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Patterns of Interaction Between Moderators and Learners during Synchronous Oral Discussions Online in Second Life

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Abstract

This paper describes research with French university graduate student moderators in a Master's program on using technology to teach French as a foreign language and advanced undergraduate students learning French at an American university. Students used Second Life and Moodle to carry out oral tasks synchronously. For fall 2011, the researchers designed five tasks (étapes) that paralleled the undergraduates' course curriculum. Transcripts of two of the six groups of moderators and learners show that the unintended different styles of moderator behaviors influenced learner interactions with each other and with the moderators. The authors show that students were less able to engage with each other when faced with more rigid questioning behaviors by the moderators.

1 Introduction

Second Life (SL) is a virtual world with multiple functionalities in which individuals move freely under the guise of their avatar. The literature concerning the affordances of virtual worlds, however, is still limited and very little empirical research has been done regarding student learning in virtual worlds (Dalgarno & Lee, 2010; Henderson et al., 2009; Hew, K. F., & Cheung, 2010; Molka-Danielsen, 2009; Peachey et al, 2010; Warburton, 2009). The immersive experience and the feeling of 'being there' is often highlighted as one of the biggest merits of virtual worlds for learning (Schroeder, 2011; Warburton, 2009) because students feel "co-located" with their classmates and share the same visual space. These characteristics of immersion and immediacy are linked, as users can act and interact authentically in real time. This immediacy is even more perceptible given the synchronous multimodal communication functions available in SL (audio, text-chat, gestures).

Additionally, given real time interaction opportunities, several studies have focused on the collaborative aspects of learning in SL in a variety of disciplines including language learning (Brown & Bell, 2004; Dickey, 2005; Gronstedt, 2007; Livingstone & Kemp, 2006; Price & Rogers, 2004). Jarmon, et al. (2009: 175) highlighted "the capacity [virtual worlds have] to host virtual social interactions and collaboration". For Gronstedt (2007: 46), virtual worlds represent a "social networking tool" and, by their very nature, encourage collaboration, for example when focused on accessing virtual world resources such as museums and archives.

Many authors point to the technical requirements and the learning curves for elements of a virtual world (e.g. the graphic capabilities of different computers and languages, the necessary competences required to navigate in-world, the sound problems, the system crashes) as obstacles difficult to overcome both for educators and students (Feng & Song, 2011; Jarmon et al., 2009; Warburton, 2009).

1.1 Teacher/Moderator and Learner Behaviors

Given the proclivity and potentiality of technical problems, as well as the time needed to become familiar with a virtual environment, how can teachers and students engage and make progress in language learning? When gathered for the purpose of language learning or language practice, how *should* teachers and students behave online? Training teachers to work in online environments often focuses on the differences inherent in traditional versus online classrooms. Experienced and novice teachers have a tendency to apply management skills, interaction patterns, group and pair work activities, according to how they were trained to teach in a traditional classroom. It is difficult to change one's teaching style and adapt it to a new environment (cf. Hubbard & Levy, 2006).

Experience has shown that in traditional classrooms, effective teacher behaviors permit elicitation of suitable output from student learners. Unlike caregiver/child talk, classroom talk can lack a level of 'naturalness', so it is not surprising that "[c]onversations in the traditional classroom tend to be marked by patterns of teacher dominance" (Hudson & Bruckman, 2001: 263). Teacher behavior in online environments can influence learner behavior as researchers have seen that "[t]he instructor's role seems similar in many ways to [that of] a physical classroom where a teacher pulls back

from his/her leadership role," resulting in students making more independent declarative contributions rather than moving toward integration and synthesis of ideas (Pawan, Paulus, Yalcin, & Chang, 2003: 136). McCarthy (1991) describes classroom interactions as a pattern of 'IRF': initiation (by the teacher), response (by the student), and follow-up (by the teacher) on either form or content, but most often, on form. Paiva provides an overview of studies discussing and revealing the complexity of second language classroom interaction and summarizes them by stating that:

"[a]ll these studies and a lot more make it clear that there are two main factors in learning a foreign language: input and student's interaction.The studies, which describe classroom interaction structure, point out that the teachers are responsible for most of the turns and that students share a small part of the classroom discourse."(1999: 249)

The preferred teacher's role, therefore, is to create an environment in which student learners of different levels can participate and learn (Paiva, 1999). Many factors have been identified as being part of 'good' teacher behavior in a traditional classroom, for example, providing comprehensible input toward a larger communicative goal or topic, allowing opportunities for learners to negotiate meaning, creating conversations and tasks that are purposeful and meaningful to the learner and parallel real-life situations, and building a nonthreatening environment that encourages self-expression (Shrum & Glisan, 2010).

Conversely, researchers have also identified a variety of factors that prevent students from talking in class (Paiva, 1999). Teachers must be adept at developing interaction skills in their students, in addition to knowing how to lead an interactive

activity in the classroom. For example, Shrum and Glisan (2010) point out that teachers need to learn to tolerate silences, to direct their gaze to any potential addressee of a student's utterance, to teach students how to take the floor, to encourage students to speak beyond one or two sentences, to not use a student's utterance to extend one's own role in the discussion, and to not cut off students too soon. Paiva notes that during asynchronous email exchanges between students and their teacher, "…avoiding explicit corrections and changing the focus from form to content…provided a context for more spontaneous student speech and less threatening interactions" (1999: 263). In fact, online teacher behaviors need to be rather complex because as Pawan et al. (2003: 137) note, "[d]iscussions do not automatically become interactive and collaborative simply by virtue of being in an anytime/anywhere asynchronous medium".

Facilitating interaction among students is also a complicated endeavor for a teacher. Dillenbourg, Baker, Blaye, & O'Malley (1996: 19) write that "[t]he general idea is that the meaning of utterances in verbal interaction (or at least, the aspect of meaning that plays a determining role) is not something that is fixed by speakers and their utterances, but is rather something to be jointly constructed throughout the interaction by both speakers". Data illustrating interaction patterns between students and teachers can provide information on how different teacher behaviors can help establish a welcoming environment for true interactive and collaborative language use.

Learning the techniques of leading profitable discussions is not an easy task for teachers in any discipline, let alone when the students are struggling both with content and a foreign language. Extending this teaching skill to a virtual world where the usual visual and physical cues are not available (except through the learned use of avatars)

can be an even more daunting task (for a discussion on CALL and language teaching, see Hubbard & Levy, 2006). It is difficult to tolerate silence in a classroom; it is even more difficult to remember that that same silence could be required in a virtual environment. Moreover, virtual or CMC projects tend to use ‘expert informants’, often native speakers, to interact with student learners. How effective can a native speaker informant without teacher training be with learners in an online environment, when even trained teachers themselves have trouble negotiating the virtual world and encouraging student-to-student interaction?

Following Fischer's recommendation, then, this study seeks to understand learner activity online and considers the need to use observational and tracking data for analysis, since focusing only on self-reports from students can be unreliable (Fischer, 2007). For the purposes of this paper, the authors will present data from one online meeting in SL as completed by two groups of participants in order to answer the following research questions.

1. What teacher behaviors did the moderators (graduate students) use during the online meeting?

2. What patterns of interaction did the learners (undergraduate students) exhibit, in response to various moderator behaviors?

2 Project Background

The Second Life InterCulturel (SLIC) project focused on the research objective of analyzing the affordances of synthetic worlds such as Second Life for the development of collaborative and intercultural communicative competences in a foreign language teaching and learning context. Although some studies have addressed this question

(Corder & U, 2010; Diehl & Prins, 2008), this was mostly done with participants in other online environments (Audras & Chanier, 2008; Belz, 2002; Furstenberg, 2001) and thus remains largely unexplored with respect to synthetic worlds.

In fall 2011, 14 graduate students enrolled in a Master's program in French language teaching using Information and Communication Technology (ICT) at Université Blaise Pascal (UBP), France, worked in SL with 21 advanced-level undergraduate students of French at Carnegie Mellon University (CMU) in Pennsylvania. Two graduate students took turns as moderators for a group of 3-4 undergraduate students. Each group of participants attended six synchronous oral sessions in SL. For training purposes, one of the researchers led separate introductory meetings in SL for the undergraduate students and the graduate students during which they learned the functionality of SL and created and played with their avatars. After their training, the graduate students led the last five content-based tasks, acting as moderators. All activities for each of the last five tasks were linked to the undergraduate course content. For this paper, groups 3 and 6, composed of both graduate and undergraduate students, were studied. These two groups were chosen for two reasons. First, given the huge amount of data, a transcription overview of all groups was done briefly. After this overview, obvious differences in interaction between groups 3 and 6 stood out and where thus chosen for this study, and specifically where the differences were the most evident, in task 5.

3 Method

3.1 Participants

The graduate students included one woman (moderator of group 6) and two men (moderators of group 3), ranging in age from 24 to 27; both men were native speakers of French and the woman was a native speaker of Mandarin Chinese. She was enrolled in the first year of the Master's degree while both men were enrolled in the second year. For all of them, SLIC represented an opportunity to experience distance language teaching and learning. Each graduate student (from this point, called *moderators*) led a group session in SL. The moderator's responsibilities included scheduling the synchronous meeting with all group members, reviewing the task, answering any of the undergraduates' (from this point, called *learners*) questions prior to the meeting, and encouraging the learners to submit all relevant materials prior to the meeting. The learners' responsibilities were to reply to the moderator's request for scheduling the SL meeting, be aware of the task, and complete any and all asynchronous homework related to the task according to the timeline.

The learners, five women and two men, aged from 18 to 21, had first languages of English (6) and Arabic (1). Based on the university's placement exam, they enrolled in a third-year advanced level course called *Introduction to French Culture* taught by one of the researchers who had extensive experience teaching this course. The course functions as the first in a sequence for majors and minors at the university and is designed to introduce students to comparative cultural analysis, primarily between American and French ways of thinking, and how these are linked to cultural development and world views. For the undergraduate students, SLIC and the interculturally-oriented tasks designed around the course content provided an

opportunity to practice their French skills and discuss questions of culture with (near-) native speakers.

3.2 Procedure

There were a total of six synchronous 90/120-minute online meetings in SL that took place throughout the entire semester at approximately three-week intervals, taking into consideration the later start of the French school year and vacation days. A timeline of the activities for each task and their keyword descriptions can be seen in Figure 1. After the introductory online meeting in SL for the participants, the first content-based task asked moderators and learners to reflect on their skill level for the languages they speak, using the *Passeport de langues* developed for the Council of Europe and available in French and English. Task 2—tasks were called *etape* in the French context—asked learners to present media (images, videos, audio clips, text…) that reflected their personal identity. Task 3 asked learners to use media to represent cultural symbols for the group or country with which they identified. Task 4 asked learners to choose a current events article to show their interests and concerns outside of their own personal identities. Task 5 asked the learners to reflect on the previous tasks and create a document outlining their progress throughout the tasks during the semester. Moderators (either moderating or acting as a participant) were also expected to engage fully in the asynchronous and synchronous tasks as participants and not leaders, and submit their own documents concerning the tasks prior to each synchronous meeting in SL. Thus, each task of the project followed the same pattern:

- asynchronous individual preparatory work for the task prior to the SL synchronous meeting

- synchronous oral group work for the task in SL
- asynchronous individual reflections on the task in the Moodle forum

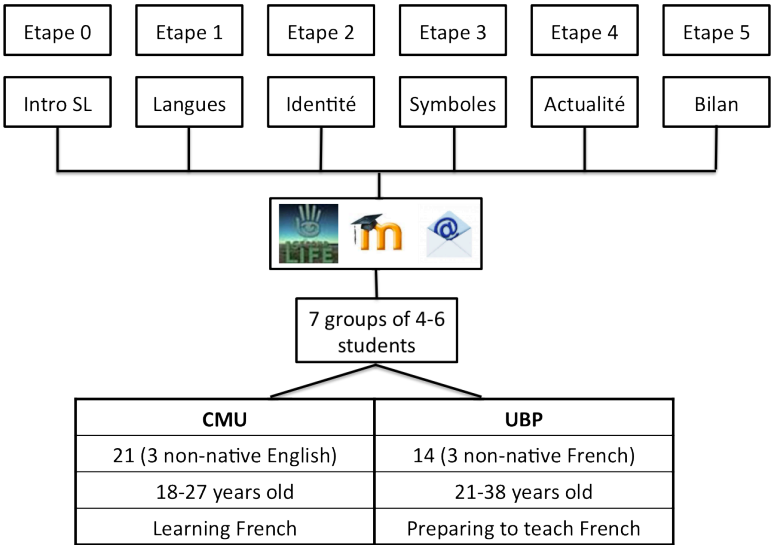


Figure 1: Overview of the SLIC Project

During the SL online meetings, the groups met on a platform designed for the project by one of the researchers (see Figure 2). The moderators and learners had access to several SL tools to complete the synchronous part of their tasks using the materials prepared asynchronously prior to the meeting, for example access either in or from SL to Google documents, a web browser, an SL chat tool, a collaborative notepad, and an image viewer. They were also able to leave the SLIC platform to visit other SL locations. Additionally, Moodle was used as a resource platform and for asynchronous exchanges within and between groups.

Figure 2: Screen capture of the SLIC platform where the groups met for online meetings

All of the UBP and CMU participants involved in the SLIC project were considered equals. They all completed the same tasks and participated in the online meetings. However, since the UBP Masters' course linked to the project aimed at introducing and preparing the moderators for teaching French as a foreign language online, they had leadership responsibilities for their group, the greatest being the role of "discussion leader" or moderator for a task. Additionally, as part of their coursework, the moderators were required to design Task 4.

During the online meeting, the moderator’s primary responsibility was to lead the discussion based on the task framework. This would involve managing the turn-taking if necessary, and participating in the discussion and creation of the final document representing the group’s work during the semester. At the end of each online meeting,

the moderator was in charge of uploading the collaboratively created documents into the Moodle.

3.3 Data Collection

The ELAN transcription program was used to understand the data on each participant (moderator or learner) and each utterance, or turn, taken during a recorded online meeting in SL, which was then coded by one of the researchers. This would include, for example, whether the act was oral or a chat message, the time in hours, minutes, seconds, and milliseconds at which the user began and finished speaking (or writing), the length of time in hours, minutes, seconds, and milliseconds that the user spoke, and the message itself. Each time a user spoke or wrote, it was considered a turn. In Table 1, the Reference column notes the reference point for each time an oral or written act occurred, even if the same user spoke or wrote sequentially; note that the written chat was barely used during these sessions. The Type column indicates the coded user. The abbreviation 'tpa' refers to an oral (audio) turn and 'tpc' refers to a written (chat) turn. The columns Beginning, End, and Duration show the timed beginning, the timed end, and the total duration of the turn in hours, minutes, seconds, and milliseconds. The Content column is the transcription of the oral and written comments in French, and the last column is the Translation. "M" refers to the moderator and L5 refers to a learner. During the semester, 70 hours of multimodal data were collected for all groups and for all online meetings in SL.

Table 1: Group 6, Task 5, sample data from the ELAN transcription program (N.B. ppt->powerpoint)

Reference	Type	Beginning	End	Duration	Content	Translation
id0001	tpa_sil	00:00:00.000	00:02:01.300	00:02:01.300	(silence)	(silence)
id0002	tpa_afubp1_6_4	00:02:01.300	00:02:02.180	00:00:00.880	bonsoir	good evening
id0003	tpa_sil	00:02:02.180	00:03:15.980	00:01:13.800	(silence)	(silence)
id0004	tpc_afubp1_6_4	00:02:27.939	00:02:28.038	00:00:00.099	Bonsoir L5	good evening L5
id0005	tpc_afubp1_6_4	00:02:35.925	00:02:36.057	00:00:00.132	tu peux parler ?	can you talk?
id0006	tpc_afubp1_6_4	00:02:37.344	00:02:37.443	00:00:00.099		
id0007	tpc_afcmu_6_3	00:02:40.182	00:02:40.248	00:00:00.066	Ah bonsoir (M)! je suis desolee que j'ai vous ennoye mon ppt si en retard	oh good evening (M)! I'm sorry that I sent you my ppt so late
id0008	tpc_afubp1_6_4	00:02:59.751	00:02:59.850	00:00:00.099	pas grave	no problem
id0009	tpa_afubp1_6_4	00:03:15.980	00:03:16.900	00:00:00.920	tu peux parler ?	can you talk?

4 Results

The results presented here concern the data for Groups 3 and 6 during the online meeting for task 5 since the instructions and task were the same for each group, and it was a point in time at which the participants were the most familiar with each other and with the SL technology. As described above, task 5 was collaborative, asking the participants to compile reflections on all the tasks completed up to that time during the semester. To ensure anonymous data reporting, each participant was assigned a code. The letter M indicates a moderator/graduate student and the letter L indicates a learner/undergraduate student. Each moderator was assigned a 1 or a 2, depending on whether it was his or her turn to lead the session. Additionally, each undergraduate

participant was assigned a number (from 1-5) and the last letter of the code represents the student's first name initial.

Group 3 was the most populated of all the groups as it was composed of four learners and two moderators. The learners in this group were two women (L1G-native of the Philippines, L2S-native of Jordan) and two men (L3E and L4M, both native English speakers). The moderators (M1 and M2) were men, native speakers of French, Master 2 students, and had had some experience teaching French as a Foreign Language (FFL). They were also very interested in new technologies and decided to join SLIC because of the innovative aspects of the project and the SL environment with which they were not familiar. Lastly, they were friends outside of the university setting. Despite the instructions that only one moderator should officially lead the group discussion during an online meeting, they decided to share the role of moderator for task 5. During this online meeting, all six group members were present, although L1G and L3E shared the same computer.

Group 6 was the only group originally composed of one Master 1 UBP student and one Master 2 UBP student as moderators. These two moderators did not know each other prior to the project start. M3 was a native speaker of Mandarin Chinese, her second language being French, with no previous teaching experience. M4 was a native speaker of French and had extensive experience teaching FFL; he was not able to be present for this session due to a family illness. The three learners were women: L5C who was a native speaker of English with one parent a native speaker of French; L6O whose family was divided between native speakers of French and Spanish; and L7M, a native speaker of English who arrived at the session one hour late.

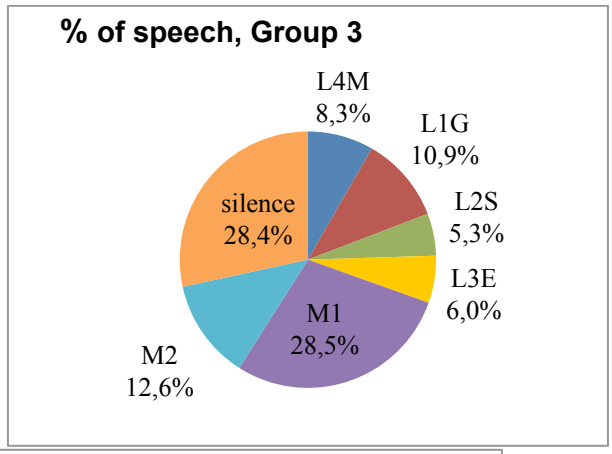
4.1 Comparative quantitative data

To get a general sense of these two groups, the following tables represent key data. Table 2 shows the group and how long each group spent in each online meeting of the project.

Table 2: SL online meeting duration for each task of the project for Groups 3 and 6

Online meeting for	Task 1	Task 2	Task 3	Task 4	Task 5
Group 3	**02:15:04**	**01:43:59**	**01:31:12**	**01:45:31**	**01:14:41**
Group 6	**01:08:27**	**02:04:15**	**01:40:30**	**01:50:39**	**01:33:09**

The graphs in Figure 3 show what percentage of time each moderator and learner spoke during the online meeting for Task 5. The graph describing Group 3 shows that the session was roughly divided into three parts: silence (28.4%), M1 and M2 (41.1%), and four learners (30.5%). For Group 6, the session divided roughly into three parts also, but not like Group 3's session: silence (53.74%), M1 (19.68%), and three learners (26.58%).



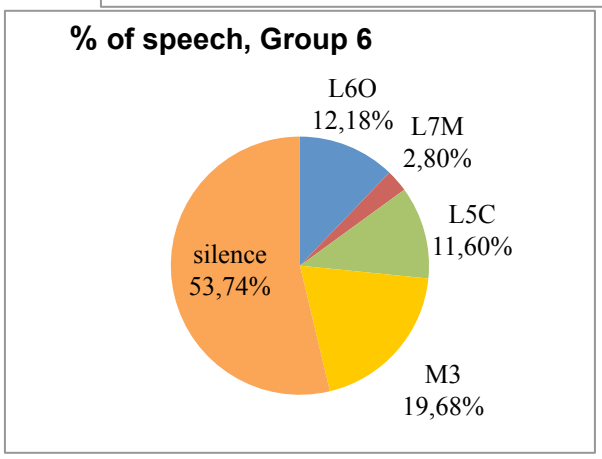


Figure 3: Graphs depicting how long moderators and learners spoke during the online meeting for Task 5

In support of these graphs, Tables 3 and 4 show the number and duration of the turns for each member of Groups 3 and 6. The highlighted row indicates the moderator responsible for the online meeting.

Table 3: Group 3 statistics for the utterances and duration of the audio turn-takings

Group 3	Number of utterances	Minimal duration (seconds)	Maximal duration (seconds)	Average duration (seconds)	Median duration (seconds)	Total duration (seconds)
L1G	38	0.35	60.983	11.72	2.97	445.49
L2S	31	0.36	30.495	7.03	1.82	218.00
L3E	27	0.66	41.034	9.03	1.73	243.81
L4M	21	0.57	45.156	16.20	11.87	340.12
M1	137	0.35	96.587	8.53	3.60	1168.86
M2	148	0.12	28.23	3.49	2.00	516.40
All speakers	402					

Table 4: Group 6 statistics for the utterances and duration of the audio turn-takings

Group 6	Number of utterances	Minimal duration (seconds)	Maximal duration (seconds)	Average duration (seconds)	Median duration (seconds)	Total duration (seconds)
L5C	95	0.16	34.02	6.35	2.21	603.15
L6O	94	0.26	37.82	6.74	2.26	633.73
L7M	33	0.26	37.03	4.42	0.92	145.86
M3	203	0.16	43.89	5.04	2.79	1023.40
All speakers	425					

These statistics highlight some differences between the two groups with regards to the rhythm of the interactions by studying the amount of time that each participant spoke. When comparing the columns labeled 'Average duration' of Table 3 and Table 4, the data show that Group 3 tended to have longer speech acts than Group 6 even though there were more participants in Group 3. Another way to look at the data is to ask which group produced a greater number of utterances; this would be Group 6, but

only by a total of 23 utterances. Group 6 had fewer participants, however. It might be expected that Group 3, with six members, would produce a greater total of utterances than Group 6, with its four participants, including one learner who arrived to the online meeting one hour late. Another data point would be the consideration of L4M in Group 3, the learner who spoke the fewest number of times, yet among all the learners, spoke in the second longest duration total (L4M with 21 utterances totaling 340 seconds, compared to L1G with 38 utterances totaling 445 seconds).

Regarding the moderators, M3, the leader of Group 6, spoke more than did M1, the de facto leader of Group 3, but the overall moderator speech total increases in Group 3 when considering that M2 spoke more than any of the learners in his group; combined, M1 and M2 spoke more than M3. Although Figure 3 shows a more or less equal division of time spent on silence, moderators, and learners, the data for Group 6 in Table 4 show that L5C and L6O spoke far and above any of the learners in Group 3. Is this significant, however? Perhaps not, as L7M arrived late and contributed almost nothing to the discussion, allowing L5C and L6O to participate equally, sharing time with M3. Similarly, in Group 3, perhaps four learners speaking with two moderators is a natural sharing of turn-taking.

Given that the quantitative data from Tables 3 and 4 do not provide any true insight into the participants' patterns of interaction during the sessions, a more qualitative and step-by-step analysis of the turn-taking events in Groups 3 and 6 is warranted. The tables and figures above, compared to the qualitative analysis of interaction patterns below, stress that number and duration of utterances are not

sufficient to determine the quality of teacher (moderator) or student (learner) behaviors, and how ‘good’ or ‘bad’ behaviors create or inhibit interaction in an online environment.

4.2 Qualitative analyses of transcription data: Group 3

Excerpts of transcripts for both groups for Task 5 were more fully analyzed in order to understand more clearly what happened during the online discussions. Such an analysis shows whether all participants brought ideas and got involved equally in the discussions or whether the moderator showed dominant and directive questioning behaviors and was therefore at the origin of all interactions, thereby evidencing the traditional teacher-student IRF pattern. This analysis also provides evidence of cooperation and/or collaboration between the participants.

Several codes were used for the transcriptions. A single ‘+’ sign corresponds to a one-second pause, two ‘+’ signs equal a two-second pause, and so on. A ‘|’ symbol indicates an interrogative intonation. [_XXX] was used when part of the utterance was inaudible. Non-French words are in brackets { }. A ‘/’ symbol was used when a word was not pronounced entirely.

Statistically, the quantitative analysis for Group 3 shows that M1 spoke the most of any group member, 28.5% of the time (Figure 3). The qualitative analysis of Group 3 shows that M1 leads the entire session and positions himself as a teacher-leader and not a moderator, giving instructions to the learners and focusing mainly on the completion of the task. The pattern of interaction in the excerpt below shows turn-taking directed by the moderator, especially as he ‘calls on’ some of the learners by name. Due to his style of questioning, demonstrating the less desirable teacher behavior of ‘initiation-response’, learners had two choices: to answer the question or not to answer

the question. This exchange lasted almost one and a half minutes and it is interesting to note that the moderator did not leave the learners much time to answer his questions, pausing only briefly before asking another learner to reply or following up himself, and sometimes talking over the learner. M1 even asks L1G to reply while she is already giving her answer as seen by the overlapping of times: L3E finishes speaking at 49:33, when L1G begins speaking, and M1 speaks again at 49:32, thus interrupting both learners.

Excerpt 1: Group 3 – Moderator questioning behavior

M1	00:48:34	00:48:52	[…] euh alors une autre question qu'est-ce que enfin pourquoi est-ce que vous avez pris du temps pour décider ou est-ce que vous avez choisi au hasard très rapidement ?	[…] um, so another question what, that is, why did you choose the avatar that you have ? did you spend any time deciding [on one] or did you just quickly choose whatever was there ?
L4M	00:48:55	00:49:14	moi j'ai choisi mon avatar euh euh très rapidement euh + + un avatar qui euh un peu me ressemble mais il n'y a pas une décision difficile	well I chose my avatar, um, um very quickly um, … an avatar that um looks a little like me but it wasn't a difficult decision
M1	00:49:16	00:49:18	L1G et L3E ?	L1G and L3E ?
L3E	00:49:20	00:49:33	hum j'ai choisi euh mon avatar parce que je pense que hum l'image de mon avatar hum semble comme hum moi-même	um I chose um my avatar because I think that um the image of my avatar um seems like um myself
M1	00:49:32	00:49:41	d'accord donc tu as travaillé ton avatar toi aussi L1G ?	ok so you worked on your avatar you too L1G ?
L1G	00:49:33	00:49:39	et moi aussi + c'est c'est moi aussi	and me too, that's, that's me too
M1	00:49:53	00:49:54	ok super	ok super

Furthermore, this excerpt shows that even though M2 was supposed to behave as a participant and not a moderator, his lack of explanation regarding his choice of avatar is telling as it shows that he views himself as a moderator. M2 positions himself with M1 who also neglects to explain his choice of avatar, a rabbit, and a fact to which the learners draw attention later in the conversation.

During Excerpt 2, which lasts more than four minutes, M2 takes the role of primary moderator. M1 finally takes over after the greetings are taken care of by M2. This again shows that M2 considers himself a moderator and not a participant.

Excerpt 2: Group 3 – Examples of M1 and M2 sharing control of the group

M2	00:00:38.736	00:00:39.936	L3E, quelqu'un sait où est L3E ?	L3E, does someone know where L3E is?
L2S	00:00:45.740	00:00:45.844	non…	no…
M1	00:01:06.680	00:01:08.570	moi j'vais me mettre debout sur la table	I'm going to stand on the table
M2	00:01:11.850	00:01:12.580	pas mal	not bad
M2	00:01:14.490	00:01:17.170	Bon ben écoute M1 je propose qu'on commence	So, listen M1 I think we should begin
M1	00:01:17.830	00:01:19.020	[rires]	[laughter]
M2	00:01:19.020	00:01:21.530	[rires] est-ce que vous êtes prêts L2S et L4M ?	[laughter] are you ready L2S et L4M ?
M2	00:01:26.890	00:01:28.550	ah est-ce que vous êtes prêts ?	um, are you ready?
L2S	00:01:28.315	00:01:28.400	oui	yes
M1	00:01:28.530	00:01:29.900	[rires]	[laughter]
M2	00:01:31.070	00:01:32.980	{yes} L2S a dit oui	{yes} L2S said yes
M1	00:01:32.450	00:01:35.150	L2S / L2S / tu peux parler L2S	L2S / L2S / can you talk L2S
L4M	00:01:34.861	00:01:35.046	oui, je pense	yes, i think so
M2	00:01:37.070	00:01:39.090	[XXX] tu penses qu'il est prêt quoi	[XXX] you think he's ready, yeah
M2	00:01:41.020	00:01:41.800	pas sûr	not sure
M2	00:01:48.930	00:01:50.900	euh est-ce que il fait froid euh chez vous ?	um, is it cold there?
M2	00:01:56.500	00:01:59.120	L2S et L4M ? [_rires]	L2S and L4M? [laughter]
L4M	00:01:59.620	00:02:08.220	euh + il fait un peu froid mais ++ euh pas trop mal +	um + it's a little cold ++ um, not too bad + yet
L2S	00:02:00.520	00:02:01.690	oui il fait froid	yes, it's cold
M2	00:02:08.950	00:02:10.310	il y a euh de la neige ?	is there snow ?
L4M	00:02:13.010	00:02:16.890	euh pas beaucoup mais de temps en temps	um, not a lot, but sometimes
M2	00:02:17.420	00:02:18.570	oh ouais ok	oh, yeah, ok
M2	00:02:21.040	00:02:27.590	ah M1 est parti je sais pas où il est ah +++ M1 tu nous	um, M1 left, i don't know where he is, uh+++ M1,
M1	00:02:34.960	00:02:47.120	[rires] bon y'a que deux personnes aujourd'hui et euh L3E/ ouais ouais ouais ouais j'ai j'ai coupé mes enceintes du coup il devrait plus y avoir d'écho + ça sera mieux	[laughter] well, there are only two people today and um, L3E ? yeah, yeah, yeah, yeah, i, i cut my speakers there shouldn't be any more echo + it will be better
M1	00:02:35.560	00:02:35.707	M1	M1
M2	00:02:39.300	00:02:43.140	si il nous entend c'est bon ++ ouais écoute	if he hears us it's good ++ yeah, listen
M2	00:02:47.120	00:02:47.700	d'ac	ok
M1	00:02:51.180	00:04:08.755	et ben c'est parti / ++ bon alors aujourd'hui/ + dernière séance/ + séance de synthèse/ ++ donc l'objectif c'est de faire un {Powerpoint} donc de faire des diaporamas + avec euh toutes les in/ tout' en fait un résumé de toutes nos séances. Donc y'en a deux là des {Powerpoint} on peut travailler sur les deux ++ euh j'vous propose ++ bon c'qu/ c'qu'on va faire déjà c'est euh résumer ensemble les les différentes séances et après on va essayer d'prendre des des photos pour représenter chacun de nous pour pouvoir nous représenter et pour les mettre sur le diaporama ++ euh il faut que vous naviguiez vous-même dans le diaporama puisque moi si je change je crois que vous ne voyez pas la différence par exemple là tout de suite je suis sur l'introduction est-ce que tout le monde voit l'introduction | +++ non voilà L2S / tu peux utiliser ton microphone L2S	Ok, so here we go ++ good, so today + last session + synthesis session ++ so the goal is to make a {Powerpoint} so to make some slides + with um all the in… all in fact a summary of all of our sessions. so there are two here, some {Powerpoint}, we can work on them both ++ um i suggest ++ well what what we'll do right away is to um summarize together the the different sessions and after we'll try to take some some photos to show each one of us and to put them on the slide ++ um you have to navigate yourselves in the slide since i, if i change i think that you won't see the difference for example here right away i'm on the introduction does everyone see the introduction ? ++ no, here L2S ? can you use your microphone L2S

An example of dominant and directive behaviors by M1 can be found in Excerpt 3 that lasts almost 1.5 minutes. M1's behavior here is not inviting; that is to say, he does not ask the learners to participate but uses the pronoun *on* which can informally mean 'we' but can also be used to be directive. He directly asks L1G and L3E to reply to the question, which looks like an invitation, but because he singles them out, the behavior could be misinterpreted as directive. Furthermore, M1 outlines very clearly how he wants the session to run.

Excerpt 3: Group 3 – Examples of directive behaviors by M1

M1	00:13:24.140	00:15:00.727	d'accord pas de problème bon ben c'est cool que vous soyez tous ici euh on a un petit problème informatique par contre enfin informatique un problème de Second Life c'est un mystère donc euh on va travailler à l'oral uniquement on va pas pouvoir écrire ou sinon on va écrire sur le tableau ici là et l'objectif c'est de faire un résumé de l'expérience Second Life ++ alors ce qu'on va faire M2 / est-ce que toi tu peux avoir le {Powerpoint} sous les yeux | et on avance tous ensemble et toi tu prends les notes et moi j'anime la séance pour savoir ce qu'on en pense et ce qu'on écrit / +++ ok vous pouvez écrire avec votre navigateur ouais + ici | +++ on va commencer par faire un +++ résumé sur euh en général travailler sur Second Life + comment c'était pour vous + si vous deviez continuer la phrase travailler dans Second Life c'est qu'est ce que vous dirirez | +++ alors L1G et L3E tous les deux qu'est-ce que vous pensez de travailler dans Second Life qu' qu'est-ce que vous pouvez dire | + tout ce que vous voulez	Ok so no problem well it's cool that you're all here um we have a little technical problem actually well technical a problem in Second Life it's a mystery so um we're just going to work orally we aren't going to be able to write or rather we'll write on the notepad here and the objective is to summarize the Second Life experience ++ so what we'll do M2 can you get the {Powerpoint} out here ? and we'll on go on and you can take notes and i'll moderate the session to know what we all think and what we write ++ok you all can write with your browswer yeah + here ? +++ we'll start by doing a +++ summary of um in general on Second Life + how it was for you + if you had to finish the sentence working in Second Life it's what would you say ? +++ so L1G and L3E both of you what's your opinion of working in Second Life what can you say ? + everything that you want

In Excerpts 4 and 5, M1 and M2 moderate the online meeting almost as equals, which becomes apparent in the types of questions and instructions that M2 gives to both the learners and M1. In Excerpt 4, M2 tries to get the students to speak by asking 'hello?' L1G asks for the question to be repeated, and M1 gives a long explanation of

what he would like the learners to talk about. After L1G's reply, M2 asks a follow-up question.

Excerpt 4: Group 3 – Examples of M1 and M2 more equally sharing control of the group

M1	00:20:46:619	00:21:18:699	comment est-ce que vous avez vécu le travail en groupes le travail en équipe	and what is your feeling how did you manage the group work the team work
L1G	00:21:20:583	00:22:07:893	ok + hum +++ oui je je crois que c'était c'était bien de travailler en équipe parce que hum ça m'a rendu hum moins nerveuse pour [à] parler parce que tout le monde doit parler et je j'aime bien quand hum les membres les membres du groupe hum expriment leurs leurs opinions parce que j'ai appris beaucoup hum des opinions des autres membres du groupe [rires]	ok + um +++ yes i i think that it was it was good to work as a team because u mit made me um less nervous to speak because for to speak because everyone must talk and i i prefer it when um the members the members of the group um express their their opinions because i learned a lot um about the opinions of other members of the group [laughter]
M2	00:21:23:221	00:21:25:849	c'était facile difficile de travailler en équipe ?	was it easy hard to work as a team ?

In Excerpt 5, the learners are confused about to whom a question is addressed. L4M begins in this excerpt, replies to the question, and ends with a muffled word that M1 does not understand. Instead of allowing L4M to reply to M1's clarification request, M2 clarifies the learner's missing word and then comments on how her answer is 'funny' (*marrant*). As a learner, this could perhaps be misconstrued as a negative comment, as she could wonder what she said that was funny. Meanwhile M2 chats to one of the learners directing him to write on the notepad while M1 asks a question orally. L4M asks if the question is directed to her, to which M2 replies affirmatively. M1 however responds that anyone can answer the question; M2 then backtracks in his reply and agrees that anyone can answer the question. M2 then orally asks L4M to write on the notepad. At the end of this excerpt M1 and M2 speak directly to each other only, and in fact, M2 suggests to M1 that they change the topic.

Excerpt 5: Group 3 – Moderator behavior leading to learner confusion

L4M	00:23:12.610	00:23:48.059	je j'crois que le le travailler en groupes est est plus facile	i i think that the the to work in groups is easier than
M1	00:23:33.129	00:23:33.998	ouais	yeah
M1	00:23:36.357	00:23:36.940	haha	haha
M1	00:23:50.609	00:23:55.702	excuse-moi j'ai pas compris la fin +++ d'accord ok	sorry i didn't understand the end +++ ok ok
M2	00:23:51.428	00:23:54.381	[_XXX] une famille	[XXX] a family
M2	00:23:56.952	00:23:58.250	c'est marrant ça	that's funny
M1	00:24:00.940	00:24:28.654	et euh moi je me demandais est-ce que quand vous	And um i was wondering do when you speak French
M2	00:24:33.389	00:24:33.511	tu peux écrire sur le tableau L4M	can you write on the notepad L4M
M2	00:24:34.657	00:24:34.779	?	?
M2	00:24:41.487	00:24:41.633	ce que tu viens de dire	what did you just say
L4M	00:24:47.726	00:24:49.762	euh c'est question à_moi |	um is that a question for me ?
M2	00:24:50.475	00:24:52.439	oui euh [_XXX]	yes um [XXX]
M1	00:24:51.000	00:24:52.762	et ben les questions à_tout le monde	well the questions are for everyone
M2	00:24:54.701	00:24:58.202	L4M tu peux écrire ta réponse sur euh le travail en équipe |	L4M can you write your answer on um the notepad ?
L4M	00:24:59.928	00:25:00.797	euh j'essaie	um i'm trying
M2	00:25:02.583	00:25:03.357	merci	thank you
M1	00:25:06.321	00:25:15.726	ma question c'était est-ce que c'est plus facile de parler français avec M2 et avec moi ou est-ce que c'est plus facile de parler français et de comprendre le français entre vous	my question was is it easier to speak French with M2 and me or is it easier to speak French and to understand French among you
L4M	00:25:06.714	00:25:07.285	[XXX]	[XXX]
M2	00:25:21.869	00:25:22.476	ah	ah
L2S	00:25:26.988	00:25:56.571	moi je n'ai pas trouvé des difficultés hum en général hum pour comprendre hum vous et les autres élèves parfois on ne comprend pas les questions que vous demandez alors c'était euh c'est bien d'avoir d'autres étudiants [études] qui qui demandent les mêmes questions et qui qui peuvent nous aider à_comprendre hum mais moi je n'ai pas trouvé d'problème	for me i didn't find it difficult um en general um to understand um you and the other students sometimes we don't understand the questions that you ask so it was um it's good to have other students [studies] who who ask the same questions and who who can help us understand um but i personally didn't have any problems
M1	00:25:57.809	00:25:58.595	ok	ok
L2S	00:25:58.119	00:25:59.047	avec ça	with that
M2	00:26:07.619	00:26:10.285	on passe à_l'étape une euh M1 ?	Shall we go on to Task 1 um M1 ?
M1	00:26:11.035	00:26:14.678	allez ben vas-y c'est tu peux commencer alors	well go ahead it's you can begin then
M2	00:26:15.190	00:26:33.595	donc euh sur le tableau j'ai mis étape une ++ alors qui veut do/ qui veut dire son opinion sur l'étape une la première étape | ++ qu'est ce que vous avez pensé pendant la première étape ? ++ L3E tu veux répondre ?	So um on the notepad i put Task 1 ++ so who wants gi/who wants to tell his opinion on Task 1 the first task? ++ what did you think during the first task? ++ L3E do you want to answer ?
M1	00:26:38.031	00:26:44.512	euh je n'étais pas là_pour cette séance désolé	um i wasn't there for that session sorry
M2	00:26:40.702	00:26:50.964	ah oui/ t(u) étais pas là_xxx [_rires] ben vas-y L1G si tu veux répondre + est-ce que tu as des souvenirs de l'étape une |	Oh yeah you weren't here xxx [laughter] ok so go ahead L1G if you want to answer + do you have any memories of Task 1 ?

These five excerpts from Group 3 show a variety of moderator miscues (M1 and M2) to each other and to the learners. The learners are not able to participate fully in the discussion because they are confused by: (1) both moderators speaking and giving instructions, (2) the length of the questions that are asked, and (3) the fact that they do not know to whom the questions are addressed. Thinking back to the statistics on Group 3, it is clearer how M1 has the highest percentage of speech (28.5%). And if M2's speech time of 12.6% is added to M1's total, the moderators spoke close to half of the time (41.1%).

Furthermore, with regard to the statistics as noted above, even though L4M had some of the longer utterances, taking into account the fact that some of his utterances consisted of short turns such as *Euh, c'est une question à moi ?* (Um, is that a question for me?) and *Euh, j'essaie* (Um, I'm trying), it is easier to understand that he is trying to survive the discussion (in the questioning style IRF) and trying to cooperate with the moderators, but he is not interacting as in negotiating meaning or creating for the task.

4.3 Qualitative analyses of transcription data: Group 6

Group 6 shows patterns of interaction primarily between two learners and one moderator. Comparatively, the statistics show that M3 spoke less than M1 but more than M2, and that individually, the learners in Group 6 spoke more than any of the learners in Group 3, except for the L7M who arrived one hour late to the online meeting.

In examining M3's utterances, different moderator (teacher) behaviors are immediately evident. After the initial greetings and the quick resolution of technical problems at the beginning of the online meeting, M3 asks: *vous pensez qu'on peut commencer maintenant? ou qu'on va attendre L7M?*" (Do you think we can start now?

Or shall we wait for L7M?) This style of moderating asks learners for their participation and their opinions. The invitation to participate in the conversation sets the tone for the rest of the online meeting. Later on in the discussion as they start on the task itself, M3 asks a learner to 'try': *est-ce que tu peux essayer d'écrire quelque chose sur le Powerpoint?* (Can you try to write something on the Powerpoint?), instead of being directive.

Other types of M3's supportive behaviors are evident in this excerpt in from the written chat. Prior to this written exchange, M3 had tried to explain to L5C how to click on the notepad in order to write on it. L5C did not understand the oral instructions, so M3 changed to the written mode, which helped the learner.

Excerpt 6: Group 6 – M3's supportive behavior to a learner in written chat

M3	00:20:01.365	00:20:01.464	Il y a une loupe à côté du lien	There's a magnifying glass next to the link
L5C	00:20:13.377	00:20:13.476	Je suis très désolée c'est un petit peu difficile pour moi de vous comprendre	I'm really sorry it's a little difficult for me to understand you
L5C	00:20:18.030	00:20:18.096	ah oui je le vois	oh i see it
M3	00:20:31.791	00:20:31.923	tu cliques	you click on it
L5C	00:20:47.103	00:20:47.235	d'accord	okay

Instead of focusing heavily on technical problems as M1 and M2 did with their learners in Group 3, spending 62 out of 489 utterances, a total of 5 minutes and 30 seconds, M3, when dealing with a learner having problems writing on the notepad, instead remarks: *bon, c'est pas grave ça marche pas trop* (Hey no problem, it's not working too well.), writing on the notepad herself. In Group 6, 82 out of the 461 total utterances or a total of 3 minutes and 15 seconds were spent on technical difficulties, mainly sound problems with students unable to understand each other.

Group 6 learners also initiated conversation sometimes, for example as L6O asks: *il nous manque deux personnes n'est-ce pas?... M4 et L7M*. (We're missing two people, right? M4 and L7M.) M3 then explains why M4 was not able to attend the session (family illness) and both L5C and L6O respond with *ah d'accord* (Oh, ok.). L6O continues after this explanation and the unexplained absence of L7M by saying: *si vous voulez on peut commencer* (We can start if you want.). M3 repeats the question, and L6O agrees, as does L5C.

M3's explanation of the online meeting's task does not last four minutes as did M1's. She states plainly: *bon d'accord donc c'est la dernière séance on va faire un bilan ensemble* (Ok, so this is the last meeting, we're going to do a summary together.) and follows up with *d'accord en fait c'est euh le Powerpoint elle te l'a donné + donc + on va discuter ensemble ++ alors première chose c'est euh c'est objectif de projet +++ si nous devions décrire le projet à quelqu'un d'autre ++ qu'est-ce que vous allez dire?* (Ok in fact it's um the Powerpoint that she gave you + we're going to talk about it together ++ so the first thing is um is the project's goal +++ if we had to describe the project to someone else ++ what will you say?) From that point on, M3's utterances are limited to single or two word answers, and after the learners respond, M3 supplies a personal answer as well, positioning herself as an equal participant in the discussion.

In Excerpt 7, once M3 gives her personal response to the question at hand, L5C replies but prefaces it with *euh pour moi* (for me), which indicates that she is aware of M3's response but permitting herself to answer differently. L5C's acknowledgement of M3's reply shows that she accepts their equal status. L6O then acknowledges L5C's reply by stating *j'ai mis à peu près la même chose* (I put down more or less the same

thing.), thereby linking her response with her classmate's. The conversation gets slightly muddled at this point, but still discussion and acknowledgement between the learners continues, as both M3 and L6O try to understand L5C, and M3 encourages L5C with a short *oui* (yes) and L6O prompts her classmate by using her first name.

Excerpt 7: Group 6 – M3's questioning behavior leads to learner interaction

M3	00:28:59.529	00:29:26.391	travailler dans Second Life + par exemple euh euh en fait la question c'est c'est euh c'était euh comment travailler dans Secon/ Second Life | + pour moi c'est une nouvelle expé/ expérience et une très bonne façon pour enseigner ou apprendre une langue étrangère à distance et pour vous |	working in Second Life + for example um um in fact the question is is um it was um how to work in Secon Second Life ? + for me it's a new expe experience and a really good way to teach or learn a foreign language online and for you ?
L5C	00:29:27.777	00:29:51.900	euh pour moi c'était bon mon expérience aussi parce que euh il nous donne une chance de parler français avec quelqu'un qui est francophone [XXX] c'était très utile et d'habitude je ne parle pas je ne parle jamais en classe alors c'est une alors j'étais forcée à parler le français alors c'était très bon pour moi	um for me it was a good experience also because um it gave us the chance to speak French with someone who is francophone [XXX] it was very useful and usually i don't speak i never speak in class so it is so i was forced to speak French so it was very good for me
L6O	00:29:56.718	00:30:16.485	j'ai mis à peu près la même chose que c'était une nouvelle opportunité de parler avec quelqu'un de français et c'est la première fois que j'ai fait quelque chose dans un monde virtuel mais je pense que ça a bien marché parce que c'était quelque chose de nouveau et intéressant	i put more or less the same thing that it was a new chance to speak with someone who is French and it is the first time that i did something in a virtual world but i think that it worked well because it was something new and interesting
L5C	00:30:19.488	00:30:21.666	je pense que c'est très [XXX]	I think that it is very [XXX]
M3	00:30:19.653	00:30:20.313	[XXX]	[XXX]
M3	00:30:24.438	00:30:24.735	oui	yes
L6O	00:30:25.428	00:30:25.956	L5C	L5C
L5C	00:30:27.903	00:30:30.807	euh {never mind} ++ c'est rien	um {never mind} ++ it's nothing

In Excerpt 8 from Group 6, further supportive behavior between the learners can be seen as well as M3's invitational and non-directive style, all of which promotes conversation. M3 introduces the change of topic and L6O picks up the conversation right away. M3 does not have to encourage L5C to continue the conversation, nor does she try to cover the silence, allowing instead the learners to maintain the thread of the conversation. Once again, non-aggressive, emphatic language use is seen between the learners when L5C says *oh oui, pour moi…* (oh yes, I…) in response to L6O's

statement, but yet they support each other when L6O replies to L5C by saying *moi je suis d'accord…* (I agree…).

Excerpt 8: Group 6 – M3's moderating style promotes conversation between learners

M3	00:37:41.325	00:37:51.687	alors ++ euh ++ l'étape deux c'est sur l'identité +++ donc	so ++ um ++ Step 2 is on identity +++ so
L6O	00:37:51.918	00:38:04.128	je pense pour cette étape j'ai mis une photo de ma famille française et américaine donc ça représentait les deux cultures dans ma vie	i think for this step i put a picture of my French and American families so that represented the two cultures of my life
L5C	00:38:08.253	00:38:22.146	oh oui pour moi j'ai j'ai mis une photo de de Côte d'Ivoire parce que mon mon père et mon frère est Côte d'Ivoire et c'est une partie de ma culture c'est pourquoi j'ai choisi	oh yes for me i i put a picture of of the Ivory Coast because my my father and my brother is Ivory Coast and it's a part of my culture that's why i chose
M3	00:38:29.175	00:38:32.640	alors c'est quoi votre appréciation pour cette étape |	so what's your evaluation of this step ?
L6O	00:38:33.795	00:38:42.540	euh je pense que c'était mon étape préférée parce que c'était laquelle	um i think that it was my favorite step because it was the one about which i had
L5C	00:38:50.196	00:39:09.105	euh c'était mon première étape je pense parce que je n'étais pas là pour le le premier alors c'était un petit peu euh inconfortable pour moi mais c'était une discussion très intéressante	um it was my first step i think because i wasn't there for the the first so it was a little um uncomfortable for me but it was a very interesting discussion
L6O	00:39:17.124	00:39:29.664	moi je suis d'accord c'était mieux hum après quelques fois qu'on a fait parce que la première fois on parlait pas trop mais une fois qu'on était plus confortable ça allait assez bien	i agree it was better um after a few times that we did (it) because the first time we didn't speak a lot but once we were more comfortable it went pretty well

M3	00:37:41.325	00:37:51.687	alors ++ euh ++ l'étape deux c'est sur l'identité +++ donc	so ++ um ++ Step 2 is on identity +++ so
L6O	00:37:51.918	00:38:04.128	je pense pour cette étape j'ai mis une photo de ma famille française et américaine donc ça représentait les deux cultures dans ma vie	i think for this step i put a picture of my French and American families so that represented the two cultures of my life
L5C	00:38:08.253	00:38:22.146	oh oui pour moi j'ai j'ai mis une photo de de Côte d'Ivoire parce que mon mon père et mon frère est Côte d'Ivoire et c'est une partie de ma culture c'est pourquoi j'ai choisi	oh yes for me i i put a picture of of the Ivory Coast because my my father and my brother is Ivory Coast and it's a part of my culture that's why i chose
M3	00:38:29.175	00:38:32.640	alors c'est quoi votre appréciation pour cette étape |	so what's your evaluation of this step ?
L6O	00:38:33.795	00:38:42.540	euh je pense que c'était mon étape préférée parce que c'était laquelle c'était sur laquelle j'avais le plus à dire	um i think that it was my favorite step because it was the one about which i had the most to say
L5C	00:38:50.196	00:39:09.105	euh c'était mon première étape je pense parce que je n'étais pas là pour le le premier alors c'était un petit peu euh inconfortable pour moi mais c'était une discussion très intéressante	um it was my first step i think because i wasn't there for the the first so it was a little um uncomfortable for me but it was a very interesting discussion
L6O	00:39:17.124	00:39:29.664	moi je suis d'accord c'était mieux hum après quelques fois qu'on a fait parce que la première fois on parlait pas trop mais une fois qu'on était plus confortable ça allait assez bien	i agree it was better um after a few times that we did (it) because the first time we didn't speak a lot but once we were more comfortable it went pretty well

When considering the percentages from Figure 4, one obvious data point is that Group 6's online meeting contained much more silence (53.74%) than did Group 3's (28.4%). One explanation could be that Group 3's online meeting actually contained two moderators instead of one, and four students instead of two. Relying on the statistics however, does not allow consideration of an alternative explanation, or rather, a supporting explanation. By allowing more silence and thus more time for thinking and preparing, M3 allowed her learners in Group 6 to spend more time thinking of their

answers and practicing strategies for communication. L5C and L6O spoke to M3 and to each other, evidencing much more interactive-like behavior than did any of the learners in Group 3.

5 Discussion

New teachers, trained or untrained, often try to cover up the silence in the classroom, forgetting that 'wait time' (the time that teachers spend not talking but waiting for students to talk) is a key element of positive teacher behavior. An untrained teacher, and a non-native speaker moderator, M3 allowed the silence, perhaps accidentally. Her possible uncertainty allowed for other supportive 'teacher' behaviors, for example, inviting the learners into the discussion and using questioning techniques that encouraged learner interaction and exchanges among all three participants. In not positioning herself at a higher status and in asking the learners their opinions, M3 opened the door for the learners to take more responsibility for the discussion, ultimately resulting in longer learner speaking times (see Table 4), surpassing the moderator's speech by a margin of 6.9% whereas in Group 3, the learners surpassed M1 by only 2% and the total speech of M1 and M2 surpassed learner speech by 10.6%.

Hudson and Bruckman (2001) examined asynchronous blog responses by charting who replied to whom when considering student response rates to either an expert moderator or a student moderator. Table 5 shows to whom each of the learners in Group 3 responded during the discussion. Of the total number of utterances made by the Group 3 learners, 98 of the 122 total utterances (80%) were directed to the moderators. A small proportion of the remaining 20% concerned responses to the

moderator built on another student's previous answer ("me too", "I agree", etc.). The remaining utterances are inaudible, laughs, and/or exclamations.

Table 5: Number of Group 3 learner utterances to moderators

Group 3	L1G	L2S	L3E	L4M
Total utterances	38	35	27	22
Utterances directed to moderators	30	29	20	19
Utterances directed to another student	0	0	0	0
Utterances built on a student's response	1	2	4	0

This limitation for Group 3 learners regarding opportunities to share information with other learners in the group severely hindered not only the development of a natural conversation, but also resulted in fewer opportunities for learners to practice meaningful interaction. The input provided by the Group 3 moderators could thus be considered as 'teacher talk' and the interaction patterns described as Moderator-Learner-Moderator for more than 50% of the session. Additionally, a higher percentage of moderator talk in Group 3 led to less time for learner talk during the session, as the moderators often engaged with each other as seen in the excerpts.

Of the teacher behaviors leading to effective class discussion described by Shrum and Glisan, the Group 3 moderators were not effective in that they did not tolerate silences, nor did they metaphorically direct their gaze to the addressee of a student's comment, instead consistently dominating the discussion and directing specific students to answer and to write. The moderators did not allow students to take the floor

by virtue of the fact that they themselves spoke 41.1% of the time, and that by their interruptions and directive questioning style, they did little to encourage students to speak beyond one or two sentences. Moreover, they used the learners' utterances to extend their own roles in the discussion, by cutting students off. When considering the 41.1% moderator talk and the 28.4% silence during the Group 3 online meetings, four learners speaking 30.5% of the time did not allow for exploration of interactive learning strategies.

Group 6 learners, as seen in the excerpts, were encouraged to talk and give their opinions, leading not only to extended learner talk but also to learner opportunities to interact with each other. Table 6 shows the number of utterances between the learners and the moderator in Group 6.

Table 6: Number of Group 6 learner utterances to moderator

Group 6	L5C	L6O	L7M
Total utterances	95	94	33
Utterances directed to moderator	65	74	26
Utterances directed to another student	9	6	0
Utterances built on a student's response	16	9	7

In order to create this supportive environment, the Group 6 moderator showed many positive teacher behaviors. She obviously tolerated silence, and although she was not able to direct her gaze physically toward a potential addressee of a student's utterance, she did allow silence in the discussion thus permitting the learners to take

control if they so chose, perhaps through her silence metaphorically directing her gaze to other students in her group. In doing so, she allowed them to take the floor, thereby encouraging them to speak beyond one or two sentences. Instead of taking the floor from the learners, M3 used their utterances to extend the conversation with her own replies, and then allowed the learners to take back the floor.

To answer the first research question, the moderators used two distinct styles of teacher/moderator behaviors during the online sessions. M1 and M2 for Group 3 used directive, dominant, and at times almost exclusionary behavior in a sort of 'us vs. them' mentality. The discussion most certainly was not originally intended to be of this nature, but the resultant interactions between the moderators set the tone for the online meeting. M3's behavior with Group 6 was more in line with what Shrum and Glisan (2010) would call positive teacher behavior: she asked questions, asked permission, and asked opinions, in addition to giving answers to the same questions that she asked of the learners. Although all of the moderators were trained to use Second Life and behave as moderators, given their ICT program, explanations of the moderators' different 'teacher' behavior may lie elsewhere.

In order to explain the different moderator behavior, it might be possible to re-examine them personally. The moderators for Group 3 were good friends, native speakers of French, both in the Master 2 level, with extensive teaching experience. Their camaraderie can be seen in the jokes that they share with each other and the amount of laughter during the session; in fact, without close analysis one might think that their session was highly successful. Other behaviors however, maybe in part due to the fact that as experienced teacher-native speakers they were so comfortable and confident

online with learners of French, perhaps led to a certain complacency in their interactions with the learners. Individuals can sense when they are not members of the 'in group'. It is possible that the Group 3 moderators created their own group within the group thereby spending more time interacting with each other than in creating opportunities for interaction among and between their learners.

Again, in contrast to Group 3, the sole moderator for Group 6 was a non-native speaker of French, in her first year of the Master's program, and did not have prior experience teaching French or interacting with learners of French. Her accidental 'backseat' attitude is perhaps more understandable as one of a lack of confidence and a hesitation to interact with her learners, or more optimistically as a language teacher growing into her subtle leadership skills.

With regard to research question number two, the two groups of undergraduate student learners exhibited different patterns of interaction due in part to the differing moderator behavior during the online meetings. Behavior such as directing questions to specific learners and requiring specific learners to write on the notepad resulted in less independent talk by the undergraduate students. When directed to *speak now*, or *write now*, or to *answer a specific question*, the learners in Group 3 responded in a rote manner directly to the moderators more than 55% of the time (see Table 5). If this SL meeting had taken place in a traditional classroom, the conversation would have been stilted and unimaginative. By contrast, the Group 6 learners exhibited more responsive behavior to their moderator's less directed and dominant behavior, reacting positively to her being more open and inviting. The moderator's input was less in quantity as compared to that of the moderators in Group 3, but M3, in speaking less and asking

open-ended questions, indeed, in obtaining the permission of the learners, created an environment in which the learners were free to express their opinions both to her and to each other. The resultant patterns of interaction on the part of the Group 6 learners were thus richer and more conversational.

6 Conclusion

Teachers are trained to lead class discussions but also to create an environment in which students can interact with each other, negotiate meaning, and improve their language skills through that interaction. When training teachers to teach in an online environment, traditionally the approach has been to tell them that they must change their teaching behavior and adapt to the online environment. Teacher trainers spend much time explaining that online and traditional environments are different, that teachers must behave differently, that one cannot simply map teaching in a traditional environment to teaching in an online environment.

It appears that as a profession, we may have been somewhat remiss in this advice. The interactions between and among learners and moderators in the SL online meetings indicated clearly a need for positive teaching behavior similar to those employed in the traditional classroom. Added to this is the fact that untrained (or perhaps inadequately trained, in the paradigm used heretofore) native speaker informants are often invited to interact with learners in online environments.

The data provided here show that less positive moderator (teacher) behavior may not allow learners to practice real interactive skills. The Group 3 learners appeared to cooperate with the moderators, but they were led through the task and not invited to participate in the task. Conversely, the Group 6 learners responded well to their

moderator's behaviors, evidencing a high level of interaction and perhaps shifting to a more collaborative mode of working. Given that only two groups' interactions were analyzed in this paper, the researchers look forward to further analyses of the SLIC project data, including other groups' interaction patterns and participant questionnaires, that will shed more light on these, and other, questions regarding language learning in a virtual world.

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