

Immersion programs and preserving endangered indigenous languages

Programas de inmersión y preservación de lenguas indígenas en peligro de extinción

Maria Lourdes Lira Gonzales

Université du Québec en Abitibi-Témiscamingue, Québec, Canada

Elizabeth Gatbonton

Concordia University, Montréal, Canada

Pascal Grégoire

Université du Québec en Abitibi-Témiscamingue, Québec, Canada

“When languages fade, so does the world’s rich tapestry of cultural diversity. Opportunities, traditions, memory, unique modes of thinking and expression – valuable resources for ensuring a better future are also lost.” (UNESCO, 2009)

Abstract The urgency of halting the erosion of their languages has compelled many indigenous groups to step up efforts not only to preserve them for posterity but also to revitalize them via language education so that they would once again serve as tools for communication. Immersion is the choice that many groups have taken to promote this revitalization. The aim of this paper is to review the relevant

literature regarding successful indigenous languages; more specifically, we provide examples of two successful indigenous immersion programs (Maori and Hawaiian), then we describe the preschool and K-12 indigenous immersion programs in Canada, which has a checkered history of success and failure. We will then analyze the factors that may contribute to the lack of success of some Canadian indigenous immersion programs. We argue that lack of instruction on the structure and form of the language in some immersion programs as one possible source of its documented flaws.

KEYWORDS: indigenous immersion programs, language revitalization, instruction on language structure

RESUMEN: La urgencia de detener el decaimiento de sus idiomas ha forzado/obligado a muchos grupos indígenas a aumentar los esfuerzos, no sólo para preservarlos para la posteridad, sino para revitalizarlos a través de la enseñanza de idiomas para que sirvan una vez más como herramientas de comunicación. La inmersión es la opción que muchos grupos han tomado para promover esta revitalización. El objetivo de este documento es revisar la literatura relevante sobre lenguas indígenas exitosas, más específicamente, proporcionamos ejemplos de dos programas de inmersión indígena exitosos (maorí y hawaiano), luego describimos los programas de inmersión indígena preescolar y K-12 en Canadá, que tiene una historia accidentada de éxitos y fracasos. Después analizaremos los factores que pueden contribuir a la falta de éxito de algunos programas canadienses de inmersión indígena. Argumentamos que la falta de instrucción sobre la estructura y la forma del lenguaje en algunos programas de inmersión es una posible fuente de sus fallas documentadas.

PALABRAS CLAVE: programas de inmersión indígena, revitalización del lenguaje, instrucción sobre la estructura del lenguaje.

Introduction

Globalization is forcing indigenous groups worldwide to take steps to protect their languages from demise due to the rapid spread of major languages like English (Crystal, 2000). The rapid extinction of minority languages in the world today is unprecedented (Dalby, 2002; Krauss, 1992; Wurm, 2001). Linguists and language scholars today generally agree that of the 7,000 languages spoken across the world; at least half may no longer exist after a few more generations. Many of these languages are no longer used in intergenerational communication and children are no longer learning them as a first language (Simons & Lewis 2013). Such languages are said to be endangered (Fishman, 2001; Hinton, 2013). In Canada, for example, of the fifty or so Indigenous languages spoken today, only three are considered to have a good chance at survival: Inuktitut, Cree, and Ojibway (Norris, 2007; Sarkar & Metallic, 2009).

The urgency of halting the erosion of their languages has compelled many indigenous groups to step up efforts not only to preserve them for posterity e.g., by creating dictionaries, analyzing their grammars, creating electronic corpora, where possible, but also to revitalize them via language education so that they would once again serve as tools for communication (Bischoff, Doak, Fontain, Ivens, & Vincent, 2013; Cameron & Poetsch, 2013; Coupe, Kelly, Yang Yu, Tang, & Temsunungsang, 2015; Laakso, 2015; Ryhner, 1992; Taylor-Adams, 2015).

1. Indigenous immersion programs

The desire to revitalize the language and concerns about the effectiveness of the Eurocentric education for indigenous children presently offered in mainstream schools worldwide have prompted many indigenous groups to seek alternative ways of educating their children (Morcom, 2013; Richards & Burnaby, 2008). The choice of many presently is immersion in the indigenous language (henceforth indigenous immersion). In indigenous immersion programs, children study their content subjects not in a major language (e.g. French or English in Canada; English in Australia, New Zealand and Great Britain) but in their mother tongue (e.g., Cree, Inuktitut, Innu/Montagnais and Atikamekw for Indigenous groups in Canada; Maori for groups in New Zealand; or, native Hawaiian for Indigenous groups in Hawaii).

Research in the past years documents positive results arising from the adoption of indigenous immersion programs in many schools across Canada (Bell et al., 2004; De Korne, 2010; Fulford, Daigle, Stevenson, Tolley, & Wade, 2007; McDonald, 2011).

However, not all the findings of studies on these immersion programs have been positive. In this paper we will explore the factors that may explain the lack of success of certain indigenous immersion programs. In particular, we will focus on the lack of instruction on language structure as a major factor to be considered and then we will describe the impact of this lack on the academic performance of children in indigenous immersion.

1.1. Examples of successful indigenous immersion programs: Maori and Hawaiian

To date the most successful indigenous immersion programs are exemplified by those conducted by the Maori's in New Zealand (Chambers, 2015; Harrison & Papa, 2005; King, 2001; McIvor & Parker, 2016) and the Hawaiians in the US state of Hawaii (Hermes & Kawai'ae'a, 2014; McCarty, 2003; Warner, 2001; Wilson, 2014). Reports suggest by 1980 many (or most) Maoris and Hawaiians had abandoned their native languages (Maori and Hawaiian, respectively) and have shifted towards the use of English as their daily language (Hinton, 2011). The few who continued to speak Maori (King, 2001) and Hawaiian (Warner, 2001) were people over forty and fifty years old. Their success in reversing this situation was specially instrumental in making the indigenous immersion model the preferred approach for teaching young indigenous children worldwide (Hinton & Hale, 2013).

1.1.1. Maori immersion programs: Maori immersion programs have their origins in a grass root Maori movement to set up “language nest” programs (Hinton & Hale, 2013; Spolsky, 2003), so called because they were created to provide a language learning environment for very young children in the home. In this program very young infants are placed in the care of elders in the community who spoke to them throughout the day only in indigenous language in the same way as mothers and grandchildren naturally spoke their native language to their children if they still have command of it. In other worlds, a language nest creates a space where young children can be “raised” in the language through meaningful interaction with proficient speakers, often Elders. It is

assumed that the immersion environment of the Language Nest supports natural language acquisition instead of conscious language instruction (Chambers, 2015) because the children learn the language through intensive meaningful interactions with proficient speakers (McIvor & Parker, 2016).

1.1.2. Hawaiian immersion programs: In 1982, a group of Hawaiian parents formed a non-profit society and opened the first “Pūnana Leo nest program” that was inspired by the “Maori’s Te Kōhanga Reo” and the “Canadian-French ‘super-immersion’ schools” (Warner, 2001, p. 138). As in the Maoris’ language nest programs the nests provide a unique language domain in which fluent and semi-fluent speakers engage young children in conversation and daily activities so that children may learn their Indigenous language as a second language” (Chambers, 2015).

In both **Maori** and **Hawaiian immersion programs** the language nest proved to be a simple but highly effective means of bringing children to fluency in their ancestral language and giving them early education in Indigenous culture and values (Pereltsvaig, 2012). However, it was clear that more had to be done. As the first groups of students grew older, parents and teachers worked feverishly to lobby governments and schools to develop primary-school and eventually high-school curriculum and materials, to the point that a Maori or Hawaiian child could receive all primary and high-school education in their heritage tongue (Hinton, 2013).

2. Indigenous immersion programs in Canada

Although early childhood language immersion programs have been internationally recognized as the most successful means available today for indigenous language revitalization (Cooper, Arago-Kemp, Wylie, & Hodgen, 2004; Iokepa-Guerrero & de France, 2007; McClutchie, 2007), this method has not been widely implemented in Canada (McIvor & Parker, 2016) until later. Patrick & Shearwood (1999) suggest that a shift to instruction in the mother tongue was already being considered early on in Northern Quebec as a viable alternative and some groups have made a move towards its adoption; however, indigenous immersion education was adopted formally only later.

To date there is still a great deal to be learned regarding the nature of the Maori and Hawaiian experiences (Hornberger, 2008). Indeed, there is overwhelming evidence that this approach effectively promotes maintenance of the indigenous language by young

learners who still speak it (e.g., young Maori or Hawaiian children who gain further knowledge and ability in the language) and that it results in increase the number of proficient second language speakers (e.g. for Maori speaking children had lost the language but who succeed in learning it in the program).

For the reasons mentioned above, immersion indigenous programs (as the Maori and Hawaiian) have gained popularity as models of educating children among the Indigenous groups in Canada especially in Quebec (e.g., the Cree , Inuit, Mohawk) (Morcom, 2013; Richards & Burnaby, 2008). For many of these groups, indigenous language immersion was seen as an educational approach worth trying out to replace the mainstream educational system that have yielded little success for their children (Morcom, 2014). Although variations exist, these groups' schools boards promote the use of the indigenous language as a medium of instruction from kindergarten to grades 3 or 4; after then either English or French becomes the medium of instruction and the indigenous language is studied as a subject.

Indigenous groups see indigenous language immersion not only as a means of promoting successful learning of school subjects taught through this medium, but also a means of guaranteeing the preservation of their indigenous language (Morcom, 2013; Richards & Burnaby, 2008).

2.1 Indigenous immersion program in Northern Quebec

The Kativik School Board (KSB), created in 1975, under the James Bay and Northern Quebec Agreement has been the exclusive provider of academic services to the Nunavik population. Education programs developed by the KSB are offered in 17 schools of the 14 Nunavik communities. In KSB schools, kindergarten and primary cycle 1 (formerly grades 1 and 2) are taught in Inuktitut; the first year of primary I cycle 2 (formerly grade 3) is taught 50% in Inuktitut and 50% in second language (English or French); starting in the second year of primary cycle 2 (formerly grade 4), the majority of classes are taught in second language.

Research on indigenous immersion programs in Northern Quebec, has shown that Inuit indigenous immersion programs have some positive impact on children's academic outcomes and self-esteem. For example, Louis and Taylor (2001) demonstrated that a strong foundation in an indigenous language in the last year of an elementary school

was the best predictor of success in the subsequent year of education in English or French. In the same vein, Wright and Taylor (1995) found that kindergarten instruction in an indigenous language was associated with increase in personal self-esteem at the end of the year, whereas kindergarten instruction in English or French had no such benefit for indigenous children.

The Mohawk on the Kahnawake reserve started a First Nations language immersion program in 1979 (McCarty 2016). This program has had a number of positive effects for students (Task Force on indigenous Languages and Cultures 2005), for example more than 85% of the immersion students passed either the Grade 10 or Grade 12 literacy test or courses (in English or French); however, the percentage of non-immersion students who passed similar tests was not reported (Guèvremont & Kohen, 2012).

Bell et al.(2004) and Fulford et al. (2007) conducted case studies of 20 successful indigenous schools across Canada. The schools were selected based on quantitative data on outcomes such as graduation rates, satisfaction surveys, and provincial examination results, as well as a nomination process from knowledgeable informants such as the Departments of Education, school districts, and First Nations groups. Language and cultural programs were present in every indigenous immersion school profiled, and each school offered instruction in the indigenous language of the community. Although English was the dominant language used in the majority of schools, most used the local language to exchange greetings, for ceremonial purposes, and to supplement instruction. These case studies suggest that language and cultural programs may be an important factor contributing to successful indigenous schools. Other common factors at these schools included leadership effectiveness and a school climate of trust and high standards.

The benefits mentioned above are ensured because the very use of the language by both the school and community, valorizes it in the children's eyes and, makes it attractive to use, thus leading to its further mastery in time (Usborne, Peck, Smith, & Taylor, 2011). In terms of content learning their adequate level of proficiency in the medium in which they are being instructed and their familiarity with the cultural perspective taken in the instruction ensure that indigenous children understand what the teacher expects them to do and help them to process content more efficiently (Morcom, 2013).

However, not all studies of indigenous immersion programs have yielded positive results. The Cree School Board in Eastern Quebec instituted the Cree Language of Instruction Program in 1991, where Cree was the primary language of instruction from kindergarten to Grade 2/3, followed by instruction in English or French. Although several reports of this program were positive (Bell et al., 2004; Burnaby & MacKenzie, 2001; Stiles, 1997), others have been critical (Feurer, 1993; Wright & Taylor, 1995). The language program was assessed as part of an Educational Review conducted in 2007/2008 (Cree School Board 2008). Canadian Achievement Test results (a standardised test with criterion-based norms) from 2003/2004 to 2006/2007 showed that less than half of students were reaching expected competencies in reading, language, and mathematics in Grades 6 and 9 – percentages ranged from 16% meeting expected competencies on the Grade 6 French test to 47% on the Grade 9 English test.

These negative results have no doubt awakened parents and school administrators' fears that immersion may not be as effective as they once believed and, consequently, they may decide to put their children back into the regular system where they receive English or French instruction from Grade 1.

3. Factors that contribute to the lack of success of some Canadian indigenous immersion program

Theoretically, there are many factors that can contribute to the success or failure of indigenous immersion programs and it is imperative that these factors be examined. We believe, that many of them can be addressed and need to be addressed before a verdict can be made about the suitability of indigenous immersion programs in Canada.

First, indigenous immersion programs depend on the use of **teachers who are fluent speakers of the indigenous language**. Although these teachers are dedicated and are trying their best to help the children, many of them are not trained thus, they are not equipped with the skills need to develop lessons that will guide students into successful language learning (Richards & Burnaby, 2008).

Also, research has shown that the amount of **time spent on language learning and the intensity of the learning experience** may be among the most important factors determining the rate of language acquisition and the level of proficiency that can be attained in a language program (Collins & White, 2011; Curtain, 2000; Serrano,

2011). It is possible that giving the students only three years of immersion is not sufficient for the indigenous immersion children to gain the skills they need for their L1 skills to transfer to their L2. In fact, French immersion program often runs from grade 1 to grade 6 with the goal of ensuring that the children gain a second language in addition to doing well in their subjects. Indigenous immersion was modeled after the successful French Canadian type immersion (Lambert & Tucker, 1972; Lightbown, 2012). This program was born in the 1960s when a group of Anglophone parents in St Lambert, a suburb of Montreal, saw the benefit of their children acquiring better French skills than they would typically get from the regular French instruction offered in their English-medium schools. Eventually, the school board and the parents agreed on a plan to open an experimental French immersion kindergarten class in a school in St. Lambert under the direction of Wallace Lambert and a team of researchers from McGill University. Their reports of the study were widely read and their influence, considerable (Lightbown, 2012).

In this program children whose mother tongue is English were taught their school subjects (e.g., math, science, and history) in their second language, French, during their primary and/or high school years. Systematic decade-long monitoring of this program has documented the following stable findings: (1) Immersion children's achieve high success in their academic subjects, which, in many cases, is shown to be the same as or even higher than those achieved by their monolingual counterparts; (2) the children develop high levels of fluency in their second language (L2) shown in many cases as equal to or even better than those who study this language as a subject in the regular school system; (3) even, without formal instruction, the children's first language benefits from this kind of L2 instruction so that after a temporary delay of a few years their levels become equal to or even surpass those of their monolingual counterparts LI (J. Cummins, 1979, 2000, 2008; Feurer, 1990; Genesee, 1986; W. A. Lazaruk, 2007).

Because of the constraints imposed by the need for all Canadian children to gain skills in either or both of the Canada's official languages, it may not be possible to do a full immersion program for 7 or more years; but, it may be possible that another or two years of immersion, may make a difference. This is however an empirical question and it is important to look at the length of the immersion program as a factor that can affect its success.

Furthermore, although the indigenous immersion curriculum is not always the same as the mainstream education, students have to pass the same standardized tests (such as the Canadian Achievement Test) in order to graduate from high school. Undoubtedly the fact that Canada's French immersion children's achieve high success in their academic subjects has made language immersion program attractive for the indigenous groups. Based on this, it is reasonable for indigenous groups opting for immersion to assume that using the indigenous language as the medium of instruction would not only trigger benefits arising from its valorization but also that the language skills learners gain in using the language in their immersion experience would transfer to the next set of language that they would learn (e.g., French or English) when it takes over as the medium of instruction. The drawback with this assumption is that it overlooks that French immersion framework and the indigenous immersion framework are not exactly of the same status and, it might be precisely within this difference that we can understand some of the problems observed in the field.

In the French immersion model, the two languages involved (English as the children first language and French, the language of instruction at school) have similar social status – both are major languages. Thus, learning one language results in what is described in the field as additive learning: the second language is learned without losing the other (Cummins, 2000).

It is also often the case that learners entering French immersion program already have strong skills in their L1. By kindergarten many of these learners already have developed some literacy and numeracy skills in their L1 that can help them profit from their school experience. For example, many of them can already count in their L1 and have beginning skills in reading; they can read the alphabet and have some initial skills in recognizing sound and letter correspondences. With this background, their engagement with the L2 as a medium of instruction becomes an advantage. Although they are not directly being taught further literacy and numeracy skills in their L1, their use of the L2 is improving these skills for them and they are able to transfer them to the L1, thus allowing them to reach a higher threshold level of development in this language.

In contrast, indigenous children coming into their immersion already speaking their first language, they bring with them basic interpersonal skills in the language (Lindholm-Leary & Genesee, 2014); but, it is not always clear that many of them have

developed the academic skills (e.g., numeracy and literacy skills) in it that they need to experience the bilingual advantage shown in the French immersion children (Cummins, 2008). In fact, if they are not given additional opportunity to have formal training in their L1 during their immersion program they may not have enough literacy skills in their L1 that to trigger transfer effects to the L2.

Due to its necessary focus on the content, immersion programs, in general, do not provide opportunities for any form-focused instruction (Harrop, 2012; Lyster, 2007; Valeo, 2013). That is, in the discussion of subject matter content, there is no room for error correction and attention to grammar and structure of the language is usually not considered to be focus of the content class (Mehisto, 2008) Indeed, the lack of instruction on the structure and form of the language is seen to be the source of the documented flaws in immersion children's speech (e.g., fossilized errors, simplistic ways of expressing ideas, and avoidance of complex structures). This can be particularly problematic in indigenous immersion programs where, as we have previously mentioned, children come with little literacy in their first language (Lindholm-Leary & Genesee, 2014).

Aware of this possibility, some indigenous immersion programs include courses that could potentially give the learners more opportunity to gain the literacy skills they need in their L2 One course is a language course that aims to help the students read and write their language; the other course is to learn more about traditional culture. Both courses have the potential of helping the Indigenous children gain more skills in their L1 that could potentially transfer to the L2 once they go back into the mainstream education. Observations of how these courses are taught, however, reveal that they could be made more effective if the teachers are aware of how they can give formal instruction on the language and how they can use the culture class as an opportunity to not only talk about cultural issues but also to teach the formal aspects of the utterances they use in discussing these issues.

The problems described above can be remedied by integrating language and content in the indigenous immersion programs; this is precisely what Content and Language Integrated Learning (CLIL) proposes. In the following section we will describe briefly CLIL and we will explain how indigenous immersion programs can benefit from it.

4. Content and language integrated learning (CLIL)

Content and Language Integrated Learning (CLIL) refers to any dual-focused type of provision in which a second language, foreign or other, is used for the teaching and learning of a non-language subject matter, with language and content having a joint and mutually beneficial role (Marsh, 2002).

CLIL differs from immersion teaching described above in terms of **integration of language and content** (Coyle, 2007; Gajo, 2007; Lasagabaster, 2008). In CLIL, these two elements are interwoven and receive equal importance, although the emphasis may vary from one to another on specific occasions. The aim is to develop proficiency in both (Eurydice, 2006), by teaching the content not in, but with and through the second or foreign language.

CLIL claims to increase the level of linguistic proficiency in several ways. It provides not just extra exposure to comprehensible input (Krashen, 1985), but more specifically, it presents the learners with context-embedded, cognitively challenging tasks that move them on in terms of both content and language (Cummins & Swain, 1986; Greenfell, 2002). Moreover, by creating an authentic communicative context, CLIL provides a naturalistic environment, where language can be more easily acquired while the focus is on meaning (Lightbown & Spada, 2006). Finally, CLIL claims to make transparent and accessible all language needed for successful completion of tasks and knowledge acquisition in a way that is not always found in content subjects (Coyle, 2007; Gajo, 2007).

The growing research evidence largely supports this claim. The outcomes of most CLIL programmes are unsurprisingly positive, with CLIL students displaying higher levels of proficiency and higher communicative competence than their non-CLIL peers. However, the differences are not always substantial (Airey, 2009; Dalton-Puffer, 2008; Ruiz de Zarobe & Jimenez Catalan, 2009).

Finally, there is further evidence from longitudinal studies suggesting that the advantage of CLIL students do not always accrue over time (Ruiz de Zarobe, 2008). This is particularly significant as one of the rationales for CLIL is precisely its alleged ability to avoid the plateau effect of traditional second language teaching.

4.1 Using content and language integrated learning (CLIL) in indigenous contexts

Research suggests that the profile of CLIL learners is similar to that of the Canadian immersion students mentioned above (Lazaruk, 2007). CLIL students largely outperform their non-CLIL peers in listening and reading comprehension, fluency and range of vocabulary, but less often so in pronunciation, accuracy and complexity of written and spoken language (Dalton-Puffer, 2008; Lasagabaster, 2008; Ruiz de Zarobe, 2008).

What this evidence suggests is that the tension between language and content which CLIL theoretically had resolved Greenfell (2002), still prevails. It seems that in the CLIL classrooms, as in indigenous immersion classrooms, there is still an insufficient focus on form, which can lead to an early fossilization of errors (Snow, Met, & Genesee, 1989; Swain & Lapkin, 1995).

In order to use content language integrated learning in indigenous immersion programs the relationship between CLIL and grammatical progression at a theoretical level needs to be re-established. Indeed, there is a distinct lack of clarity in all the literature as to how the two may be best combined. The unspoken assumption seems to be that most structure practice by nature would be context-reduced and cognitively undemanding, and thus unsuitable for CLIL (Harrop, 2012).

In addition, if CLIL is to be implemented in indigenous immersion programs the lack of systematic and constructive approach to error correction focusing on form in CLIL practice must be solved and more negotiation of meaning opportunities should be provided in CLIL classrooms (Dalton-Puffer, 2008; Sajda, 2008; Serra, 2007).

Conclusion

Through its integration of cognition and language, CLIL has undoubtedly the potential to lead to higher levels of attainment in indigenous contexts. However, if CLIL is to realize its full potential, it needs to resolve the tension between content and language emerging from CLIL practice. Both theoretical and practical adjustments are required so that CLIL can fully contribute to the learners' balanced and ongoing linguistic development.

We believe that it is possible to achieve this balance between content and language and we consider that in indigenous immersion classes teachers can achieve this balance. For example, in a class about the traditional summer activities in the community, the teacher and the students will talk about hunting, looking for mussels, looking for eggs, and berry picking. They may talk about the differences between what people did then and now. After they have done these activities that raise awareness about the culture, the teacher could call the students attention to the utterances used to describe these summer activities. The teacher can make them aware of the structure of the sentences such: *UvilutsiuKattavugut* (we look for mussels), *mannisiuKattavugut* (we look for eggs), *KitjiuKattavugut* (we chop wood) which the students use to describe the typical summer activities that people engage in in their communities. Then the teacher can lead the students to discover that all the sentences above contain the word *Katta* which indicate that the activity is done habitually. In other words, there is discussion about the cultural aspect but after this there is a focus on the utterances used to describe the activities. The students can look at the structure how the utterance is put together (e.g. there is a particular order: verb+katta+pronoun doer) and then learn to write these utterances etc.

References

- Airey, J. (2009). Estimating undergraduate bilingual scientific Literacy in Sweden. *International CLIL Research Journal*, 1(2), 26-35.
- Bell, D., Anderson, K., Fortin, T., Ottoman, J., Rose, S., Simard, L., & Spencer, K. (Producer). (2004). Sharing our success: Ten case studies in aboriginal schooling. Retrieved from http://www.cla.sd57.bc.ca/fileadmin/sites/cla.sd57.bc.ca/SPSS/ab_ed/Sharing_our_Success.pdf
- Bischoff, S., Doak, I., Fontain, A., Ivens, J., & Vincent, A. (2013). *The TAPS Checklist as a tool for grassroots development of digital language resources* Paper presented at the 3rd International Conference on Language Documentation and Conservation
- Burnaby, B., & MacKenzie, M. (2001). Cree Decision Making Concerning Language: A Case Study. *Journal of Multilingual and Multicultural Development*, 22(3), 191-209.

- Cameron, T., & Poetsch, S. (2013). *What works well for teaching a reawakening language? A Gamilaraay teacher's perspective*. Paper presented at the 3rd International Conference on Language Documentation and Conservation (ICLDC), Hawai'i Imin International Conference Center, University of Hawai'i
- Chambers, N. A. (2015). Language nests as an emergent global phenomenon: Diverse approaches to program development and delivery. *The International Journal of Holistic Early Learning and Development*, 1, 25-38.
- Collins, L., & White, J. (2011). An intensive look at intensity and language learning. *TESOL Quarterly*, 45, 106-133.
- Cooper, G., Arago-Kemp, V., Wylie, C., & Hodgen, E. (2004). *Te rerenga ā te pīrere: A longitudinal study of kōhanga reo and kura kaupapa Māori students - Phase I Report*. New Zealand Council for Educational Research. Retrieved from Te rerenga ā te pīrere: Alongitudinal study of kōhanga reo and kura kaupapa Māori students - Phase I Report. New Zealand Council for Educational Research.:
- Coupe, A., Kelly, J., Yang Yu, P., Tang, L., & Tamsunungsang, T. (2015). *Giving it back: From oral folktales to illustrated bilingual reading books for minority languages* Paper presented at the 4th International Conference on Language Documentation and Conservation (ICLDC), University of Hawai'i at Mānoa.
- Coyle, D. (2007). CLIL: towards a connected research agenda for CLIL pedagogies. *International Journal of Bilingual Education and Bilingualism*, 10(5), 543-562.
- Crystal, D. (2000). *Language Death* Cambridge University Press.
- Cummins, & Swain. (1986). *Bilingualism in education*. London: Longman.
- Cummins, J. (2000). *Language, power and pedagogy: Bilingual children in the crossfire* Clevedon, England: Multilingual Matters.
- Curtain, H. (2000). Time as a Factor in Early Start Language Learning Programs. In J. Moon & M. Nikolov (Eds.), *Research into Teaching English to Young Learners* (pp. 87-120): University Press.
- Dalby, A. (2002). *Language in danger*. London: Penguin.
- Dalton-Puffer, C. (2008). Outcomes and processes in CLIL: current research from Europe. In W. Delanoy & L. Volkman (Eds.), *Future Perspectives for English Language Teaching*. Heidelberg: Carl Winter.

- De Korne, H. (2010). Indigenous Language Education Policy: Supporting Community Controlled Immersion in Canada and the US. *Lang Policy*, 9, 115–141
- Eurydice. (2006). *CLIL at school in Europe*. Brussels European Commission.
- Feurer, H. (1993). Beyond multilingual education: The Cree of Waskaganish. *Canadian Journal of Native Education*, 20(1), 87-95.
- Fishman, J. A. (2001). If threatened languages can be saved, then can dead languages be revived? . *Current Issues in Language Planning*, 2(2), 222-230.
- Fulford, G., Daigle, J., Stevenson, B., Tolley, C., & Wade, T. (2007). *Sharing our success: More case studies in Aboriginal schooling*. Kelowa, BC: Society for the Advancement of Excellence in Education.
- Gajo, L. (2007). Linguistic knowledge and Subject knowledge: how does bilingualism contribute to subject development? *International Journal of Bilingual Education and Bilingualism*, 10(5), 563-581.
- Greenfell, M. (Ed.) (2002). *Modern Languages across the curriculum*. London: Routledge.
- Guèvremont, A., & Kohen, D. E. (2012). Knowledge of an Aboriginal language and school outcomes for children and adults. *International Journal of Bilingual Education and Bilingualism*, 15(1), 1-27.
- Harrison, B., & Papa, R. (2005). The development of an indigenous knowledge program in a New Zealand Maori Language immersion school. *Anthropology and Education Quarterly*, 36(1), 57-72.
- Harrop, E. (2012). Content and Language Integrated Learning (CLIL): Limitations and possibilities. *Encuentro*, 21, 57-70.
- Hermes, M., & Kawai'ae'a, K. (2014). Revitalizing indigenous languages through indigenous immersion education. *Journal of Immersion and Content-Based Language Education*, 2(2), 303-322.
- Hinton, L. (2011). Revitalization of endangered languages. In P. K. Austin & J. Sallabank (Eds.), *Endangered Languages*. UK: Cambridge University Press.
- Hinton, L. (2013). Language Revitalization: An Overview. In L. Hinton & K. Hale (Eds.), *The Green Book of Language Revitalization in Practice* (pp. 3-18). Boston: Brill.
- Hinton, L., & Hale, K. (2013). *The green book of language revitalization in practice*. Boston: Brill.

- Iokepa-Guerrero, N., & de France, R. (2007). Nest of voices: Early child care and education in Hawai'i. *Canadian Journal of Native Education*, 30(1), 41-47.
- King, A. (2001). *The Primary Health Care Strategy*. Retrieved from Wellington:
- Krashen, S. (1985). *The input hypothesis: issues and implication*. London: Longman.
- Krauss, M. (1992). The world's languages in crisis. *Language*, 68(1), 4-10.
- Laakso, J. (2015). *Confronting the Extinction Narrative: Diversity research, media, and folk views on language endangerment*. Paper presented at the 4th International Conference on Language Documentation and Conservation, Honolulu, Hawaii.
- Lasagabaster, D. (2008). Foreign Language competence in CLIL courses. *The Open Applied Linguistics Journal*, 1, 31-42.
- Lazaruk, W. (2007). Linguistic, Academic, and Cognitive Benefits of French Immersion. *The Canadian Modern Language Review/La Revue canadienne des langues vivantes*, August/août 63(5), 605-625.
- Lightbown, P., & Spada, N. (2006). *How Languages are Learned*. Oxford: OUP.
- Lindholm-Leary, K., & Genesee, F. (2014). Language Immersion Education: A research agenda for 2015 and beyond. *Journal of Immersion and Content-Based Language Education*, 16, 165-180.
- Louis, W., & Taylor, D. M. (2001). When the survival of a language is at stake: The future of Inuttitut in Arctic Quebec. *Journal of Language and Psychology*, 20(1&2), 111-143.
- Lyster, R. (2007). *Learning and Teaching Languages Through Content : A Counterbalanced Approach*. Amsterdam: John Benjamins Pub. .
- Marsh (Ed.) (2002). *CLIL/EMILE- The European Dimension: actions, trends and foresight potential*. Brussels: European Commission.
- McCarty , T. (2016). 1W Policy and Politics of Language Revitalization in the USA and Canada. *Indigenous Language Revitalization in the Americas*.
- McCarty, T. L. (2003). Revitalizing indigenous languages in homogenising times. *Comparative Education*, 39(2), 147-163.
- McClutchie, M. D. (2007). Māori language revitalization: A vision for the future. *Canadian Journal of Native Education*, 30(1), 101-107.

- McDonald, R. A. (2011). *First Nations Languages and Culture Impacts on Literacy and Student Achievement Outcomes: Review of Literature*. . Ottawa: Assembly of First Nations.
- McIvor, O., & Parker, A. (2016). Back to the future: Recreating natural Indigenous language learning environments through language nest early childhood immersion programs. *The International Journal of Holistic Early Learning and Development*, 3, 21-35.
- Mehisto, P. (2008). CLIL Counterweights: Recognising and Decreasing Disjuncture in CLIL. *International CLIL Research Journal*, 1.
- Morcom, L. (2013). Language Immersion and School Success: What Can I Expect for my Child? Retrieved from http://www.ktei.net/uploads/1/4/7/8/1478467/language_immersion_and_school_success_for_parents_-_dr._morcom.pdf.
- Morcom, L. (2014). Determining the role of language and culture in first nations schools: a comparison of the first nations education act with the policy of the assembly of first nations. *Canadian Journal of Educational Administration and Policy*, September 19(163).
- Norris, M. J. (2007). Aboriginal languages in Canada: Emerging trends and perspectives on second language acquisition. *Canadian Social Trends*, 83, 19-27.
- Pereltsvaig, A. (2012). Language nest program to nurture the Enets language. Retrieved from <http://languagesoftheworld.info/geolinguistics/endangered-languages/language-nest-program-to-nurture-the-enets-language.html>
- Richards, M., & Burnaby, B. (2008). Immersion program models in aboriginal languages in Canada. In T. Williams Fortune & D. J. Tedick Clevedon (Eds.), *Pathways to multilingualism: Evolving perspectives on immersion education* (pp. 221-242). Clevedon, UK: Multilingual Matters.
- Ruiz de Zarobe, Y. (2008). CLIL and Foreign Language Learning: a longitudinal study in the Basque Country. *International CLIL Research Journal*, 1(1), 60-73.
- Ruiz de Zarobe, Y., & Jimenez Catalan, R. (Eds.). (2009). *CLIL: evidence from research in Europe*. Bristol: Multilingual Matters.
- Ryhner, J. (1992). American Indians out of school: A review of school-based causes and solutions. *Journal of American Indian Education*, 31(3), 37-56.

Sajda, L. (2008). *CLIL*. Salzburg: GRIN.

Sarkar, M., & Metallic, M. A. (2009). Indigenizing the structural syllabus: The challenge of revitalizing Mi'gmaq in Listuguj. *Canadian Modern Language Review*, 66(1), 49-71.

Serra, C. (2007). Assessing CLIL at Primary School: a longitudinal study. *International Journal of Bilingual Education and Bilingualism*, 10(5), 582-602.

Serrano, R. (2011). Is Intensive Learning Effective? Reflecting on the Results from Cognitive Psychology and the Second Language Acquisition Literature. In C. Muñoz (Ed.), *Intensive exposure experiences in second language learning* (pp. 3-22).

Simons, G., & Lewis, P. (2013). *The world's languages in crisis: A 20-year update* Paper presented at the 26th Linguistics Symposium: Language Death, Endangerment, Documentation, and Revitalization, University of Wisconsin, Milwaukee.

Snow, M., Met, M., & Genesee, F. (1989). A conceptual Framework for the integration of Language and Content in second/foreign language instruction. *TESOL Quarterly*, 23(2), 201-217.

Spolsky, B. (2003). Reassessing Māori regeneration. *Language in Society*, 32, 553-578.

Stiles, D. B. (1997). Four successful Indigenous language programs. In J. A. Reyhner (Ed.), *Teaching Indigenous languages*. Flagstaff, AZ: Northern Arizona University.

Swain, M., & Lapkin, S. (1995). Problems in output and cognitive processes they generate: a step towards second language learning. *Applied Linguistics*, 16(3), 371-390.

Taylor-Adams, A. (2015). *Telling Stories Together: A collaborative technology-based curriculum project for an endangered language community*. Paper presented at the 4th International Conference on Language Documentation and Conservation (ICLDC), University of Hawai'i, Honolulu.

Usborne, E., Peck, J., Smith, D.-L., & Taylor, D. M. (2011). Learning through an Aboriginal language: The impact on students' English and Aboriginal language skills. *Canadian Journal of Education*, 34(4), 200-215.

- Valeo, A. (2013). The integration of Language and Content:Form-Focused Instruction in a Content-Based Language Program. *The Canadian Journal of Applied Linguistics*, 16(1), 25-50.
- Warner, S. N. (2001). The movement to revitalize Hawaiian language and culture. In L. Hinton & K. Hale (Eds.), *The green book of language revitalization in practice* San Diego, CA: Academic Press.
- Wilson, W. H. (2014). Hawaiian-A Native American language official for a state. *Handbook of heritage, community, and Native American languages in the United States: Research, policy, and educational practice*, 219-228.
- Wright, S. C., & Taylor, D. M. (1995). Identity and the language of the classroom: Investigating the impact of heritage versus second language instruction on personal and collective self esteem. *Journal of Educational Psychology*, 87(2).
- Wurm, S. (2001). *Atlas of the World's Languages in Danger of Disappearing* (2nd ed.). Paris: UNESCO.

Correspondencia

Dr. Maria Lourdes Lira Gonzales, Associated Professor at Université du Québec en Abitibi-Témiscamingue, Québec, Canada. E-mail : maria-lourdes.lira-gonzales@uqat.ca

Recibido 10/1/2017 | Aceptado 10/03/17