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Department of English Studies, Faculty of Pedagogy and Fine Arts, Adam Mickiewicz University, Kalisz
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Observing the interactive qualities of L2 instructional practices in ESL and FSL classrooms

Michael Zuniga
University of Quebec, Montreal, Canada
zuniga.michael_j@uqam.ca

Daphnée Simard
University of Quebec, Montreal, Canada
simard.daphnee@uqam.ca

Abstract

Discourse features that promote the generation of interactionally modified input and output, such as negotiation for meaning, have been shown to significantly enhance second language acquisition. Research has also identified several characteristics of instructional practices that render them more or less propitious to the generation of these discourse features. While various classroom observation studies have successfully measured the communicative orientation of classroom environments, most of the indicators of interactivity analyzed in those studies were obtained through micro-level discourse analyses and not through macro-level analyses of task-related factors shown to directly influence the interactivity of instructional practices. Such a macro-level scale has potential practical implications for teachers and administrators seeking an efficient tool for assessing and improving the interactivity afforded by a given curriculum. The objective of the present study was therefore to develop macro-level scale to determine the extent to which teachers of French and English as a second language use interaction-friendly instructional practices. Using an observation scheme designed to code data on factors shown to influence interactivity, 63 hours of FSL and ESL classes from secondary schools in the Montreal area were observed and analyzed. Results indicate clear differences between the two groups. While both ESL and FSL classes were less teacher-centered than those observed in previous studies, they were still rated as not-very-interactive. Target language differences showed that the FSL

classes were more teacher-centered and characterized by fewer interaction-friendly tasks and activities than the ESL classes. Task characteristics, reasons for ESL and FSL differences and recommendations for improvement are discussed.

Keywords: classroom observation; interaction; negotiation for meaning; pedagogical practices

1. Introduction

Since the 1980s, research on the role of interaction in second language acquisition (SLA) has isolated several features in second language (L2) learner discourse shown to facilitate acquisition (e.g., Gass, Mackey, & Pica, 1998; Long, 1983a, 1983b; Mackey, 1999; Pica, 1996; Pica, Doughty, & Young, 1986; Polio & Gass, 1998; Sato, 1986). One such feature is *negotiation for meaning*, a conversational process in which learners work collaboratively to achieve mutual understanding (Gass, 1997; Gass & Varonis, 1985; Long, 1996; Pica, 1987, 1994; Varonis & Gass, 1985). Through such discourse features, learners increase exposition to comprehensible input and obtain immediate feedback on output, allowing them to test hypotheses and notice gaps in their interlanguage, the result of which becomes intake which is then available for further processing and integration into learners' developing interlanguage (Gass, 1997; Gass & Mackey, 2015). The product of such negotiation is commonly referred to as *interactionally modified input and output*, whose positive effect on learning outcomes has indeed been well-documented in the SLA literature by studies showing that interactional feedback of any kind is beneficial to the acquisition of both grammar (e.g., Mackey, 1999; McDonough, 2005, 2007; Loewen & Nabei, 2007; Pica, 1994; Takashima & Ellis, 1999) and vocabulary (e.g., Ellis & He, 1999; Ellis, Tanaka, & Yamazaki, 1994). The objective of the present observational study was to determine the extent to which French and English second language teachers (FSL, ESL) in a public secondary school setting use interaction-friendly instructional practices, wherein *instructional practices* has a macro-level definition referring to the interactive characteristics of the instructional segments (i.e., tasks and activities) organized and used by teachers.

2. Interaction-friendly instructional practices

Research examining the characteristics of instructional practices with regard to their impact on the generation of interactionally modified input and output (e.g., Antón, 1999; Long, 1981; Gass & Varonis, 1985; Pica & Doughty, 1985,

among others) can be defined along five dimensions: (a) the general focus of attention in the classroom (i.e., student-centered, teacher-centered), (b) the interactional dynamics within a given activity (e.g., collaborative tasks, individual seat work, dialogic and traditional teaching), (c) the information flow between participants (e.g., required or optional information-exchange), (d) the goal orientation created by the activity (i.e., convergent or divergent) and (e) the number of active participants in a given instructional segment (e.g., individual, pair, group, class).

The first dimension refers to the *general collective focus of attention* in the classroom. In *teacher-cen*tered contexts there is, in principle, one teacher-directed interactional focal point between the teacher and the students, while *student-centered* contexts are composed of multiple self-directed interactional focal points. It is within the crux of such focal points that interactionally modified input and output are generated. Not surprisingly, early interactionist research (Doughty & Pica, 1986) found that student-centered contexts generate significantly more negotiation moves (i.e., clarification requests, confirmation checks, confirmation checks) than teacher-centered ones. The authors argued that the student-centered setting offers learners more opportunities to interact.

The second dimension, *interactivity*, indicates whether or not the structure of a given activity encourages interaction in the target language. In the teacher-centered context, for example, interactivity distinguishes *traditional teaching*, characterized by the unilateral transmission of knowledge from teachers to passive learners, and *dialogic teaching*, which is characterized by responsive dialogue that assists students in hypothesis construction (Antón, 1999, p. 304). Within such a dialogic approach, teachers "integrate given explanations with demonstration while placing a central role in the learner's participation in the instructional activity" (Antón, 1999, p. 308). Antón (1999) analyzed the teacher-centered discourse produced in a traditional and dialogic setting, and found that the interactive nature of dialogic instruction generated significantly more self-repairs, negotiation moves and turn allocations than traditional teacher-fronted instruction.

In the student-centered context, interactivity distinguishes individual and collaborative tasks. Not surprisingly, collaborative tasks are regarded as the best way to create conditions favorable to interaction (Doughty & Pica, 1986; Lee, 2000; Long, 1981; Garcia Mayo & Lazaro Ibarrola, 2015). Researchers specifically interested in studying the effect of tasks on interactional modifications, such as negotiation, have focused on the third dimension, that is, *the information flow of tasks* (e.g., Doughy & Pica, 1986, Foster, 1998; Gass, Mackey, & Ross-Feldman, 2005; Gass & Varonis, 1985; Long, 1983b), which refers to how the information necessary for task execution is distributed among participants and how that information flows during task completion. For example, during *optional information-*

exchange tasks, all participants have access to the necessary information, while during *required information-exchange tasks*, key bits of information are distributed unevenly to participants, making it necessary to exchange information for task completion (Doughty & Pica, 1986). Required-exchange tasks further vary according to how the information is distributed among participants: During *one-way tasks*, one participant holds all the necessary information necessary and must transmit it to the others (e.g., listen-and-draw, 20 questions), while through *two-way tasks,* different bits of key information are allocated to participants, so that they all must communicate to complete the task (e.g., spot-the-difference).

Data from numerous studies investigating the influence of information flow on negotiation (e.g., Doughy & Pica, 1986, Gass, Mackey, & Ross-Feldman, 2005; Gass & Varonis, 1985; Long, 1983a, 1983b; Nakahama, Tyler, & van Lier, 2001) offer solid evidence that tasks requiring an information exchange generate significantly more of the benefits associated with interaction than optional exchange tasks. With regard to the directionality of this exchange, the results are somewhat less clear-cut. Some studies (e.g., Pica & Doughty, 1985; Doughty & Pica, 1986; Gass, Mackey, & Ross-Feldman, 2005; Long, 1983a, 1983b) have shown that two-way tasks are more effective at promoting negotiation than one-way tasks, while others (e.g., Foster, 1998; Foster & Ohta, 2005; Eckerth, 2009) have shown no significant differences and have called for a broadening of the definition of negotiation to include a more socio-constructivist view of the phenomenon (Foster & Ohta, 2005).

The fourth dimension is related to the *goal-orientation* of a given task, that is, whether or not task completion involves the attainment of some common goal. Duff (1986) distinguished between tasks such as oral presentations or debates, where participants' goals diverge, and tasks such as projects and information-gap activities, where their goals converge. She studied the effects of such divergent and convergent tasks on nonnative speaker-nonnative speaker (NNS-NNS) dyadic interaction and found that, while the two types of tasks produced about the same number of total words during the activity, the convergent tasks generated about twice as many negotiation moves (Duff, 1986). She argued that, due to their collaborative nature, convergent tasks create more opportunities for negotiation than divergent tasks, making them useful vehicles of instruction and language practice in second language classrooms.

The fifth and final dimension concerns *the number of active participants*, that is, whether the tasks are carried out in pairs, in groups or as a class. Results from studies examining this variable (i.e., Foster, 1988; Pica & Doughty, 1985; Doughty & Pica, 1986) suggest that the smaller groups generate more negotiation for each individual learner. Doughty and Pica (1986) showed that student-centered participation patterns (e.g., during pair and group work) create more

opportunities for negotiation than those generated by teacher-fronted activity, and Foster (1998) revealed that the dyadic condition created more negotiation than the group condition. Statistically speaking, the smaller the group the more opportunities students have to actively participate.

While these discourse analysis studies offer a coherent portrait of the types of environments most likely to favor interactionally modified input and output, they do not offer insight into the range and frequency of interaction-friendly instructional practices that teachers use in classrooms. For this, classroom observational studies shed additional light on the topic.

3. Classroom observational studies

Mackey and Gass (2011) distinguish between observational studies in which discourse-level events constitute the unit of analysis (interactionist studies) and those whose unit of analysis includes tasks and instructional practices (instructional segment studies). The interactionist studies have resulted in the creation of various observation schemes used to identify and characterize critical features in classroom discourse such as corrective feedback (e.g., Chaudron, 1977; Lyster & Ranta, 1997), form-focused pedagogical episodes (e.g., Ellis, Basturkmen, & Loewen, 2001; Loewen, 2003; Simard & Jean, 2011; Yuqin Zhao & Bitchener, 2007; Zyzik & Polio, 2008), question types (Long & Sato, 1983), turn allocation (Seliger, 1977), and L1 and L2 language use (Duff & Polio, 1990; Polio & Duff, 1994). The objective of the studies observing instructional segments, on the other hand, has been to elaborate observation instruments used to create a coherent and rational portrait of the complexities of the L2 classroom (e.g., Allen, Fröhlich, & Spada, 1984; Fanselow, 1977; Mitchell, Parkinson, & Johnstone, 1981; Ullman & Geva, 1984). Of the resulting observation instruments, none have been as extensively used and validated as the Communicative Orientation of Language Teaching (COLT) observation scheme (Allen, Fröhlich, & Spada, 1984; Fröhlich, Spada, & Allen, 1985; Spada & Fröhlich, 1995), which was elaborated to determine the extent to which classrooms conform to the principles of communicative language teaching. It has been used to develop experiential-analytical scales (see Stern, 1990), whereby instruction in *experiential* classrooms tends to focus on meaning while the practices in *analytical classrooms* are more oriented toward form.

The COLT is divided into two parts: a macro level part (Part A) and a micro level part (Part B). "Part A describes classroom instruction in terms of the types of activities that take place; Part B describes the verbal interactions which take place within activities" (Fröhlich, Spada, & Allen, 1985, p. 29). While only one Part A category is directly related to the task interactivity research outlined above (i.e., participant organization), most of the Part B categories were intended to detect

discourse features favoring communication (i.e., information gap, sustained speech, reaction to form/message, incorporation of utterances). Indeed, the COLT has been used to detect communicative differences between classes with regard to target language and program type.

An early pilot study for the COLT (Allen, Fröhlich, & Spada, 1984) revealed differences between ESL and FSL classes in Ontario, Canada. While both classes were mostly teacher-centered and form-focused,

> the input of the ESL class appeared to be more varied, containing a higher level of information gap, more instances of sustained speech, and a greater number of expansion and elaborations than the FSL input. Similarly, the students' output in the ESL class appeared to be more varied, containing fewer restrictions in terms of form, a higher level of information gap, and more instances of sustained speech than in the FSL data. (Allen, Fröhlich, & Spada, 1984, p. 17)

These profiles depicted an ESL class with experiential tendencies and an FSL class that was more analytic in nature.

The following year, Fröhlich, Spada, and Allen (1985) published the results of a study comparing the communicative orientation of 13 classes in four different FSL and ESL language programs. Their observations showed that the ESL and the French core classes were more teacher-controlled and form-focused and less communicative than the French immersion classes.

In a subsequent study, Allen and Carroll (1988) found similar results using the COLT to observe eight core FSL classes (four observations of 40-70 minutes). Their results depicted classes falling into the middle of the experiential-analytical continuum, of which 50% of the class time was teacher-centered and 54% was explicitly form-focused. In general, students in these observations did not initiate discourse and there was very little collaborative work.

In a slightly more recent study, Fazio and Lyster (1998) used the COLT to compare the learning environments of elementary school children learning French in submersion (minority-language students attending classes designed for native speakers of French) and immersion (English-speaking students attending a French immersion programme in an English-language school) contexts in Montreal, Canada. Their corpus was composed of 28.4 hours of submersion and 30.5 hours immersion observation. Results indicate clear differences between the two learning environments. Instruction in the submersion setting was mainly focused on language form with minimal discourse practice, while that of the immersion classrooms appeared to be more balanced in terms of language form teaching and discourse practice. These finding are in line with previous research (Allen, Swain, Harley, & Cummins, 1990) suggesting that immersion classes (Swain & Carroll, 1987) are more experiential than core French classes (Allen & Carroll, 1988).

These observational studies conducted using the COLT have revealed that target language (i.e., ESL, FSL) and program type (i.e., core, immersion) appear to have an impact on the communicative orientation of classrooms. The results indeed show that ESL classes in general and FSL immersion classes tend to be more experiential than core FSL classes. While such findings offer insight into the general communicative orientation of classrooms, they do not provide evidence of the range and frequency of macro-level interaction-friendly instructional practices that teachers use in classrooms. In light of research showing the benefits of interactionally modified input and output on SLA (e.g., Ellis & He, 1999; Ellis, Tanaka, & Yamazaki, 1994; Mackey, 1999; McDonough, 2005, 2007; Loewen & Nabei, 2007; Pica, 1994; Takashima & Ellis, 1999) and results from studies revealing factors shown to render instructional segments more amenable to the generation of interactionally modified input and output (e.g., Doughy & Pica, 1986, Gass, Mackey, & Ross-Feldman, 2005; Gass & Varonis, 1985; Long, 1983a, 1983b; Nakahama, Tyler, & van Lier, 2001), we formulate the following research question: To what extent do ESL and FSL teachers in a public secondary school setting use interaction-friendly instructional practices?

4. Method

In order to answer our research question, an observational study was designed. We first created a macro-level observation scheme allowing for the coding of interaction-friendly tasks. Then, we coded the instructional practices of 8 teachers occurring during 63.8 hours of live classroom activity using our grid. Finally, the coded observations were further analyzed according to the "interaction-favorability index" we devised based on previous study results.

4.1. The corpus

The corpus consisted of about 63.8 hours of video-recorded FSL (31.3 hours) and ESL (32.5 hours) high school classes from secondary 2 to secondary 5 (Grade 9 to Grade 12 classes).[1] The students were between 11 and 16 years old. Eight language teachers (4 ESL, 4 FSL), each one from a different public secondary school in the Montreal area of Quebec, Canada, participated in the study. Seven of them were women and all had at least 5 years of experience as L2 instructors. They all had been formally trained and certified in university programs validated by the Ministry of Education. They taught regular and enriched programs. Students in the enriched classes are generally more advanced than students in the

[1] The corpus was taken from Simard and Jean (2011).

core and regular classes. Among the teachers, two taught regular classes, four taught enriched and one taught one class of each. Both the ESL and FSL teachers taught according to guidelines provided by the Quebec Ministry of Education, which privilege a communicative language teaching (CLT) approach (MELS, 2006).

As shown in Table 1, each teacher was observed for approximately 8 hours using a camera positioned in a discreet part of the classroom. A research assistant was instructed to train the camera on the teachers as they moved throughout the classroom. Audio data was captured by two microphones; one worn by the teacher and the other located near the camera. Finally, to collect data on a wider variety of instructional practices, the 60- to 90-minute observations were spread out over the course of the semester. Additionally, no information was provided to the participants (teachers and students) concerning the study's objectives and nothing was done to influence the teachers' instructional practices.

Table 1 Breakdown of teachers and classes observed

Abbreviated teacher's name	Time observed	Sex	Language
J	7.5 hours	F	FSL
L	6.3 hours	F	FSL
C	8.75 hours	F	FSL
P	8.75 hours	F	FSL
B	8.75 hours	F	ESL
D	8.75 hours	F	ESL
S	7.5 hours	F	ESL
F	7.5 hours	M	ESL

Note. F = female; M = male; FSL = French as a second language; ESL = English as a second language.

4.2. Observation grid

Since our research question was related to the observation of practices used to promote interaction in the L2 classroom, we decided to create a macro-level observation scheme using the five dimensions organizing the negotiation studies presented above (i.e., general focus of attention, interactivity, information flow, goals, participant organization). Recall that the COLT, although allowing for the coding of interaction-friendly "environments," does not specifically focus on task favorability to interaction. The unit of analysis for the present study is, therefore, an *instructional segment*, that is, a time segment with a definable beginning and end allotted to a given classroom activity (i.e., tasks, activities, class business). As suggested by Cone and Foster (2006) and Quivy and Campenhoudt (1988), the creation of an observation grid should include the establishment of the pertinent parts, followed by a pilot period, and an interrater validation. The components of the grid are illustrated in Table 2.

Table 2 Observation grid: Task favorability to negotiation

General focus of attention	Interactivity	Information flow	Goals	Participant organization	Duration in minutes
Student-centered activity	Collaborative tasks	Required information-exchange	Convergent	Pairs Group Class	
		Optional information-exchange	Convergent	Pairs Group Class	
			Divergent	Pairs Group Class	
	Individual tasks	Questions No question	Divergent Divergent	Individual Individual	
Teacher-centered activity	Dialogic teaching Traditional teaching	Bilateral Unilateral	Divergent Divergent	Class Class	

The first dimension concerns the *general focus of attention*, that is, whether students interact with each other (student-centered activity) or whether the teacher is the center of attention (teacher-centered activity). The second characteristic concerns the segments' *interactivity*, that is, whether student-centered activity is individual or collaborative and whether teacher-centered activity is traditional or dialogic. *Traditional teaching* is defined as events where information flows unilaterally from the teacher to the students (e.g., a lecture or a dictation), and where students' questions are answered directly and explicitly, without the engagement of scaffolding functions. *Dialogic teaching,*[2] on the other hand, is characterized by a bidirectional flow of information, whereby teachers engage students in a conversation through which they are ultimately led to create their own hypotheses about given language features or topics.

The remaining variables are linked to the quality of interaction that the activities generate. For example, *information flow* refers to whether or not collaborative tasks require an exchange of information, or whether or not students can ask questions during individual work, or whether or not information flows unilaterally or bilaterally during teacher-centered activity. With regard to *goal orientation*, tasks create situations where participants' goals either converge or diverge. For example, problem-solving tasks create convergent goals while debates generate divergent ones. Finally, as for participant organization, classroom activity can either be conducted in the individual, pair, group or class *setting*. In general, the level of interactivity for each individual participant increases as the number of participants in the setting decreases. As for the classroom time that was not pedagogic in nature, we coded segments that were teacher-directed as

[2] Wood, Bruner, and Ross's (1976) six scaffolding functions were used to identify evidence of dialogic teaching events in the data: (a) recruitment, (b) reducing the degrees of freedom, (c) maintaining direction, (d) marking critical features, (e) controlling frustration, and (f) demonstration.

classroom management, and undirected segments, typically occurring at the beginning and end of class and between activities, as *down time*.

Piloting of the grid and interrater coding were performed. Following recommendations outlined in Cone and Foster (2006), 20% of filmed data was double scored using the observation grid. Therefore, the first 90-minute observation for each individual teacher was viewed and coded separately and then compared. 95% of the observed events were coded identically by both raters. After validating the grid, the researcher coded the remaining 52 hours of observation.

4.3. Data analysis

Since our study is descriptive in nature, the data were calculated as the percentage of time attributable to the task categories presented in Table 2 (e.g., Fazio & Lyster, 1998; Spada & Fröhlich, 1995).[3] In order to investigate more specifically the extent to which the ESL and FSL groups use interaction-friendly instructional practices, we created an interaction favorability index, using the binary system presented in Table 3.

Table 3 Values used to create the interaction favorability index

General focus of attention	Interaction	Information flow	Goals	Setting	Score	Rank
Student-centered (+)	Collaborative (+)	Required (+)	Convergent (+)	Pairs (+)	5	4
				Group (=)	4	4
				Class (–)	3	3
		Optional (–)	Convergent (+)	Pairs (+)	3	3
				Group (=)	2	3
				Class (–)	1	3
			Divergent (–)	Pairs (+)	1	3
				Group (=)	0	2
				Class (–)	-1	2
	Individual (–)	Questions (+)	Divergent (–)	(–)	-1	2
		No question (–)	Divergent (–)	(–)	-3	1
Teacher-centered (–)	Dialogic (+)	Bilateral (+)	Divergent (–)	Class (–)	-1	2
	Traditional (–)	Unilateral (–)	Divergent (–)	Class (–)	-5	1

As shown in the table, each task characteristic was assigned a weight according to whether it creates a condition that is favorable (+1) or unfavorable (-1) to the generation of interactionally modified input and output (e.g., student-

[3] As rightfully mentioned by Loewen (2004), the independence of observation assumption is often violated in SLA studies, "which can lead to type I errors, overestimating significant differences in the data" (p. 171). The nature of the data analyzed in our study, like in other observational studies, does not meet assumptions for statistical tests commonly used to determine group independence. We therefore do not make claims about the statistical significance of our findings and keep our interpretation strictly as descriptive.

centered activity (+1), teacher-centered activity (-1)). For participant structure, a neutral weight (= 0) was assigned to the "group" setting, placing its value between that of pair and class work. The scores were calculated and the following ranks were assigned: Category 1 (*not interactive*) was assigned to scores of -5 to -4. Category 2 (*not very interactive*) represents scores between -3 and -1. Category 3 (*interactive*) includes scores falling between 0 and 2. And finally, Category 4 (*very interactive*) was assigned to scores above 3. The higher categories are more favorable to the generation of interactionally modified input and output. Finally, in order to obtain a general indicator of the level of interactivity of the ESL and FLS corpora, an interaction favorability index was then calculated as the weighted average of the negotiation categories using the following formula, where N represents the total number of minutes allocated to tasks and activities from each category:

$$\frac{((4 \times N) + (3 \times N) + (2 \times N) + (1 \times N))}{\text{Total number of minutes of observation}}$$

Scores in this interactivity index can range from 1 to 4, whereby a sore of 1 indicates a class composed exclusively of traditional teaching and individual seat-work allowing for little or no interaction; and a score of 4 signals a class entirely characterized by tasks and activities requiring an exchange of information in the pair or group setting. Scores falling at the extremes of such a scale depict an unlikely scenario. One would rather expect most classes to fall somewhere in between the two, with increasing scores indicating passage from divergent, noncollaborative environments to convergent, interactive environments facilitating information exchange in smaller group and pair settings.

5. Results

We first present the results obtained for total classroom time and then per target language. We then provide the results for the interaction favorability index.

5.1. Global results

To gain a global portrait of class time usage, we initially broke down the 63.8 hours (3828 minutes) of total FSL and ESL classroom observation into minutes and percentage of total observation time dedicated to student-centered activity time (SAT), teacher-centered activity time (TAT), class business and down time. Those results are presented in Table 4. Overall, the table shows that 47% of classroom time was devoted to student-centered activity as opposed to the 30%

devoted to teacher-centered activity. Class management and downtime respectively accounted for 16 % and 8% of total classroom time.

Table 4 Global breakdown of classroom activity

Activity	Minutes	% of total class time
Student-centered activity	1777	47
Teacher-center activity	1135	30
Class management	608	16
Downtime	303	8
Total class time	3823	100

Next, we wanted to obtain information regarding each language teaching context. The results are presented in Table 5. While the data show that the teachers in our study gave preference to student-centered activity when planning their courses, the ESL classes (52%) were nearly 20% more student-centered that then FSL sections (41%). Teacher-centered activity was the second most common activity, with FSL classes (38%) coming in at 72% more teacher-centered than ESL classes (22%). ESL classes spent about 20% of class time on class management, while only 14% of FSL class time was spent on such activity. Finally, both settings lost about 8% of the class to down time.

Table 5 Global breakdown of classroom activity according to target language

Activity	ESL		FSL	
	Minutes	Percentage	Minutes	Percentage
Student-centered activity	1008	52	769	41
Teacher-centered activity	427	22	708	38
Class management	350	20	258	14
Down time	165	8	143	8
Total class time	1950	100	1878	100

Note. FSL = French as a second language; ESL = English as a second language

To create a portrait of the 29.3 hours of observed student-centered activity, we first broke the events down according to the four variables shown to influence interactivity and negotiation: participant distribution, information flow, goal orientation, setting. Those data are displayed in Table 6. Its inspection shows that collaborative tasks (67%) were used by the teachers in the corpus about twice as frequently as individual ones (33%). Among the collaborative tasks, only a minority required an exchange of information (13%). Of those information-gap activities, 20% were conducted in pairs, 59% in small groups and 21% with the entire class. Optional-exchange tasks were the most common

type, occupying 57% of the student-centered activity time. Among these tasks, a clear majority (81%) were convergent, that is, tasks where students work collaboratively to solve a problem or reach a common goal. Convergent optional-exchange tasks were most commonly conducted in a group setting (84%), followed by the pair setting (15%). Convergent tasks conducted at the level of the class were almost nonexistent. Only a slim 19% of the optional-exchange tasks were divergent in nature. Unlike its convergent counterpart, divergent tasks (62%) tended to be conducted in the "whole class" setting (e.g., oral presentations), with only a minority conducted in groups (37%) and pairs (1%). As for individual tasks, almost all events (90%) allowed students to seek help and ask questions.

Table 6 Breakdown of student-centered activity

Participant distribution	Information flow	Goals	Setting	Minutes	% of SAT
Individual (611 min.)	Questions	Divergent	Individual	571	32.1
	No questions	Divergent	Individual	40	1.0
Collective (1166 min.)	Required (154 min.)	Convergent	Pairs	28	1.6
			Group	91	5.1
			Class	35	2.0
	Optional (1012 min.)	Convergent (822 min.)	Pairs	129	7.2
			Group	687	38.17
			Class	6	0.3
		Divergent (190 min.)	Pairs	2	0.1
			Group	70	4.0
			Class	118	6.7
			Total	1777	100

Note. SAT = student-centered activity time.

We then broke down the same 29.3 hours of student-centered class time according to the language teaching context, that is, ESL and FSL. Those data are displayed in Table 7. The data show that, among the student-centered activity, FSL classes (45%) had about 70% more individual work than the ESL classes (26%). During most of the ESL and all of the FSL individual activities, students were allowed to seek assistance. Nearly three quarters of the ESL SAT (74%) and half of the FLS SAT (55%) were collaborative in nature. Recall that convergent, required-exchange tasks were among the most favorable to interaction. Only about 13% of ESL SAT and 3% of FSL SAT fit into this category. Among the interaction-friendly required-exchange tasks, most (63%) were conducted in the group setting in both languages. Convergent optional-exchange tasks were the most common task type for both ESL (52%) and FSL (38%), and among those task, 83% of the ESL and 84% of the FSL were conducted in groups. Finally, the divergent optional-exchange tasks were the least common collaborative task for

the ESL group, occupying about 9% of the SAT, and the second least common in FSL at 13%. Unlike the other collaborative segments, these activities were typically conducted in the class setting.

Table 7 Breakdown of student-centered activity according to target language (%)

Interactivity	Information flow	Goals	Participant distribution	ESL SAT	FSL SAT
Individual	Questions	Divergent	Individual	22	45
	No questions	Divergent	Individual	4	0
Total individual				26	45
Collaborative	Required	Convergent	Pairs	3	0
			Group	7	3
			Class	3	0
	Optional	Convergent	Pairs	9	5
			Group	43	33
			Class	0	1
		Divergent	Pairs	0	0
			Group	4	4
			Class	5	9
Total collaborative				74	55
Grand total				100	100

Note. SAT = student-centered activity time; FSL = French as a second language; ESL = English as a second language.

Recall that teacher-centered activity characterized about 22% of the ESL and 38% of the FSL total observation time. To gain an indication of the quality of this time with regard to interaction, we classified events as either traditional or dialogic. Table 8 offers a breakdown of this activity for total time and for each target language context. A clear majority (88%) of teacher-centered activity was collaborative and dialogic in nature, while traditional teaching approaches, whose discourse is characterized by a unilateral flow of information, were rather uncommon (12%) within the corpus. With regard to language context, the dialogic approach was more common in the FSL (93%) than the ESL (80%) setting. Unexpectedly, while there was less teacher-fronted activity in the ESL settings, those ESL interventions were more traditional than the FSL ones.

Table 8 Breakdown of teacher-centered activity according to target language

Type	Discourse pattern	Minutes	% of TAT	% of ESL TAT	% of FSL TAT
Teacher-centered	Traditional	137	12	20	7
(1087 min.)	Dialogic	998	88	80	93
Total		1135	100	100	100

Note. TAT= Teacher-centered activity time; FSL = French as a second language; ESL = English as a second language.

5.2. Interaction favorability index results

Following the procedure presented in the methodology section, the task types were regrouped according to the interaction favorability rankings, then the number of minutes and the percentage of the total teaching time dedicated to each category were calculated, as presented in Table 9. Only a small minority of the total teaching time (4%) was considered very interactive, that is, dedicated to tasks considered most favorable to negotiation. About a third of the teaching time (29%) was interactive, and therefore moderately favorable, while a majority was coded as not very interactive (60%) and not very favorable to negotiation. Finally, only a small portion of the teaching time (6%) was characterized as noninteractive.

Table 9 Interaction favorability index for combined ESL and FSL groups

Category	Task types	Minutes	% of teaching time
4	Very interactive: required-exchange in pairs, groups	119	4%
3	Interactive: required-exchange as a class, convergent optional-exchange in pairs and groups and as a class, and divergent optional exchange in pairs	859	29%
2	Not very interactive: divergent optional exchange in groups and as a class, individual tasks with questions, dialogic teaching	1757	60%
1	Not interactive: individual tasks without questions, traditional teaching	177	6%
Index	2.29	2912	100%

Using the formula presented in the methodology section, the weighted average of the negotiation-favorability categories was calculated, with a resulting score of 2.29/4. The index allows us to compare the global interactivity of the observed ESL and FSL groups, whose results are displayed in Table 10. A couple of interesting trends emerge from the data presented in the table. First, while Category 4 activity (very interactive) was rather uncommon for both groups, ESL classes benefitted from somewhat more interaction-friendly tasks (7%) than did their FSL counterparts (1%). The gap was more pronounced for the interactive Category 3 activities, which were nearly twice a frequent in ESL (39%) than in FSL (20%). Another stark contrast was observed within the not-very-interactive Category 2 activities. The FSL classes tended to be much more teacher-centered, with nearly twice as much time dedicated to teacher-centered dialogic teaching (44%) than in ESL classes (24%). The same was true for individual tasks with questions, which were about 50% more frequent in FSL (24%) than ESL (15%). Among the Category 1 activities, however, the ESL data had about 60% more traditional teaching than that of FSL. Additionally, while there were no FSL individual task events without questions, about 3% of the ESL

data was characterized by such activity. The results offer an interaction favorability index score of 2.44 for the ESL classes and 2.19 for the FSL classes, suggesting that, while both classes fall into the middle of the interactive continuum, the ESL classes we observed were about 8.3% more favorable to interaction and the resulting modified input and output. Recall that according to our index interpretation, a sore of 1 would indicate a class characterized by exclusive use of traditional teaching and individual seat-work allowing for little or no interaction, while a score of 4 would point to exclusive use of tasks and activities requiring an exchange of information in the pair or group setting. Inspection of the index distribution (see Table 10) shows that the .25 difference can be explained by a greater frequency of student-centered, convergent tasks in the ESL setting and a heavier reliance on teacher-centered practices and individual work in the FSL classes.

Table 10 Interaction favorability index according to target language

Category and task type		ESL %	FSL %
4	Required-exchange tasks (pairs)	2	0
	Required-exchange tasks (groups)	5	1
	Total	7	1
3	Required-exchange tasks (class)	2	0
	Convergent optional-exchange tasks	37	20
	Divergent tasks (pairs)	0	0
	Total	39	20
2	Divergent optional-exchange tasks (group)	3	2
	Divergent optional-exchange tasks (class)	3	5
	Individual task with questions	15	24
	Dialogic teaching	24	44
	Total	45	75
1	Individual task no questions	3	0
	Traditional teaching	6	4
	Total	9	4
Grand total		100	100
Negotiation index		2.44	2.19

Note. FSL = French as a second language; ESL = English as a second language.

6. Discussion

The objective of the present study was to gain insight into the types of instructional practices that are being exploited in contemporary ESL and FSL classrooms, with regard to their favorability to the generation of interactionally modified input and output. We formulated the following research question: To what extent do ESL and FSL second language teachers in a public secondary school setting use instructional practices believed to promote interactionally modified input and output?

In order to answer our research question, we created an observation tool allowing us to rank 63.8 hours of observed ESL and FSL classroom activity according to a set of empirically tested factors shown to promote interactionally modified input and output, that is, general direction of attention, interactivity, information flow, goal structure and setting. This tool allowed us to rank tasks according to what we called an interaction favorability index containing four categories: not interactive, not very interactive, interactive, very interactive.

Globally the results showed that there was about 60% more student-centered contexts (47%) than teacher-centered contexts (30%), with almost a quarter (24%) of the class time lost to class management and down time. This stands in contrast with Fazio and Lyster (1998), who found that 78% of French submersion classes and 62% of French immersion classes (from the same Montreal region context as the present study) were characterized by teacher-centered activity. Such differences signal a trend toward increased student-centered activity in L2 classrooms. With regard to target language, student-centered and teacher-centered activity for the FSL classes were more evenly distributed, with 41% for student-centered and 38% for teacher-centered activity, while in the ESL classes 52% of classroom time was devoted to student-centered activity and only 22% to teacher-centered activity.

Examination of the distribution of practices according to the interaction favorability index showed that only a slim minority of teaching time (4%) was dedicated to the most interactive tasks, (i.e., collaborative information-exchange tasks in pairs and groups), and nearly 85% of that Category 4 activity occurred in the ESL context. Only 1% of the FSL data was characterized as very interactive. Among the observed required information-exchange tasks were interviews and various versions of the game 20 Questions, where learners had to ask questions and guess the word or expression that another learner had in mind. Let us recall the one-way-two-way information-gap distinction. The tasks we observed were are all characterized by a one-way exchange in that the target information flowed unilaterally from Participant A to Participant B. We did not observe a single two-way information-gap task, the most interactive of activities, in either the ESL or FSL corpora (e.g., spot-the-differences).

Interactive (Category 3) tasks (e.g., convergent optional-exchange tasks) occupied about a third (29%) of the total teaching time. While these tasks do not require an exchange of information, they are interactive because the convergent nature of their goal structures push interaction and favor communication more than divergent ones (Duff, 1986). The Category 3 tasks we observed include written comprehension and production tasks, brainstorming, role-plays, reading dialogues, arranging and illustrating images, and creating a brochure. The collaborative nature of such tasks was apparent in our data, as nearly 85%

were conducted in the group setting. With regard to target language differences, these interactive types of tasks were favored by the ESL classes, whose learners benefitted from 75% more of such activity than did FSL learners.

The not-very-interactive (Category 2) tasks characterized the majority (60%) of the classroom activity we observed, among which about one third (30%) was individual tasks with questions and nearly two thirds (60%) was teacher-centered dialogic teaching. In contrast with Categories 3 and 4, the FSL group accounted for the majority (63%) of the Category 2 activity. Additionally, 61% of the individual tasks with questions and 66% of the teacher-centered dialogic activity occurred within the FSL setting. The most commonly observed individual activities included written comprehension and production, listening comprehension and sentence diagramming. Dialogic teaching was roughly divided between class discussions, explicit presentation of form, correction of written production and structural exercises, and comprehension activities. The dialogic approach used during these activities led students with varying degree of explicitness to create hypotheses using scaffolding functions, which added an element of interactivity to activities that would otherwise fit squarely into the description of traditional teaching approaches.

Finally, only about 6% of the observed practices were categorized as not interactive (Category 1), and a majority (70%) of this observation was attributed to ESL classes. The traditional-teaching practices consisted of correction, explicit presentation of form, and oral and written comprehension activities. Similar in nature to the practices observed in the dialogic context, these traditional practices differed in that the students were not invited to participate in the interaction. Their role was simply to take notes.

Our decision to create a new observation tool rather than use a previously validated instrument such as the COLT was motivated by pragmatic reasons: In addition to finding an answer to our research questions, our objective was to create a macro-level scale of classroom interactivity based on empirically tested variables, with instructional segments as the unit of analysis. Such a tool—not requiring the formal training in discourse analysis needed for the COLT—could be useful to ESL and FSL teachers and curriculum advisors as a relatively simple, valid procedure for assessing the interactivity of current classroom practices and increasing the interactivity of current or future curriculum. No other published classroom observation tool responds to this need. However, from a research perspective, one of the consequences of creating such a tool is that the results are not directly comparable to those of previous studies using validated instruments. We therefore must determine whether our results reflect the trends observed in the previous studies.

The sample of ESL and FSL classrooms observed for the current study scored 2.29/4 on the interaction favourability index (i.e., ESL and FSL), suggesting that

the classes were not very interactive. These results seem to corroborate previous findings using the COLT, which placed most observed classes in the middle of the experiential-analytical continuum (e.g., Allen & Carroll, 1988; Allen, Swain, Harley, & Cummins, 1990; Dicks, 1992; Fazio & Lyster, 1998). By the same token, the current results suggest that language classes, albeit not very interactive, are becoming more student-centered than those observed in pervious research (i.e., Fazio & Lyster, 1998). Comparison of the target language contexts showed that the ESL classes were about 8% more interactive (2.44/4) than their FSL counterparts (2.19/4). These results seem to contradict those from Frölich, Spada, and Allen (1985), who, observing schools in the Toronto area, found that teachers of ESL, the dominant language outside the classroom, offered fewer of the most highly interactive learning situations. They reasoned that Toronto ESL teachers might focus more on form in the classroom because students have ample opportunity to benefit from a richly communicative environment outside the classroom. In the case of our observations, French is the dominant language outside the classroom. For the same reasons, this might suggest that FSL teachers tend to focus more on language code in the classroom than ESL teachers. From this perspective, our results would seem to be in line with those from the Frölich, Spada and Allen study.

Analyses of the index categories suggest that globally the observed language classes would benefit from reducing the 60% of time dedicated to weak interactive practices (i.e., Category 2: divergent optional exchange in groups and as a class, individual tasks with questions, dialogic teaching) and increasing the 29% dedicated to interactive (i.e., Category 3: required-exchange as a class, convergent optional-exchange in pairs and groups and as a class, and divergent optional exchange in pairs) and the 4% dedicated to very interactive (i.e., Category 4: required-exchange in pairs and groups) practices. These recommendations would be even more beneficial to the observed FSL classes, which allocated a generous 75% of class time to not very interactive practices and only 20% and 1% to interactive and very interactive practices respectively.

7. Conclusion

The objective of this observational study was to compare the interactive nature of the instructional practices observed in ESL and FSL classrooms. Unlike previous classroom observation research, this study examined the instructional sequences used by eight teachers during 60 hours of recorded classroom activity according to five empirically tested factors shown to influence the generation of interactionally modified input and output. While the result show that the ESL classes were more student-centered and offered conditions that were more favorable to SLA

through interaction than did the FSL classes, the global results suggest that both the ESL and FSL classes were generally not very interactive. Indeed, nearly 70% of the total observed classroom practices was dedicated to individual seat-work and teacher-centered activity.

Such a lack of interactivity more than a quarter century after the advent of the communicative language teaching approaches suggests that further research is needed to probe practitioners' knowledge of task characteristics related to SLA through interaction. For example, what are practitioners' perceptions of collaborative tasks exploiting the gap principle? Are they perceived as valuable, difficult to elaborate, unauthentic, unwieldy in the classroom setting? Answers to such questions would offer insight into how one might go about increasing the level interactivity of L2 classrooms.

Another avenue for future research would be to determine whether the five macro-factors investigated in the present study can predict the outcomes of the micro-factors in Part B of the COLT. The existence of such a relationship would suggest that teachers could use the scheme as an accurate and efficient way to assess the communicative nature of their pedagogical practices, without having to resort to costly discourse analyses.

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