# Corrective Feedback and Student Uptakes in English Immersion Classrooms in Japan: Is the Counter-Balance Hypothesis Valid?

**Shogo Sakurai**
Purdue University, West Lafayette, Indiana
<ssakurai@purdue.edu>

## Abstract

There are a number of studies on teachers' corrective feedback and students' uptakes in immersion settings, but the majority is carried out in the North American context. Based on limited data, *the counter-balance hypothesis* was proposed by Lyster and Mori (2006) to explain distributions of teacher feedback and students' uptakes in French and Japanese immersion classrooms. In order to shed further light, the current study explores (1) how the distribution of teacher feedback and students' uptakes are observed in an English immersion school in Japan (i.e., the Asian context), and (2) whether the data supports the counter-balance hypothesis. From observing three English immersion teachers' and their students' classroom talk in math and science lessons, their utterances were recorded, transcribed, and analyzed. The results revealed that the pattern of teacher feedback was similar to that of the previous findings but not the pattern of students' uptakes and that the counter-balance hypothesis could not explain this phenomenon.

*Introduction*

In foreign language education, there have been various types of programs that were developed and institutionalized in K-12 school systems across the globe for the same/similar purposes: to effectively increase students' foreign language proficiency in tandem with age-appropriate cognitive development and cultural understanding. One such successful program, which has recently gained tremendous popularity, is a foreign language immersion program [1] (Genesee, 1987; Swain & Lapkin, 1982). In the United States, for instance, the number of foreign language immersion programs in public and private schools over the years has rapidly increased: three in 1971, 27 in 1982, 119 in 1991, 258 in 2003, and 448 in 2011 (Center for Applied Linguistics, 2011). Although it is difficult to gather accurate numbers of immersion programs in other parts of the world, literature on immersion education across the globe indicates its increased popularity in other nations as well (e.g., Fortune & Tedick, 2008; Johnson & Swain, 1997; Tedick, Christian, & Fortune,

2011). However, in order to enhance students' target language proficiency, especially in content-based, meaning-oriented classrooms in which the target language is used as a means of instruction, teachers' corrective feedback (CF) on students' errors is crucial. In the previous literature, teachers' CF and students' reactions in immersion/content-based classroom settings have been researched widely in the North American context (e.g., Chaudron, 1997; Doughty & Varela, 1998; Lyster, 1998a,b, 2004; Lyster & Ranta, 1997; Mori, 2002; Sheen, 2004), but little is known about the Asian context. In this current study, how teachers' CF and students' responses in English immersion classrooms in Japan may/may not differ from the ones observed by Lyster and Ranta (1997) and Mori (2002) in the North American context will be explored. Also, whether *the counter-balance hypothesis* proposed by Lyster and Mori (2006), based on the North American context, is able to explain the pattern observed in a different socio-cultural context vis. English immersion classrooms in Japan will be investigated.

*Immersion Education*

The history of immersion education in North America dates back to the 1960s. The first immersion school was started by a concerned group of English-speaking parents in St. Lambert, Quebec, Canada (Peritz, 2006; as cited in Fortune & Tedick, 2008). They wanted to create a more effective way to develop their English-speaking children's bilingualism and biliteracy with the French language. Engaging the expertise of a few local academics, the parents cooperated with school officials and designed and implemented the first French immersion (FI) program with 26 English-speaking kindergarteners.

Immersion programs come in different forms. Fortune and Tedick (2008) outlined three broad types of immersion programs: one-way immersion (a.k.a., foreign language immersion), two-way immersion (a.k.a., dual language immersion), and indigenous immersion programs. One-way immersion programs primarily aim to develop high proficiency in the instructional target language; students are mostly homogenous non-native speakers of the target language. Two-way immersion programs, which are currently gaining popularity in the United States, aim to develop high proficiency in two target languages; students make up two linguistic groups who have one of the target languages as their native language. Thus, the students in two-way immersion programs move in two directions towards the native languages of their linguistically different peers. Indigenous immersion programs, on the other hand, have a distinctly different goal in comparison with one- and two-way immersion programs; they intend to revitalize their indigenous culture and language for entire Native communities. Within each type of immersion program, there are a myriad of variations depending on when programs start and the ratio of the instructional languages (e.g., early immersion vs. late immersion, total immersion vs. partial immersion) (Swain & Johnson, 1997).

Among the variety of types of immersion programs, there are core characteristics that should underlie all types of programs. Fortune and Tedick (2008) list the following five characteristics: [2]

1. Instructional use of the immersion language (IL) to teach subject matter for at least 50% of the preschool or elementary day (typically up to grade 5 or 6). If continued at the middle/secondary level, a minimum of two year-long content courses is customary, and, during that time, all instruction occurs in the IL;

2. Promotion of additive bi- or multilingualism and bi- or multilingual literacy with sustained and enriched instruction through at least two languages;
3. Employment of teachers who are fully proficient in the language(s) they use for instruction;
4. Reliance on support for the majority language in the community at large for majority language speakers and home language support for the minority language for minority language speakers;
5. Clear separation of teacher use of one language versus another for sustained periods of time. (pp. 9-10)

## Characteristics of Immersion Students

From these characteristics of immersion programs, research reveals that immersion students in successful programs gain (1) academic achievement which is equivalent to or better than the students in regular schools, (2) high target language proficiency, and (3) native language proficiency which is equivalent to or better than the peers who go to regular schools (e.g., Bostwick, 2001a; Swain, 1996a; Swain & Lapkin, 1982). [3] In addition, much research has documented that many immersion students should benefit both cognitively and socially in comparison with their peers in regular monolingual schools. Some of the cognitive benefits accrued from additive bilingualism, especially balanced bilinguals, are the following: heightened mental flexibility, creative thinking skills, enhanced metalinguistic awareness, greater communicative sensitivity, early development of theory of mind, and executive control functions (for recent overviews, refer to Ardila & Ramos, 2007; Bialystok, 2005, 2009; Bialystok & Barac, 2013; King & Mackey, 2007; Lazaruk, 2007; Porter, 2010; Salvatierra & Rosselli, 2011; for a meta-analysis, refer to Adesope, Lavin, Thompson, & Ungerleider, 2010). [4] Recent research by Bialystok, Craik, and Freedman (2007) also found that lifelong bilingualism (i.e., a consistent use of two languages) could delay the onset of symptoms of dementia by four years in comparison to monolingual speakers (Claudia, 2011). [5] Regarding the social aspect, Genesee and Gándara (1999) found that the students in immersion programs (both one-way and two-way programs) tend to enhance cross-cultural understanding and reduce prejudice, discrimination, and stereotyping of other ethnic/cultural groups. Also, Downes (2001) found that many immersion students display a stronger sense of cultural identity than their monolingual counterparts.

In respect to target language proficiency, however, immersion students often do not achieve the level of the native speaker, in spite of many years of learning and exposure to subject matters in the target language. The areas of weakness are documented in various aspects of productive skills (i.e., speaking and writing): morphosyntactic (e.g., Harley, Cummins, Swain, & Allen, 1990; Swain, 1985, 1996a, 1996b), lexical (e.g., Harley, 1992; Johnson, 1997; Swain, 1996a, 1996b), and sociolinguistic/pragmatic knowledge aspects (e.g., Lyster, 1994; Swain, 1985; Tarone & Swain, 1995). In order to improve accuracy as well as fluency of the productive skills in communicatively-oriented immersion programs, teachers' CF could play a beneficial role (Ellis, 2009; Lyster & Mori, 2006).

## Effectiveness of Corrective Feedback in the North American Context

Although some researchers contest that there is little or no place for CF in second language (L2) acquisition (e.g., Krashen, 1982; Truscott, 1996, 1999, 2004, 2007), effectiveness of CF has been generally supported by recent meta-analysis studies (Li, 2010; Lyster & Saito,

2010; Mackey & Goo, 2007; Russell & Spada, 2006). Recent researchers, especially those who work within the interactionist framework, recognize the potential role of CF in L2 acquisition.

The effectiveness of CF is based on the premise that learners might require feedback on errors when they are not able to discover, through exposure to positive evidence alone, how their interlanguage differs from the target language (Lyster & Mori, 2006). In the ESL context, Trahey and White (1993) studied whether input flood (i.e., positive evidence) could reset the verb-movement parameter of the French language (i.e., verbs moving past adverbs) to that of the English language. Francophone children (age 11) in an intensive ESL program were provided with an abundance of input flood of the English structure. The results revealed that the Francophone children increased their use of the English SAV (subject-adverb-verb) order but did not decrease the incorrect use of the French SVA (subject-verb-adverb) order. Thus, the results indicate that positive evidence alone does not affect the change of incorrect language use. In other words, negative evidence (e.g., CF) is necessary to acquire L2 structures that are different from the native language.

However, CF comes in a variety of forms and affects student responses differently. Lyster and Ranta (1997) observed fourth grade FI classrooms to investigate what types of feedback the immersion teachers most often provide students and how these feedback types affect the number of uptakes elicited from the students. The term uptake is defined by Lyster and Ranta (1997) as a student's immediate response to the teacher's feedback that "constitutes a reaction in some way to the teacher's intention to draw attention to some aspect of the student's initial utterance" (p. 49). The uptake can be further categorized into self-repair and needs-repair. While self-repairs are successful (error-free) reformulations of the initial utterance generated by students, needs-repairs are unsuccessful (error-filled) reformulations, repetition of the original error, or acknowledgment (e.g., yes/no) generated by students. From the database of 18. 3 hours of classroom observation in various subject areas by four immersion teachers, Lyster and Ranta categorized the teacher feedback into six types: explicit correction (explicit provision of correct form with clear indications of ungrammatical responses), recasts (implicit correct feedback), clarification request, metalinguistic feedback, elicitation, and repetition (repetition of students' incorrect utterances with oft-rising intonation). The results revealed that the most popular teacher feedback in the immersion classrooms were recasts (55%) followed by elicitations (14%), clarification requests (11%), metalinguistic feedback (8%), explicit corrections (7%), and repetition (5%). However, the most popular feedback type, recasts, generated the least number of uptakes (31%) from students whereas elicitation, metalinguistic feedback, clarification requests, and repetition (all of these are called *prompts* [6]) elicited significant amounts of uptakes. The authors concluded that the prompts were more effective in generating uptakes from students, but the most commonly used teacher feedback, recasts, were the least effective. Nevertheless, Nassaji (2009) warns that the occurrence of uptakes, even successful ones, does not indicate that any language acquisition has taken place (also refer to Ellis, Basturkmen, Loewen, 2001; Long, 2007; Lyster, 1998b; 2004; Mackey & Philp, 1998). It may be an indication of students noticing the feedback, [7] but it does not indicate that they have learned or processed the target form (Ellis & Sheen, 2006). In such cases, uptakes may simply be due to a mechanical repetition of the teacher's feedback.

If uptake production may not be a clear indication of L2 acquisition, then the next question would be what type of CF is the most effective in actual L2 acquisition. The subsequent

quasi-experimental study by Lyster (2004) indicated the effectiveness of prompts over recasts in regards to L2 acquisition. He studied 179 fifth grade FI students on French grammatical gender assignment. The three experimental groups- one with proactive form-focused instruction (FFI), one with proactive FFI plus recasts, and one with proactive FFI plus prompts (i.e., clarification requests, repetition, metalinguistic clues, and elicitation)- were compared to the control group which carried out a regular curriculum without any proactive FFI nor any particular types of CF for five weeks. During this time, the experimental groups spent approximately 8-10 hours of the proactive FFI curriculum on gender assignment. A pre-test, an immediate post-test, and a delayed post-test (eight weeks later) were administered via four testing instruments: two oral tests and two written tests. The test results revealed that the experimental group with FFI with prompts significantly outperformed the group with FFI with recasts on all the tests (both in the immediate and delayed tests) except for one oral test (i.e., an object-identification test). Thus, prompts, which usually generate more uptakes than recasts, were proven to be a more effective type of CF than recasts on the acquisition of French gender assignment. These results also corroborate with the Ellis, Loewen, and Erlam (2006) study that compared the effectiveness of metalinguistic feedback over recasts for low-intermediate learners of second language English on the past tense *–ed*. However, there are other studies that show the effectiveness of recasts on a par with prompts (e.g., Loewen & Nabei, 2007) and the effectiveness of recasts over prompts (e.g., Nassaji, 2009). Possible explanations for the differential results are methodological designs (e.g., lengths of treatment), contextual differences (e.g., immersion classrooms vs. experimental laboratory settings), explicitness of recasts, and/or students' latent knowledge of the target structure. Effectiveness of CF, therefore, is influenced by a myriad of variables.

When Japanese immersion (JI) classrooms are considered, the relationship between the teachers' CF and student uptakes deviates from the phenomenon observed in FI classrooms. Mori (2002) observed three JI classrooms with fourth and fifth grade students in the United States. The students started from a kindergarten program in which 10% of the instruction was taught in English and 90% was taught in Japanese. At elementary school, the ratio became 50-50 in English and Japanese. The data of 14. 8 hours of classroom observation revealed a very similar pattern of teachers' CF vis-à-vis FI classrooms. Recasts were the most often used CF type (65%), followed by prompts (26%), and explicit correction (9%). However, a distinctly different pattern was observed vis-à-vis the Lyster and Ranta (1997) study of FI classrooms in the amount of student uptakes produced by recasts and prompts. In Lyster and Ranta's study, FI students produced the highest percentage of uptakes after prompts (62%), followed by recasts (32%), and explicit correction (7%). In Mori's study, JI students produced the highest percentage of uptakes after recasts (61%), followed by prompts (30%), and explicit correction (9%).

*Counter-Balance Hypothesis*

Comparing the data of Lyster and Ranta's (1997) and Mori's (2002) studies, Lyster and Mori (2006) proposed the *counter-balance hypothesis* to explain the different patterns observed in FI and JI classrooms. According to the counter-balance hypothesis, some possible reasons for the observed differences are as follows. Firstly, differences in language structure and typology are greater between Japanese and English than between French and English. The differences are evidenced by various language typologies proposed by linguists (e.g., Hinds, 1987). According to Hinds (1987), for instance, Greenberg's linguistic typology categorizes

French and English as SVO (subject-verb-object) languages and Japanese as a SOV (subject-object-verb) language. Li and Thompson's typology categorizes French and English as subject-prominent languages whereas Japanese is both a subject-prominent and a topic-prominent language. From a historical perspective, French and English are both Indo-European languages while Japanese is considered either an Ural –Altaic language or an isolate depending on the linguist (e.g., Labrune, 2012; Salzmann, Stanlaw, & Adachi, 2012).

Odlin (1989) also provides concrete examples by citing from the Foreign Service Institute (FSI) of the US State Department. FSI estimates the number of weeks that might be required to achieve a high level of proficiency by American learners (i.e., English-speaking learners) who have 30 hours of lessons per week. To achieve a high level of proficiency in French and Spanish requires approximately 20 weeks for American learners while Japanese, Chinese, and Arabic learners require 44 weeks of lessons to achieve an equivalent proficiency level. The Defense Language Institute (n.d.) also categorizes languages into four levels based on their difficulty for American learners (i.e., English-speaking learners). The languages that are categorized as the most difficult (Category IV) include Japanese, Chinese, Korean, Arabic, and Pashto while the least difficult (Category I) includes French, Italian, Spanish, and Portuguese. In order to achieve an equivalent proficiency level, according to the Defense Language Institute, the former group of languages takes 64 weeks of course work while the latter group only takes 26 weeks. Hence, Lyster and Mori (2006) conclude:

*The relationship between French and English as cognate languages that share similar syntactic structures and writing systems arguably creates propitious conditions for a meaning-focused communicative orientation, whereas the fact that Japanese and English are noncognate languages with completely different syntactic structures and different writing systems predisposes JI students and teachers toward a more form-focused orientation. (p. 293)*

Secondly, according to Lyster and Mori (2006), the social settings in which FI and JI classrooms are located might have contributed to the different pattern observed in FI and JI classrooms. The FI program was in a typical second language setting; French is the official language of Quebec and widely used in the Montreal area where Lyster and Ranta's (1997) study took place. On the contrary, the JI program was in a typical foreign language setting; Japanese in the U. S. is a much less commonly used language. Lyster and Mori (2006) hence conclude that "These differences in social setting might have affected overall communicative orientations in predictable ways, making FI instructional settings more meaning-focused and JI instructional settings more form-focused" (p. 293).

In order to (dis)confirm the validity of the counter-balance hypothesis, more immersion settings, especially ones from different socio-cultural contexts, need to be investigated. As Ellis (2010a) strongly suggests, "There is, in fact, clear evidence that CF varies from one context to another, whether context is defined narrowly or more broadly" (p. 156). Therefore, the current study aims to fill this gap by (1) exploring how teachers' CF and students' uptake are realized in an English immersion (EI) school in Japan, and (2) whether the data derived from the EI school in Japan will support the counter-balance hypothesis proposed by Lyster and Mori (2006). These aims are imperative in two respects: the teachers' CF and students' uptakes have yet to be investigated in immersion classrooms in Japan (to the best of the author's knowledge), and accrued data will be ideal to test the validity of the counter-balance hypothesis since the Asian context is presumed to be starkly different from the North American context.

*Research Questions*

The current study will investigate the two research questions posed by Lyster and Mori (2006, p. 277) for EI classrooms in Japan:

1. What is the distribution of different types of interactional feedback [8] in EI classrooms in Japan?

2. What is the distribution of uptake and repair following different types of interactional feedback in EI classrooms in Japan?

3. From the data derived from the two aforementioned research questions, an additional research question will be explored:

4. How do the distributions of interactional feedback, student uptakes, and repair in EI classrooms in Japan differ from FI and JI classrooms in the North American context?

The data used in the study come from a larger study conducted by Sakurai (2010), and they are compared with the data from Lyster and Ranta's (1997) FI study and the data from Mori's (2002) JI study.

In Sakurai's (2010) original mixed methods case study, the data were collected during the English portion of the curriculum in second and fifth grade mathematics and science lessons using several techniques: audiotapes, videotapes, field notes, interviews with the participating teachers, and biographical questionnaires from the teachers. The current study, however, focuses exclusively on the quantitative data gathered from the fifth grade mathematics and science teachers. Only the procedures that are relevant to the current data will be explained below.

*English Immersion School in Japan*

The EI school under current study is located in a rural area of Japan (86 kilometers northwest of Tokyo). The school was established in April 2005. The city was one of the 56 cities throughout the nation to be designated as a *special education zone*, which means that the city is authorized to offer an innovative and experimental curriculum to their students without following the national curriculum designated by the Ministry of Education, Culture, Sports, Science and Technology (without any financial support from the government, however). As a recognized special education zone, the city opened its first EI school with unusual freedom to implement its unique curriculum, yet it still retains its status as an accredited public school. The school is considered the second EI school in Japan following the *Kato Gakuen*, the first EI school opened in Japan in April, 1994 (Bostowick, 2001b). The instruction is roughly 70% in English and 30% in Japanese. Based on Swain and Johnson's (1997) categorization, the school is regarded as a partial immersion school.

*Participants*

The participants of the study are 2 fifth grade mathematics teachers (M1 and M2) and 1 fifth grade science teacher (S1). M1 is a male Filipino teacher who first came to Japan to teach at the immersion school two years before the current study took place. Prior to coming to Japan, he earned his MA in Elementary Education in the Philippines and taught English to third through fifth grade students for four years and mathematics to fifth and sixth grade students for 12 years. He has had two years of experience in teaching science, mathematics, and art to the fifth and sixth grade students at the current immersion school. In the 2009-

2010 academic year when the current data were collected, he taught mathematics and morals to fifth and sixth grade students. Although English is not his native language, he studied it from the first grade to college. In addition, all of his past teaching experiences were conducted in English in the Philippines and Japan. His Japanese skills are very limited, however. The two lessons observed were about teaching decimal multiplication. Each class had 15-18 students.

M2 is a male teacher who is originally from the U. S. but has lived in Japan for almost 20 years. He first came to Japan as a junior high school student due to his parents' business. He went to an international school in Tokyo for five years. Six years after finishing college in the U.S.A., he came back to Japan for the second time and became an English teacher. Before coming to the EI school, he taught English at Japanese junior high schools for three years and at high schools for 10 years. During that time, he received an MA in Education from an American university. He has taught for four years at the EI school. Beginning at its founding in 2005; the 2009-2010 academic year was his fifth year. Besides teaching mathematics, he also teaches fifth grade English language arts and morals. He claims to possess advanced Japanese language skills. The two mathematics lessons observed for the current study were also about teaching decimal multiplication, and each class had 15-18 students.

S1 is a female teacher who is from India. She received an MA in chemistry from a university in India and had taught chemistry to eleventh and twelfth grade students for a year at an international school in India before coming to Japan. Though this is her first experience living abroad, she has enjoyed living in Japan for the last 10 years. At the EI school, she has taught science to the first, second, fourth, fifth, and sixth grade students for two years prior to the 2009-2010 academic year. At the time of the study, she was teaching science to fifth and sixth grade students, morals to fifth grade students, and acting as a teacher's assistant for a Japanese art teacher for fifth and sixth grade students. Although S1 speaks English with a distinct Indian accent, she claims to have near-native [9] English skills and elementary Japanese skills. The content of her observed lessons was about weather and temperature, and her class had 34-36 students.

In comparing the mathematics and science lessons, the main differences were as follows: (1) the science lessons had twice as many students (34-36), and (2) the students were taught science three times a week and mathematics five times a week.

### Students

The age of the students in the current study was 10-11 years old. Each class had roughly equal numbers of male and female students (i.e., 8-10 males and 8-10 females in the mathematics classes, and 17-18 males and 17-18 females in the science class).

It is evident that many of the students come from affluent families. The tuition at the time of data collection consisted of (1) 200,000 yen ($1,923 US) enrollment fee for city residents and 400,000 yen ($3,846 US) for non-city residents, (2) 58,000 yen ($558 US) monthly tuition, (3) 10,000 yen ($96) US/year facility fee, (4) 8,400 yen ($81 US) monthly lunch fee, (5) 6,000 yen ($58 US)/year welfare fee, and (6) 30,000 ($288 US)/year textbook fee. Additional fees for designated summer and winter uniforms, a school bag, sportswear, indoor shoes, and translated textbooks are also expected. From informal interviews with several students, they often go to extracurricular activities after school (e.g., swimming lessons, piano lessons, mathematics lessons, English conversation lessons, language arts lessons, etc.). Some of them even have extra activities on weekends.

The students are a select group. Admission to the school is fairly competitive based on past application records. In the year the data were collected, there were only 105 first grade vacancies (35 students/class x 3 classes), but 210 applicants applied for the positions. For the selection procedure, these applicants come to the school for two days of testing: on the first day, the prospective students take a written test (recognition test) in which the students look at pictures and categorize them according to both English and Japanese instructions. On the second day, these same students are engaged in a variety of group activities under the directions of English-speaking teachers, and their behaviors are monitored by an admission committee comprised of several teachers. During that time, the parents have an interview with school personnel. This two-day exam also costs 10,000 yen ($96 US) for each child.

Academically, the students at the EI Japanese language proficiency are above the national level.
The newsletter of the EI school (Gunma Kokusai Academy, May 2009) revealed that the EI students' Japanese language proficiency is, on average, 10 points higher than the national average on the Standard Achievement Examination held by *Tokyo Shoseki*. The results of the National Circumstantial Achievement Examination held by the Ministry of Education, Culture, Sports, Science and Technology also revealed that the Japanese language arts knowledge section among the EI students is, on average, nearly 10 points higher than the national average. Moreover, in the Japanese language arts application section, the EI students scored 16-17 points higher than the national average as well. According to the newsletter, the Japanese language proficiency and skills are attributable to several factors. First, the school emphasizes that 70% of English instruction accounts for, in a bigger picture, only about 30% of the students' waking time; thus, learning English does not hinder the development of their L1. On the contrary, it may cause the students to be more sensitive to their native language and its usages.

On the other hand, the EI students' English proficiency is not on a par with their native English-speaking counterparts, and all the language skills are not balanced either. Once a year, the school assesses every student's English proficiency via the IDEA English Language Proficiency Test, which was originally created to measure the English proficiency of immigrant children in the U.S.A. This assessment tool consists of reading, writing, and oral sections, and each section consists of seven levels. From the interview with the director of the EI curriculum at the school, who also administers the test, the results show that EI students tend to have lower scores on grammar and comprehension subsections of the test. She also mentioned that oral fluency is difficult to develop since English is only spoken at school. However, most of the students in the current study have been learning English via the EI program since the first grade, plus they have had some previous English learning before entering the EI program. Therefore, they have had at least 4+ years of English learning by the time of data collection.

## Procedure

Sakurai (2010) first distributed a consent form to each participant (M1, M2, and S1). The purpose of the original study, which was to assess how the target language teaching and subject teaching were integrated, was explained to each participant; however, the purpose of the study, that is, how different types of teacher feedback elicit student uptakes, was not mentioned.

Second, biographical information was collected via questionnaires. Any incomprehensible or ambiguous information provided in the questionnaire was clarified at an individual interview with each participant after lesson observations.

Each participant was observed during two consecutive lessons (45 min x 2 lessons = 90 minutes). Thus, the total data of the current study collected from the three participants come from approximately 4. 5 hours of lesson observations. During each observation, the researcher sat in the back of the classroom and took field notes. Each lesson was recorded by a video camera that was set in the back of the classroom as well as by a voice recorder that was placed in the front of the classroom (in case the video camera had difficulty recording voices). From the recordings, all of the comprehensible classroom discourse was manually transcribed (restricted to teacher-fronted classroom teaching). [10]

After the lesson observations, the researcher interviewed each participant individually about any questions and concerns he had in regards to the questionnaires and lesson observations.

Broad transcription of teachers' and students' utterances was analyzed sentence by sentence. First, students' ungrammatical utterances were marked. [11] Then, immediately following teachers' CF were marked and categorized based on Lyster and Ranta's (1997) feedback types, namely prompts (elicitation, repetition, clarification requests, and metalinguistic clues), recasts, and explicit correction. Following each feedback type, student uptakes were quantified. After collecting the data, they were compared with the ones derived from Lyster and Ranta's (1997) FI classrooms and Mori's (2002) JI classrooms in the North American context. Since this study is a descriptive study, no statistical analyses were performed.

*Results*

**M1**

From his two fifth grade mathematics lessons, M1 produced a total of 33 types of feed back, among which 25 were recasts, seven were prompts, and one was explicit correction (Table 1).

**Table 1. CF by M1**

| Type | n | % |
|------|------|------|
| Recasts | 25 | 76% |
| Prompts | 7 | 21% |
| Explicit Correction | 1 | 3% |

Overall, most of his feedback was provided for his students' incomplete phrases and sentences (Example 1). The next most prominent erroneous utterances of the students were wrong word usage, especially when the students interchangeably used the words *plus* and *times*when explaining the process of multiplication of decimal numbers (Example 2). In rare instances, M1 also corrected a student's pronunciation (Example 3) and morphosyntactic errors (Example 4).

**Example 1**
M1: There are two decimal places, right? So from the right…from the right side of six, ok, you start counting going to the left. How many times? Ok, how many times?
Student: Two. (one-word answer)
M1: Two times. (recast)
Ok, so from…from six…or from the right side of six, going to the left, we have to count two places, ok? (Sakurai, 2010, p. 132)

**Example 2**
M1: So we have one here, one here. How many decimal places in all?
Some students: Two (one-word answer)
M1: There are? (prompt)
Class: Two (need-repair)
M1: Two. (prompt: repetition)
There are two. (recast)
That's why in your product, you have two decimal places, right? Two decimal places, isn't it? (Sakurai, 2010, p. 133)

**Example 3**
Some students: Twelve.
M1: Plus three?
Some students: Fifty. (mispronunciation)
M1: Fifteen. (recast)
Carry one.
One times six? (Sakurai, 2010, pp. 134-135)

**Example 4**
M1: We have to?
Student: Add zero. (a lack of plural "s")
M1: Add zeros. (recast)
How many zeros? (Sakurai, 2010, p. 135)

As can also be seen, in many cases after recasts, students were not provided with opportunities to produce self-repairs (see Examples 1, 2, 3, and 4). After the teacher's feedback (33), students produced 17 uptakes. M1's seven prompts were all followed by uptakes (four need-repairs (Example 2) and three self-repairs (Example 5)), but only 10 recasts out of 25 were followed by uptakes (all self-repairs) (Example 6) (Table 2).

**Example 5**
Student: Decimal place is one and 0. 05 is decimal point.
M1: It has? (prompt)
Student: It has two. (self-repair)

**Example 6**
Student: Bring down 0 and it has 3 decimal places. And 0. 4 has one decimal places.
(plural "s")
M1: Place. (recast)
Student: Place, so 3 plus 1 equal 4. One, two, three, four. (self-repair)

**Table 2. Student Uptakes in M1's Lessons**

| | Recasts | | Prompts | | Explicit Corrections | |
|---|---|---|---|---|---|---|
| **Uptake** | n | % | n | % | n | % |
| **Self-repair** | 10 | 40% | 3 | 43% | 0 | 0% |
| **Needs repair** | 0 | 0% | 4 | 57% | 0 | 0% |
| **No Uptake** | 15 | 60% | 0 | 0% | 1 | 100% |

## M2

From his two fifth grade mathematics lessons, M2 produced a total of 16 tokens of feedback, among which five were recasts, nine were prompts, and two were explicit correction (Table 3).

**Table 3. CF by M2**

| Type | n | % |
|---|---|---|
| **Recasts** | 5 | 31% |
| **Prompts** | 9 | 56% |
| **Explicit Correction** | 2 | 13% |

There are several differences in comparison to M1's use of feedback. First, the distribution of M2's CF was very different from M1's; he used more prompts than recasts. Second, most of M2's CF was provided for pronunciation errors by students, and all of the pronunciation errors were provided with prompts (Example 7). In rare instances, M2 also provided feedback on students' grammatical errors (Example 8) and wrong word usages (Example 9).

**Example 7**
M2: Three times two is?
Class: Shiiiiiiiiix. (phonological error)
M2: Shiiiiiiix? (prompt: repetition)
Class: Six. (self-repair)
M2: I like that.
(Incomprehensible) is six like Steven. (awareness-probing: analogy)
I like Steven six, ok? (awareness-probing: analogy)
(Sakurai, 2010, p. 138)

**Example 8**
M2: Three numbers?
There are four numbers, one, two, three, four.
Three numbers of what?
Three numbers where?

Student: Behind decimal point. (missing an article "the")
M2: Behind the decimal point. (recast)
(Sakurai, 2010, p. 137)

**Example 9**
M2: Ok, hands down.
Who can tell me...how would you...how did you estimate this?
Ummm, I want more hands.
I want more hands.
I want more hands.
I want more hands.
Koichi.

Koichi: Zero...ah, point fifty. (wrong decimal number reading)

M2: Point fifty? (prompt: repetition)

Koichi: Point fifty. (need-repair)

Class: (laugh)

Kosuke: Ahh, five zero. (other-repair)

As for student uptakes, M2's students produced 12 uptakes from the 16 instances of feedback provided. A similar pattern with M1's students was observed: all of the prompts were followed by uptakes (nine uptakes in which five were need-repairs and four were self-repairs (Example 9)), none of the recasts were followed by uptakes (Example 10), and all explicit corrections were followed by uptakes (two uptakes in which one was a need-repair and the other was a self-repair) (Example 11) (Table 4).

**Example 10**
M2: No.
Why?
What's wrong with it?
What's wrong with it?
Yes, sir?

Student: Decimal is wrong. (missing an article "the")

M2: The decimal is wrong. (recast)
Why is the decimal wrong?
Let's check it.
Point five two times seven point three, yes?
Ok, I'm horrible at math, so I need you guys to help me.
Ready?
Three times two is?

**Example 11**
Some students: Fourteeeeeeeen. (phonological error)
Some students: Forty. (phonological error)
M2: Ok, it's not fourteeeeeen; it's fourteen. (explicit correction)
Class: Fourteen [still not quite right] (need-repair)
M2: Fourteen, you got to hit it. (explicit correction)
Some students: Fourteen. (self-repair)
M2: There you go. Alright.

**Table 4. Student Uptakes in M2's Lessons**

|  | Recasts | | Prompts | | Explicit Corrections | |
|---|---|---|---|---|---|---|
| Uptake | n | % | n | % | n | % |
| Self-repair | 0 | 0% | 4 | 44% | 1 | 50% |
| Needs repair | 0 | 0% | 5 | 56% | 1 | 50% |
| No Uptake | 5 | 100% | 0 | 0% | 0 | 0% |

## S1

From her two fifth grade science lessons, S1 produced a total of 14 instances ofCF, among which 13 were recasts and one was a prompt (Table 5).

**Table 5. CF by S1**

| Type | n | % |
|---|---|---|
| Recasts | 13 | 93% |
| Prompts | 1 | 7% |
| Explicit Correction | 0 | 0% |

Feedback was most often used for students' morphosyntactic errors (Example 12). Other corrections were provided for sentence structures (Example 13), one-word answers (Example 13), wrong usage of an article (Example 14), and a wrong lexical choice. The only prompt used in her lessons was for a one-word answer.

**Example 12**
S1: Rainy day or cloudy day, how does temperature change?
On rainy or cloudy day.
Chiko?

Chiko: Cloudy day is…have small difference (a lack of plural "s")

S1: Small differences. (recast)
Temperature doesn't change a lot.
It remains almost the same. (Sakurai, 2010, p. 144)

**Example 13**
Student A: It's cloudy because temperature go down (incomprehensible).
(present progressive aspect)

S1: Ok, because first temperature is going down. (recast)
Student B: Decrease. (one-word answer)
S1: Oh, you can write "decrease. "
Temperature is decreasing or temperature decreases. (recast)
(Sakurai, 2010, p. 145)

**Example 14**
Student: It is ahhh cloudy day (incomprehensible).
It's a cloudy. (error in article usage)

S1: It's cloudy. (recast)
You think cloudy. (Sakurai, 2010, p. 144)

As for S1's student uptakes, there was only one uptake following the prompt but there was no uptake following her recasts. None of the recasts provided an opportunity for students to produce an uptake (Examples 12 & 14), or possibly they were not perceived as CF by the students (Example 13). The only uptake produced by the prompt was repetition of a student's one word answer, and it was rephrased by the student later in the episode but was still not grammatically correct (Example 15). The summary of the student uptakes in S1's lessons is in Table 6.

**Example 15**
S1: Shhhh. Riku thinks sunny because?
Riku: Everyday. (one word answer)
S1: Everyday? (prompt)
Riku: From three to…down, going down.
S1: Wow, that's true.
Riku: Like six o'clock, everyday temperature get decrease. (need-repair)
S1: Decrease, that's right, that's right. I like Riku's point.

**Table 6. Student Uptakes in S1's Lessons**

|  | Recasts | | Prompts | | Explicit Corrections | |
|---|---|---|---|---|---|---|
| Uptake | n | % | n | % | n | % |
| Self-repair | 0 | 0% | 0 | 0% | NA | NA |
| Needs repair | 0 | 0% | 1 | 100% | NA | NA |
| No Uptake | 13 | 100% | 0 | 0% | NA | NA |

Combining the data of M1, M2, and S1, the distribution of feedback types, namely recasts, prompts, and explicit corrections, the three types of feedback in EI classrooms in Japan are 72%, 23%, and 5%, respectively. When comparing these data with that from the FI (Lyster & Ranta, 1997) and the JI classrooms (Mori, 2002; as cited in Lyster & Mori, 2006), the distribution is very similar. That is, recasts are the most frequently provided feedback followed by prompts and explicit corrections regardless of the target languages and social settings (Table 7).

Combining the data of M1's, M2's, and S1's student uptakes, teachers' prompts elicited the most uptakes whereas teachers' recasts elicited the least uptakes. To be exact, prompts produced 41% self-repairs, 59% need-repairs, and 0% no uptakes; explicit correction produced 33% self-repairs, 33% need-repairs, and 33% no uptakes; recasts produced 19% self-repairs, 0% need-repairs, and 81% no uptakes. In comparison, the distribution of student uptakes by Japanese students at the EI school looks more similar to the pattern observed in the FI (Lyster & Ranta, 1997) rather than the JI classrooms (Mori, 2002) (Table

8). Nevertheless, the distribution of repair moves (self-repairs) looks more similar to the JI rather than the FI classrooms (Table 9). That is, the Japanese students in the EI classrooms produced more uptakes after prompts than recasts; however, when self-repaired uptakes are considered, recasts elicited more self-repairs than prompts.

**Table 7. Comparison of Teachers' CF with FI, JI, and EI Classrooms**

| CF Context | FI | | JI | | EI | |
|---|---|---|---|---|---|---|
| | n | % | N | % | n | % |
| **Recasts** | 345 | 54% | 169 | 65% | 43 | 68% |
| **Prompts** | 244 | 38% | 66 | 26% | 17 | 27% |
| **Explicit Correction** | 46 | 7% | 24 | 9% | 3 | 5% |

**Table 8. Comparison of Student Uptakes with FI, JI, and EI Classrooms**

| Uptake Context | FI | | JI | | EI | |
|---|---|---|---|---|---|---|
| | n | % | N | % | N | % |
| **After recasts** | 110 | 32% | 121 | 61% | 10 | 34% |
| **After prompts** | 215 | 62% | 59 | 30% | 17 | 59% |
| **After explicit correction** | 23 | 7% | 18 | 9% | 2 | 7% |

**Table 9. Comparison of Repair moves with FI, JI, and EI Classrooms**

| Repair Context | FI | | JI | | EI | |
|---|---|---|---|---|---|---|
| | n | % | N | % | n | % |
| **After recasts** | 66 | 38% | 84 | 68% | 10 | 56% |
| **After prompts** | 93 | 53% | 28 | 23% | 7 | 39% |
| **After explicit correction** | 16 | 9% | 12 | 10% | 1 | 6% |

## Discussion

In this study, the distribution of teachers' feedback and its relationship with student uptakes in EI classrooms in Japan were observed. In addition, how the distribution of teachers' feedback, student uptakes, and repairs in EI classrooms in Japan differ from those in FI and

JI classrooms in the North American context were examined. The research questions are as follows:

1.      What is the distribution of different types of interactional feedback in EI classrooms in Japan?

The teachers in EI classrooms in Japan used feedback in a similar way to FI and JI classrooms in North America. Recasts constituted the greatest proportion (68%), followed by prompts (27%), and then explicit correction (5%).

2.      What is the distribution of uptakes and self-repairs following different types of interactional feedback in EI classrooms in Japan?

The EI students in Japan produced the most uptakes following prompts (59%), recasts (34%), and explicit correction (7%), which is the same pattern found in the FI classrooms. However, the distribution of self-repairs in the EI classrooms in Japan shows the same pattern found in the JI classrooms. Self-repairs were generated the most by recasts (56%), followed by prompts (39%), and explicit correction (6%).

3.      How do the distributions of interactional feedback, student uptakes, and repair in EI classrooms in Japan differ from FI and JI classrooms in the North American context?

By comparing current data from EI classrooms in Japan with those of the FI and JI classrooms in the North American context, the distribution of different types of teacher feedback in EI classrooms in Japan is very similar to that of FI and JI classrooms in North America. That is to say, recasts are the most frequently used teacher feedback, followed by prompts, and explicit corrections. However, in regards to student uptakes, the distribution in the EI classrooms in Japan is similar to that in the FI classrooms but not to the JI classrooms; uptakes are most often generated by prompts, followed by recasts, and explicit corrections. In terms of self-repairs, the distribution shows the same pattern as the JI classrooms; most self-repairs are generated by recasts, followed by prompts, and explicit corrections.

The following discussion will explore some possible reasons for the above phenomena. Firstly, a common pattern of the distribution of teachers' CF (i.e., recasts being the most frequently used teacher feedback followed by prompts and explicit correction) has been observed in a range of sociocultural and educational settings for different populations: elementary immersion classrooms as in the current study, university-level foreign language classrooms, high school English as a foreign language classrooms, and adult ESL classrooms (Lyster & Mori, 2008). Thus, it is not surprising that recasts are the most frequent teacher feedback in different sociocultural and educational as well as laboratory settings (Braidi, 2002; Lyster, 1998a; Oliver, 1995; Sheen, 2004),as was exemplified in the EI elementary classrooms in Japan. However, in some cases, recasts may not necessarily be the most frequently used CF in all instructional settings (cf. Lyster, Saito, & Sato, 2013, pp. 5-7).

The above common phenomenon can be explained by Seedhouse's (1997) study. He observed various L2 classroom discourses (330 lessons in 11 different countries) and found that teachers tend to avoid direct, explicit, overtly negative evaluation of students' linguistically incorrect utterances in order to avoid students' loss of face and demoralization. Studies by Schultz (1996, 2001) on teachers' beliefs about CF also lend support to the teachers' preference of implicit error correction. In these studies, foreign language teachers in higher education (both in America and Colombia) perceived oral CF

very differently from their students. [12] The teachers place less emphasis on the importance and implementation of oral CF for their lessons than the students, which explains why recasts, which are inherently implicit in nature and carry less corrective force, are preferred over prompts by many teachers.

In terms of the number of uptakes, there are a few plausible reasons for why prompts generated the most uptakes rather than recasts or explicit correction. One reason is that students were oftentimes not provided with opportunities (i.e., conversational turns) to produce uptakes after recasts (Examples 12 & 14). For example, S1 used 13 recasts but none of the recasts provided an opportunity for students to react verbally; rather, she continued her utterance and moved on with her lesson. Her conversational move to put more emphasis on content progress rather than treating L2 learners' errors is shared by many immersion teachers; they identify themselves as content teachers rather than as language teachers and attest that their content can only be taught in a limited time by content teachers but the target language can be taught in language arts lessons by language arts teachers (Sakurai, 2010).

Another possible reason for prompts generating more uptakes than recasts is the ambiguity of recasts as CF (Lyster, 1998a, 2004, Lyster & Ranta, 1997; Panova & Lyster, 2002). Lyster (1998a) compared the number of recasts (CF) and noncorrective repetitions produced by FI teachers from 18 hours of classroom interactions. The findings revealed that recasts and noncorrective repetitions of students' utterances were produced in almost equal proportions. Thus, it may be difficult for students to discern whether teachers are providing CF (i.e., recasts) or expressing signs of listening, approval of the content, or conversational moves. For example, when recasts are compared with other types of CF, it is clear that recasts are less often perceived as CF. Using stimulated recall interviews, Rassaei and Moinzadeh (2012) compared Persian EFL students' perceptions of recasts and metalinguistic feedback. Their results indicated that the students were more accurate in identifying corrective force in metalinguistic feedback than in recasts. Similarly, Rassaei (2013) also compared Persian EFL students' perception as well as acquisition of English articles by recasts and explicit corrections. Using a stimulated recall method, the students who received explicit corrections were significantly more accurate in identifying corrective force of the teacher feedback than their counterparts who received recasts. In turn, the explicit correction group performed better than the recast group in post-tests regarding to the target language structure (also refer to Yilmaz, 2012).

Even if recasts are perceived as CF, teachers' intentions and students' perceptions as to which linguistic form(s) is the focus may be different (Al-Surmi, 2012; Carpenter, Jeon, MacGregor, & Mackey, 2006; Kim & Han, 2007; Mackey, 2006; Mackey, Gass, & McDonough, 2000; Roberts, 1995; Trofimovich, Ammar, & Gatbonton, 2007). Robert (1995) studied American college students studying Japanese as a foreign language and their perceptions of recasts provided by classroom teachers. Using stimulated recall, the students noticed approximately 38% of the CF including recasts, repetition, and confirmation checks and understood only 25% of their intent. Studies by Mackey et al. (2000) and Kim and Han (2007) revealed that teachers' intentions and students' perceptions tend to have an inverse relationship. The adult ESL classroom teachers in the Mackey et al. (2000) study tend to provide recasts on morphosyntactic, phonological, and lexical errors in order of frequency, but the students tend to recognize them in the opposite order. The adult EFL classroom teachers in Korea from the Kim and Hanstudy tend to provide recasts on

morphophonological, syntactic, lexical, and phonological errors in order of frequency, but the students tend to recognize them in the opposite order. From these results, Kim and Han (2007) and Han (2008) hypothesize that the lack of noticing recasts as morphological and syntactic CF is L2 learners' natural inclination for processing input for meaning.

Although prompts produced the most uptakes, recasts produced the most repairs in the EI classrooms in Japan. In other words, uptakes generated by prompts tend to be more needs-repairs than self-repairs. One possible reason is the students' current stage in interlanguage development. Inasmuch as prompts provide a greater opportunity for uptakes, this opportunity is not always fulfilled because repairs require knowledge of the targeted linguistic form. If students do not have at least latent knowledge of the targeted linguistic form, they will not be able to produce self-repairs on their own. In other words, L2 learners' interlanguage development which influentially dictates their learning succession may have a stronger effect on L2 acquisition than the effect of CF. If students are not ready to progress in their interlanguage, prompts do not elicit repairs from students (Krashen, 1982; Pienneman, 2007, 2010).

Also, it is much easier for students to produce repairs by repeating the teachers' recasts than to produce correct forms by their own devises. The basic distinction between recasts and prompts is that recasts provide students with correct forms while prompts withhold correct forms. Thus, the students in EI classrooms in Japan could have merely repeated what the teachers said. As can be seen in Example 6, most of the repairs followed by recasts are one word uptakes; recasts are not incorporated into the reformulation of the phrases or sentences. This implies that the repairs generated by recasts may be mere repetition.

*Limitations of the Current Study*

In order to correctly interpret the data of this current study, some caveats are in order. First, there is a great discrepancy in the quantity of data between EI classrooms in Japan vs. FI and JI classrooms in North America. The data from EI classrooms were obtained from about 4. 5 hours of classroom observation whereas the data from French and JI classrooms were obtained from 18. 3 hours and 14. 3 hours of classroom observation, respectively.

Second, the content of the lessons observed is not consistent across the studies. The data from the EI classrooms come from mathematics and science; the data from the FI classrooms come from French language arts, social studies, science, and mathematics; the data from the JI classrooms come from Japanese language arts, other subject-matter lessons (not defined), and other activities involving discussions before and after regular lessons pertaining to topics such as classroom procedures, daily scheduling, attendance, and the weather (Lyster & Mori, 2008). The crucial difference is that the data from the FI and JI classrooms contain classroom discourses from the target language arts lessons (43% and 74%, respectively) while the EI classrooms do not. Although Lyster and Mori (2006) describe the observed lessons as follows: "The teachers were so adept at blurring borders between language arts classes and subject-matter classes that it was often difficult to identify the type of class under observation" (p. 279), the goals and inherent focus of the lessons must clearly differ between the target language arts and content classes. In this regards, one can easily assume that JI students overall interpret teachers' recasts as CF on language form, and they, in turn, produce more uptake and repairs after recasts.

Third, it cannot be emphasized enough that more uptakes (especially self-repairs) does not necessarily lead to greater acquisition of the target form. In the case of mere repetitions,

investigators have very little conviction that the linguistic items are acquired or even processed. In order to demonstrate acquisition, Ellis (2010b) proposes that the following sequence needs to be shown:

1. The learner could not do X at time *a* (the 'gap').
2. The learner co-adapted X at time *b* ('social construction').
3. The learner initiated X at time *c* in a similar context as in time b ('internalization/self-regulation').
4. The learner employed X at time *d* in a new context ('transfer of learning'). (p. 44)

## Conclusion

Although the distribution of CF remains similar regardless of sociocultural and educational settings, the distributions of uptakes and repairs differ among different immersion contexts. In terms of the use of recasts, the current study bolsters the original studies by Lyster and Ranta (1997) and Mori (2002) by demonstrating that recasts are the most frequently used teacher feedback type in immersion classrooms vis-à-vis prompts and explicit corrections regardless of their sociocultural/educational contexts. However, the greatest number of uptakes in the EI classrooms is elicited by prompts followed by recasts and explicit correction, thus showing a similar pattern to that observed in the FI classrooms but not in the JI classrooms. The distribution of repairs in the EI classrooms, on the other hand, demonstrated a pattern observed in the JI classrooms but not in the FI classrooms. Hence, the two factors of the counter-balance hypothesis, namely the linguistic distance between the target language and students' native language and the status of the target language in a given social setting, cannot explain the phenomena observed in the EI classrooms. That is to say, because these two factors are equivalent in the EI and JI classrooms, the EI classrooms should have replicated the phenomena observed in the JI classrooms based on the premise of the counter-balance hypothesis.

In order to pursue a clearer picture of CF in immersion classrooms, Ellis (2010a) suggests using a sociocognitive framework to investigate cognitive, psychological, and social dimensions. Hitherto, research on CF has mainly focused on cognitive aspects (e.g., attention, noticing, etc.) with less focus on psychological (e.g., individual differences of teachers and students) and social aspects (e.g., sociocultural and educational settings). In a similar vein, as one of reviewer pointed out, the EI, FI, and JI classrooms are all embedded in uniquely different sociocultural settings from each other, which naturally generate different attitudes/values towards the respective target languages, how to teach/learn them, and what it means to be able to master/use them. Thus, one context (e.g., EI) being different from others (e.g., FI and JI) is a natural phenomenon because both students and teachers bring unique individual repertoires to the classroom. All in all, further investigation of teachers' and students' psychological factors as well as finer variables on a social dimension may help disclose other independent and/or mediating variables which might influence the distribution and its relationship with CF, student uptakes, and repairs.

## About the Author

Shogo Sakurai is a Ph.D. candidate in the School of Languages and Cultures at Purdue University, West Lafayette, Indiana. His research interests are second language acquisition, bilingualism, bilingual education, and second/foreign language teaching methodology.

**Notes**

[1] Fortune and Tedick (2008) introduce three broad types of immersion programs: one-way immersion (a.k.a., foreign language immersion), two-way immersion (a.k.a., dual language immersion), and indigenous immersion programs. For this paper, 'immersion education' and 'immersion program' refer to one-way immersion programs in which the majority of the students share the native language and the content of school subjects are taught in the target language.

[2] Swain and Johnson (1997) introduced eight core features of immersion programs, and later, Swain and Lapkin (2005) revised those features.

[3] Fortune and Tedick (2008, p. 10) also add "enhanced levels of intercultural sensitivity" as an additional goal.

[4] Being bilingual also causes negative consequences in regards to rapid lexical access in comparison with monolingual counterparts. Bilinguals tend to be slower in naming pictures and verbal fluency tasks. Also, they experience more tip-of-the-tongue episodes (Ardila & Ramon, 2007; Bialystok, 2011).

[5] Please refer to Nicolay and Poncelet (2013) for cognitive advantages specifically conferred to immersion students.

[6] At the time, Lyster and Ranta (1997) called elicitation, metalinguistic feedback, clarification request, and repetition as negotiation of form, but, in later years, Lyster changed the term to prompt.

[7] Based on the ESL classroom study by Bao, Egi, and Han (2011), the number of uptakes (i.e., a performance measure) tends to undermine the frequency of noticing recasts as corrective feedback vis-à-vis a stimulated recall method (i.e., an introspective measure). In a laboratory setting, Egi (2010) found that learners who produced uptake after the recast were significantly more likely to report having perceived the recast as corrective.

[8] Lyster and Mori (2006) preferred to use the term interactional feedback rather than corrective feedback because the corrective feedback in immersion classrooms "sustain[s] classroom interaction and maintain[s] its coherence, but without consistently fulfilling a corrective function" (p. 272). In this paper, however, the author uses the term corrective feedback.

[9] In this case, the term is used in a lay sense. The concept of the term has not been agreed upon by researchers with respect to what counts as near native (Sorace, 2003).

[10] During the lessons, some teachers walked around the classroom and talked to individual students or individual groups. Those tokens were not included in this study.

[11] Ungrammatical utterances can be structural, lexical, phonological, and unsolicited L1 use (Lyster & Ranta, 1997).

[12] A recent study by Lee (2013) revealed a discrepancy between students' and teachers' preferred CF types in adult ESL advanced –level classrooms. While the students most preferred to get explicit error correction, the teachers most preferred to give the students recasts, and they strongly resisted correcting all of the students' oral errors.

# References

Adesope, O. O., Lavin, T., Thompson, T., & Ungerleider, C. (2010). A systematic review and meta-analysis of the cognitive correlates of bilingualism. *Review of Educational Research, 80*, 207-245.

Al-Surmi, M. (2012). Learners' noticing of recasts of morpho-syntactic errors: Recast types and delayed recognition. *System, 40*, 226-236.

Ardila, A., & Ramos, E. (2007). Bilingualism and cognition: The good, the bad, and the ugly of bilingualism. In A. Ardila & E. Ramos (Eds.), *Speech and language disorders in bilinguals* (pp. 213-234). New York, NY: Nova Science Publishers.

Bao, M., Egi, T., & Han, Y. (2011). Classroom study on noticing and recast features: Capturing learner noticing with uptake and stimulated recall. *System, 39*, 215-228.

Bialystok, E. (2005). Consequences of bilingualism for cognitive development. In J. F. Kroll & A. B. de Groot (Eds.), *Handbook of bilingualism: Psycholinguistic approaches* (pp. 41-432). Oxford, England: Oxford University Press.

Bialystok, E. (2009). Bilingualism: The good, the bad, and the indifferent. *Bilingualism: Language and Cognition, 12*, 3-11.

Bialystok, E. (2011). How analysis and control lead to advantages and disadvantages in bilingual processing. In C. Sanz & R. P. Leow (Eds.), *Implicit and explicit language learning: Conditions, processes, and knowledge in SLA and bilingualism* (pp. 49-58). Washington DC: Georgetown University Press.

Bialystok, E., & Barac, R. (2013). Cognitive effects. In F. Grosjean & P. Li (Eds.), *The psycholinguistics of bilingualism* (pp. 192-213). Malden, MA: Blackwell Publishing.

Bialystok, E., Craik, F. I. M., & Freedman, M. (2007). Bilingualism as a protection against the onset of symptoms of dementia. *Neuropsychologia, 45*, 459-464.

Bostwick, R. M. (2001). Bilingual education of children in Japan: Year four of a partial immersion program. In M. G. Noguchi & S. Fotos (Eds.), *Studies in Japanese bilingualism* (pp. 272-311). Clevedon, England: Multilingual Matters.

Braidi, S. M. (2002). Reexamining the role of recasts in native-speaker/nonnative-speaker interactions. *Language Learning, 52*, 1-42.

Carpenter, H., Jeon, K. S., MacGregor, D., & Mackey, A. (2006). Learners' interpretations of recasts. *Studies of Second Language Acquisition, 28*, 209-236.

Center for Applied Linguistics (2011). Growth of language immersion programs in the U. S., 1971-2011. Retrieved from http://www. cal. org/resources/immersion/Doc/Growth%20of%20Language%20Immersion%20Programs%20in%20the%20US%201971-2011. pdf

Chaudron, C. (1977). A descriptive model of discourse in the corrective treatment of learners' errors. *Language Learning, 27*, 29-46.

Defense Language Institute. (n. d.). Languages taught at DLIFLC and duration of courses. Retrieved from http://www. dliflc.edu/dlilife.aspx

Doughty, C., & Varela, E. (1998). Communicative focus on form. In C. Doughty & J. Williams (Eds.), Focus on form in classroom second language acquisition (pp. 114-138). New York: Cambridge University Press.

Downes, S. (2001). Sense of Japanese cultural identity within an English partial immersion programme: Should parents worry? *International Journal of Bilingual Education and Bilingualism, 4*, 165-180.

Dreifus, C. (2011, May 30). The bilingual advantage. *The New York Times*, p. D2.

Egi, T. (2010). Uptake, modified output, and learner perceptions of recasts: Learner responses as language awareness. *The Modern Language Journal, 94*, 1-21.

Ellis, R. (2009). Corrective feedback and teacher development. *L2 Journal, 1*, 3-18.

Ellis, R. (2010a). Cognitive, social, and psychological dimensions of corrective feedback. In R. Batstone (Ed.), *Sociocognitive perspectives on language use and language learning* (pp. 151-165). Oxford, England: Oxford University Press.

Ellis, R. (2010b). Theoretical pluralism in SLA: Is there a way forward? In P. Seedhouse, S. Walsh & C. Jenks (Eds.), *Conceptualising 'learning' in applied linguistics* (pp. 23-51). London, England: Palgrave Macmillan.

Ellis, R., Basturkmen, H., & Loewen, S. (2001). Learner uptake in communicative ESL lessons. *Language Learning, 51*, 281-318.

Ellis, R., & Sheen, Y. (2006). Reexamining the role of recasts in second language acquisition. *Studies in Second Language Acquisition, 28*, 339-369.

Fortune, T. W., & Tedick, D, J. (2008). One-way, two-way and indigenous immersion: A call for cross-fertilization. In T. W. Fortune & D J. Tedick (Eds.), *Pathways to multilingualism: Evolving perspectives on immersion education* (pp. 3-21). Clevedon, England: Multilingual Matters.

Genesee, F. (1987). *Learning through two languages: Studies of immersion and bilingual education*. Cambridge, MA: Newbury House Publishers.

Genesee, F., & Gándara, P. (1999). Bilingual education programs: A cross-national perspective, *Journal of Social Issues, 55*, 665-685.

Gunma Kokusai Academy (2009, May). *GKA Newsletter*. Gunma Kokusai Academy.

Han, Z. (2008). On the role of meaning in focus on form. In Z. Han (Ed.), *Understanding second language process* (pp. 45-79). New York, NY: Multilingual Matters.

Harley, B. (1992). Patterns of second language development in French immersion. *Journal of French Language Studies, 2*, 159-183.

Harley, B., Cummins, J., Swain, M., & Allen, P. (1990). The nature of language proficiency. In B. Harley, P. Allen, J. Cummins & Swain, M. (Eds.), *The development of second language proficiency* (pp. 7-25). Cambridge, England: Cambridge University Press.

Hinds, J. (1987). Reader vs. writer responsibility: A new typology. In U. Conner, & R. Kaplan (Eds.), *Writing across languages* (pp. 141-152). Reading, MA: Addison-Wesley.

Johnson, R. K. (1997). The Hong Kong education system: Late immersion under stress. In R. K. Johnson & M. Swain (Eds.), *Immersion education: International perspectives* (pp. 171-189). New York, NY: Cambridge University Press.

Johnson, R. K., & Swain, M. (1997). *Immersion education: International perspectives*. New York, NY: Cambridge University Press.

King, K., & Mackey, A. (2007). *The bilingual edge: Why, when, and how to teach your child a second language*. New York, NY: Harper Collins.

Kim, J., & Han, Z. (2007). Recasts in communicative EFL classes: Do teacher intent and learner interpretation overlap? In A. Mackey (Ed.).*Conversation interaction in second language acquisition: A collection of empirical studies* (pp. 269-297). Oxford, England: Oxford University Press.

Krashen, S. (1982). *Principles and practice in second language acquisition*. Oxford, England: Oxford University Press.

Labrune, L. (2012). *The phonology of Japanese*. Oxford, England: Oxford University Press.

Lazaruk, W. (2007). Linguistic, academic, and cognitive benefits of French immersion. *The Canadian Modern Language Review, 63*, 605-628.

Lee, E. J. (2013). Corrective feedback preferences and learner repair among advanced ESL students. *System, 41*, 217-230.

Li, S. (2010). The effectiveness of corrective feedback in SLA: A meta-analysis. *Language Learning, 60*, 309-365.

Loewen, S., & Nabei, T. (2007). Measuring the effects of oral corrective feedback on L2 knowledge. I n A. Mackey (Ed.), *Conversational interaction in second language acquisition* (pp. 361-377). Oxford, England: Oxford University Press.

Long, M. H. (2007). *Problems in SLA*. Mahwah, HJ: Lawrence Erlbaum.

Lyster, R. (1994). The effect of functional-analytic teaching on aspects of French immersion students' sociolinguistic competence . *Applied Linguistics, 15*, 263-287.

Lyster, R. (1998a). Negotiation of form, recasts, and explicit correction in relation to error types and learner repair in immersion classrooms. *Language Learning, 48*, 183-218.

Lyster, R. (1998b). Recasts, repetition, and ambiguity in L2 classroom discourse. *Studies in Second Language Acquisition, 20*, 51-81.

Lyster, R. (2004). Differential effects of prompts and recasts in form-focused instruction. *Studies in Second Language Acquisition, 26*, 399-432.

Lyster, R., & Mori, H. (2006). Interactional feedback and instructional counterbalance. *Studies of Second Language Acquisition, 28*, 269-300.

Lyster, R., & Mori, H. (2008). Instructional counterbalance in immersion pedagogy. In T. W. Fortune & D. J. Tedick (Eds.), *Pathways to multilingualism: Evolving perspectives on immersion education* (pp. 133-151). New York, NY: Multilingual Matters.

Lyster, R., & Ranta, L. (1997). Corrective feedback and learner uptake. *Studies in Second Language Acquisition, 20*, 37-66.

Lyster, R., Saito, K., & Sato, M. (2013). Oral corrective feedback in second language classrooms. *Language Teaching, 46*, 1-40.

Lyster, R., & Saito, M. (2010). Oral feedback in classroom SLA: A meta-analysis. *Studies in Second Language Acquisition, 32*, 265-302.

Mackey, A. (2006). Feedback, noticing and instructed second language learning. *Applied Linguistics, 27*, 405-430.

Mackey, A., Gass, S., & McDonough, K. (2000). How do learners perceive interactional feedback. *Studies in Second Language Acquisition, 22*, 471-497.

Mackey, A., & Goo, J. (2007). Interaction research in SLA: A meta-analysis and research synthesis. In A. Mackey (Ed.), *Conversational interaction in second language acquisition: A collection of empirical studies* (pp. 407-452). Oxford, England: Oxford University Press.

Mackey, A., & Philp, J. (1998). Conversational interaction and second language development: Recasts, responses, and red herrings? *Modern Language Journal, 82*, 338-356.

Mori, H. (2002). *Error treatment sequences in Japanese immersion classroom interactions at different grade levels*, Unpublished doctoral dissertation, University of California, Los Angeles, California.

Nassaji, H. (2009). Effects of recasts and elicitations in dyadic interaction and the role of feedback explicitness. *Language Learning, 59*, 411-452.

Nicolay, A., & Poncelet, M. (2013). Cognitive advantage in children enrolled in a second-language immersion elementary school program for three years. *Bilingualism: Language and Cognition, 16*, 596-607.

Odlin, T. (1989). *Language transfer: Cross-linguistic influence in language learning*. Cambridge, England: Cambridge University Press.

Oliver, R. (1995). Negative feedback in child NS-NNS conversation. *Studies in Second Language Acquisition, 17*, 459-483.

Panova, I., & Lyster, R. (2002). Patterns of corrective feedback and uptake in an adult ESL classroom. *TESOL Quarterly, 36*, 573-595.

Pienemann, M. (2007). Processability theory. In B. VanPatten & J. Williams (Eds.), *Theories in second language acquisition* (pp. 137-154). Mahwah, NJ: Lawrence Erlbaum Associates.

Pienemann, M. (2010). A cognitive view of language acquisition: Processability theory and beyond. In P. Seedhouse, S. Walsh & C. Jenks (Eds.), *Conceptualising 'learning' in applied linguistics* (pp. 69-88). London, England: Palgrave Macmillan.

Porter, C. (2010, April). English is not enough. *The Chronicle of Higher Education. 56*(32), p. A64.

Rassaei, E. (2013). Corrective feedback, learners' perceptions, and second language development. *System 41*, 472-483.

Rassaei, E., & Moinzadeh, A. (2012). Recasts, metalinguistic feedback, and learners' perceptions: A case of Persian EFL learners. *Innovation in Language Learning and Teaching*, (ahead-of-print), 1-17.

Roberts, M. (1995). Awareness and the efficacy of error correction. In R. W. Schmidt (Ed.), *Attention and awareness in foreign language learning* (pp. 163-182). Honolulu, HI: University of Hawai'i Press.

Russell, J., & Spada, N. (2006). The effectiveness of corrective feedback for the acquisition of L2 grammar. In J. Norris & L. Ortega (Eds.), *Synthesizing research on language learning and teaching* (pp. 133-162). Amsterdam, the Netherlands: John Benjamins.

Sakurai, S. (2010). *Form-focused instruction in immersion classrooms: A case study of an English immersion school in Japan*. (Unpublished master's thesis). Purdue University, West Lafayette, Indiana.

Salvatierra, J. L., & Rosselli, M. (2011). The effect of bilingualism and age on inhibitory control. *International Journal of Bilingualism, 15*, 26-37.

Salzmann, Z., Stanlaw, J., & Adachi, N. (2012). *Language, culture, and society: an introduction to linguistic anthropology*. Boulder, CO: Westview Press.

Schultz, R. A. (1996). Focus on form in the foreign language classroom: Students' and teachers' views on error correction and the role of grammar. *Foreign Language Annals, 29*, 343-364.

Schulz, R. A. (2001). Cultural differences in student and teacher perceptions concerning the role of grammar instruction and corrective feedback: USA-Columbia. *The Modern Language Journal, 85*, 244-258.

Seedhouse, P. (1997). The case of the missing "no": The relationship between pedagogy and interaction. *Language Learning, 47*, 547-583.

Sheen, Y. (2004). Corrective feedback and learner uptake in communicative classrooms across instructional settings, *Language Teaching Research, 8*, 263-300.

Sorace, A. (2003). Near-nativeness. In C. J. Doughty & M. H. Long (Eds.), *The handbook of second language acquisition* (pp. 130-151). Malden, MA: Blackwell Publishing.

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass & C. Madden (Eds.), Input in second language acquisition (pp. 235-253). Rowley, MA: Newbury House.

Swain, M. (1996a). Discovering successful second language teaching strategies and practices: From programme evaluation to classroom experimentation. *Journal of Multilingual and Multicultural Development, 17*, 89-104.

Swain, M. (1996b). Integrating language and content in immersion classrooms: Research perspectives. *Canadian Modern Language Review, 52*, 529-548.

Swain, M., & Johnson, R. K. (1997). Immersion education: A category within bilingual education. In R. K. Johnson & M. Swain (Eds.), *Immersion education: International perspectives* (pp. 1-16). Cambridge, England: Cambridge University Press.

Swain, M., & Lapkin, S. (1982). *Evaluating bilingual education: A Canadian case study*. Clevedon, England: Multilingual Matters.

Swain, M., & Lapkin, S. (2005). The evolving sociopolitical context of immersion education in Canada: Some implications for program development. *International Journal of Applied Linguistics, 15*, 169-186.

Tarone, E., & Swain, M. (1995). A sociolinguistic perspective on second language use in immersion classrooms. *The Modern Language Journal, 79*, 166-178.

Tedick, D. J., Christian, D., & Fortune, T. W. (2011), *Immersion education: Practices, policies, possibilities*. Bristol, England: Multilingual Matters.

Trahey, M., & White, L. (1993). Positive evidence and preemption in the second language classroom. *Studies in Second Language Acquisition, 15*, 181-204.

Trofimovich, P., Ammar, A., & Gatbonton, E. (2007). How effective are recasts? The role of attention, memory, and analytical ability. In A. Mackey (Ed.), *Conversational interaction in second language acquisition* (pp. 171-195). Oxford, England: Oxford University Press.

Truscott, J. (1996). The case against grammar correction in L2 writing classes. *Language Learning, 46*, 327-369.

Truscott, J. (1999). The case for "the case against grammar correction in L2 writing classes": A response to Ferris. *Journal of Second Language Writing, 8*, 111-122.

Truscott, J. (2004). Evidence and conjecture on the effects of correction: A response to Chandler. *Journal of Second Language Writing, 13*, 337-343.

Truscott, J. (2007). The effect of error correction on learners' ability to write accurately. *Journal of Second Language Writing, 16*, 255-272.

Yilmaz, Y. (2012). The relative effects of explicit correction and recasts on two target structures via two communication modes. *Language Learning, 62*, 1134-1169.