

Research perspectives on immersion pedagogy

Looking back and looking forward

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This article presents an overview of immersion pedagogy and how it has developed over the years in conjunction with classroom research and evolving classroom practices. We first consider initial conceptualization of immersion pedagogy as being primarily content-based and input-driven with only an incidental focus on the immersion language. We consider the strengths and weaknesses of this approach as a means to explain subsequent recommendations for a more systematic focus on language in immersion pedagogy. We then review classroom research investigating various pedagogical means of enhancing immersion students' metalinguistic awareness through form-focused instruction, corrective feedback, and cross-lingual pedagogy. We conclude with questions and issues for future research and development in the realm of immersion pedagogy.

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Amid the flourishing movement of naturalistic and communicative language teaching methods of the 1980s, which assumed that implicit acquisition determines second language (L2) performance and obviates the need for explicit instructional intervention (e.g., Krashen, 1985), studies of L2 learners in programs such as French immersion in Canada revealed that, even after many years of exposure to the immersion language, students exhibited lower-than-expected levels of grammatical accuracy, lexical variety, and sociolinguistic competence (Harley, Cummins, Swain, & Allen, 1990). These outcomes are now thought to be the result of initial conceptualizations of immersion pedagogy, which underrated the extent to which students needed to attend to the immersion language to ensure optimal conditions for its acquisition. Accordingly, to paint a portrait of what is now known about immersion pedagogy, this article will first identify some essential

characteristics of content-based input and instruction while also highlighting their limitations, and then report on instructional initiatives and teacher perspectives related to integrating a systematic focus on language in immersion pedagogy. The article concludes with questions and issues for future research and development.

1. Content-based input and instruction

1.1 Comprehensible input

Making subject-matter input comprehensible through a learner's L2 is the primary goal of immersion teachers yet is no small undertaking because the curricular content itself must not be simplified to the point of shortchanging students (Met, 1998). To ensure comprehension, experienced teachers rely on a wide range of instructional strategies that facilitate the learning of curricular content through the immersion language. These include scaffolding techniques that enable learners to carry out tasks they would be unable to do on their own and also those that give students many chances to understand the target language and curricular content. For example, some scaffolding techniques involve linguistic redundancy (e.g., self-repetition, paraphrase, synonyms, and use of multiple examples) while others entail non-linguistic support (e.g., gestures, graphic organizers, visual and multimedia resources). Because such scaffolding needs to be seen as temporary, however, immersion teachers need to engage in a delicate balancing act of providing, on the one hand, just the right amount of support to make the immersion language comprehensible, while being demanding enough, on the other hand, to ensure that learners engage in higher-order cognitive skills. Strategies that rely too much on gestures and other visual and non-linguistic support are unlikely over time to make the kinds of increasing demands on the learners' language system that are necessary for continued L2 learning.

1.2 Limitations of content-based input

Swain (1988) proposed that content teaching on its own is not necessarily good language teaching because of the limited range of language forms and functions to which it exposes students. A powerful example of this pertains to the range of verb tenses used by French immersion teachers in Ontario (Swain, 1988) and Quebec (Lyster, 2007). Across both contexts, 74–75% of all verbs used were restricted to the present tense or imperative forms, whereas only 14–15% were in the past tense, 6–8% in the future tense, and 3% in the conditional mood. The disproportionate use of present tense and imperative forms may help to explain gaps in French

immersion students' L2 development, especially their limited use of conditional forms and their inaccurate use of past tense forms. Similarly and more recently, in their analysis of the oral production of Cherokee immersion students, Peter, Hirata-Edds, and Montgomery-Anderson (2008) observed a predominance of verbs in the imperative form in obligatory contexts for the present continuous. They concluded that the students' overuse of imperative forms was likely due to the fact that imperative forms were the verb forms used most frequently by teachers to address students.

The "functionally restricted" input to which immersion students are exposed (Swain, 1988, p. 74) has also been invoked to explain other gaps in French immersion students' language development. For example, their choice of second-person pronouns — characterized by overuse of informal *tu* and underuse of formal *vous* — has been linked to the absence of formal *vous* in classroom discourse (Swain, 1988) but also to teachers' use of *tu* to indicate indefinite reference and even plural reference as they address the whole class while expressing a sense of closeness with each individual (Lyster & Rebuffot, 2002). With respect to lexical clues available in teacher discourse to mark grammatical gender (another well documented problem for immersion students), Poirier and Lyster (2014) reported that only half of the determiners and adjectives used by French immersion teachers and less than a third of all direct object 3rd-person clitic pronouns were clearly marked for grammatical gender. Finally, with respect to gaps in immersion students' sociolinguistic competence, Mougeon, Nadasdi, and Rehner's (2010) reported that students' underuse of vernacular and other informal variants on the one hand, and their overuse of formal variants on the other, reflected their teachers' excessive use of formal variants at the expense of informal variants.

Swain (1988) also argued, however, that even if learners were exposed to richer and more varied input, mere exposure would be insufficient for driving L2 development. This is because students whose primary preoccupation is learning content can do so through semantic processing, which does not require precise syntactic and morphological knowledge of the target language. They can bypass syntax and morphology by drawing instead on "vastly greater stores of schematic and contextual knowledge" (Skehan, 1998, p. 26) and on mental processing that "may be carried out in the first language or some language-independent way" (Cameron, 2001, p. 40). This helps to explain the outcomes of French immersion programs, whereby students were shown to perform similarly to native speakers on measures of discourse competence including story retells, argumentation, and suasion tasks, but were clearly less proficient on most grammar variables (Harley et al., 1990).

1.3 Language and content separation

The extent to which immersion pedagogy entails the integration of language and content is seen to affect learning outcomes and yet is contingent upon a multitude of factors ranging from grade level and teachers' professional backgrounds to whether the language and content teachers are one and the same or different. At the secondary level, Tan (2011) reported that teachers' beliefs about their respective roles as "only content teachers or only language teachers" (p. 325) limited students' language learning opportunities. At the middle-school level, Kong (2009) reported that content-trained teachers focused mainly on content at the expense of language while language-trained teachers focused more on language but often at the expense of greater in-depth exploration of content. Even in elementary programs in which immersion teachers teach both language arts and subject matter, research has revealed a tendency for them to keep language instruction and content instruction separate, as first observed by Allen, Swain, Harley, and Cummins (1990):

It is a relatively rare occurrence for teachers to refer to what has been learned in a grammar lesson when they are involved in content teaching, and even more rare for teachers to set up content-based activities for the purpose of focusing on problematic language forms. (p. 75)

As Lightbown (2014) suggests, separating content and language in this way "may deprive students of opportunities to focus on specific features of language at the very moment when their motivation to learn them may be at its highest" (p. 30). More recent studies have continued to reveal the complexities of teachers' beliefs in this regard. For example, Fortune, Tedick, and Walker (2008) reported that Spanish immersion teachers (Grades 3–6) perceived themselves primarily as content rather than language teachers and yet, at the same time, believed that they were "always teaching language" (p. 77), whereas video recordings revealed that they did not attend to language in systematic ways and limited their attention to vocabulary and verbs. Cammarata and Tedick's (2012) study confirmed that one of the greatest challenges for immersion teachers is to identify which target language features to focus on, but also that, as experience increases, teachers develop a greater sense of the language and content connection.

2. Form-focused input, interaction, and instruction

There is now unanimity in calling for a greater focus on language in immersion pedagogy, not only for the sake of greater accuracy but also for learners to achieve the high levels of oral and written proficiency required for academic literacy and

school success (Met, 2008). While researchers concur that the language focus in immersion pedagogy needs to be less incidental and more intentional, they do not appeal to more traditional language instruction as a solution. Instead, various proposals for improving target language outcomes in immersion have been made, and most have to do with a more systematic integration of language and content.

Swain (1988) proposed that content teaching needs to be manipulated and complemented in ways that maximize L2 learning, and suggested that, to do so, teachers need to draw students' attention to specific form/meaning mappings by creating contrived contexts that allow students to notice L2 features in their full functional range. Dalton-Puffer (2007) called for greater emphasis on academic language functions such as describing, explaining, hypothesizing and predicting, and Hoare and Kong (2011) suggested instructional strategies that emphasize technical academic knowledge rather than only common sense knowledge. Lyster (2007) argued for the integration of form-focused and content-based instruction through a counterbalanced approach that incites students to vary their attentional focus between the content to which they usually attend in classroom discourse and target language features that are not otherwise attended to.

The goal of a language focus in immersion pedagogy is to strengthen students' metalinguistic awareness, which then serves as a tool for extracting linguistic information from content-based input and thus for learning language through subject-matter instruction. Because young immersion students rely heavily on the use of formulaic chunks in their early production (e.g., Weber & Tardif, 1991), teachers can exploit their students' emerging metalinguistic awareness to engage increasingly over time in analyses of formulaic items as a means of developing a more generative rule-based system. Three ways to enhance immersion students' metalinguistic awareness that have been tried and tested in classroom studies are reviewed next: form-focused instruction, corrective feedback, and cross-lingual pedagogy.

2.1 Form-focused instruction

Form-focused instruction refers to "any pedagogical effort which is used to draw the learners' attention to form implicitly or explicitly" (Spada, 1997, p. 73) and has been operationalized specifically in immersion settings as a recursive sequence of noticing, awareness, and practice activities (Lyster, 2007). In the noticing phase, students engage in activities designed to draw their attention to problematic target features contrived to appear more salient and/or frequent in oral and written input. In the awareness phase, students participate in activities that require them to do more than merely notice enhanced forms in the input and instead to engage in some degree of elaboration. Awareness activities include inductive rule-discovery

tasks and opportunities to compare and contrast language patterns, followed by different types of metalinguistic information. In the practice phase, students engage in tasks that create obligatory contexts for meaningful use of problematic target forms that are otherwise misused or avoided.

A set of intervention studies conducted in French immersion classrooms ranging from Grades 2 to 8 demonstrated the variable effects of form-focused instruction on a range of challenging target features in French: grammatical gender (Harley, 1998; Lyster, 2004), second-person pronouns (Lyster, 1994), conditional verb forms (Day & Shapson, 2001), functional distinctions between perfect and imperfect past tenses (Harley, 1989), verbs of motion (Wright, 1996), and derivational morphology (Lyster, Quiroga, & Ballinger, 2013). In the context of a Grade 5 two-way immersion (Spanish-English) classroom in the U.S., Tedick and Young (2014) observed the teacher's use of noticing, awareness, and practice activities to improve students' use of imperfect and preterit past tenses. The intervention appeared effective for some learners, but not for those with very low levels of proficiency in Spanish, leading Tedick and Young to conclude that a certain threshold of proficiency may be needed for form-focused instruction to have a positive impact.

2.2 Interaction and corrective feedback

Netten's (1991) observational study of immersion classrooms called into question the importance typically attributed to immersion teacher input and revealed instead that interaction between teacher and students and also among students "may permit more experimentation with the language, leading to higher levels of competence in the second language" (p.303). The way in which immersion teachers interact with their students is indeed now considered central to immersion pedagogy. Teacher-student interaction holds much potential for promoting language development through questioning and feedback techniques that provide learners with the scaffolding they need in order to understand, participate, and engage with both language and content.

Corrective feedback provided during teacher-student interaction is one way for teachers to integrate a focus on language into their instructional practices. However, early classroom observation studies suggested that the use of feedback was not a priority for immersion teachers. For example, a study by Allen, Swain, Harley, and Cummins (1990) revealed that error treatment was dealt with in "a confusing and unsystematic way" (p.67). Only 19% of grammatical errors overall were corrected, and when correction did occur it generally appeared to be motivated by an "irritation" factor. They cautioned that such "unsystematic, possibly random feedback to learners about their language errors" (p.76) could have a "detrimental effect on learning" (p.67). Since Allen et al.'s (1990) study, immersion

teachers have been observed using corrective feedback more frequently, in response to as many as 56% of students' grammatical errors in French immersion (Lyster, 1998) and after more than 60% of students' overall errors in French immersion (Lyster & Ranta, 1997), Japanese immersion (Lyster & Mori, 2006), and English immersion (Lee, 2007). In all cases, the majority of the feedback used by immersion teachers involved recasting, which entails an implicit reformulation of the student's utterance, minus the error.

The frequency of recasts in immersion classrooms is likely associated with their discourse functions that facilitate the delivery of subject matter and provide helpful scaffolding to learners when target forms are beyond their abilities. Research suggests, however, that students — especially in meaning-oriented classrooms such as those in immersion — are likely to benefit more from feedback that pushes them to self-repair (i.e., prompts), especially in cases where recasts could be perceived ambiguously as approving their use of non-target forms and where learners have reached a developmental plateau in their use of the non-target forms. Nonetheless, students are most likely to benefit from a range of feedback types than from one type at the expense of others (Lyster, Saito, & Sato, 2013).

In a study with Grade 3 French immersion students, Bouffard and Sarkar (2008) video recorded students engaging in a range of oral activities then edited the video recordings to isolate error-feedback-repair patterns. Using those video clips, the researchers guided the children to notice and repair their errors while encouraging them at the same time to use their L2 grammatical knowledge to pinpoint the nature of the errors. Over the three-month period students learned to use “metalinguistic terminology appropriately to identify, fluently correct, and analyse the nature of their errors, and were sometimes able to propose explanations for why the errors had occurred” (p. 19). Bouffard and Sarkar concluded that it is possible to use form-focused pedagogical techniques to teach young learners how to shape and improve their L2 development.

A related strand of research has shown that when adolescent immersion students work collaboratively to complete tasks with a linguistic focus they engage in “metatalk” that enables them to use language “to reflect consciously on language use” (Swain & Lapkin, 2002, p. 286). Collaborative dialogue can also promote “languageing,” which is defined as “the process of making meaning and shaping knowledge and experience through language” (Swain, 2006, p. 98) and is considered propitious for language development. In a recent study of peer interaction at the Grade 3 level, Ballinger (2013) found that French immersion students benefited from instruction that modeled collaborative strategies for them (including provision of peer feedback), but that the quality of the interaction and the extent to which students' engaged in “reciprocal learning strategies” were of course tempered by pair dynamics (see also Palmer, Ballinger, & Peter, this issue).

2.3 Cross-lingual pedagogy and teacher collaboration

Previous research into literacy instruction in Canadian French immersion settings revealed a tendency for teachers — well in step with curricular objectives in content areas — to focus on vocabulary for the purpose of comprehension more than for drawing explicit attention to the formal and generative properties of words (Allen et al., 1990). This line of research has led to recommendations for explicit vocabulary instruction designed to increase generative word knowledge through word-focused tasks and cross-lingual pedagogy.

Others too have stressed the importance of cross-lingual connections, not only for vocabulary development but also for facilitating the role of the L1 as a cognitive resource in L2 learning (Swain & Lapkin, 2013). Cummins (2007) in particular has argued that, “learning efficiencies can be achieved if teachers explicitly draw students’ attention to similarities and differences between their languages and reinforce effective learning strategies in a coordinated way across languages” (p. 233). Cummins argued further that cross-lingual instructional strategies would serve to subvert “the two solitudes assumption” (p. 229) that has pervaded immersion programs and kept target languages separate, even though the goal is literacy in two languages (i.e., biliteracy).

To explore the feasibility of cross-lingual pedagogy in the context of French immersion, Lyster, Collins, and Ballinger (2009) implemented a bilingual read-aloud project in three classrooms ranging from Grades 1 to 3 composed of French-dominant, English-dominant, and French/English bilingual students. The project aimed to facilitate collaboration between the French and English teachers of the same students as a means of reinforcing the latter’s biliteracy skills. The two teachers of each class read aloud to their students from the same storybooks over four months, alternating the reading of one chapter from the French edition and another from the English edition. Prior to each read-aloud session, teachers asked their students to summarize the content of the previous reading, which had taken place in the other language of instruction, and after each reading they asked their students to make predictions about the next chapter thereby generating a great deal of student interaction. Students became enthusiastic participants during the reading of the stories in both languages, which appeared to enable the students, irrespective of language dominance, to understand the stories. Many of the students continued to read stories on their own from the same book series, whether in English or French. While the read-aloud sessions led to some cross-linguistic connections made incidentally, systematic collaboration between partner teachers to make connections across languages was minimal. Based on this observation, Lyster, Quiroga, and Ballinger (2013) undertook a follow-up study designed to provide (a) more time for participating teachers to actually

collaborate on planning and (b) more structured guidance regarding language objectives.

In the Lyster et al. (2013) study, three pairs of partner teachers (French/English) co-designed and implemented biliteracy tasks across their French and English classes at the Grade 2 level. The biliteracy tasks began in one language during its allotted class time and continued in the other language during its class time. The tasks were designed to draw attention to word formation and thereby develop students' awareness of derivational morphology within and across languages. While the language focus was on derivational morphology, the content focus emerged from the themes of illustrated storybooks that were read in both languages.

Before and after the intervention, separate measures of morphological awareness in French and English were administered to a subsample of the students receiving the biliteracy instruction (the experimental group) as well as to a comparison group of students not receiving the instruction. At the time of post-testing, the experimental group significantly outperformed the comparison group in French, and these positive effects were similar for all students receiving the instruction irrespective of language dominance. In addition, participating teachers' perceptions were positive and enthusiastic. They appreciated the time to collaborate and were impressed by their students' positive reactions to the biliteracy instruction, observing that students "enjoyed making connections between the two languages" (Lyster et al., 2013, p. 187). For further discussion of biliteracy and cross-lingual connections, see Hopewell and Escamilla (this issue).

3. Teachers' pedagogical experiences and perspectives

When it comes to classroom practice, teachers are the ultimate decision makers; everything they do is filtered through their prior experiences and knowledge in addition to their beliefs, attitudes, and perceptions. Research specifically regarding the perspectives of one-way and two-way immersion teachers has brought to the fore various challenges these teachers face, especially concerning the integration of language and content (Cammarata & Tedick, 2012; Fortune et al., 2008, see Section 1.3). In the context of indigenous immersion, studies of teacher perspectives have tended to focus on the incorporation of indigenous cultural values and worldviews. Indigenous teaching practices in Hawaiian and Māori immersion programs, for example, emphasize traditional cultural values and modes of learning such as hands-on experiences, learning through observation, memorization, chants, use of proverbs (Yamauchi, Ceppi, & Lau-Smith, 2000; Yamauchi & Wilhelm, 2001), and reciprocal learning wherein students can be teachers

and teachers become students (Bishop, Berryman, & Richardson, 2002, see also Hermes & Kawai'ai'a and Palmer, Ballinger, & Peter, this issue). Indigenous teachers see themselves as having a unique role and responsibility in the larger mission to revitalize the indigenous language and culture (Yamauchi et al., 2000).

Another line of inquiry related to immersion teacher perspectives has recently emerged as attention has increasingly been drawn to the importance of facilitating cross-lingual connections in immersion contexts (Section 2.3). A Canadian study examined the use of L1 (English) by two teachers in a late French immersion program beginning in Grade 7 (McMillan & Turnbull, 2009). One teacher used English extensively (up to 40%) at the start of students' first year in the program and gradually reduced its use to approximately 10–15% by January. He explained that using English helped him to know whether students had understood and that it actually encouraged students to use French. In contrast, the other teacher used very little English and believed that translating for students would not help them. On the basis of three observed lessons, McMillan and Turnbull concluded that "judicious use of the [L1] does not necessarily lead to increased student use of the [L1]; rather it can aid comprehension and increase and improve students' [L2] production" (p. 34). It is important to emphasize the context of this study — late French immersion in Canada. In discussing the potential for L1 use in French immersion, Cummins (2014) cautions that "each sociolinguistic context is unique in significant respects and therefore generalizations from one context to another should not be undertaken without specific analysis of the realities of each context" (p. 4).

4. Questions and issues for future research

A vast amount of scholarly research and professional experience confirms (a) that students connect more to a language through the use of meaningful academic content than through more traditional methods of language study but (b) that teachers who teach content through their students' L2 require considerable professional development to effectively do so. Many of the issues that we identify for future research on immersion pedagogy are therefore inextricably linked to teacher education and professional development.

The instructional integration of language and content continues to prove challenging for teachers (Cammarata & Tedick, 2012) and needs to be systematically addressed through pre-service teacher education and ongoing professional development. The underlying questions include what immersion-specific skills teachers need in order to integrate language and content instruction effectively and also how teacher collaboration might facilitate language and content connections. It

appears to be the case that novice teachers and those in preparation may still be getting the message that immersion is a “two-for-one” deal whereby teachers are encouraged to focus on content while letting the language simply emerge on its own. What we now know is that the language does not come for free. Instructional strategies and the development of curricular materials for fostering content-and-language integrated learning need to be at the heart of both pre-service and ongoing teacher development.

A pivotal question is how a focus on language can best be integrated into subject-matter instruction and a related question is whether the integration is more feasible when the language and content teachers are the same or different. An interesting area to explore in this regard is the extent to which discipline-specific language (i.e., the language of science, of mathematics, of history, etc.) can be identified in ways that would help teachers integrate language and content.

Research on form-focused instruction and collaborative tasks has been conducted more in the context of language arts than during subject-matter instruction, leaving open many questions about the feasibility and effectiveness of focusing on language during subject-matter instruction. Specifically, we still need to know whether content knowledge might be compromised by a greater focus on language during content instruction. Also with respect to form-focused instruction, we need to know more about how it can be adapted to accommodate different groups of learners with different language learning needs in two-way immersion contexts (e.g., Spanish-dominant, English-dominant, bilingual; see Tedick & Young, 2014).

Whether the context is one-way or two-way immersion, questions arise regarding the use of students’ L1 as a resource for L2 learning. What are the points in instructional activities when using the L1 to scaffold L2 learning is an efficient route to L2 learning? A related and pressing question is how immersion teachers can effectively encourage students to draw on their knowledge of at least two languages while developing a sense of linguistic and contextual integrity for each language on its own. Immersion teachers need answers to this question because, in school settings where competition for time and status between target languages often leads to the habitual use of one language over the other, the notion of each language having its own space becomes crucial (Lyster et al., 2013). Systematic collaboration between partner teachers would seem to be a promising avenue to pursue in this regard.

Although one of the goals of immersion education is multi- or intercultural competence, there is virtually no research on how immersion teachers in contemporary world language programs address this goal in instruction. The goal of cultural revitalization that corresponds to indigenous immersion programs has been addressed minimally with a few studies on teacher perspectives as they relate to

the incorporation of indigenous cultural values and worldviews in their teaching and on student and family experiences. Worthy of further pursuit would be how culture-based pedagogy impacts language development, academic achievement, and identity development.

Directly related to immersion pedagogy is of course the issue of assessment. The question raised at the research convocation addressed the need for assessment tools that can be used in immersion to move students' language and content learning forward while at the same time satisfying external evaluation requirements. The problem of standardized assessments in a language other than the immersion language was raised as a serious policy issue in need of resolution in order to preempt a greater focus on the non-immersion language at the expense of the immersion language. Notwithstanding the need to develop assessments in the immersion language, a parallel set of high-stakes assessments in the immersion language was not necessarily seen as a pedagogically sound solution. To the extent that immersion pedagogy is driven by national standards, assessment is a key issue that needs to be further pursued to ensure the sustainability of immersion programs and recognition of their specific needs in the face of educational policies that, in many contexts, are skewed towards national monolingualism.

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