interpersonal rapport a group has, the more willing each participant is to share their perspectives, to seek help and to offer their support. In such an atmosphere, it was apparent in this study that the participants provided more scaffolding.

On the other hand, MG#3 appeared as though the participants were not working as a group. Kubota's (native speaker in MG#3) Navigation Scaffolding during the first discussion forum, telling the Learners where they should have made a post, did not seem to have any effect. Kubota commented in the post-session interview that she felt the members were not functioning as a group. She also commented that she did not feel as though she was part of a group and that the group lacked unity. She thought this might be due to her not interacting with the Learners during the set up stage (Kubota, post-session interview). In spite of the fact that Kubota recognised the group's lack of unity, she did not know how she could change the situation and so she did not attempt to make any changes. Given the lack of interactions involving Kubota during the set up stage and the absence of Learners demonstrating any dominate leadership, MG#3 struggled to function as a group. However, from the Learners' point of view, they could not take dominant leadership in the presence of a native speaker or seniors since that would seem an impertinence and discourtesy to Japanese culture (refer Chapter 5;

Austin & Victoria's logbook entries). The Learners' hesitation to take any leadership was predominant in the groups where the interactions with the native speakers during the set up stage were limited.

In line with Fitze's (2006) observation of the group dynamics in his online discussion forums, the present study also observed some group dynamics reflecting the characteristics of communities, as the discussion forums developed. Warshauer (1996) and Fitze (2006) observed that online discussion forums provided a more equal distribution of participation amongst participants. The native speakers had the role of facilitator in the current study; however, the Learners dominated the discussion forums in most groups, while the native speaker made the majority posts in MG#3 during the discussion forums.

The interactions during the set up stage were a significant influence on the community, affecting the participants' performances during the discussion forums. However, to understand the full effect of this on the community the division of labour has to be examined. The next section discusses the division of labour by examining the roles of participants and how those influenced the other constituent components in the *OJAS*.

6.5.2 Division of Labour

This section discusses contradictions in relations to the performances and roles of participants during the discussion forums. Firstly, a contradiction within the division of labour was identified, where there was a gap between the Learners' expectation of native speakers and what the native speakers did. The second contradiction observed was in relation to the participants' reactions to a situation where the discussion leader did not or could not upload topics. No topic meant absence of a discussion forum for that week; therefore, it was vital for a topic to be uploaded. How each group and each participant reacted to this circumstance presented certain contradictions. Thirdly, different approaches taken by each group in relation to contacting fellow participants produced an interesting observation: some Learners provided email addresses that were not in regular use, thereby causing further contradictions. Fourthly, how the Learners valued the native speakers' inputs is discussed. It seemed that the native speakers' interactions were vital to the development of discussion forums and provision of scaffolding. Fifthly, the section discusses the role of discussion leaders. One of the

expected roles for Learners as well as native speakers was to provide scaffolding. However, many Learners felt it difficult to provide Linguistic Scaffolding. The final section (Section 6.5.2.6) presents what hindered the Learners from providing Linguistic Scaffolding and discusses how this can be changed.

6.5.2.1 Gap between the Learners' Expectation and Native Speakers' Actions

The Learners expected the native speakers to provide corrections and to guide them during the *Nihongo4us* Session. The Learners' role during the discussion forums was to provide a discussion topic during the nominated week, to provide scaffolding if they could, and to participate in the discussion. The native speakers' role was to provide corrections and to facilitate the forum at the *Nihongo4us* site. However, the amount of corrections and how native speakers facilitated the site did not always meet the expectations of individual Learners. Similarly, the views of native speakers on provision of scaffolding varied considerably; hence, they produced different outcomes at *Nihongo4us*.

These primary contradictions also triggered secondary contradictions. For example, when a Learner did not accept the role as discussion leader and did not post a topic when it was scheduled, the rest of the Learners could have expected the native speaker to post an alternative discussion topic and to facilitate the discussion or they could reasonably have expected the native speaker to call for another volunteer to take a lead. This is because, in the Learners' opinion and according to the *Nihongo4us'* rule, the native speakers were the group facilitators. When neither occurred, the participants were often left with no discussion forum in which to participate.

However, in the case of groups that created a supportive learning environment, when the Learners recognised that a topic had not been uploaded they volunteered to be a leader or made a post seeking opinions from the native speaker and others. Such a sense of community enabled its members to take proactive actions. Otherwise, the Learners were rather reserved and hesitant to take proactive actions in the presence of the native speakers.

The role of the native speakers was to provide the necessary scaffolding and to facilitate the *Nihongo4us* Session. Therefore, the Learners expected some corrections and some leadership from the native speakers. However, when this did not happen, the Learners' motive was affected, as was seen in IG#1 or MG#3. Native speaker irregularity and infrequency in providing feedback/response caused Learners to be frustrated and decreased their motivation. Post-session interviews and the survey indicated that in IG#1, the Learners' motivation to contribute to the discussion forums or ask for questions decreased due to the inconsistency of response from native speakers.

Post-session interviews with the Learners also revealed that some Learners from both IG#1 and IG#2 thought that if corrections were not made, the sentences were correct. This was a rather dangerous assumption to make because in fact not every mistake was corrected; therefore, these Learners might have acquired some inaccurate Japanese. However, Learners in the Mixed Groups did not have this assumption. They did not think uncorrected sentences were correct but they thought the uncorrected sentences were acceptable. Learners in the introductory level groups seemed to need more scaffolding from, and interactions with, the native speakers. Language experience and varied competencies of the Learners might have brought these different reactions. Generally speaking, the first year learners are not quite sure about the sentence structures and word usage; therefore, they needed more guidance and positive assurance in all aspects of the language. As a result, the Learners were somewhat reliant on the native speakers to make an input and lead the groups. Hence, when native speakers' posts were infrequent and the Learners did not receive corrections from them, the Learners made a request for corrections; the Learners needed some assurance that their meaning was conveyed to the participants. However, this introductory level Learners' need for correction was not noted in the Mixed Groups.

Introductory level Learners in the Mixed Group did not need to make requests for corrections because receiving replies from both native speakers and senior Learners, as well as receiving regular scaffolding, assured them that their meaning was conveyed. Important here is the fact (and awareness on the part of the introductory level Learners) that they were receiving advice from participants who possessed proficiency levels were above their own. On the other hand, the learners in the single level introductory groups were at a similar competency standard; hence, they seemed to rely heavily on the native speakers.

Some native speakers experienced difficulties in making corrections; however, the native speaker in IG#1 (Suzuki) reported that making corrections was not difficult. This is because Suzuki was teaching and familiar with the content of the introductory level of UNSW and he also knew some of the Learners in his group from teaching. However, quite a few posts were not corrected. When the incorrect posts were pointed out during the post-session interview, Suzuki said he had overlooked them and had not noticed any mistakes before. It seems as though he did not recognise a mistake if he could understand the gist of what a Learner was trying to say; therefore, he did not make any corrections. For Suzuki, communication was more important than correctness of the sentences. So Suzuki's own teaching belief caused the contradictions with the Learners' expectations. This caused the tertiary contradictions. Suzuki, as being a UNSW tutor, held his own belief on teaching method, which was embedded in a more culturally advanced activity system. This culturally advanced neighbouring activity system introduced a tertiary contradiction into the central activity system of *Nihongo4us*' *OJAS* (refer Figure 6-2).

Suzuki's action of not making corrections where the Learner conveyed a gist of meaning meant his provision of corrections was not regular. Because the Learners did not know of Suzuki's reasoning for not correcting, a lack of scaffolding from Suzuki caused the contradictions with the Learners' expectations. One of the Learners' learning objectives was to improve their language accuracies and they would have liked any mistakes to be corrected. If they were not corrected, the Learners assumed the sentences were correct. Especially since they had completed only the first year study, they were not in a position to judge themselves whether their sentences were correct or not. In their view, they would appreciate more rigid corrections by the native speakers, such as corrections of particles. Without that, they did not feel that they had gained knowledge or had improved their language skills.

Without any explicit rules about the provision of scaffolding, this study enabled us to understand the provision of scaffolding. However, providing more explicit rules in relation to the provision of scaffolding could have minimised the contradiction such as mentioned above. For example, stating clearly that 'not all mistakes would be corrected' or 'if the meaning was conveyed, mistakes would not be corrected' could have been helpful since Learners would have possessed additional information to interpret what was happening.

Differences between groups are of interest here. Suzuki in IG#1 provided less scaffolding compared to that of Takahashi in IG#2. Furthermore, the frustration and anxiety for the Learners in IG#1 were greater as is seen in Table 4-7. The Learners' frustration and anxiety also caused another level of contradiction within the activity system. These contradictions, arising from Learners' expectations, triggered a chain of contradictions over the *Nihongo4us' OJAS* affecting its outcome. If Suzuki had been more active in making posts in IG#1 and had made more regular provision of scaffolding strategies, the Learners would have been more assured that their meaning had been conveyed. At the same time, if some senior Learners had been in the group, other Leaners might not have depended on Suzuki so much and the level of Learners frustration and anxiety could have been lowered.

The native speakers had a separate SNS called the 'helpline *Nihongo4us'* (refer Section 3.7.1) where they could discuss any problems or seek assistance regarding the operation of *Nihongo4us*. However, the 'helpline *Nihongo4us'* was not used whilst the discussion forums were underway. The reasons for this were that the native speakers did not have enough time and did not find any particular issues that they wanted to discuss in the forums (Fujii & Nakamura, post-session interview). However, some native speakers, for example Takahashi and Nakagawa, who shared a group (IG#2), kept in touch from time to time, comparing notes on how their groups were performing, using their mobile phones. The 'helpline *Nihongo4us'* site did not have any facilitators and, in fact, the login records revealed no access from any native speakers once the discussion forums started. However, if a facilitator had been assigned and if the site had a specific forum assisting the native speakers how to facilitate the discussion forums at the *Nihongo4us* site, native speakers might have used the 'helpline *Nihongo4us'*. If so, the groups that struggled to create a supportive online environment and to facilitate online forums could have improved their interactions.

6.5.2.2 Participants' Reactions to the Absence of a Topic

One of the main reasons for the differences in the total number of discussion forums was a discussion leader's failure to upload a topic without a substitute topic being previously organised. All groups experienced incidents where the designated discussion leader did not upload a topic on time, yet it only significantly affected IG#1 and MG#3. There were various reasons and explanations for the discussion leader not uploading a

topic. The reasons interrelated to rules, mediated artifacts and division of labour. The reasons that related to rules and mediating artifacts will be discussed later in this chapter (Section 6.5.3 and 6.5.4 respectively). As best can be managed given the interrelations between the *OJAS*' constituent components, this section discusses the reasons related to division of labour by focusing on how each group dealt with this situation.

In the second half of the session, Suzuki sent an email reminding participants of the need for a discussion leader to post a topic, but neither other Learners nor Suzuki took further actions when there was no reply from the discussion leader. This resulted in no topic for that week. This occurred also in MG#3 with Kubota. Kubota used her own private email to ask for the leader to upload a topic and did not receive a reply. When she had no replies, she too did not act any further. When asked about this during the post-session interview, she thought the Learners did not reply because no posts were made from others at the *Nihongo4us* site; therefore, it was not worth pursuing. This statement itself presented a contradiction, as Kubota was not making further posts to encourage the Learners to write more posts when a topic was not uploaded.

The email communication between the inactive discussion leader and Kubota was not open to everyone, therefore, the other Learners were left without a clear understanding of the situation. The Learners could not tell whether the native speaker was going to upload a topic, or the designated leader was just late in uploading. As MG#3 struggled to form a supportive online environment with many contradictions appearing in the activity system, the Learners hesitated to take leadership in the presence of native speakers and others. The group members continued to perform on an individual level but did not share responsibilities or collaborate in the discussion activity.

By contrast, in other groups when no topic was uploaded, or the native speakers realised that the next discussion leader had become an inactive participant, native speakers took actions to continue the discussion forum, or another Learner volunteered and uploaded a topic at her/his own initiative. In the majority of cases, the native speakers made a post calling for a volunteer or asked a Learner directly whether s/he was prepared to be the leader. The communication was conducted over the *Nihongo4us* site, where every participant could read and understand what was happening. So anyone who would not mind volunteering could volunteer. At other times, the native speakers uploaded a topic.

The groups, that interacted well to establish a strong bond in a community, were able to share the responsibilities and roles as such situations arose.

6.5.2.3 Why Emails didn't Work

Use of emails also presented an interesting object of observation in itself. The private emails could not be retrieved and the numbers of these emails that Kubota sent were unknown. However, all the mails sent via the *Nihongo4us* mail tool were retrieved for this study. The Mail tool was used for some announcements, such as how to navigate the site, and to call for assistance. Some mails were sent to everyone in a group, some were interactions between a native speaker and a Learner, which were not publicly available to the whole group.

In order to use Bebo (SNS), the participants had to sign in and provide an email account. This is a normal practice in SNSs. The participants were supposed to provide the email address that they regularly use. However, some Learners who did not want to generate any unrelated emails as a result of joining a SNS, provided a newly created email address for the purpose of joining this study. A Learner, Nicky from MG#4, said in the post-session interview that for the above reason, she provided a new email address but did not often check it. Therefore, Nicky did not read emails that were sent during the *Nihongo4us* Session. This could also have been the case for others including Learners in MG#3.

6.5.2.4 Importance of Native Speakers' Inputs

Just as the Learners valued the native speakers' contribution in providing ideas and experiences, so the actions of native speakers had a direct influence over the motive of the participants and set the atmosphere and environment of individual groups in *Nihongo4us*. This study also supports Rimmershaw's (1999) findings that the Learners responded well to a native speaker's active participation in the discussion, as seen in Emma's comments in Chapter 4 (4.4.2.5). Comparing the interactions and the posts across the groups, it is noted that the Learners participated in the discussion forums more actively when the native speakers shared their thoughts, opinions and personal experiences with them. What mattered was not simply the number of posts that the native speakers made but the quality and type of posts that they made.

Consistency in native speakers' actions was again an important factor, as Vonderwell (2003) found. Therefore, their interactions through sharing thoughts from an early stage seemed to assist in developing the discussion forums to stay active. This was also reflected in Akkerman and Bakker's (2011) and Edwards' (2012) boundary crossing as discussed in Chapter 2 (refer Section 2.4.2.4). The sharing of their expertise by native speakers had an important impact on the Learners with respect to culture as well as linguistically. The posts where the native speakers openly shared their insight into Japan and Japanese culture, personal accounts and their thoughts on the discussion topic was important for the development of the forums. Furthermore, native speakers' posts presented the 'linguistically model Japanese' that the Learners aim to work towards to improve their Japanese expressions.

The collaborative activities at *Nihongo4us* were seen as boundary crossing activities (Edwards, 2012). The impacts of native speakers on the Learners during the stages of the *Nihongo4us* Session can be understood in the concepts of relational expertise and boundary crossing as in Table 6-1 below. Kubota, for example, who did not interact during the set up stage, felt the group was lacking in unity but did not know how to change it. Using Edwards' terms, Kubota did not present relational agency competencies. Edwards expanded the relational agency competencies and described these as relational expertise, which involves recognising others' involvements, understanding others' points of view and sharing motives in order to continue their engagement in the activities. Relational expertise recognises the need of nurturing common knowledge; therefore, relational expertise involves building, contributing and working with the common knowledge (Edwards, 2012).

Table 6-1: Relations of the *Nihongo4us* Session, process of boundary crossing and relational expertise

Nihongo4us Session	Processes of boundary crossing	Relational Expertise
Set up stage	Identification	Building
During discussion forums	Coordination	Contributing
	Reflection	Working with the common knowledge; Japanese
	Transformation	

Both native speakers and Learners played the role of discussion leader. The role of a discussion leader also had a direct impact on the development of the discussion forums as the following section describes.

6.5.2.5 Role of Discussion Leaders

The primary contradiction in the division of labour in relation to the role of discussion leaders was that some Learners did not post a topic; therefore, those Learners did not fulfill their role of discussion leaders. The groups that had active interactions during the set up stage, were able to attract spontaneous volunteers as an alternative discussion leader. This section discusses the role of discussion leaders in developing discussion forums and promoting scaffolding.

The participants took turns to be discussion leader by uploading a topic and facilitating the discussion for a week. There were no restrictions about the type of topic or how they should facilitate the discussion forums. Some discussion leaders presented a discussion question without presenting his or her opinions, while others presented multiple questions in a single post as a discussion topic. Some discussion leaders actively facilitated the forum by replying back to each fellow participant's comment about his or her opinions, while other discussion leaders took a passive stance.

Time taken by the discussion leader in replying to the fellow participants' requests was also important. During IG#1's first discussion forum led by the native speaker, Suzuki, Kylie replied promptly within 24 hours of the post being made, while Suzuki's subsequent reply to Kylie took five days. Each discussion forum only lasted seven days; therefore, Suzuki, taking five days to reply to Kylie's question for the meaning of a word, caused a loss of motivation for Kylie to continue with the discussion. This had a double impact as Suzuki was the native speaker and he was also the discussion leader at the time. After this incident, although the logging record at the *Nihongo4us* site showed that Kylie was viewing the sites, she became a very passive participant and rarely made posts. Kylie did not participate in the post-session interview, therefore, this study could not reveal her thoughts in detail, but the observation shows that this interaction in the *OJAS* presented a contradiction, which perhaps decisively affected the outcome for her.

On the other hand, the first discussion leader in IG#2, Charlotte, posted the initial topic 10 days prior to the discussion starting, announcing when and where the discussion

forum would take place. This gave all the participants time to prepare and everyone was aware of the content of the topic as well as the starting time. By the time the discussion started, Charlotte had already received a few reactions from the participants. The discussion started off with Charlotte making two posts describing her first experience of travelling alone. She made the separate posts because of the length of each post. The first post had 448 characters and the second one had 330 which, if combined, would have been extremely long. She thought about how the fellow Learners would feel if her travel experiences were presented as one post (Charlotte, post-session interview). She also uploaded many photos (130) and photo diaries (63) to share her travel experience during the discussion forum.

Charlotte replied back to every post that the participants made, summarising their contents and adding more personal experiences and putting forward her opinions in her replies. This acted as Content Scaffolding. She also expanded her original discussion topic as the discussion developed. For example, when she realised nobody else had the experience of travelling alone, she asked where people would like to go, if there were no money or time restrictions. This gave everyone an opportunity to present her/his opinions. Charlotte's Content Scaffolding in this incident is similar to 'suggesting a new direction' in Hew and Chung's (2008) terms. Without this change of direction, the discussion probably would have come to a halt, as others could not develop the discussion any further apart from exposing their deeper thoughts/feelings which they may have been afraid of so doing. This topic gathered 34 posts in total with eight participants. The strategies Charlotte used to facilitate the forum also reflected three critical phases and seven techniques identified among successful facilitators in the study of Hew and Cheung (2008) (refer Section 2.3.2.5).

Discussion leaders in IG#2, MG#4 and MG#5 also presented similar questioning skills to trigger replies from fellow participants or to change the direction of a discussion. As Collison, Elbaum, Haavind and Tinker (2000) stated, a good facilitator can identify comments already posted in a dialogue that can serve as bridges to the next level of discussion – questioning seemed to serve the role of bridging. Instructional technologist, MacKnight (2000, p.39) argued that 'the level of questions asked influences the depth of thinking that occurs'. Online discussion forums need thought-provoking questions so that the Learners go beyond the facts and use their knowledge to express their thoughts. MacKnight (2000, p.39) also argues that 'critical thinking questions tend to generate

more questions in both the questioner and responder'. The Learners and native speakers in the groups that were able to discuss a number of topics and produced many posts, such as IG#2, MG#4 and MG#5, presented their opinion, prompting a thought-provoking question to each other. These Learners learnt the relevant expressions, vocabularies and sentence structures from each other.

Sharing information and thoughts was also an important technique in facilitating a forum. This was also recognised as an important factor in the boundary crossing theory as discussed by Edwards (2012). In order to fully collaborate in a discussion forum, the participants need to share their thoughts and expertise. In other words, a constructive style would involve a participant making a post, summarising other participants' opinions and making comments on previous posts as well as presenting his or her own opinions and finally contributing to further discussion by prompting a thought-provoking question. Such a style of posts would make a difference in a forum and the Learners could learn from the post how to contribute to a discussion forum. This style of posts was missing in IG#1, MG#1 and MG#3.

Across *Nihongo4us* generally, as the participants took their own initiative and style of the division of labour, the first discussion leader, and the first discussion forum seemed to set the style for the remaining discussion forums in that group. That is, for example in the instance of IG#1, the discussion leaders followed Suzuki's style and posted their question without contributing to the discussion itself and in turn each participant posted his/her opinion without linking to the others. On the other hand, the discussion leaders in IG#2 followed Charlotte's style and not only posted the discussion topic question but also contributed to the discussion and replied back to each post made by the participants. Furthermore, the fellow participants also commented on each other's posts presenting more interactions and exchanges of thoughts similar to face-to-face discussion forums. In other words, the discussion leaders in IG#2 were able to become facilitators and led the forums, while the discussion leaders in IG#1 were the providers of discussion topics rather than facilitators.

The style used in IG#2 not only enhanced the development of the discussions, but it also stimulated the participants to write more posts. Hence, IG#2 produced more and longer posts than did IG#1. Naturally, it was quite a task to read everyone's lengthy posts and to make comments and then to reply back within a relatively short time. The Learners'

posts, especially introductory level groups, often did have some grammatical errors, which confused the Learners at times, or demanded extra time to digest the gist of what other participants were saying. However, the Learners in IG#2 felt that they had learnt and achieved a lot by the end of the *Nihongo4us* Session, as shown in the Survey result in Table 4-7 and discussed in Chapter 4. IG#2 presented high scores in many items in the Survey, for example: enjoyed participating; gained better understanding of Japanese; felt less anxious; and found new approach to studying.

Reflections on what they had accomplished reveal that the participants were happy knowing that the discussion leader was reading everyone's posts and not just presenting a discussion topic but also sharing his/her views and facilitating the forum. The Learner in IG#2, Emma made a comment in her logbook reflecting her feelings:

> 'when the person who leads discussions actually responds, it feels great'
> (Emma, week 7 logbook entry).

This feeling that Emma had was probably what the Learners in IG#1 also sought from Suzuki, as a native speaker and a discussion leader during the first discussion forum. The contradictions occurred in the *OJAS*, because from the Learners' point of view, Suzuki did not participate in a discussion nor facilitate the forum. As a result, the Learners' motive was negatively affected in the *OJAS*, producing fewer posts and scaffolding, and the group could not develop the discussion forum further. The processes of boundary crossing did not occur as relational agency was missing in IG#1.

If participants did not interact well to create a supportive online environment and the native speaker was not actively involved, the Learners became passive and the group could not develop a successful discussion forum. Amongst Mixed Groups, if the participants interacted well and successfully created a supportive online environment, the groups were able to develop the discussion forums, even if the discussion leader did not reply back to every post made. However, for the introductory level groups, the role of discussion leaders played an important role that the leaders' replies and inputs were needed to expand the discussion forums. Perhaps the reasons for these differences are similar to that discussed in Section 6.5.2.1, where the senior Learners' inputs in the Mixed Group presented assurances to the groups. Furthermore, even if the number of participants was small such as in MG#5, if the native speaker progressively provided

summaries of the participants' comments, the group was able to have a successful forum.

As the discussions in the Mixed Groups dealt with complex issues, each post was quite lengthy. The native speakers presented their own views on the topic along with summaries of Learners' opinions, and this assisted other Learners to comprehend what had been said. Content Scaffolding played an important role in such cases. In this study, for both Introductory and mixed level groups, the more the native speaker showed interest in the discussion forums, the more active the Learners became.

Some discussion leaders used Internet sites to assist their discussions. Having actual materials to talk about was helpful and this acted as Content Scaffolding. However, this did not guarantee the successful development of a discussion, because the development of the discussion depended on how motive was influenced to produce the outcome as seen in the *OJAS*. This illustrates the point that contradictions can deliver more disruptive impact on motive than other matters that might act to reinforce motive. Thus discussion leaders' use of helpful material was not able to overwhelm or counter-balance contradictions generated by discussion leader behaviours.

6.5.2.6 Learner's Difficulties in Providing Linguistic Scaffolding

This section discusses the contradictions that were observed amongst the Learners in the division of labour. All Learners saw themselves as learners; therefore, it was difficult for the Learners to correct fellow Learners. Correcting a fellow Learner's post was not just a simple action that required making suggestions or knowing the correct use of grammar. It was far more complex than that. It involved social and emotional aspects for Learners as well as their linguistic knowledge. In order for a Learner to correct a fellow Learner, she/he needed to be sure about the accuracy of the corrections to be posted. Overwhelmingly, Learners did not want to be seen as being pretentious or disrespectful to their peers by making corrections. Thus in order to correct fellow Learners, firstly a Learner had to overcome fear or emotional dilemma generated by that potential action.

This emotional boundary seemed difficult to overcome regardless of the Learners' proficiency levels. The juniors did not mind the seniors making corrections (Post-session interview). In fact, they said they appreciated the seniors' comments and

corrections. They looked up to their seniors as their role model and they worked towards the utterances that the seniors produced. Yet for the seniors, they feared the juniors were merely being polite to say so; deep down they suspected that the juniors would feel a bit embarrassed to be corrected by their seniors (Jack, post-session interview; Dominic, post-session interview). These seniors were talking from their own experience as they reflected on these events during the post-session interviews. Victoria, one of the senior Learners in her fourth year of Japanese Studies, remarked that she needed to be 100% sure about a correction otherwise she would not implement the correction (Victoria, post-session interview).

Some of the Learners of the mixed level groups had the experience being a UNSW 'Junior Sensei' (Thomson, 2008) (refer Section 2.3.2.3). Nevertheless, they felt difficulty in correcting their fellow Learners' posts in *Nihongo4us*. The senior Learners in UNSW's 'Junior Sensei' program could provide scaffolding to the juniors relatively at ease because their performances were a part of their assessment, they were expected to make corrections and they were in the face-to-face classroom in the presence of a teacher. All of that generated a legitimacy of role that was not questioned, even silently, by participants in the UNSW 'Junior Sensei' program. On the other hand, participating in *Nihongo4us* was not a part of an assessment task and it was not conducted in a classroom situation with a teacher. Without these safety nets, the senior Learners had to overcome their emotional barrier to provide scaffolding (especially a 'Providing Corrections' Linguistic Scaffolding strategy) to the junior Learners.

Some emotional barriers may have been minimised when a Learner took the role of discussion leader. Being discussion leaders, the Learners felt they had responsibilities to facilitate discussion forums. With such responsibilities, they also felt that they were responsible for providing scaffolding, which included making corrections. Providing scaffoldings was seen almost as a part of the job as a leader, which lifted their emotional dilemma temporarily.

Another way to ease the Learners' emotional difficulties was that the Learners felt more at ease to provide scaffolding strategies, especially Linguistic Scaffolding, when other fellow Learners were also providing them. Emma in IG#2 was proactive in providing Linguistic Scaffolding. Having Emma's proactivity in a group, other Learners in IG#2 also provided corrections. Learners in IG#2 produced a third of 'providing corrections'

strategies (11 out of 33 in total). However, they, too, said that they only made corrections if they were 100% sure of the corrections (Marian; Charlotte, post-session interviews).

Similarly, Aya[51] in MG#4 was also very active in providing scaffolding to her fellow Learners. Aya's proactive actions encouraged another Learner in her group (MG#4), Liz, to do the same (Liz, post-session interview). Liz commented that if she was the only Learner who was providing scaffolding, especially 'Provide Correction' scaffolding strategy, it could look as though she was pretentious. However, being together with Aya who has been active, Liz was somewhat encouraged to do so. Liz said she still needed to push herself to correct the fellow Learners' posts, however, she thought it was not as bad as she initially had imagined. In this instance, Fujii's (the native speaker) encouragement supported her emotionally. He encouraged Liz to provide scaffolding and he praised her mission accomplishment. She knew that Fujii would have corrected any mistakes if so needed. This also gave her assurance. Reflecting back, she reported that she was pleased that she was able to do so, as she did learn more by correcting others (Liz, post-session interview).

Having a set rule that every Learner had to provide a certain number of Linguistic Scaffolding instances during each discussion forum could encourage the Learners to do so. However, this study was designed to fill a gap in the literature by observing and examining the provision of scaffolding in a naturally occurring online situation and so it had strategically decided to avoid such rules sets that would reduce learner flexibility.

The way in which Emma participated during the *Nihongo4us* Session gave an interesting perspective on Learner difficulty in providing Linguistic Scaffolding. She had not yet started her Japanese studies at UNSW; however, she had extensively studied Japanese at high school. Therefore, her level of Japanese was probably higher than that of most of the first year Learners. Emma was very keen to learn and made regular posts and set up Blogs to help her learn new vocabularies. The fact that Emma had not started her UNSW Japanese studies at the time of *Nihongo4us*, and that she had not yet immersed herself into a culture of UNSW Japanese studies meant that she was outside the culturally and institutionally imposed expectations (Hadjistassou, 2012) that other Learners possessed. This might have contributed to her freedom in providing more

[51] Aya can be classified as a 'heritage learner' (Board of Studies New South Wales Australia, 2010).

scaffolding strategies compared to others, where the neighbouring activity system can influence the central activity system.

A useful caveat to note here is that the Learners, as a group, were heterogeneous. This heterogeneity, as described in Chapter 3 (refer Section 3.6.2: Background of the Learners), is manifested in the Learners' proficiency levels and cultural backgrounds. Of particular interest here were the three Learners with some form of Japanese heritage background. Using an institutional definition of the term 'heritage learner' provided by the Board of Studies New South Wales (2010), two Learners[52] can be so classified[53] since they had been exposed to Japanese at home. In this study, the Learners were enrolled at UNSW as Japanese language students and no special activities were prepared for those of differing backgrounds, specifically for the heritage Learners. However, as will be noted, the Learners with a Japanese background do present interesting findings for this study.

Aya was one of Japanese heritage learners in her fourth year of Japanese Studies with some teaching experience and these characteristics seemed to help her to provide scaffoldings to her fellow Learners. Aya was a teacher assistant in the UNSW 'Junior Sensei' program; she had helped her mother teach Japanese privately; and, she was studying education at UNSW. As a result of those factors, Aya was proficient in providing Linguistic Scaffolding. Further, she actively participated and contributed in MG#4's discussions and provided scaffolding in all three categories.

The native speaker of MG#4, Fujii, valued Aya's inputs and also encouraged her to provide scaffolding. When Aya had computer problems and came back to MG#4 after her computer was re-serviced, fellow participants welcomed her back and Fujii made a post commenting that he was glad to see her, as without Aya, everyone's enthusiasm was down. Aya provided 12 scaffolding strategies in total to her group; nine in

[52] Three Learners were identified as Japanese by way of nationality in Table 3-2. However, only two of them were identified as 'heritage learner'. The other Learner held a Japanese passport, however, was not classified as heritage learner because Japanese was not spoken at home and she was educated and raised outside of Japan.

[53] The term 'heritage learner' in this study follows the NSW Board of Studies description, as learners; 'who have been brought up in a home where the Japanese language is used and who have a connection to Japanese culture. They have some degree of understanding and knowledge of Japanese, although their oral proficiency is typically more highly developed than their proficiency in the written language. These students have received all or most of their formal education in schools where English (or another language different from Japanese) is the medium of instruction. They can therefore be considered to some extent bilingual, with English or the other language being the predominant language' (Board of Studies, 2010, p.5).

Linguistic and three in Navigation Scaffolding. The fellow Learners in Aya's group saw her as a near native speaker and respected her input and they were happy to be corrected by Aya. However, it can be noted that Aya's provision of scaffolding cannot be seen as a norm of Learner's scaffolding. Although Aya was a Learner in this study, her being a heritage learner with exposure to language teaching presents a unique position.

Yoshimitsu (2008) and Koshiba and Kurata (2012) reveal the mixed emotions and difficulties that Japanese heritage learners experience when they studied Japanese in a face-to-face language class in Australia. This was also reflected in another heritage learner, Ella, in *Nihongo4us*, as she was at the same Japanese level as Aya yet did not produce any scaffolding. This study proceed further regarding issues with heritage learners in relation to provision of scaffolding since it could not gather interview data from those heritage learners. However, other Learners including heritage learners, had difficulties in providing scaffolding because their cultural and historical backgrounds (as represented in the neighbouring activity systems) presented contradictions influencing the central activity system.

Two groups where the Learners actively produced scaffolding were IG#2 and MG#4. The key element is what was it that initially triggered the Learner to produce Linguistic Scaffolding. Chapter 4 presented the Learners' feelings and their views on collaborative activities. It also presented the Learners' anxiety and the level of collaboration (refer Section 4.4.2.5). The groups that had more scaffolding strategies contained the Learners who also enjoyed the *Nihongo4us* Session more. The Learners in those groups felt less anxious and wished to continue their relationships with the other participants (refer Table 4-7, Section 4.4.1). The provision of scaffolding required the Learners to feel comfortable in the community and then, the more Learners participated in providing scaffolding, the more provision of scaffolding was observed.

In other words, the provision of scaffolding by a fellow Learner, within a supportive online atmosphere where community members interact well, with minimal contradictions in the *OJAS*, encourages other fellow Learners to provide scaffolding. The writer(s) influences the reader(s), who in turn influence the division of labour, thus altering the motive to produce scaffolding. It seems clear then that group dynamics is an important element in the provision of scaffolding.

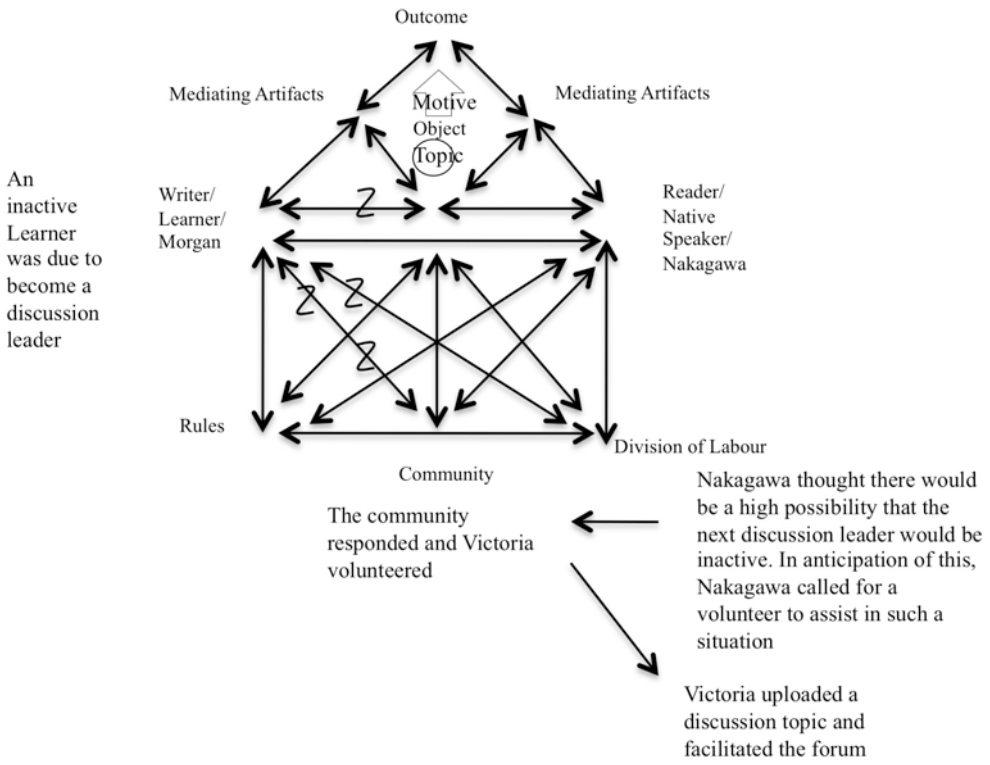
Given the importance of rules in regard to group dynamics, the next section describes the contradictions in relation to rules in the *OJAS*.

6.5.3 Rules

Throughout the conduct of *Nihongo4us*, all the participants respected and followed the rules about the use of socially appropriate language and behaviour. However, a major contradiction that occurred contrary to the rules was that the Learners sometimes failed to upload the discussion topic on time or omitted it entirely. This contradiction was triggered by another contradiction that occurred regarding the division of labour: the participants' role was to make posts and the discussion leaders' role was to upload the topic.

Without a discussion topic, there could not be a discussion forum. Most of the groups missed one or two discussion forums. However, each group dealt with these incidents differently, as discussed previously. The extreme case of this was MG#3, producing only three discussion forums over thirteen weeks. MG#5 produced ten discussion topics with a small number of participants similar to that of MG#3. The number of discussions held was different across the groups because the contradictions caused in the rules in the *OJAS* affected each group differently. Firstly, the primary contradiction within the division of labour occurred, where the Learner failed to upload the topic. This omission also violated the rules causing further contradictions. These contradictions caused the secondary contradiction affecting the community and the readers. As a result, the motive of readers was affected, which in turn affected the outcome in the *OJAS*. The effect of contradictions differed from group to group because the participants reacted differently when the topic was not uploaded. Hence, the contradictions produced different outcomes in different groups. Whereas, if a strong bond between the members of the community was observed, the division of labour triggered the production of a topic on behalf of an inactive writer and thus minimised the contradictions in the *OJAS*. An illustration of the *OJAS* of MG#5 is presented below in Figure 6-9.

Figure 6-9: The *OJAS* of MG#5



The contradictions in the *OJAS* of MG#5 were limited in extent, with the writer only causing the contradictions as shown in Figure 6-9 on the writer side of the *OJAS*. The members of community worked together so that the motive was unaffected by these contradictions. Hence the desired outcome was produced; the discussion forum took place.

Indicative of the interrelationships that are apparent when using the *OJAS* to understand this complex situation, Learner failure to upload a discussion topic was also due partly to the mediating artifacts. This is discussed next.

6.5.4 Mediating Artifacts

The absence of an automatic notification to the participants about new postings, as discussed previously, continued to cause contradictions. This situation worsened for irregular participants because each forum took place at the discussion leader's homepage and thus the location of the discussion forum changed each week. The roster of discussion leaders was available at the native speakers' homepages, however, irregular participants could easily be lost trying to navigate the sites in order to find the

correct discussion forum that was in progress. The complex layout of the site presented the contradictions to some Learners.

Similarly, the senior Learners' frustration with *Furigana* also continued, which de-motivated them from making posts (e.g. Jack, post-session interview; Dominic, post-session interview). Perhaps this could be one of the reasons for the senior Learners not making posts in MG#3, notwithstanding that the site counter displayed that they had visited the site.

The biggest problem that the Learners and the groups faced was inadequate Internet access such that some Learners were unable to enter the *Nihongo4us* site. In some cases, the unreliability of Internet access and performance was complicated by the Learner being outside Australia (especially in China) but regardless of the reason, the main issue here is that an online community is dependent on Internet access. The severity of this contradiction was noted by some Learners who decided to withdraw from the study. However, two Learners in mixed level groups used an alternative method so as to participate in the discussion forums. The alternative solution involved extra time and effort for the Learners and the native speaker or the researcher, as the correspondence had to be via email.

The alternative solution involved a process where by the native speaker of the group or the researcher sent emails to the Learners in China by cutting and pasting all the posts made at the forum. Then the Learners in China sent their replies, containing what they would like to post at the *Nihongo4us* site back to a native speaker/researcher using email. The native speaker/researcher uploaded these replies at the forum on their behalf. Both the Learners' and native speakers' motive had to be high, as this required considerable patience and effort. There were a number of Learners in the situation where the Internet access was blocked, but only two participated (Jasmine and Helen) in this way.

Jasmine, a first year Learner in MG#4, participated in most of the discussion forums in this way until she returned to Australia. She stayed active and made regular posts inspiring fellow Learners by sharing her points of view. She made the following comments in her logbook during the time she was in China:

> ‘The site gives me a chance to write in Japanese, read Japanese and think in Japanese. It helps me brush up my old Japanese vocabularies and keeps “feeding” me with new ones. By participating in group discussions, I learnt not only the grammar, vocabs and phrases of Japanese, but also the unique culture of Japan from reading the comments from other group members…’ (Jasmine, week 9 logbook entry)

Helen, a third year Learner in MG#3, also participated using the alternative way; however, she only participated in the final discussion forum. Since she did not participate in the post-session interview the study could not reveal the reason for her failure to participate in two other discussion forums. However, her logbook entry for her final forum perhaps summarises her thoughts. Helen’s response to a logbook question regarding whether she was able to collaborate with the fellow Learners by using *Nihongo4us*:

> ‘Yes, definitely. Because people exchange their experiences and ideas for learning Japanese and other interesting things, making learning Japanese more fun’ (Helen, week 7 logbook entry)

Inevitably there was a time delay in Helen’s and Jasmine posts. However, Helen and Jasmine wanted to participate in the face of difficulties and were able to continue, showing a higher motivation and dedication. Their fellow participants accepted the delay in responses from Jasmine and Helen. They were able to gain something by participating in *Nihongo4us* and the time delay or the Internet block did not hinder their outcomes.

The above examples demonstrated how a problem within the mediating artifacts was cooperatively dealt with by community members and therefore the contradictions in the *OJAS* were minimised. As a result, the discussion was conducted and both Jasmine and Helen were able to participate and the outcome was produced in the *OJAS*.

6.5.5 Topics

The initial task of the writer as a discussion leader was to post a discussion topic. Topics played a vital role in the *Nihongo4us*. Without a topic, there was no discussion

forum. No discussion forum meant no posts, and no opportunities for learning. This section discusses the importance of the choice of the topics and a lead question.

The list of the topics presented in Appendix 9 showed the wide range of issues that the participants discussed. Some required a lot of imagination, for example: 'what would you do with a time machine?' and some were more close to their reality such as: 'How do you study languages?' The content of the topic itself was also influential in developing a discussion forum.

An example of the importance of topic content is found in the first topic discussed by IG#1: 'why do you study Japanese?' Five participants made posts in this forum. However, two of those five participants had already stated their reasons for studying Japanese in their self-introductions. In her post, Kylie remarked that she had already written her reasons for studying Japanese in her self-introduction, which might indicate her slight disapproval or disappointment at the topic choice. The participants had several weeks to read each other's self-introductions and to make comments before the discussion started. Therefore, one could assume everyone had read the self-introductions. This discussion ended with each making a post, stating the reasons why they study Japanese, without commenting on others' posts. This was because, from the Learners' point of view, the comments were already made during the set up stage as each participant commented on the others' self-introduction; by way of getting to know each other. In other words, a topic that had already been discussed enough was not likely to generate any more posts. This is because, as indicated in the Figure 6-1, the topic and object in the *OJAS* have a direct impact on motive, affecting the outcome (to make posts in this case).

IG#2 also experienced a similar incident where a topic overlapped with the participants' self-introductions; this quickly brought discussion to a halt. Ashley, one of IG#2's irregular participants, only made one or two posts per topic during the discussion forums and her topic was 'What are your hobbies? Why [sic]?' as the final discussion topic. By the final weeks of the Session, across all the groups the final topic attracted the least number of participants, as everyone was busy starting to prepare for the commencement of the semester. However, in case of IG#2, the topic itself presented a contradiction, as each participant's self-introduction already indicated her/his hobbies. Therefore, to ask whether the participants have any hobbies reflected poorly on the

discussion leader and indicated that Ashley had not read the participants' self-introductions prior to posting this topic, or did not care. Only two of IG#2's participants, Takahashi and Emma, replied. It seemed that the lead question for the topic was not appropriate as a final discussion topic. If Ashley approached the topic differently; for example, instead of asking 'why?', if she asked 'how did you acquire such hobbies?' or 'when do you enjoy doing your hobbies?', she might have had more replies. Perhaps phrasing a lead question itself was difficult for Ashley.

Cory in IG#2 commented during the post-session interview that one of the difficulties he faced was the discussion topic. The topics were too general for him to make comments and to contribute to a discussion forum. To compose a comment, he needed more specific questions. This indicated that he needed more 'Summarising/Developing Discussion' scaffolding strategies; rephrasing a topic question might have been helpful. Such scaffolding strategies could attract more posts to develop the discussion forums. Cory's difficulty was not only due to his level of language proficiency because the Learners at an advanced level also showed similar difficulties as is discussed next.

Mixed level groups had difficulties discussing some topics. For example, topics like 'how the climate changes affect the four seasons?' in MG#1 and 'why is the Japanese economy continuing in recession?' in MG#5 were difficult to develop into extensive discussions without the Learners undertaking some research. The native speaker in MG#1 tried to prompt the discussion by rephrasing the original question posted by the Learner and but the discussion could not develop any further beyond receiving four posts in total. The native speaker in MG#5 also provided Content Scaffolding, giving an example of how the Japanese government tried to save Japan Airlines from its bankruptcy and prompting the participants with a question: 'if they were the leaders what they would have done'. Victoria made a post saying 'うんんん〜難しいです。まったく分からないです。: unnn ~ difficult. I have no ideas at all', while Harry, also finding the topic difficult to discuss, tried to analyse the Japanese economy from a global perspective. The effect of the scaffolding was difficult to determine; however, the topic produced ten posts with four participants presenting their opinions thus it can be said, other things being equal, that this topic generated less contradictions than did other topics.

The participants in MG#2 commented on one of the Learners' posts, which acted as Content Scaffolding and was helpful in developing a discussion. Dominic presented the discussion topic about Japanese vogue-words. He presented the 'yes we can' phrase used by President Obama, as an example of a vogue-word, which he called 'catchphrases/buzz words/popular words'. He explained that many vogue-words are in everyday usage in Japan and he wanted to know them and what others knew. Yumi made a post commenting that she did not know any vogue-words, so she used Google and found '草食男子: herbivorous men'. She further researched using Wikipedia for its meaning[54] and shared her findings. She thought this word was very unique and interesting. Yumi thought such a description did not exist in English but was unique to Japan. Other participants were a little puzzled by Dominic's explanation of vogue-words (described as catchphrases/buzz words/popular words), but Yumi's example helped them to recall what they had heard or read in *manga* and in their Japanese friends' text messages. This topic produced 13 posts in total with seven participants. In other words, Yumi's post acted as Content Scaffolding and helped others to make posts.

There were some similarities in the choice of food and Japanese study topics across the groups. These topics attracted more posts than others. Previous studies in other languages also showed the most common and popular topic discussed was food (for example, Furstenberg & Levet, 2010). However, even choosing these common and popular topics did not guarantee the extent of discussion, as is discussed below.

Grace and Jacob from IG#1 commented at the post-session interviews that the topics that were posted during the *Nihongo4us* Session were the same as the ones they had already discussed in their face-to-face Japanese classes. Grace said that therefore:

> 'it was good to practice again but at the same time I could not learn anything from it' (Grace, Post-session interview)

Jacob said that:

> ' [I could] predict how the discussion was going to end' (Jacob, Post-session interview)

[54] Yumi explained that 'herbivorous men' describes a type of a man who generally has strong sense of cooperation and is gentle and a family man but is passive in romance. The term is used to describe some young men aged in their 20s and 30s.

Having the same topics as in their Japanese classes, the Learners' posts were merely restatement of what they had learnt to say in their classes. Comparing the food discussions between two introductory level groups, IG#1 had five participants with 14 posts, while IG#2 had nine participants with 37 posts. IG#2 presented a more active discussion forum than IG#1. Possible reasons for this lie in the presentation and style with which the discussion leader led the forum as discussed previously in Section 6.5.2.5.

The content of the topic and the level of difficulty of the topic presented some challenges during the discussion forums. Jack in MG#1, who was above fourth year level in Japanese Studies at UNSW, said it was very difficult to choose a topic (Jack, post-session interview). Jack was conscious of the fact that a topic might be interesting to him but it might not hold interest for others. The range of topics discussed produced different amounts of interest and so demonstrated that the choice of topic influenced the interactions. Cheng (2010) also found that topics influenced the interactions of discussion forums. She found the instructors, who could provide scaffolding by breaking down the topic to smaller sections, assisted the Learners to partake in the discussion forums.

Jack in MG#1 presented a discussion topic about studying Japanese and asked four questions in a single post. In other words, he broke down the big topic into four smaller sections, (something Cheng (2010) found to be helpful), and presented them as a topic. Jack presented the questions in both Japanese and English[55] to the group, telling them they did not need to answer them in order. He also suggested that they could answer in whatever form and style they like. The four questions presented were (in English):

1. 'Do you enjoy studying Japanese? Why?
2. How are you using Japanese other than for study?
3. What is your goal in studying Japanese? How long do you think it will take you to reach that goal?
4. What is the most difficult part of studying Japanese including cultural issues? If you had been to Japan, did you experience any

[55] English was rarely used at the *Nihongo4us* site, however, Jack presented the topic using both languages because he was not quite sure of the level of other Learners' Japanese at the time (this topic was the second discussion topic). Nobody else in this group presented or used English for the remainder of *Nihongo4us* Session.

difficulties while you were travelling?' (Jack, discussion forum 2 at the *Nihongo4us* site)

Jack's approach might have helped some Learners to write their posts as they could exercise their thought patterns by answering each question. However, the Learners seemed to be too focused on answering questions rather than contributing to a discussion, as they needed to look deeply into their thoughts to answer these questions. The participants presented their answers to all four questions in a single post, which made each post to become fairly long. As a result, these multiple questions in a post did not leave any room to comment on others' posts or to further expand on their own thoughts.

Instead of the multiple questions becoming helpful scaffolding strategies, they hindered the opportunity from others to presenting thought-provoking questions. This might be similar to how multiple topics presented in chats confused the participants in Toyoda and Harrison's (2002) study. In retrospect, it can be seen that this style of post as a discussion topic could not develop into a discussion but rather left participants to just post a statement. Instead of presenting all four questions at one time, if Jack had presented the questions as the discussion progressed in such a way that he was providing Content Scaffolding, they could then have been more thought-provoking and the fellow participants might have been able to utilise them to fully develop the discussion. By doing so, the topic could attract more posts.

To summarise the interactions and contradictions observed during the discussion forums using the *OJAS*, the next section discusses the differences between the single level of proficiency (introductory level groups) and the mixed level groups.

6.6 Single Level vs Mixed Levels

Both introductory level groups had the same number of participants and produced a similar length of posts during the set up stage. However, IG#2 produced more posts and scaffoldings than IG#1 and some Mixed Groups (MG#1, MG#2 and MG#3) (refer Table 5-3). The differences were observed across the groups rather than between the two proficiency levels. Furthermore, the differences appeared as a result of how the participants interacted during the set up stage and the occurrence of contradictions varied, as was discussed in Section 6.4. The extent to which the *Nihongo4us* site could

foster collaborative learning and reflective thinking as well as providing scaffolding to each other, depended on how the group functioned and interacted to produce the outcomes at the *OJAS*.

Comparing the performances across the groups in relation to the provision of scaffolding and development of forums, the differences were not based on their language proficiency levels but more depended on how the community members worked together to create a supportive online learning environment. In order for this to happen, important factors were the activeness of the native speakers in providing scaffolding and the way the participants, especially the native speakers interacted during the set up stage. In other words, the present study supports Yamamoto's (2009) argument that learners can provide scaffolding and extend each other's knowledge in an appropriate learning environment. The study extended Yamamoto's suggestion in relation to an appropriate learning environment by identifying it to be a supportive online learning environment. Furthermore the study found the factors that created such environment using the *OJAS* as discussed in this chapter.

Collectively speaking, the Learners in the introductory level and other levels were able to provide scaffolding in all three categories of scaffolding, supporting Donato's (2000) findings. The introductory level Learners were able to provide Content and Navigation Scaffolding assisting senior Learners and extending the development of discussion forums. As seen in Liz's comments, providing corrections to the introductory level Learners, senior Learners were able to learn and further develop their language skills. Similarly, the introductory level Learners asking further questions to their fellow participants about language matters provided an opportunity for open learning for the Learners in all levels.

Within the single level groups, the Learners were able to provide scaffolding. However, for the Learners to provide Linguistic Scaffolding, especially 'Providing Corrections' scaffolding strategies, the Learners needed to be in a supportive online environment, otherwise, they relied on the native speakers for the corrections. Furthermore, in relation to providing corrections to fellow Learners, individual differences were observed across the groups, for example some heritage background Learners and some senior Learners found it emotionally difficult to provide corrections.

The data gathered for this study extends the understanding of intricacies in provision of scaffolding and further extends Villamil and de Guerrerro's (1996) recommendations of inclusion of more knowledgeable learners to pair with the novice learners. The reason for doing so is not as simple as utilisation of advanced learners' language abilities to correct fellow learners. Comparing between single level and mixed levels, the study found the Learners in the Mixed Groups seemed to stimulate each other in providing scaffolding and in developing discussion forums more than the introductory level groups.

The Learners in the Mixed Group commented that they considered the native speakers and senior Learners' utterances to be models. This indicates that the Learners in the mixed level groups were perhaps more stimulated than the single level introductory groups. The study also found that the introductory level Learners in the Mixed Groups received more assurances and were less anxious in their interactions.

6.7 Summary

Arnold and Ducate (2006) found that teachers' involvement and prompting was necessary for learners to reach the outcome as well as to promote frequent collaborative feedback and input. The present study observed how a fine balance between native speakers' involvement and provision of scaffolding promoted the Learners to actively collaborate, both in the discussion forums as well as in provision of scaffolding.

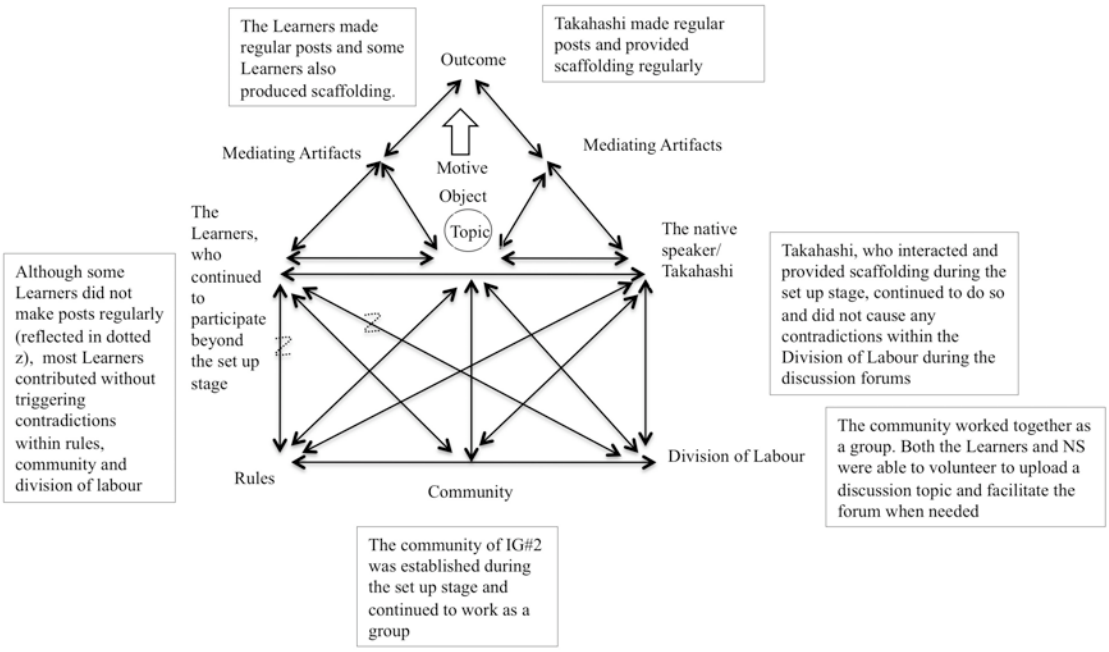
Pasfield-Neofitou et al. (2009) noted that if teachers fully retain the role of teachers, while partaking in the activities at a SNS, the meaning of social interactions using a SNS would be lost. The benefit of using a SNS in language studies would be to promote social interactions, while maintaining the balance of professionalism that the teachers can offer by providing scaffolding when needed. This balance is not easy to achieve as seen in the present study. Some native speakers were not equipped to achieve this balance without being given some guidance or receiving some prior training. In the present study, the relationship of the participants was not that of teacher-student, as in a face-to-face class. However, some native speakers were tutors at UNSW, therefore, the Learners saw them as teachers. The contradictions occurred when these native speakers retained a tutor's stance in their interactions yet did not produce much scaffolding,

thereby clashing with the Learners' expectation. The result was that the Learners did not interact and the extent of collaborative learning over *Nihongo4us* was limited.

The Learners, who were proactive learners and perhaps autonomous learners, also presented themselves to be active Learners at *Nihongo4us*. This study's findings support Thomson's (2008) argument that the effective learning community is filled by autonomous learners, who are fully committed to being members of the community, helping each other to achieve their common goal of learning Japanese. The present study observed that not only Learners but native speakers also needed to be autonomous and fully engaged in sharing the common goals: being a member of the *Nihongo4us* community, promoting scaffolding and helping to develop discussion forums. Figures 6-10, 6-11 and 6-12 present three *OJAS* representations for IG#2, MG#3 and MG#5 respectively.

Figure 6-10 represents an overview of IG#2's interactions between the Learners and the native speaker, Takahashi, at the *Nihongo4us* site using the *OJAS*.

Figure 6-10: Overview of *OJAS* of IG#2

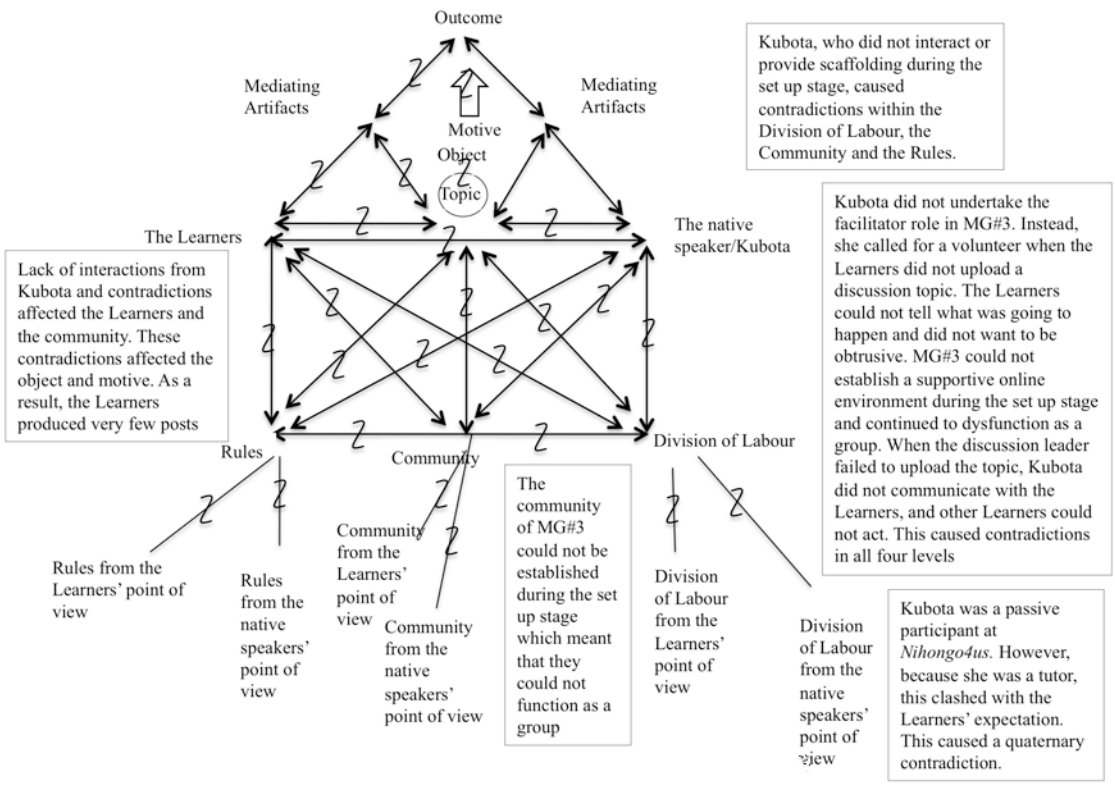


Close interactions between the participants of IG#2 assisted in establishing a supportive online learning environment and the members of the community were able to function and develop their discussion forums. In such an environment, the Learners were able to step in and volunteer to be discussion leaders without being asked, when the topic was

not uploaded. The Learners were also able to provide scaffolding across all three categories to each other and gained confidence in expressing themselves through having the safety net of knowing Takahashi would correct the mistakes (refer Charlotte's comment in Section 4.4.2.6).

Figure 6-11 represents an overview of MG#3's interactions between the Learners and the native speaker, Kubota at the *Nihongo4us* site using the *OJAS*.

Figure 6-11: Overview of interactions in MG#3 between the Learners and Kubota

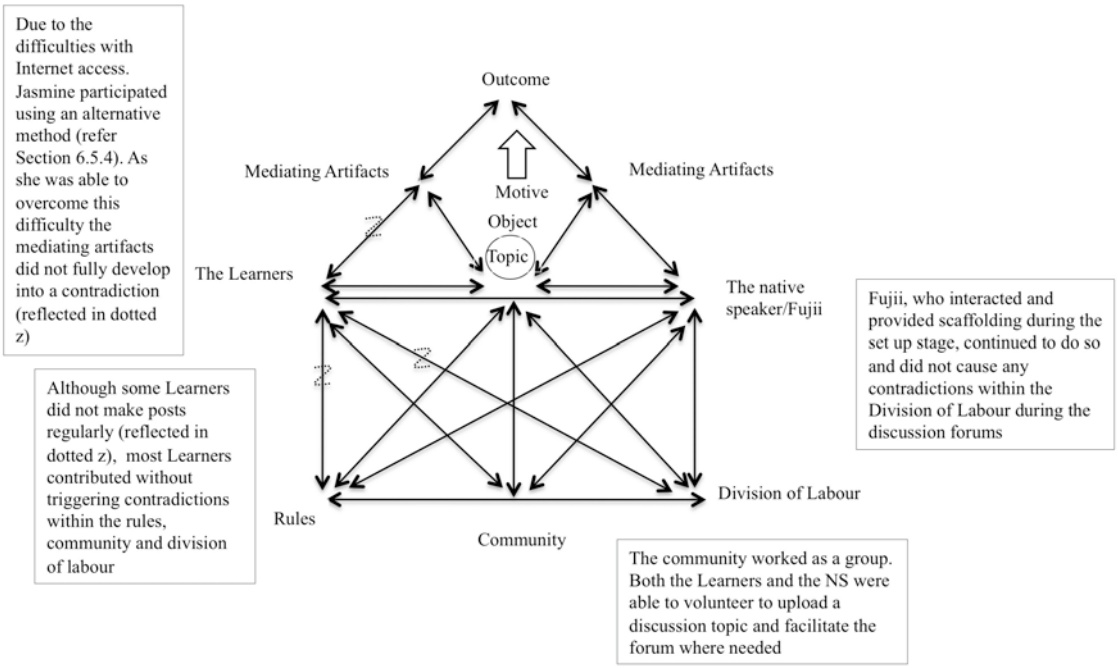


Although the Learners interacted with each other, Kubota did not interact during the set up stage. This triggered the series of contradictions as discussed in the Section 6.4, which affected the community members' ability to function as a group and establish an online learning environment. As a result, the Learners became passive and could not take an active role during the *Nihongo4us* Session. Even in MG#4 and MG#5, where the communities provided a supportive learning atmosphere, some Learners still expressed their hesitancy to be fully proactive in the presence of native speakers; they felt that was the polite thing to do, following Japanese culture. In the case of MG#3, a lack of interaction with Kubota during the set up stage compounded the Learners' hesitancy; they did not want to be obtrusive in the presence of Kubota or the fellow

Learners. Hence, the Learners' passive and non-proactive style of participation was observed with nobody taking the place of the discussion leader when no topic was uploaded.

On the other hand, MG#4, where the Learners and the native speaker, Fujii, had close interactions during the set up stage, produced longer threads and scaffolding and was able to establish community. The number of participants during the discussion forums in MG#4 was reasonably stable: five to six participants in each forum (refer Appendix 9). Figure 6-12 represents an overview of MG#4's interactions between the Learners and Fujii at the *Nihongo4us* site using the *OJAS*.

Figure 6-12: Overview of interactions in MG#4 between the Learners and Fujii



When Jasmine could not make a post directly to the *Nihongo4us* site, as she could not access it from China, she participated by using email (refer Section 6.5.4). The community was patient with her delayed responses and understanding of her circumstances. When she returned to Australia, she was welcomed back by the others. Similarly when Aya came back after computer problems, the participants made posts welcoming her back. The sense of a supportive and close online learning environment was maintained where the participants could express themselves freely and collaborate with each other.

This collaboration was evident in the number of scaffolding instances - especially in Navigation Scaffolding. The Learners assisted each other when they initially could not navigate the site during the set up stage; they produced 18 instances of Navigation Scaffolding during the set up stage and 31 Navigation Scaffolding in total (refer Appendix 10 and Table 5-8).

When an inactive Learner was due to be a discussion leader, Aya realised this situation and suggested that all the Learners should have a second turn, volunteering herself to do it again. The rest followed and Fujii reminded the Learners of their turns from time to time. When a discussion topic was not uploaded on the due date, another Learner just stepped in. The group seemed to operate smoothly without a fuss. The group was able to conduct eight discussion forums consisting of numerous posts ranging from ten to a maximum of 23 posts, while all other groups had a minimum number of posts that was lower than ten.

The participants in MG#4 also used emoticons regularly in their posts, as though they were compensating for their lack of non-verbal communication. This strategy seemed to work well as they shared their supportive approach to each other. The feelings of the Learners in MG#4 perhaps can be summarised in Aya's comment below:

> 'Japanese language tasks are more enjoyable when it's done in groups, and there is interaction with people you don't know (i.e. getting to know new people)' (Aya, week 1 logbook entry).

Many others also frequently commented in similar terms to the abovementioned initial feeling of Aya. Furthermore, the survey results also confirmed that they enjoyed talking to their fellow participants, sharing and expressing their thoughts. Clearly an important aspect of the exercise for the Learners was to use Japanese in a real life situation (not a set situational exercise conducted in a classroom) and to receive feedback and corrections from native speakers and fellow Learners.

The next chapter presents the conclusion to the present study; responding to the research questions and discussing the study's limitations and its implications for future studies.

CHAPTER 7: Conclusion

7.1 Introduction

The present study aimed to investigate learning activities used by foreign language learners of Japanese in a SNS out-of-classroom environment. The investigation was conducted by creating a specific SNS called *Nihongo4us*, using a commercially available SNS (*Bebo*). An out-of-classroom environment was chosen, as this would be the place where language learners were most likely to use SNSs, yet few studies had been conducted to enhance its effective use. This environment was also chosen to investigate learning activities in SNSs alone; without any influence of academic program or face-to-face interactions.

The research questions that were introduced in Chapter 1 had been addressed in Chapter 4, 5 and 6. This final chapter, as a conclusion to the study, presents firstly the summary of the major findings responding to each research question. Secondly, the chapter presents the study's contributions to the pedagogy and activity theory. Thirdly, the limitations of this study are discussed before presenting recommendations of future studies.

7.2 Answers to the Research Questions

The core motivation of this project was to derive empirically informed answers to questions that constitute the curiosity of how collaborative learning in an out-of-classroom context can be improved through the use of SNS tools. The research problem vested in that curiosity was centered on observations of learners' and native speakers' use of a SNS learning environment. That learning environment was constructed for this research so as to allow close and specific observation of factors that affected the types and extent of scaffolding in the learning activities used for the acquisition of Japanese language and culture. On the basis of those observations, and the analysis of them, Chapters 4, 5 and 6 presented the findings of this study. The participants' opinions on CMC and *Nihongo4us* were presented in Chapter 4. A discussion of scaffolding that were observed was presented in Chapter 5, while Chapter 6 presented a discussion, using the newly created activity system (*OJAS*), of possible reasons for the different learning performances across the groups.

The study found that the Learners were able to gain not only cultural knowledge about Japan and the Japanese language, but also some language skills such as skim reading for gist of meaning, increased vocabulary and *Kanji*, improved reading skills, writing skills capable of more complex sentences and some added confidence. Furthermore, the Learners in general found that the *Nihongo4us* site was a positive collaborative learning environment where they enjoyed sharing their opinions and formed a small learning community. Within this learning community, observed differences in scaffolding assist us in understanding how a SNS learning environment can be best crafted to maximise learning outcomes. That understanding can be used to establish contributions to practice that will be identified in Section 7.3 below. The remainder of this section presents the responses to each research question posed at the commencement of this study and for which findings have been presented in the prior chapters.

Research Question 1: How do Learners perceive the role of CMC as a tool in their language learning activities?

Prior to participating in *Nihongo4us*, the Learners engaged with CMC for purposes of language and culture acquisition; for some, learning was a subconscious part of their engagement with CMC and for others, they consciously used CMC for learning, as discussed in Chapter 4. Their choice of specific CMC tools depended on the Learners' interests.

Although some had used blogs and SNSs such as Facebook, the majority of the Learners had not used a SNS as a language learning tool. Instead, they had used such CMC as a means to keep contact with their friends. The majority of the Learners did not have any Japanese contacts with whom they could practice the language in an out-of-classroom context, in spite of the fact that they wished to have such contacts. Therefore, the *Nihongo4us* site was a reasonably attractive site for the Learners in that it mobilised a means to satisfy a need. The Learners liked the *Nihongo4us* concept with its facility to allow them to practice their Japanese and share their common interests with fellow Learners and native speakers.

Nineteen out of 20 Learners who completed the end of session survey responded that they enjoyed participating in the discussion forums. The process of talking through topics helped them to practice writing and organise their thought processes in Japanese.

Therefore, the site offered good opportunities for revision exercises and for discussions of a wide range of topics with native speakers and fellow Learners.

The Learners also found that the experience helped their retention of language skills over their long semester break. Thus it assisted them in the preparation for their Japanese study of the following semester. The Learners who completed the *Nihongo4us* Session felt positive towards *Nihongo4us* as a language learning tool, even though they also found some difficulties, such as in navigating the site. The activities challenged the Learners and, as a result, many gained new skills as noted above. Many Learners wanted to continue participating in *Nihongo4us*, or would like it to be incorporated into a face-to-face program.

Both Learners and native speakers expressed their frustrations in relation to navigating the site, due to having too many optional SNS tools. This finding highlights the need for careful construction of such learning sites and will be discussed below. Under-participation from some Learners and native speakers caused contradictions which the *OJAS* visually explains as discussed in Chapter 6. The Learners' enjoyment and learning depended upon the active participation from members of their learning community.

Although a non-participation bias needs to be noted, the findings of the collected data indicate that using a SNS to create a discussion forum has potential as a language learning tool since flexible learning is attractive to many Learners. The survey results showed that although 75% of the Learners responded that they would prefer a face-to-face class, 60% also felt that *Nihongo4us* gave them an opportunity to ask questions that they would not have asked in a class. The ideal learning environment, from the Learners' point of view, is an online activity incorporated into a face-to-face program. This was consistent with the findings of Tiene's study (2000). With appropriate training and monitoring of the activities, SNS tools can offer a platform that can foster collaborative learning.

Research Question 2: Can a SNS foster collaborative learning and reflective thinking via Learners and native speakers' scaffolding in an out-of-classroom environment?

The study showed that a SNS was, in general, able to foster collaborative learning and that some Learners were able to develop reflective thinking through discussion forums

via each others' scaffolding. However, not every group was able to achieve collaborative learning. Thus, there is the potential of understanding what impacts differential rates of collaborative learning in the groups where discussion forums developed, collaborative learning resulted and reflective thinking was fostered. The following research questions sought explanation of these differences.

Research Question 3: What factors influence collaborative learning and the provision and take-up of scaffolding?

Applying a theoretical lens provided by the *OJAS*, it is apparent that the key factors influencing development of a discussion forum were active interactions and provision of scaffolding during the set up stage or the initial moments of interaction between participants in the learning community. The active interactions, including the scaffolding, were assisted by the formation of a strong bond in the community, resulting from a supportive online environment. Without these, contradictions appeared within the community and hindered the level of discussion and provision of scaffolding. In other words, the groups that presented multiple contradictions as identified in the activity system found collaboration and provision of scaffolding difficult. However, in the supportive communities, it was observed that the more active the native speakers were in their interactions (including the provision of scaffolding), the more Learners interacted with each other and produced scaffolding.

Some contradictions in a SNS learning community can be avoided by instituting means to achieve self-disclosure amongst participants, especially the native speakers. For example, deeper interactions producing threads with multiple posts and involving multiple participants can assist participants to be connected and to bond with each other to function as a group. This will facilitate a supportive online community. The native speakers' involvement is crucial as this sets the tone of their commitment showing that they also share common goals with the Learners. In other words, participants who acted as both readers and writers appeared not to cause any contradictions within (and between) rules, community and division of labour.

No contradictions were observed in the Learners' take-up of scaffolding, as the Learners were eager to receive more scaffolding hoping to improve their Japanese. However, contradictions were observed when these Learners' expectations to receive more

scaffolding were unmet. These contradictions appeared to influence provision of scaffolding rather than take-up of scaffolding. The *OJAS* identifies a number of potential contradictions within and between: community; division of labour; rules; mediating artifacts; and, topic. The outcomes of the groups that presented most of those potential contradictions were affected because the contradictions had hindered the interactions and provision of scaffolding.

Both native speakers and Learners were able to provide scaffolding. By providing scaffolding to the fellow Learners, the Learners felt they gained more language skills as well as confidence. The study observed that Learners from various levels were able to provide all three categories of scaffolding to their fellow Learners. The introductory level Learners were able to provide Content Scaffolding and Navigation Scaffolding, as the native speakers or advanced level Learners could. Learners at various levels produced Linguistic Scaffolding where the native speakers or the fellow Learners had to answer, creating a learning activities. However, 'Providing Correction' strategy in Linguistic Scaffolding was more difficult for the Learners regardless of their proficiency levels, as they had to overcome emotional barriers.

For some Learners, psychological barriers[56] prevented them from providing Linguistic Scaffolding. This might be more so for Japanese language learners since they learn to be humble and to respect their seniors and teachers whereas students of other languages may not experience the same phenomenon. From the Learners' viewpoint, they saw the native speakers as teachers, even if they were not qualified teachers possessing formal responsibilities. The introductory level Learners, for example, showed respect towards the senior Learners and the native speakers and were hesitant to make corrections in their presence. The study was able to reveal this complex issue as the study was conducted with no explicit rules or restrictions over the provision of scaffolding in order to observe the Learners' actions under near natural circumstances.

Allowing Learners to be discussion leaders seemed to ease these emotional barriers, as this provided more power to the discussion leaders within the division of labour. During the discussion forums, Learners who were the discussion leader/facilitator felt more responsible to guide their fellow participants. From this, it became apparent that having

[56] Prior sociolinguistic research confirms provision of error correction to others is frequently avoided in social communication. The explicit rules of the SNS could only have a limited impact on the provision of feedback which can be considered as deviating from social norms (for anyone other than a teacher).

this responsibility made it easier for them to overcome emotional barriers that would otherwise have been impediments to scaffolding in the presence of senior Learners and native speakers.

Discussion leaders also had an important role to play in making differences in the development of discussion forums. The discussion leader's performance could cause contradictions within the division of labour, which could cause further contradictions with other constituent components within the activity system. The groups where a discussion leader was able to actively facilitate the forum experienced more active and more detailed discussion forums. In other words, a discussion leader who was able to provide scaffolding, especially content scaffolding, was able to expand the discussion.

All groups tended to follow the style presented to them at the beginning of the *Nihongo4us* discussion forum session, regardless of whether that style worked well or not. Therefore, if the first discussion leader presented a well-structured topic and skillfully facilitated the forum interactions, that group was likely to continue to develop the discussion forums to a greater extent.

As is shown in the *OJAS*, the topic had a direct influence on object and motive within the activity system. Both the style of presentation and the choice of topic content are of central importance in the provision of scaffolding and thus the avoidance of some potential contradictions. The topics that were highly interesting to the participants attracted more posts and more participants. However, topics that had already been discussed could not be further discussed, unless it was facilitated with provocative questions as the discussion progressed. A discussion topic presented with multiple questions at once also hindered the development of discussion, since it seemed to dilute the attention and interest devoted to each resultant thread. As a further extreme, the absence of a topic and the absence of participants filling that void resulted in the absence of collaborative learning.

Even with the insights provided by the *OJAS*, it is not possible to fully address the complex issues arising in *Nihongo4us* without further research. Such research opportunities are discussed below in Section 7.5. However, one observation that was made clear in this study with the analysis of the *OJAS* is that the more active the native speakers were in providing scaffolding and presenting relational agency expertise to the

group, the more Learners participated in providing scaffolding. Furthermore, as Learners increasingly participate in providing scaffolding, the emotionally easier it is for fellow Learners to do the same. The discussion presented in Chapter 6, with the aid of analysis based on the *OJAS*, showed that these domino effects of provision of scaffolding.

Introducing new explicit rules, such as requiring all Learners to actively make corrections at each discussion, could initially cause contradictions between the rules and the Learners' beliefs. However, with a supportive and effective learning community, the contradictions between the constituent parts represented in the central activity system can be minimised and the participants will be able to produce an effective outcome.

Research Question 4: In relation to the above questions, what differences are there in different groups arising from level of proficiency?

The study found that there were no differences in the groups between the levels of proficiency except for the provision of the 'Requesting Action' in Linguistic Scaffolding. 'Requesting Action' was only observed in the introductory groups where the Learners asked the native speakers for corrections. 'Requesting Action' scaffolding did not occur in the Mixed Groups, as receipt of replies from not only native speakers but also from advanced level Learners acted as scaffolding, assuring the introductory level Learners that their meaning had been conveyed.

With respect to other categories of scaffolding strategies, differences were observed across the groups. However, these differences were not based on proficiency level. Some groups had more active and interactive discussion forums and more provision and take-up of scaffolding. The causes of these differences were discussed with respect to findings related to Research Question 3.

Prior studies in this field were conducted within a classroom context, while the present study formed groups consisting of a wide range of proficiency levels, providing a new dimension to the field. The Learners in the mixed levels were exposed to diversity in understanding and use of language as well as their life experiences with the language and Japanese culture. Some junior Learners from the Mixed Groups saw the senior Learners and native speakers as their future models and so they aimed high. Similarly, the senior Learners also learnt and gained confidence from the act of providing

scaffolding to their fellow Learners and expanding their network in the Japanese community. As was discussed in Chapter 4, the senior Learners reflected their own past experience, as they provided scaffolding to their junior Learners and became a mentor to them. These Learners saw the advantages of being in a Mixed Group.

7.3 Contribution to the field

The present study has contributed to our understanding of the factors that influence the role of participants in a SNS, especially native speakers' roles and the effect of interactions on the discussion forums. The context of universities around the western world is changing rapidly (Parker, 2011), and incorporating more online-based educational programs. The context of such change makes the potential contribution of this study of significance to the practical realities of pressures on language education and altered expectations of student engagement in that education. In that regard, the study has been able to make observations about ways in which improved learning outcomes may be derived from various practices involving a SNS in education. These observations form part of the contribution from the study, whilst the theoretical base used to derive the observations is another contribution. Collectively, the contributions from the study are to address the literature gap noted in Chapter 2.

This section highlights the study's contribution by noting pedagogical contributions (with recommendations for action with respect to these contributions) and identifying the study's contribution to theory.

7.3.1 Contribution to Pedagogy

The number of SNS users is increasing rapidly and the extent of their use is encroaching into educational applications. Commensurately, the opportunities for Japanese language learners to find friends and to communicate with native speakers using SNSs or similar CMC tools are increasing. If language learners can find a SNS where they can learn a language while freely communicating with its participants, they would be able to continue practice and study Japanese regardless of their formal study program or their location. *Nihongo4us* was able to offer such a platform where the Learners could renew their Japanese skills during the semester break at their own pace in a flexible learning environment. However, not all groups or participants were able to meet their outcomes. Understanding this mixed result could contribute to future studies of a similar nature.

The present study offered a new dimension to prior studies by considering out-of-class activities and doing so in a context of mixed proficiency levels. In contrast, prior studies examined learners of a single proficiency level in conventional face-to-face classes (e.g. Fitze, 2006; Kitade, 2006; Meguro & Bryant, 2010).

Participant feedback (both positive and negative) presented in Chapter 4 provides the general view that a supportive atmosphere within the SNS was of paramount importance. Where that condition was met *Nihongo4us* challenged the Learners to practice Japanese beyond their current level of expertise. Although some differences amongst the groups were observed in achieving the outcomes, the Learners were able to learn from each other, providing scaffolding and conduct the discussion forums. From this, the following pedagogic recommendations can be provided for administering future successful SNS-based online discussion forums incorporating native speakers with learners of Japanese. Before noting these recommendations, it is worth mention that these recommendations can be adapted for other languages but are made here specifically targeted for interactions with Japanese language learners.

Recommendation 1: Conduct an Orientation/Workshop

An effective orientation program, including a workshop prior to commencement of online discussion forums, is important for the quality and operation of the forums. The orientation program should include not only introducing the site and its explicit set rules but also include a 'hands-on session' where participants can access the site and familiarise themselves with various SNS tools available at the site.

Prior to starting an online discussion forum, it is recommended that a reasonable time (e.g. three weeks) should be set aside where the participants can interact with each other. Involvement of all the participants during this time is important and so guidelines should be developed and promulgated amongst the participants. These guidelines should establish as a minimum that each participant should contact all participants. The participants should aim to produce threads containing at least six posts before the commencement of the task-focused activities.

It is also recommended that the orientation workshop introduces participants to any Internet browser or Internet based programs, such as Firefox and *Rikaichan* so as to

enhance the online discussion forums. This introductory workshop is equally important for all participants, including the native speakers.

The orientation program should provide participants with a handbook introducing them to helpful phrases, ways to present a topic and useful strategies for facilitating online discussion forums.

Recommendation 2: Explicit Rules

All participants need to be provided with explicit rules regarding acceptable online manners for the site, for example: the acceptable timeframe for participants to reply (e.g. within 24 - 48 hours); 'not all mistakes need to be corrected'; and, 'minor mistakes where the meaning was conveyed do not need corrections'.

In order to lift some emotional barriers so that the learners are more encouraged to provide Linguistic Scaffolding, especially providing corrections, explicit rules regarding provision of scaffolding will be helpful. Such rules may be that each participant should provide a minimum number of scaffolding. If such a rule is established in the site, it is likely to provide greater legitimacy to the acts of scaffolding and so will encourage the learners to actively provide scaffolding by reducing their emotional dilemma in correcting others' language.

In the case where learners have roles, such as a discussion leader, such a role assisted their development of language skills. However, not every learner was able to be an effective facilitator. A list of advice on how to facilitate a discussion forum made available at the site is, in itself, provision of scaffolding to the discussion leaders.

Some explicit rules aimed at enhancement of a forum could also be helpful; for example, a rule requiring a minimum number of posts that each participant has to make per discussion forum. Collectively, such rules need to aim for a balance between participant freedom to interact as suits their motivation and sufficient direction such that participants do not feel lost in the absence of appropriate protocols.

Recommendation 3: Automatic Reminders

The study has clearly shown that a SNS out-of-class activity needs to have a tool that generates an automatic reminder notice when a participant makes a post. This will advise each participant to navigate the site where a post has been made. By creating

awareness of new posts, this reminder facility will encourage learners to participate as well as assist them to navigate the site.

Recommendation 4: Discussion Topics

It is recommended for any future SNS activity of a similar nature to this study that the following are implemented during the set-up stage prior to the start of the discussion forums:

- the participants decide discussion topics; and,
- short descriptions of the topics are posted.

Promulgating the context of topics should then avoid the situation where there is no topic to be discussed. The discussion schedule and the topic descriptions need to be clear to all participants in order for smooth online discussion forums to operate without periods of dormancy.

Some learners might need some assistance in phrasing their discussion topic and question(s). Accordingly, good practice would be to conduct a brainstorming session prior to the commencement of the forum in order to discuss a range of possible topics and their aspects. Creating a general list of plausible topics could also assist some learners, however, topics that had already been discussed in class should be avoided or worded differently with more provocative questions.

Recommendation 5: Fun and Helpful Activities

In spite of the fact that too many SNS tools in *Nihongo4us* confused some participants, other participants requested incorporation of a variety of activities. Having a range of activities crafted to create amusement, such as quizzes or games, can motivate some learners. Similarly, some reward systems (for example, awarding stickers or points) to encourage learners to provide scaffolding or make a post at the forum might encourage some learners to participate regularly.

Providing a section within the SNS where the participants can call for assistance might also be helpful. A separate section away from the main discussion threads will assist easy navigation. A list of hints on what to do and a bank of expressions to facilitate smooth discussions will also be helpful.

Recommendation 6: Logbook

The study recommends that future research in this field incorporate a logbook requirement where participants would maintain journals. The logbook entries could assist in altering the SNS activities or to guide participants when needed. However, in order to maximise the utility of these journals, some explicit guidance on how to write such a journal could be helpful.

Recommendation 7: The Length of Discussion

In general, the duration of each discussion for this study was a week. As some discussion topics attracted lot of attention and complex issues arising from the discussion, some learners felt a week was too short and would have liked to have had a longer time frame. Therefore, two weeks might be a better time frame especially taking into account that the discussion is to be conducted in a foreign language and in an out-of-class environment.

Recommendation 8: Internet Block Sites

Future SNS activities should be aware of impediments to access arising from the fact that certain sites might not be accessible from overseas. Primarily this can arise where some sites or the browser software may be blocked as a result of policies of certain governments. Where such eventualities are anticipated and are relevant (for example, where participants may be visiting these countries during the forums), it will be necessary to consider an optional procedure.

7.3.2 Contribution to Activity Theory

This study grounded its analysis in a view enriched by sociocultural theory and the activity system (Engeström, 1987; 2001). In order to assist a deeper understanding of what was being observed in the study, it has extended the activity system in two ways and thus created the Online Joint Activity System. First, the extended system takes into account and makes explicit the perspectives of both a writer and a reader in a single activity system, representing the interactions at a SNS. Second, the *OJAS* recognises that choice of topic in an online environment influences motive and outcome; as a result, the *OJAS* makes topic as one of its constituent components.

Combining these two extensions of the activity system, *OJAS* allows adoption of a more finely grained and explanatory visual representation of interactions (and lack of

interactions) such as those observed in *Nihongo4us*. With that visual representation, a more informed understanding of what impacts an online educational program utilising SNS-tools can be developed. The *OJAS* should be of assistance to future research of online interactions involving a group of readers and writers.

7.4. Limitations of the Study

All research needs to acknowledge its limitations. The present study is primarily limited by a number of considerations such that its suitability for generalisation can be questioned. Those considerations relate to at least four matters: the selection of the study's research site; use of some data with an inherent bias; implications from selection of technologies; and, the design of the out-of-classroom study. Each is discussed below.

The study was conducted at UNSW, an Australian university, and thus is subject to a specific and institutional context. That context brings with it an organisational culture and a student body which is not replicated in other institutions. UNSW attracts a high-achieving cohort of students and is one of only a handful of Australian universities that has been able to withstand a severe drop in demand for languages from undergraduate students. Consequently, the students who formed the pool from which volunteers were secured for this study probably exhibit a higher need for achievement and a strong commitment to study – especially study of Japanese – than would be observed in the average student in an average Australian university. This limitation probably means that the extent of scaffolding and the overall engagement in *Nihongo4us* are both more pronounced than may be found elsewhere.

A related limitation was that the number of native speakers available at UNSW was constrained to a small number, such that it was not possible to standardise the characteristics of the native speakers in the study. This meant that the backgrounds, motivations, behaviours and engagements of the native speakers were quite varied. Significant in the heterogeneity of the native speakers was the fact that some native speakers had teaching experience, whilst others had not and so native speaker behaviour was not a controlled factor in the study. As a consequence of the study's relationship with UNSW, it is acknowledged that its findings may not be generalised.

A second limitation arises from the fact that some data is subject to a 'survivor bias'. Less than a third of Learners who had commenced partaking in *Nihongo4us* completed

all activities including the survey, the post-session interview and the second SPOT test. As a result, the study was unable to incorporate data derived from the participants who had discontinued in *Nihongo4us* and data from the survey, the second SPOT test and the post-session interviews can be said to be related only to those participants who completed all the activities. As a result of this limitation it is likely that findings may overstate the extent of scaffolding and the factors that had greatest impact on scaffolding. However, the questionnaire results demonstrate differences between the continuing and discontinuing students. Accordingly, we can learn from the discontinuing Learners' behaviour. For example, the group of Learners who completed the *Nihongo4us* Session showed higher motivation and a desire to learn Japanese than did the group of Learners who had discontinued; 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 scaffolding usage than did the Learners who continued.

A third limitation arose from the choice of technology in the broadest sense of that word. Primarily due to security and privacy rules required for Ethics Committee approval (refer Appendix 2), the SNS platform chosen for *Nihongo4us* needed to possess means of excluding non-participant observation or involvement. As a consequence the chosen SNS, Bebo, was less familiar to participants and it became part of the dynamics observed to impact on scaffolding (refer Chapter 4 discussion of difficulties experienced by some participants in using the *Nihongo4us* site). SNS's are not identical in their design and operation and so research results based on only one SNS may not be fully generalisable across to other SNS's.

A fourth limitation is found in the design of the out-of-classroom study. Specifically, it was decided to exclude from the study an important aspect of most educational programs: an assessment regime. Assessment is understood to influence student behaviour (Pasfield-Neofitou, 2007; Spence-Brown, 2007; Vonderwell, 2003) and so the results of this study are unlikely to be generalisable into pedagogies where students are being assessed.

Collectively, the abovementioned limitations act to reduce the generalisable nature of this study. However, these limitations also point to potentially fruitful future research; this is discussed next.

7.5 Recommendations for Future Studies

The findings of this study are sufficient to justify the effort of extending into a multi-institutional setting. That is, the limitation of a single institution could be lifted in a future study in order to further test the propositions arising from this single-institution study. Such a future study may benefit from having a more diverse student body with an increase range of competencies, motivations and behaviours such that it could perhaps more accurately reflect the reality of student cohorts either nationally or internationally.

This study has demonstrated advantages arising from mixed proficiency levels. One significant advantage is the encouragement towards self-autonomy of language learners and so it would be useful to test this finding in studies where the mix of proficiencies is given greater prominence and control within an experimental research design. Such a design could be crafted to test for the impact of advanced level Learners on other Learners and how the out-of-class learning activities specifically in a SNS context can affect either or both of these Learners' levels of autonomy.

An intriguing aspect arising from this study is the efficacy of SNS-based education. Although the present study specifically avoided measuring or assessing the extent of language acquisition that arose in *Nihongo4us*, future research in the area of language acquisition using SNS-platforms could utilise longitudinal data to assess this aspect. Whilst educational research is vexed in regard to impact of specific programs, the benefit from such research is worth the effort.

The effectiveness of scaffolding where all participants actively provide scaffolding can be subject to further research. Specifically, it would be useful for future studies to:

- compare groups with or without the involvement of native speakers;
- compare groups with or without face-to-face interactions; and,
- compare groups where scaffolding is either assessed or not assessed.

These suggestions for future research are only a selection of the very large and growing range of opportunities for fruitful further research. Collectively they serve to provide a sense of great change that is underway in both the student body and societal context of education.

7.6 A Final Note

It is self-evident that the Internet has brought significant change to our society and that all indications are that the extent and impact of future changes will be great. Education cannot be isolated from these changes since its student body will consequentially change and the range of educational technologies will expand. This study has thus been conducted at a time of great disjunction between the past and the future. It has demonstrated that a rapidly growing internet-based technology, in the shape of Social Network Sites, deserves study in terms of its educational impacts. Specifically, the relationship between scaffolding and SNS activities is a rich field of both research and practical application. In the growing body of research in this field, the findings of this study may be of use to both researchers and educationalists looking for gains arising from the sea of change that is sweeping across the educational environs.

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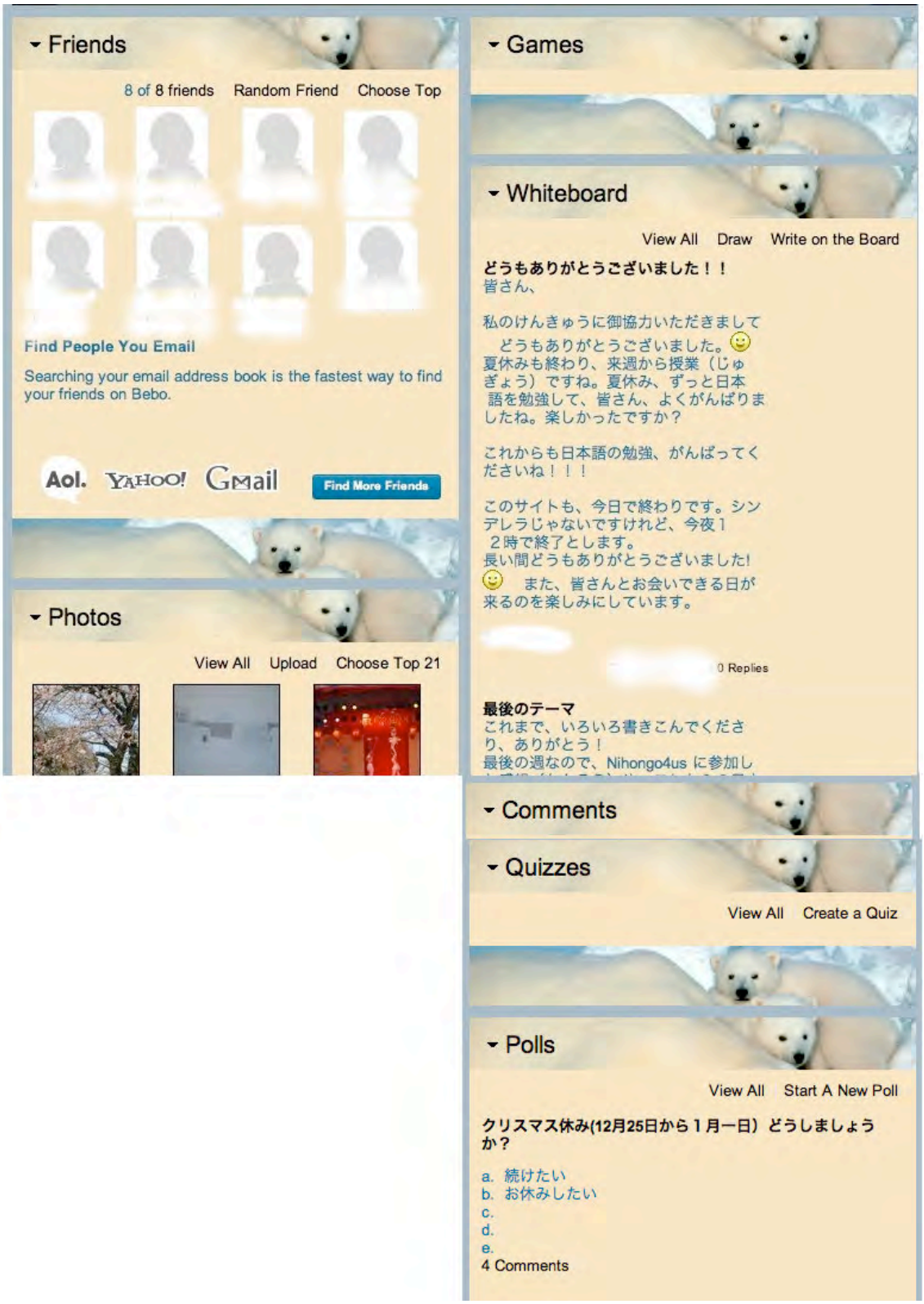
Appendix 1: Sample of the *Nihongo4us* site pages

Hayashi's Homepage (Native Speaker MG#2)


Friends
8 of 8 friends
Random Friend
Choose Top
Find People You Email
Searching your email address book is the fastest way to find your friends on Bebo.
Aol.
YAHOO!
Gmail
Find More Friends
Photos
View All
Upload
Choose Top 21
Games
Whiteboard
View All
Draw
Write on the Board
どうもありがとうございました！！
皆さん、
私のけんきゅうに御協力いただきまして
どうもありがとうございました。
夏休みも終わり、来週から授業（じゅぎょう）ですね。夏休み、ずっと日本語を勉強して、皆さん、よくがんばりましたね。楽しかったですか？
これからも日本語の勉強、がんばってくださいね！！！
このサイトも、今日で終わりです。シンデレラじゃないですけれど、今夜１２時で終了とします。
長い間どうもありがとうございました!
また、皆さんとお会いできる日が来るのを楽しみにしています。
0 Replies
最後のテーマ
これまで、いろいろ書きこんでくださり、ありがとう！
最後の週なので、Nihongo4us に参加し
Comments
Quizzes
View All
Create a Quiz
Polls
View All
Start A New Poll
クリスマス休み(12月25日から１月一日）どうしましょうか？
a. 続けたい
b. お休みしたい
c.
d.
e.
4 Comments

Emma’s Whiteboard: Linguistic Scaffolding (IG#2)

Takahashi said... 14/02/10

エマ さん、

質問に答えますね。

1/「気を付きます」と「気をつけます」の違いはなんですか?
「気をつきます」ではなくて、「気『が』つきます」かな？
気をつきますとは言わないので・・・。
「気がつきます」は、英語だとrealizeやnoticeですね。
「気をつけます」は、使うときによりますが、英語だとtake careや(be) carefulだと思います。

2/"台湾で食ったのは多分本物の和食じゃなくて、ただの「和食っぽい」 だと思う。"は大丈夫ですか？
「台湾で食べたのは多分本物の和食じゃなくて、ただの和食っぽい（台湾？）料理だと思う」がいいと思います。

3/"春にはさくらが咲く、夏には緑陰、秋には落葉と紅葉、冬には雪がふるんだ"で、どうして「夏には緑陰」と「秋には落葉と
紅葉」は動詞を付け ていないのですか。
何かの詩（Poem)ですか？セリフかな？きれいですね。
なぜ動詞をつけてないのか、私もわかりませんが（すみません）、
詩ならば、動詞じゃなくて、名詞で終わっている方がリズムがいいのかもしれませんね。

これで少し エマ さんの勉強の役（やく）に立ってればいいのですが・・・。

高橋

Edit | Delete

Emma said... 16/02/10

高橋 先生、
返事ありがとうございます!

第三目の問題は モーガンさんからのコメントです。「四季があるからとてもたのしくてき
れいだとおもいます。春にはさくらが咲く、夏には緑陰、秋には落葉と紅葉、冬には雪がふるんだ。韓国の季節 とおなじですがまだわたしは異邦（いほう）にすんでいるのがすきです。」と、書きました。意味が分かるけれど、どうしてそう書
けるか分からないので、ここで聞きました。
エマ

Report Spam

Tkahashi said... 16/02/10

エマ さん、

そうでしたか、モーガンさんのコメントだったんですね。
どうりで、どこかで見たような気が・・・。

Nakagawa’s Whiteboard: Navigation Scaffolding (MG#5)

Appendix 2: Ethics Approval

The University of New South Wales Human Research Ethics Committee Approval Letter

3.2(a) Approval

THE UNIVERSITY OF NEW SOUTH WALES

Arts, Humanities & Law Human Research Ethics Advisory Panel

Date:	25/09/2009
School:	School of Language and Linguistics
Supervisors:	Associate Professor Chihiro Thomson
Title of Project:	An investigation of second language learners of Japanese out-of-classroom on-line learning processes
Reference Number:	**09 2 145**
Investigators:	Ms Motoko Christensen

The Arts, Humanities & Law Human Research Ethics Advisory Panel has recommended to your Head of School/Unit/Centre and the Human Research Ethics Committee that this project, being of minimal ethical impact, may proceed. This approval is valid for 12 months from this date.

.....
Associate Professor Leong Chan
Convenor
Arts, Humanities & Law Human Research Ethics Advisory Panel

P. Collins
.....
Associate Professor Peter Craig Collins
Acting Head
School of Language and Linguistics

Appendix 3: Questionnaire

The following is a questionnaire on learning and communicating in Japanese, the purpose of which is to aid in educational research. Please read each item carefully and answer according to the directions given. The answers will be subjected to statistical analysis. Your responses to this questionnaire will in no way affect your grades or affect you personally, so please answer honestly. If you have any questions about this questionnaire, please ask the survey administrator or your sensei. Thank you for your cooperation.

Part I Background questions:

Please answer the following questions about yourself.

1. Name: _____
2. Which Year at UNSW: _____
3. Program in which you are enrolled: e.g. B.A/B.Com _____
4. Major(s): e.g. Japanese and Industrial Relations: _____
5. Age: _____
6. (Please tick one) I am an International Student [ ] / Local Student [ ]
7. Birth place: e.g. Tokyo, Japan _____
8. Suburb or country in which you have grown up (if there are a number of locations you have lived, please choose the one that you identify yourself with the most):

   _____
9. Length of your study in Japanese: _____ year(s)
10. Have you ever been to Japan? Yes [ ] / No [ ]
11. If Yes, when and how long did you spend in Japan and why.

    e.g. Two weeks in 1999 sightseeing Kyoto and Tokyo with my parents.

    _____

    _____

Part II

The following seeks to find out to what degree you feel each statement applies. If you feel it fully and completely applies, please choose 4.

There are no right or wrong answers to the following questions, which are about your Japanese language study. Please answer each item by choosing the response which best represents your honest feelings.

		strongly agree	agree	disagree	Strongly disagree
12	Compared to my classmates, I think I study relatively hard.	4	3	2	1
13	I often think about the words and ideas, which I learn in my Japanese classes.	4	3	2	1
14	If Japanese were not taught at UNSW, I would study on my own.	4	3	2	1
15	I think I spend fairly long hours studying Japanese.	4	3	2	1
16	I really try to learn Japanese.	4	3	2	1
17	After I graduate from UNSW, I will continue to study Japanese and try to improve.	4	3	2	1
18	When I have assignments to do in Japanese, I try to do them immediately.	4	3	2	1
19	I read Japanese newspapers or magazines outside my Japanese course work.	4	3	2	1
20	During Japanese classes at UNSW, I'm absorbed in what is taught and I concentrate on my studies.	4	3	2	1
21	I would like the number of Japanese classes at UNSW to increase.	4	3	2	1
22	I believe Japanese should be taught more widely at secondary school levels.	4	3	2	1
23	I find studying Japanese more interesting than other subjects.	4	3	2	1

What kind of reasons do you have for studying Japanese? Please indicate the degree to which the following reasons for studying Japanese apply to you. Please circle the number that best represents your feeling (4: strongly agree -1: strongly disagree).

		strongly agree	agree	disagree	Strongly disagree
24	Learning Japanese enables me to meet and talk with a variety of people.	4	3	2	1
25	Learning Japanese enables me to get to know various cultures and people.	4	3	2	1
26	Learning Japanese enables me to participate more freely in the activities of other cultural groups.	4	3	2	1
27	I'd like to make friends with Japanese people.	4	3	2	1
28	I'd like to work in Japan after completing my study at UNSW.	4	3	2	1
29	I'd like to travel to/in Japan.	4	3	2	1
30	I was advised to study Japanese because it will allow me to get a better job.	4	3	2	1

Others: Please describe

To what degree do the below statements apply to you? Circle the number that best indicates your feeling (4: strongly agree -1: strongly disagree).

		strongly agree	agree	disagree	Strongly disagree
31	I want to make friends with Japanese living in Australia.	4	3	2	1
32	I try to avoid talking with Japanese if I can.	4	3	2	1
33	I would talk to a Japanese international student if I met one at UNSW.	4	3	2	1
34	I wouldn't mind sharing a flat with a Japanese person.	4	3	2	1
35	I want to participate in a volunteer activity to help Japanese people studying, or living in Australia.	4	3	2	1
36	I would feel somewhat uncomfortable if a foreigner moved in next door.	4	3	2	1
37	I would help a foreigner who is in trouble communicating in a restaurant or at a station.	4	3	2	1
38	I want to live in a foreign country.	4	3	2	1
39	I want to work for an international organization such as the United Nations.	4	3	2	1
40	I'm interested in volunteer activities in developing countries such as participating in Youth International Development Assistance.	4	3	2	1
41	I don't think what's happening overseas has much to do	4	3	2	1

	with my daily life.				
42	I'd rather avoid the kind of work that sends me overseas frequently.	4	3	2	1
43	I'm not very interested in news from overseas.	4	3	2	1
44	I feel strongly about international problems.	4	3	2	1

How often do you use Japanese through following media outside of classes? Use the last month as an example.

		All the time: almost everyday	Often: three or four times a WEEK	Sometimes: once or twice times a WEEK	Seldom: once or twice over the last MONTH	Thinking about it but haven't yet	Never
45	Games	6	5	4	3	2	1
46	DVD/Movie/TV drama/Anime	6	5	4	3	2	1
47	Music	6	5	4	3	2	1
48	Books/magazines/*manga*/newspapers and other written media	6	5	4	3	2	1
49	Friends/Social clubs	6	5	4	3	2	1
50	Restaurant/Café	6	5	4	3	2	1
51	Email/Chat room/Mobile/Text/SMS	6	5	4	3	2	1
52	Computer based learning tools, including online dictionaries, online language tools	6	5	4	3	2	1
53	Participated in any computer mediated communication sites such as Blog, Facebook, Bebo etc.	6	5	4	3	2	1
54	Use of the Internet other than mentioned above (Please specify the resources in the space provided below)	6	5	4	3	2	1

Others: Please specify

Appendix 4: Sample of semi-structured pre-session interview

The following questions form a sample of the kind of semi-structured pre-session interviews conducted with the Japanese language Learners during the orientation. Details of its administration are discussed in Chapter 3. Interviews were conducted to enhance the understanding of the background of the participants and questions based on their responses on the questionnaire.

1. Which level of Japanese class did you just complete this semester?
2. Who were the teachers?
3. When did you come to Australia?
4. Which high school did you go to?
5. How long have you been studying Japanese?
6. What degree are you taking at UNSW?
7. What language do you speak at home?
8. Do you use Japanese outside of class? (if yes) where, how and with whom do you use Japanese?
9. Have you ever been to Japan? (if yes) How many times? What did you do in Japan?
10. What methods of study do you use when studying Japanese?
11. Do you have any areas of the Japanese language that you would like to improve?
12. How do you use CMC tools in your study of Japanese? (if yes) what do you enjoy?
13. How often do you use (CMC tools)?
14. Are you comfortable talking to other Learners in Japanese?
15. Do you have any preference to whom you would like to be with in a group? Friends? Classmates?
16. Do you have any questions about *Nihongo4us*?

The following questions form a sample of the kind of semi-structured pre-session interview conducted with the native speakers during the orientation. Details of its administration and reasons are same as that of the Learners.

1. When did you come to Australia?
2. What are you studying at UNSW?
3. How long have you been studying at UNSW?
4. Why did you decide to come to Australia and study at UNSW?
5. Have you ever taught Japanese as a foreign language? (if yes) Where? When? For how long? At what level of Japanese?

6. What would you like to do after you have completed your degree?
7. Do you have a preference on what proficiency level group (introductory or mixed level) you would like to facilitate?
8. Would you like to be paired with another native speaker or take a group on your own?
9. Have you used any SNS or online discussion forums before?
10. Do you have any questions about *Nihongo4us*?

Appendix 5: Weekly Reflective Logbook

Weekly Reflective Logbook

Participants are asked to fill this weekly reflective logbook by answering the following questions and posting their responses on 'Nihongo4us'.

1. How much time did you spend on Nihongo4us this week?

2. What did you learn from using Nihongo4us this week? This will include language learning including new vocabularies, phrases, *Kanji* and any other new discoveries you made.

3. Do you think the use of Nihongo4us allowed you to interact and collaborate with your fellow students of Japanese in a meaningful way? How?

4. Were there moments in the exchange when you felt particularly helpful or challenged? Please be specific in your reply.

5. How did Nihongo4us enhance your understanding of Japanese language?

6. Were the topics on '*Nihongo4us*' engaging? Why? Why not?

7. How has your participation in this Nihongo4us changed the way you think about Japanese language tasks?

8. What would you like to do on Nihongo4us next week?

9. What is your Japanese study goal for next week?

10. Please write any additional comments you would like to make.

Appendix 6: Survey

End of Summer Session Survey on 'Nihongo4us'

Thank you once again for participating in the CMC project: 'Nihongo4us'! It is important now that I can analyse the results of this project and so I need to ask your assistance in providing me with whatever feedback you feel is relevant. I know you are asked to do too many feedback questionnaires so the one below is fairly short but it also allows you to write some comments (which hopefully you will feel like doing!!). Also, I will conduct semi-structured interviews with participants – partly informed by your answers below – on the main issues that emerge from this project. Those interviews will allow you to express yourself freely as to your reactions to this project.

In answering this survey, please circle the answer that best fits your opinion about the electronic discussion this semester: strongly agree, agree, disagree, strongly disagree.

		Strongly agree	agree	disagree	strongly disagree
1	I enjoyed the discussion on Nihong4us.	4	3	2	1
2	I learned things in the discussions that I would not have figured out on my own.	4	3	2	1
3	The discussions on Nihongo4us gave me the opportunity to ask questions that I would not have asked in class.	4	3	2	1
4	I would enjoy participating in such a computer-based learning tool like Nihongo4us for Japanese again.	4	3	2	1
5	The process of talking/writing through topics helped me to understand Japanese better.	4	3	2	1
6	Chatting with other students helped me to look at topics from perspectives that I would not have considered on my own.	4	3	2	1
7	Nihongo4us provided less anxiety and a more relaxed environment than I usually experience in my classroom.	4	3	2	1
8	I would have liked a face-to-face class better than Nihongo4us.	4	3	2	1
9	I would have preferred to chat, on the Nihongo4us, only with people whom I had classes before.	4	3	2	1
10	I hope to keep in touch with one or more people from Nihongo4us.	4	3	2	1
11	I experienced a sense of community with the other students in my group using Nihongo4us.	4	3	2	1
12	Nihongo4us gave me some ideas for my approach to studying Japanese.	4	3	2	1
13	The time I spent participating in this exercise during this summer holiday would have been better spent studying Japanese in a conventional classroom approach.	4	3	2	1
14	Compared to past periods where I had a break from studying Japanese (e.g. holidays), I now feel better prepared to continue my Japanese studies with less 'catch up' needed.	4	3	2	1

Please be as descriptive as possible in your responses.

15. What suggestions do you have for improving this Nihongo4us site?

16. What was the most valuable part of Nihongo4us for you and why?

17. What was the least valuable part of Nihongo4us for you and why?

18. Did you find any mistakes in fellow students' comments? If yes, what actions did you take and why? Please be as descriptive as possible and also describe your feelings about your actions.

19. What comments do you have regarding the role of the native speakers of Japanese in Nihongo4us

20. Do you expect your academic performance (i.e. future grades) to improve as a result of your participation in Nihongo4us during the summer holiday?

21. In the absence of Nihongo4us: (a) would you have done any study of Japanese during your summer holiday?; and, (b) if so, how would you have done so?

22. In what ways did the use of Nihongo4us differ from UNSW WebCT you have used in regular Japanese courses?

23. Do you have any other comments?

Appendix 7: Sample of semi-structured Post-session Interview

The following questions form a sample of the kind of semi-structured post-session interviews conducted with the Japanese language Learners after the *Nihongo4us* Session. Details of its administration are discussed in Chapter 3. Interviews were conducted to enhance the understanding of the background of the participants and questions based on their responses on the Survey and Weekly Reflective Logbook, therefore questions varied greatly.

1. Which Japanese classes are you taking this semester?
2. Who is your teacher?
3. Are there any fellow participants of *Nihongo4us* in your current class?
4. How did you find the Japanese classes in your first few weeks after participating in *Nihongo4us*?
5. Have you felt any differences in returning to Japanese classes after the holidays since participating in *Nihongo4us*?
6. What difficulties have you encountered during *Nihongo4us?*
7. What was interesting for you in *Nihongo4us*?
8. Did you have any difficulties with scaffolding?
9. What did you think of the discussion forums?
10. Did you understand the posts/corrections made on the site?
11. What did you do when you found a mistake in your fellow participants?
12. Do you have any further feedback?
13. How would you like to participate in any future online forums?
14. Do you have any further opinions on (CMC) tools to enhance your knowledge Japanese language?

The following questions form a sample of the kind of semi-structured post-session interviews conducted with the native speakers.

1. Would you have any feedback regarding *Nihongo4us*?
2. Have you ever participated in any other activities such as *Nihongo4us*?
3. Did you enjoy interacting with the Learners?
4. How did you communicate with your native speaker partner to decide the role?
5. What were your thoughts on correcting the Learners?
6. What did you find difficult in *Nihongo4us*?
7. Could you make comments on why you did or did not make corrections in the following situations (by looking at the actual online data)?
8. What did you do when the Learners became inactive or did not upload a topic?
9. Do you have any overall comments or recommendations?

Appendix 8: Learners' Background

IG#1: Suzuki's Group

Name	Jacob	Grace	Amber	Lucinda	Maddy	Olivia	Kylie	Clancy	Alexandra	Madeline	Sarah	Average
Gender	M	F	F	F	F	F	F	M	F	F	F	
Age	22	18	18	21	18	18	23	20	19	20	20	21
Uni. Year	4	1	1	3	1	1	2	2	1	1	2	2
Japanese Studies at UNSW	1	1	1	1	1	1	1	1	1	1	1	
Length of Japanese Studies	1	1	1	1	1	1	1	1	1	1	1	
Years spent in Australia*	14				6	0.5						
Nationality	Indian	Australian	Australian	Chinese	Indonesian	Australian	Hong Kong	Chinese	Chinese	Chinese	Chinese	
Language spoken at home	Indian/ English	Chinese/ English	English/ French	Chinese	Indonesian	English	Chinese/ English	Chinese	Chinese	Chinese	Chinese	
Had travelled to Japan				Yes	Yes	Yes	Yes					
SPOT score pre-session	27	36	32	24	59	52	48	37	40	19	40	37
SPOT score post-session	37	42	n/a	n/a	60	n/a	n/a	n/a	n/a	n/a	n/a	46

*Includes permanent residents as well as overseas students

IG#2: Takahashi & Nakagawa

Name	Ashley	Emma	Elizabeth	Morgan	Gabby	Marian	Sophie	Cory	Jasper	Charlotte	Georgia	Average
Gender	F	F	F	F	F	F	F	M	M	F	F	
Age	20	19	20	50	20	22	34	23	19	26	23	25
Uni. Year	1	1	2	1	1	4	2	3	1	1	4	2
Japanese Studies at UNSW	1	1	1	1	1	1	1	1	1	1	1	
Length of Japanese Studies	1	5	1	1	1	1	1	1	1	1	1	
Years spent in Australia*		11	2	12	2	19	3		4	10	6	
Nationality	Australian	Taiwanese	Hong Kong	Korean	Hong Kong	Chinese	Korean	Australian	Vietnamese	Hong Kong	Chinese	
Language spoken at home	English	Chinese/ English/ Taiwanese	Chinese/ English	Korean/ English	Chinese/ English	Chinese/ English	Korean/ English	Chinese	Chinese/ Vietnamese	Chinese/ English	Chinese	
Had travelled to Japan		Yes		Yes	Yes	Yes						
SPOT score pre-session	34	55	57	33	32	53	55	27	25	45	24	50
SPOT score post-session	n/a	60	n/a	n/a	n/a	55	n/a	22	n/a	46	n/a	45

MG#1: Nakamura & Suzuki

Name	Jessica	Sebastian	Tom	Annika	Jack	John	Zoe	Danielle	Briana	Average
Gender	F	M	M	F	M	M	F	F	F	
Age	18	20	18	20	20	20	20	21	22	22
Uni. Year	1	2	1	2	3	1	2	1	4	2
Japanese Studies at UNSW	3	1	0	2	5	3	3	2	3	2
Length of Japanese Studies	7	1	4	2	8	5	7	2	3	4
Years spent in Australia*	5			2		10		0.5		
Nationality	Chinese	Australian	Australian	Hong Kong	Australian	Hong Kong	Australian	Malaysia	Australian	
Language spoken at home	Chinese/ English	English	English	Chinese/ English	English	Chinese/ English	English	Chinese/ English	English	
Had travelled to Japan		Yes	Yes	Yes	Yes	Yes	Yes	Yes		
SPOT score pre-session	59	41	58	50	59	55	59	27	43	50
SPOT score post-session	n/a	n/a	60	n/a	59	n/a	n/a	25	n/a	48

MG#2: Hayashi & Takahashi

Name	Yumi	Alexis	Sabrina	Zac	Ella	Rose	Dominic	Brooke	Ben	Average
Gender	F	F	F	M	F	F	M	F	M	
Age	18	21	23	19	21	19	24	20	19	22
Uni. Year	1	3	3	2	3	2	Graduated	2	1	2
Japanese Studies at UNSW	1	5	2	3	3	4	3	2	3	3
Length of Japanese Studies	1	9	2	6	3	10	7	3	6	5
Years spent in Australia*	12	11		10						
Nationality	Japanese	Hong Kong	Indonesian	Hong Kong	Japanese	Australian	Australian	Chinese	Chinese	
Language spoken at home	English	Chinese/ English	Indonesian	Chinese/ English	English/ Japanese	English	English	Chinese	Chinese	
Had travelled to Japan	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
SPOT score pre-session	54	59	54	54	56	55	57	50	43	43
SPOT score post-session	n/a	n/a	n/a	n/a	n/a	59	59	n/a	n/a	59

MG#3: Kubota

Name	Sarah	Ryan	Kerry	Paige	Jim	Henry	Helen	Claudia	Average
Gender	F	M	F	F	M	M	F	F	
Age	22	21	33	22	22	23	19	20	23
Uni. Year	4	3	2	3	5	2	1	3	3
Japanese Studies at UNSW	3	3	2	2	5	1	3	3	2
Length of Japanese Studies	3	8	2	2	5	1	6	3	4
Years spent in Australia*	13	15	10	1		3	10	5	
Nationality	Hong Kong	Taiwanese	Italian	Singaporean	Australian	Chinese	Chinese	Chinese	
Language spoken at home	Chinese	Chinese/ English	Italian/ English	English	English	Chinese	Chinese	Chinese	
Had travelled to Japan	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
SPOT score pre-session	47	57	49	56	59	40	53	54	51
SPOT score post-session	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

MG#4: Fujii

Name	Austin	Nicky	Elisha	Mark	Roselyn	Liz	Aya	Sam	Jasmine	Average
Gender	M	F	F	M	F	F	F	M	F	
Age	23	20	19	21	19	19	20	25	20	20
Uni. Year	5	2	3	2	1	2	3	Honours	1	2
Japanese Studies at UNSW	2	3	3	3	2	3	4	1	1	
Length of Japanese Studies	2	4	3	5	3	7	8	3	1	
Years spent in Australia*		6	5	4	2	18	13	22	2	
Nationality	Kuwaiti	Hong Kong	Singaporean	Chinese	Hong Kong	Hong Kong	Japanese	Filipino	Chinese	
Language spoken at home	Arab/ English	Chinese/ English	Chinese/ English	Chinese	Chinese/ English	English	English/ Japanese		Chinese	
Had travelled to Japan		Yes	Yes	Yes	Yes		Yes	Yes		
SPOT score pre-session	54	55	58	50	60	57	60	48	46	54
SPOT score post-session	58	58	n/a	n/a	n/a	57	n/a	n/a	56	57

MG#5: Nakagawa

Name	Victoria	Harrison	Connor	Hanna	Karoline	Harry	Isabelle	Morgan	Average
Gender	F	M	M	F	F	M	F	F	
Age	20	20	23	21	23	26	21	22	23
Uni. Year	2	3	2	4	2	3	3	3	3
Japanese Studies at UNSW	4	3	1	3	2	3	2	3	3
Length of Japanese Studies	7	3	3	3	1	3	3	3	3
Years spent in Australia*	10		5	6	2	3	6		
Nationality	Taiwanese	Australian	Korean	Hong Kong	Chinese	Hong Kong	Singaporean	Malaysian	
Language spoken at home	Chinese/ English	English	Korean	Chinese/ English	Chinese	English	Chinese/ English	Chinese/ English	
Had travelled to Japan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
SPOT score pre-session	54	51	56	59	58	60	40	56	54
SPOT score post-session	59	n/a	n/a	n/a	n/a	n/a	53	n/a	56

Appendix 9: List of Discussion Topics and the number of posts

For some incidences, multiple scaffoldings were observed in a post.
Numbers are rounded down
IG#1: Native Speaker: Suzuki Total No. of Learners: 12

Discussion No.	Discussion Topic	No. of participants	No. of posts	Average no. of character posted	No. of scaffolding		
					Linguistic	Content	Navigation
	Set up stage Nov. 27 – Dec. 14	12	69 (10)	92	19 (11)		
					9 (4)	0	10 (7)
1	Why do you study Japanese? Dec. 10 – Dec. 15	5	9 (4)	105	2 (1)		
					2 (1)	0	0
2	Have you ever been to Japan before? If you do go there, what would you want to do in Japan and why? Dec. 18 – Dec 24	5	5 (1)	137	0		
					0	0	0
3	Are there any moments that gave you some deep impressions about Japanese language or Japan? Jan. 7 – Jan. 8	4	4 (1)	151	2 (0)		
					2 (0)	0	0
4	What sorts of food do you like/don't like eating? Which restaurants do you like? Jan. 13 – Jan. 27	5	13 (3)	163	1 (1)		
					1 (1)	0	0
5	What do you normally do in your spare time? Jan. 25 – Jan. 29	3	5 (2)	121	0		
					0	0	0
6	How did you spend the summer holiday Jan. 30 – Feb. 4	4	9 (3)	103	2 (2)		
					2 (2)	0	0
Posts made outside of discussion		3	27 (4)	147	6		
					0	0	6 (4)
Average post during discussions		4	7 (2.3)	130			
Total posts during discussion			45 (14)		7 (4)	0	0
TOTAL			**141 (28)**	5,906	**16 (8)**	**0**	**16 (11)**

IG#2: Native Speakers: Takahashi (Nakagawa) Total No. of Learners: 11

Discussion No.	Discussion Topic	No. of participants	No. of posts	Average no. of character posted	No. of scaffolding		
					Linguistic	Content	Navigation
	Set up stage Nov. 25 – Dec. 18 (Jan. 7 & 8)	12	118 (24)	118	37 (20)		
					13 (7)	0	24 (13)
1	What do you think about travelling alone? Dec. 1 – Dec. 17	8	34 (4)	183	20 (4)		
					10 (3)	3 (0)	7 (1)
2	What effect does *anime/manga* have on learners of Japanese? Is it good or bad effect? Dec. 18 – Dec. 31	7	19 (3)	280	8 (3)		
					6 (3)	1 (1)	1 (0)
3	What do you like about Japan? Jan. 2 – Jan. 7	8	19 (5)	272	10 (4)		
					10 (4)	0	0
4	What is your favourite food Jan. 12 – Jan. 22	9	37 (4)	194	9 (2)		
					5 (4)	0	4 (1)
5	Which country do you like? Would you like to live there and why? Jan. 18 – Feb. 7	10	27 (2)	229	3 (2)		
					3 (2)	0	0
6	Did anything interesting happen during the holidays? Anything that made you sad or angry or gave you trouble? Feb. 3 – Feb. 10	4	10 (0)	218	1 (0)		
					1 (0)	0	0
7	Did you have any experience where you felt glad that you are studying Japanese? Feb. 4 – Feb. 12	5	7 (2)	272	2 (1)		
					2 (1)	0	0
8	What is your hobby? Why? Feb. 12 – Feb. 20	3	3 (1)	316	0		
					0	0	0
Posts made outside of discussion		11	66 (12)	181	26 (12)		
					18 (10)	3 (1)	8 (2)
Average post during discussions		6	19 (2.6)	266			
Total posts during discussion			156 (21)		38 (14)	4 (0)	12 (2)
TOTAL			**340 (57)**	**35,495**	**68 (34)**	**7 (2)**	**44 (17)**

MG#1: Native Speakers: Nakamura (Suzuki) Total No. of Learners: 10

Discussion No.	Discussion Topic	No. of participants	No. of posts	Average no. of character posted	No. of scaffolding		
					Linguistic	Content	Navigation
	Set up stage Nov. 28 – Dec. 11	10	52 (11)	135	15 (8)		
					4 (0)	0	11 (8)
1	What sort of music do you listen to? Can you recommend any Japanese music? Dec. 11 – Dec. 20	7	11 (1)	299	3 (1)		
					2 (1)	1 (0)	0
2	Do you enjoy studying Japanese? Why? How are you using Japanese other than for study? What is your goal in studying Japanese? How long do you think it will take you to reach that goal? What is the most difficult part of studying Japanese including cultural issues? Id you had been to Japan, did you experience any difficulties while you were travelling? Dec. 19 – Dec. 28	5	11 (2)	412	4 (1)		
					3 (1)	0	1 (0)
3	How did you spend your Christmas and New Year? What are your New Year resolutions? Jan. 2 – Jan. 7	3	3 (1)	197	0		
					0	0	0
4	Have you had true love? Do you believe in meeting a destined lover? Jan. 2 – Jan. 14	5	10 (1)	208	1		
					0	1 (0)	0
5	Why are some Japanese lyrics so strange? Jan. 5 – Jan 20	5	8 (2)	412	4 (2)		
					0	3 (1)	1 (1)
6	What did you think about Avatar? What was the most memorable movie you saw? Jan. 23 – Jan. 31	4	5 (2)	293	2 (1)		
					0	0	2 (1)
7	What sorts of winter sports do you like? Feb. 1 – Feb 8	5	7 (3)	156	1 (0)		
					0	0	1 (0)
8	How the climate changes affect the four seasons Feb. 7 – Feb. 10	4	4 (2)	261	1 (1)		
					0	1 (1)	0
9	What are some differences between Japan & Australia Feb. 13 – Feb. 21	4	6 (3)	170	0		
					0	0	0
Posts made outside of discussion		6	30 (19)	118	14 (8)		
					0	0	14 (8)
Average post during discussions		4	8 (1.8)	254			
Total post during discussions			65 (17)		16 (6)		
					5 (2)	6 (2)	5 (2)
TOTAL			**147 (47)**	**22,388**	**45 (22)**		
					9 (2)	**6 (2)**	**30 (18)**

MG#2: Native Speakers: Hayashi (Takahashi) Total No. of Learners: 10

Discussion No.	Discussion Topic	No. of participants	No. of posts	Average no. of character posted	No. of scaffolding		
					Linguistic	Content	Navigation
	Set up stage Dec. 1 – Dec. 12	10	74 (30)	162	31 (16)		
					13 (6)	0	18 (10)
1	Even if you are fluent in your second language, do you still have difficulty in expressing deep thoughts and feelings in the second language? Is the first language always the easiest language to express yourself? Dec. 12 – Dec. 17	8	14 (9)	376	9 (8)		
					3 (3)	5 (5)	1 (1)
2	Trip to Japan – Can you tell me about any special experience you had? Sight seeing, food, festivals? Dec. 18 – Dec. 25	8	18 (7)	277	4 (3)		
					4 (3)	0	0
3	Can you teach me some Japanese vogue words? Dec. 25 – Jan. 6	7	13 (5)	288	5 (3)		
					2 (2)	3 (1)	0
4	Have you learnt any new words, or customs through Japanese media? Jan. 1 – Jan. 12	6	7 (3)	359	3 (3)		
					1 (1)	2 (2)	0
5	What new science do you hope for? Jan. 11 – Jan. 17	5	7 (1)	381	1 (1)		
					0	1 (1)	0
6	What is your favourite food? Which ethnic food do you like? Any Japanese food? Any good restaurants? Do you cook? What do you eat for lunch at uni? Jan. 14 – Jan. 22	6	12 (3)	468	1 (1)		
					1 (1)	0	0
7	What Japanese music do you enjoy listening to? Jan. 22 – Feb. 1	3	6 (3)	397	2 (2)		
					0	1 (1)	1 (1)
8	How does the Japanese dialect and customs differ in different regions? Feb. 4 – Feb. 15	4	6 (4)	425	4 (4)		
					2 (2)	2 (2)	0
Posts made outside of discussion		6	17 (6)	173	3 (1)		
					2 (0)	0	1 (1)
Average post during discussions		5	10 (4.4)	371			
Total post during discussions			83 (35)		13 (12)	14 (12)	2 (2)
TOTAL			**174 (71)**	**58,832**	**28 (18)**	**14 (12)**	**21 (13)**

MG#3: Native Speaker: Kubota Total No. of Learners: 9

Discussion No.	Discussion Topic	No. of participants	No. of posts	Average no. of character posted	No. of scaffolding		
					Linguistics	Content	Navigation
	Set up stage Nov. 28 – Dec. 11	9	83 (6)	139	6 (3)		
					0	0	6 (3)
1	What is your most memorable moment from your Japanese classes? Dec. 11 – Dec. 18	4	11 (6)	293	5 (3)		
					2 (0)	0	3 (3)
2	Did anything inspire you? Dec. 18 – Dec. 23	3	7 (5)	351	4 (4)		
					2 (2)	0	2 (2)
3	Do you have any advice on how to improve speaking skills in Japanese? Jan. 3 – Jan. 17	4	15 (10)	352	7 (5)		
					7 (5)	0	0
Posts made outside of discussion		3	16 (8)	359	11 (9)		
					4 (4)	0	7 (5)
Average post during discussions		3	11 (7)	332			
Total post during discussions			40 (21)		11 (7)	0	5 (5)
TOTAL			**139 (37)**	**37,261**	**15 (11)**	**0**	**18 (13)**

MG#4: Native Speaker: Fujii Total No. of Learners: 8

Discussion No.	Discussion Topic	No. of participants	No. of posts	Average no. of character posted	No. of scaffolding		
					Linguistics	Content	Navigation
	Set up stage Nov. 26 – Dec. 14	8	116 (35)	158	70 (30)		
					33 (13)	4 (2)	33 (15)
1	Why do you think the Japanese do not directly express their feelings? Dec. 11 – Dec. 18	6	23 (3)	228	13 (4)		
					4 (0)	5 (1)	4 (3)
2	Why is Japanese culture so popular overseas? Dec. 18 – Jan. 14	6	17 (1)	226	7		
					2 (0)	4 (0)	1 (0)
3	Why does Japanese language have polite forms? How can you use it naturally? Dec. 26 – Jan. 22	5	10 (2)	231	3 (2)		
					1 (1)	2 (1)	0
4	What is your favourite Japanese sweet? Jan. 15 – Jan. 30	6	12 (4)	142	2 (2)		
					2 (2)	0	0
5	Have you experienced culture shock whilst travelling? Jan. 23 – Jan. 29	6	11 (1)	299	2 (0)		
					1 (0)	1 (0)	0
6	What made you decide to study Japanese? Will you continue studying Japanese? Jan. 29 – Feb. 11	6	14 (2)	259	8 (2)		
					7 (1)	0	1 (1)
7	What would you like to do if you are in a time machine? Feb. 8 – Feb. 12	5	11 (3)	158	6 (4)		
					1 (1)	4 (2)	1 (1)
8	Japan has produced interesting Japanese technology? What are your thoughts? Feb. 13 – Feb. 18	6	12 (2)	204	6 (1)		
					3 (0)	2 (0)	1 (1)
Posts made outside of discussion		6	59 (13)	113	32 (11)		
					2 (0)	8 (1)	22 (10)
Average post during discussions		5	13 (2.2)	204			
Total post during discussions			110 (18)		21 (5)	18 (4)	8 (6)
TOTAL			**285 (66)**	**56,880**	**56 (18)**	**30 (7)**	**63 (31)**

MG#5: Native Speaker: Nakagawa Total No. of Learners: 8

Discussion No.	Discussion Topic	No. of participants	No. of posts	Average no. of character posted	No. of scaffolding		
					Linguistics	Content	Navigation
	Set up stage Nov. 25 – Dec. 18	8	121 (28)	81	38 (31%)		
					9 (7)	0	27 (12)
1	What made you want to study Japanese in the first place? Dec. 11 – Dec. 20	5	24 (11)	139	14 (8)		
					9 (5)	0	5 (3)
2	What is your favourite Japanese food? What sort of Japanese dish can you make? Dec. 18 – Dec. 24	4	10 (5)	442	6 (5)		
					3 (3)	1 (1)	2 (1)
3	How do you spend X'mas eve? With your family or with your lover? Jan. 3 – Jan. 8	5	11 (6)	411	8 (7)		
					6 (5)	2 (2)	0
4	How do you study languages? Jan. 11 – Jan. 17	3	14 (7)	334	14 (11)		
					5 (4)	7 (6)	2 (1)
5	Do you think the differences between male and female genders are lessening? 7Jan. 12 – Jan. 29	6	18 (9)	361	12 (8)		
					7 (5)	5 (3)	0
6	Why is Japanese economy continuing in recession? Jan. 17 – Jan. 26	4	10 (5)	273	6 (5)		
					3 (3)	1 (1)	2 (1)
7	Where in Japan do you want to travel & why? Jan. 23 – Feb. 2	5	7 (4)	468	5 (5)		
					2 (2)	2 (2)	2 (1)
8	What is your favourite music? Feb. 5 – Feb. 11	3	13 (6)	358	11 (7)		
					10 (7)	1 (0)	0
9	What do you think about the way Japanese celebrate Valentine's day Feb. 15 – Feb. 17	3	5 (3)	380	3 (3)		
					1 (1)	2 (2)	0
10	What is your favourite *Anime/Manga*? Feb. 20 – Feb. 24	3	7 (2)	486	4 (3)		
					3 (3)	1	0
Posts made outside of discussion		4	44 (22)	99	49 (26)		
					6 (3)	0	43 (23)
Average post during discussions		3	13 (5.8)	339			
Total post during discussions			119 (58)		49 (38)	22 (17)	13 (7)
TOTAL			**284 (108)**	**48,318**	**64 (38)**	**22 (17)**	**83 (42)**

Appendix 10: Numbers of Scaffolding Strategies Observed

Nil provision of scaffolding is shown with ‘ - ’ in the table for visually making it easy to read the tables.

IG#1: Suzuki

		Linguistic Scaffolding						Content	Negotiation					
		Eliciting	Correcting	Clarifying	Requesting	Answering	**Subtotal**		Asking	Suggesting	Answering	**Subtotal**	Total	**TOTAL**
Set up stage	L	1	-	-	4	-	**5**	-	2	-	1	**3**	8	**19**
	NS	-	4	-	-	-	**4**	-	-	5	2	**7**	11	
1	L	1	-	-	-	-	**1**	-	-	-	-	-	1	**2**
	NS	-	-	-	-	1	**1**	-	-	-	-	-	1	
2	L	-	-	-	-	-	-	-	-	-	-	-	-	**0**
	NS	-	-	-	-	-	-	-	-	-	-	-	-	
3	L	1	-	-	-	1	**2**	-	-	-	-	-	2	**2**
	NS	-	-	-	-	-	-	-	-	-	-	-	-	
4	L	-	-	-	-	-	-	-	-	-	-	-	-	**1**
	NS	-	1	-	-	-	**1**	-	-	-	-	-	1	
5	L	-	-	-	-	-	-	-	-	-	-	-	-	**0**
	NS	-	-	-	-	-	-	-	-	-	-	-	-	
6	L	-	-	-	-	-	-	-	-	-	-	-	-	**2**
	NS	-	2	-	-	-	**2**	-	-	-	-	-	2	
Outside	L	-	-	-	-	-	-	-	-	-	2	**2**	2	**6**
	NS	-	-	-	-	-	-	-	-	2	2	**4**	4	
Subtotal	L	3	-	-	4	1	**8**	-	2	-	3	**5**		**13**
	NS	-	7	-	-	1	**8**	-	-	7	4	**11**		**19**
TOTAL		**3**	**7**	**0**	**4**	**2**	**16**	**-**	**2**	**7**	**7**	**16**		**32**

IG#2: Takahashi (& Nakagawa)

		Linguistic Scaffolding						Content	Negotiation					
		Eliciting	Correcting	Clarifying	Requesting	Answering	**Subtotal**		Asking	Suggesting	Answering	**Subtotal**	Total	**TOTAL**
Set up stage	L	1	2	-	1	2	**6**	-	5	1	5	**11**	17	**37**
	NS	2	3	1	-	1	**7**	-	1	10	2	**13**	20	
1	L	2	4	1	-	-	**7**	**3**	-	3	3	**6**	16	**20**
	NS	-	3	-	-	-	**3**	-	-	-	1	**1**	4	
2	L	-	2	-	1	-	**3**	-	-	-	1	**1**	4	**8**
	NS	-	3	-	-	-	**3**	**1**	-	-	-	-	4	
3	L	1	2	1	-	2	**6**	-	-	-	-	-	6	**10**
	NS	-	4	-	-	-	**4**	-	-	-	-	-	4	
4	L	-	-	-	1	-	**1**	-	1	1	1	**3**	4	**9**
	NS	-	4	-	-	-	**4**	-	-	-	1	**1**	5	
5	L	1	-	-	-	-	**1**	-	-	-	-	-	1	**3**
	NS	-	2	-	-	-	**2**	-	-	-	-	-	2	
6	L	-	1	-	-	-	**1**	-	-	-	-	-	1	**1**
	NS	-	-	-	-	-	-	-	-	-	-	-	-	
7	L	1		-	-	-	**1**	-	-	-	-	-	1	**2**
	NS	-	1	-	-	-	**1**	-	-	-	-	-	1	
8	L	-	-	-	-	-	-	-	-	-	-	-	-	-
	NS	-	-	-	-	-	-	-	-	-	-	-	-	
Outside	L	3	-	3	1	1	**8**	**2**	1	2-	3-	**6**	16	**29**
	NS	-	2	-	-	8	**10**	**1**	-	1	1	**2**	13	
Subtotal	L	9	10	5	4	5	**34**	**5**	7	7	13	**27**		**66**
	NS	2	22	1	-	9	**34**	**2**	1	11	5	**17**		**53**
TOTAL		**11**	**33**	**6**	**4**	**14**	**68**	**7**	**8**	**18**	**18**	**44**		**119**

MG#1: Nakamura (Suzuki)

		Linguistic Scaffolding						Content	Negotiation					
		Eliciting	Correcting	Clarifying	Requesting	Answering	**Subtotal**		Asking	Suggesting	Answering	**Subtotal**	Total	**TOTAL**
Set up stage	L	1	2	-	-	1	**4**	-	-	-	3	**3**	7	**15**
	NS	-	-	-	-	-	-	-	3	4	1	**8**	8	
1	L	-	1	-	-	-	**1**	**1**	-	-	-	-	2	**3**
	NS	-	1	-	-	-	**1**	-	-	-	-	-	1	
2	L	-	2	-	-	-	**2**	-	-	1	-	**1**	3	**4**
	NS	-	1	-	-	-	**1**	-	-	-	-	-	1	
3	L	-	-	-	-	-	-	-	-	-	-	-	-	**0**
	NS	-	-	-	-	-	-	-	-	-	-	-	-	
4	L	-	-	-	-	-	-	**1**	-	-	-	-	-	**1**
	NS	-	-	-	-	-	-	-	-	-	-	-	-	
5	L	-	-	-	-	-	-	**2**	-	-	-	**1**	3	**5**
	NS	-	-	-	-	-	-	**1**	1	-	-	-	2	
6	L	-	-	-	-	-	-	-	-	-	1	**1**	1	**2**
	NS	-	-	-	-	-	-	-	-	1	-	**1**	1	
7	L	-	-	-	-	-	-	-	-	-	1	**1**	1	**1**
	NS	-	-	-	-	-	-	-	-	-	-	-	-	
8	L	-	-	-	-	-	-	-	-	-	-	-	-	**1**
	NS	-	-	-	-	-	-	**1**	-	-	-	-	-	
9	L	-	-	-	-	-	-	-	-	-	-	-	-	**0**
	NS	-	-	-	-	-	-	-	-	-	-	-	-	
Outside	L	-	-	-	-	-	-	-	2	1	3	**6**	6	**14**
	NS	-	-	-	-	-	-	-	2	2	4	**8**	8	
Subtotal	L	1	5	-	-	1	**7**	**4**	3	2	8	**13**		**24**
	NS	-	2	-	-	-	**2**	**2**	6	7	5	**18**		**22**
TOTAL		**1**	**7**	**-**	**-**	**1**	**9**	**6**	**8**	**9**	**13**	**30**		**45**

MG#2: Hayashi (Takahashi)

		Linguistic Scaffolding						Content	Negotiation					
		Eliciting	Correcting	Clarifying	Requesting	Answering	**Subtotal**		Asking	Suggesting	Answering	**Subtotal**	Total	**TOTAL**
Set up stage	L	2	3	1	-	1	**7**	-	6	2	-	**8**	15	**31**
	NS	1	5	-	-	-	**6**	-	-	3	7	**10**	16	
1	L	-	-	-	-	-	-	-	-	-	-	-	-	**9**
	NS	-	3	-	-	-	**3**	**5**	-	1	-	**1**	9	
2	L	-	1	-	-	-	**1**	-	-	-	-	-	1	**4**
	NS	-	3	-	-	-	**3**	-	-	-	-	-	3	
3	L	-	-	-	-	-	-	**2**	-	-	-	-	2	**5**
	NS	-	2	-	-	-	**2**	**1**	-	-	-	-	3	
4	L	-	-	-	-	-	-	-	-	-	-	-	-	**3**
	NS	-	1	-	-	-	**1**	**2**	-	-	-	-	3	
5	L	-	-	-	-	-	-	-	-	-	-	-	-	**1**
	NS	-	-	-	-	-	-	**1**	-	-	-	-	1	
6	L	-	-	-	-	-	-	-	-	-	-	-	-	**1**
	NS	-	1	-	-	-	**1**	-	-	-	-	-	1	
7	L	-	-	-	-	-	-	-	-	-	-	-	-	**2**
	NS	-	-	-	-	-	-	**1**	1	-	-	**1**	2	
8	L	-	-	-	-	-	-	-	-	-	-	-	-	**4**
	NS	-	2	-	-	-	**2**	**2**	-	-	-	-	-	
Outside	L	1	-	-	-	1	**2**	-	-	-	-	-	2	**3**
	NS	-	-	-	-	-	-	-	-	1	-	**1**	1	
Subtotal	L	3	4	1	-	2	**10**	**2**	6	2	-	**8**		**20**
	NS	1	17	-	-	-	**18**	**12**	1	5	7	**13**		**43**
TOTAL		**4**	**21**	**1**	**0**	**2**	**28**	**14**	**7**	**7**	**7**	**21**		**63**

MG#3: Kubota

		Linguistic Scaffolding						Content	Negotiation					
		Eliciting	Correcting	Clarifying	Requesting	Answering	**Subtotal**		Asking	Suggesting	Answering	**Subtotal**	Total	**TOTAL**
Set up stage	L	-	-	-	-	-	-	-	3	-	-	**3**	3	**6**
	NS	-	-	-	-	-	-	-	-	3	-	**3**	3	
1	L	1	-	-	-	1	**2**	-	-	-	-	-	2	**5**
	NS	-	-	-	-	-	-	-	-	3	-	**3**	3	
2	L	-	-	-	-	-	-	-	-	-	-	-	-	**4**
	NS	-	2	-	-	-	**2**	-	-	2	-	**2**	4	
3	L	2	-	-	-	-	**2**	-	-	-	-	-	2	**7**
	NS	-	3	-	-	2	**5**	-	-	-	-	-	5	
Outside	L	-	-	-	-	-	-	-	-	-	2	**2**	2	**11**
	NS	-	4	-	-	-	**4**	-	-	4	1	**5**	9	
Subtotal	L	3	-	-	-	1	**4**	-	3	-	2	**5**		**9**
	NS	-	9	-	-	2	**11**	-	-	12	1	**13**		**24**
TOTAL		**3**	**9**	**0**	**0**	**3**	**15**	**0**	**3**	**12**	**3**	**18**		**33**

MG#4: Fujii

		Linguistic Scaffolding						Content	Negotiation					
		Eliciting	Correcting	Clarifying	Requesting	Answering	**Subtotal**		Asking	Suggesting	Answering	**Subtotal**	Total	**TOTAL**
Set up stage	L	6	3	4	-	7	**20**	**2**	9	3	6	**18**	40	**70**
	NS	-	11	-	-	2	**13**	**2**	1	10	4	**15**	30	
1	L	1	-	-	-	3	**4**	**4**	-	-	1	**1**	9	**13**
	NS	-	-	-	-	-	**-**	**1**	-	3	-	**3**	4	
2	L	-	2	-	-	-	**2**	**4**	-	-	1	**1**	7	**7**
	NS	-	-	-	-	-	**-**	**-**	-	-	-	**-**	-	
3	L	-	-	-	-	-	**-**	**1**	-	-	-	**-**	1	**3**
	NS	-	1	-	-	-	**1**	**1**	-	-	-	**-**	2	
4	L	-	-	-	-	-	**-**	**-**	-	-	-	**-**	-	**2**
	NS	-	2	-	-	-	**2**	**-**	-	-	-	**-**	2	
5	L	-	1	-	-	-	**1**	**1**	-	-	-	**-**	2	**2**
	NS	-	-	-	-	-	**-**	**-**	-	-	-	**-**	-	
6	L	1	2	-	-	3	**6**	**-**	-	-	-	**-**	6	**8**
	NS	-	1	-	-	-	**1**	**-**	-	-	1	**1**	2	
7	L	-	-	-	-	-	**-**	**2**	-	-	-	**-**	2	**6**
	NS	-	1	-	-	-	**1**	**2**	1	-	-	**1**	4	
8	L	1	-	-	-	2	**3**	**2**	-	-	-	**-**	5	**6**
	NS	-	-	-	-	-	**-**	**-**	-	-	1	**1**	1	
Outside	L	-	1	-	-	1	**2**	**7**	2	2	8	**12**	21	**32**
	NS	-	-	-	-	-	**-**	**1**	-	9	1	**10**	11	
Subtotal	L	9	9	4	-	16	**38**	**23**	11	5	16	**32**		**93**
	NS	-	16	-	-	2	**18**	**7**	2	22	7	**31**		**56**
TOTAL		**9**	**25**	**4**	**-**	**18**	**56**	**30**	**13**	**27**	**23**	**63**		**149**

MG#5: Nakagawa

		Linguistic Scaffolding						Content	Negotiation					
		Eliciting	Correcting	Clarifying	Requesting	Answering	**Subtotal**		Asking	Suggesting	Answering	**Subtotal**	Total	**TOTAL**
Set up stage	L	2	-	-	-	-	**2**	-	5	3	7	**15**	17	**36**
	NS	-	7	-	-	-	**7**	-	2	7	3	**12**	19	
1	L	2	-	2	-	-	**4**	-	-	1	1	**2**	6	**14**
	NS	-	5	-	-	-	**5**	-	1	2	-	**3**	8	
2	L	-	-	-	-	-	**-**	-	-	1	-	**1**	1	**6**
	NS	-	3	-	-	-	**3**	**1**	-	1	-	**1**	5	
3	L	-	-	1	-	-	**1**	-	-	-	-	**-**	1	**8**
	NS	-	4	-	-	1	**5**	**2**	-	-	-	**-**	7	
4	L	1	-	-	-	-	**1**	**1**	-	1	-	**1**	3	**14**
	NS	-	4	-	-	-	**4**	**6**	1	-	-	**1**	11	
5	L	2	-	-	-	-	**2**	**2**	-	-	-	**-**	4	**12**
	NS	-	5	-	-	-	**5**	**3**	-	-	-	**-**	8	
6	L	-	-	-	-	-	**-**	-	-	-	1	**1**	1	**6**
	NS	-	3	-	-	-	**3**	**1**	-	1	-	**1**	5	
7	L	-	-	-	-	-	**-**	-	-	-	1	**1**	1	**6**
	NS	-	2	-	-	-	**2**	**2**	-	1	-	**1**	5	
8	L	2	1	-	-	-	**3**	**1**	-	-	-	**-**	4	**11**
	NS	-	6	1	-	-	**7**	-	-	-	-	**-**	7	
9	L	-	-	-	-	-	**-**	-	-	-	-	**-**		**3**
	NS	-	1	-	-	-	**1**	**2**	-	-	-	**-**	3	
10	L	-	-	-	-	-	**-**	**1**	-	-	-	**-**	1	**4**
	NS	-	3	-	-	-	**3**	-	-	-	-	**-**	3	
Outside	L	-	-	3	-	-	**3**	-	5	5	10	**20**	23	**49**
	NS	-	2	-	-	1	**3**	-	4	12	7	**23**	26	
Subtotal	L	9	1	6	-	-	**16**	**5**	10	11	20	**41**		**62**
	NS	-	45	1	-	2	**48**	**17**	8	24	10	**42**		**107**
TOTAL		**9**	**46**	**7**	**0**	**2**	**64**	**22**	**18**	**35**	**30**	**83**		**169**

Glossary:

Blog	One of SNS tools in Bebo
blog	One of CMC tools in general
Emoticon	A metacoomunicative pictorial representation of a facial expression
Furigana	Reading aid consisting of smaller *Kana*, or syllabic characters, printed next to a *Kanji*
Helpline Nihongo4us	A SNS where the native speakers could discuss any issues related to *Nihongo4us*, specifically created to assist native speakers by providing a forum where they could help each other.
Heritage Learner	Learners 'who have been brought up in a home where the Japanese language is used and who have a connection to Japanese culture. They have some degree of understanding and knowledge of Japanese, although their oral proficiency is typically more highly developed than their proficiency in the written language. These students have received all or most of their formal education in schools where English (or another language different from Japanese) is the medium of instruction. They can therefore be considered to some extent bilingual, with English or the other language being the predominant language' (Board of Studies, 2010, p.5).
Internet	Used as noun meaning international computer network
Junior Learner (Junior/*Kohai*)	A Learner who has less proficiency relative to the other Learners in a group
Learner	All learners, who participated in the current study are referred to as Learners with a capital 'L'

learner	With use of a lower case ‘l’, learner is given the generic meaning of a person aiming to gain knowledge, comprehension or mastery through study
Netiquette	An etiquette practiced over the Internet
Nihongo4us	The current study, including all the activities held during the pre-session, the Nihongo4us Session and post-session
Nihongo4us Session	A 13 weeks period during which voluntary participants undertook a series of online learning activities
Nihongo4us site	A SNS created specifically for the present study using a Bebo platform
Online	Connected to or accessible by means of a computing device and a computer network
Scaffolding	Any assistance given to a learner to complete a task
Senior Learner (Senior/*Senpai*)	A Learner who has greater proficiency relative to the other Learners in a group
Single entry thread	Single post without subsequent related posts that is a thread with one post
SNS tools	Tools and applications available at SNS providing specific functions such as video, games, whiteboard, blogs and comments