

## Adult Immersion in Kanien'kéha Revitalization

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### Abstract

This paper highlights Kanien'kéha (Mohawk language) "adult immersion" as an effective and expedient program structure for creating second-language (L2) speakers and argues that concentrated efforts to strengthen and expand adult immersion are essential in advancing Kanien'kéha revitalization. By conducting a comprehensive vitality assessment, detailing the 'health' of Kanien'kéha use and transmission in all Kanien'kehá:ka (Mohawk) communities, this paper argues that adult L2 speakers play a crucial role in revitalization and that adult immersion is essential in creating those adult speakers. Adult immersion as a unique program structure is defined and the foundational components of an effective adult immersion program are described, as well as the challenges that these programs continue to face.

### Résumé

Cet article met l'accent sur l'efficacité de la structure du programme « d'immersion des adultes » en langue Kanien'kéha (langue Mohawk) pour le développement des locuteurs du Kanien'kéha comme langue seconde et propose que les efforts concentrés sur l'expansion et le renforcement de l'immersion des adultes sont indispensables pour l'avancement de la revitalisation du Kanien'kéha. En menant une évaluation complète de la vitalité de la langue qui détaille la « santé » de l'usage et de la transmission du Kanien'kéha dans toutes les communautés Kanien'kehá:ka (Mohawk), cet article soutient les arguments que les locuteurs de langue seconde jouent un rôle crucial dans les efforts de revitalisation et que l'immersion des adultes est essentielle pour la création de ces locuteurs. L'immersion des adultes en tant que structure de programme unique est définie et nous décrivons les composantes fondamentales d'un programme efficace de l'immersion des adultes ainsi que les défis continus auxquels ces programmes sont confrontés.

**Glossing Abbreviations**

1	first person
AGT	agent
CIS	cislocative
FAC	factual
FUT	future
HAB	habitual
JOIN	joiner vowel
M	masculine
PAT	patient
PL	plural
PUNC	punctual
REP	repetitive
RFL	reflexive
RMT	remote past
SG	singular
SRFL	semi-reflexive
STAT	stative

## **Adult Immersion in Kanien'kéha Revitalization**

### **Introduction**

Kanien'kehá:ka (Mohawk people) have been working to revitalize Kanien'kéha (the Mohawk language) since the 1970s. This has been in response to its rapid decline over the last century. Today, this work has revealed the resilience and resolve of Kanien'kehá:ka, exemplified by the system of structures established to prevent further language decline and restore Kanien'kéha use in Kanien'kehá:ka communities. A part of that infrastructure is full-time adult immersion programs. Despite the challenges of teaching and learning a highly complex and typologically distinct language like Kanien'kéha, adult immersion has been successful in efficiently creating new adult second-language (L2) speakers, even without core long-term funding and support and without a firm embrace from an institute of higher education.

In this paper, I conduct a Kanien'kéha vitality assessment, detailing the “health” of Kanien'kéha use and transmission in all Kanien'kéha communities. I use this as a method to point to the paucity of adult speakers due to a lack of focus on adults in the Kanien'kéha speech community and revitalization movement historically. I argue that adults are an important demographic in language acquisition and revitalization due to their role in strengthening and maintaining primary language use among and between peer groups in critical speech domains, as well as in restoring intergenerational transmission. I focus on adult immersion programs to address this gap in adult L2 acquisition, arguing that adult immersion is an effective and expedient pathway for producing highly proficient adult L2 speakers. Based on my experience as an adult immersion practitioner and grounded in the most relevant literature, I describe the foundational components of an effective adult immersion program. I argue that concentrated efforts in strengthening and expanding the delivery of adult immersion is critical to have the most significant impact on Kanien'kéha revitalization today. Given the current level of vitality of Kanien'kéha, adequate resources and efforts should be focused on adult immersion as it is the most efficient way to create and strengthen the needed adult speaking peer group.

### **Positionality and Method**

I was born and raised in Wáhta Mohawk Territory, the smallest of all the Kanien'kehá:ka territories. Growing up in Wáhta, I heard people using Kanien'kéha in the exchange of simple greetings and I wondered why it was so rare to hear it more frequently. I knew about the primary reasons for the decline of the language, but I wondered why we still chose one language over the other or why we did not speak both Kanien'kéha and English bilingually. I wondered why the people who did learn it as adults still were not able to speak fluently. In my late teens, I began my learning journey.

I was especially inspired by my relative and bus driver, Tommy, a first-language (L1) speaker. I felt that he was happier when he used the language, always laughing, smiling and making jokes. I also noticed that when he spoke the language, he seemed to be a different person. I thought I could never know who that different person was because I did not speak the language. Longing to get to know the Kanien'kéha speaking Tommy, and, by extension, the past and present Kanien'kéha speaking community, is largely what propelled me to learn the language myself. Even though Tommy and many other speakers

in Wáhta passed away before I was able to speak with them in the language, I acknowledge them for showing me the joys of knowing and speaking the language, especially those who continued to speak it despite the pressure not to.

It is now over fifteen years since then, and I have travelled to all Kanien'kehá:ka territories on a journey to become a speaker. I began as a self-guided learner, taking short-term classes and visiting elders to make recordings to study on my own. But I soon determined that progress was minimal and decided to take adult immersion at Onkwawén:na Kentyóhkwa in Ohswé:ken (Six Nations of the Grand River Territory). Since then, I have lived with L1 speakers and spent hundreds of hours visiting them in different communities. I have taught the language in several settings (community night classes, university courses and adult immersion). I have taught at two different adult immersion programs and served as a curriculum consultant for others. I have created learning and teaching material such as grammars and dictionaries, designed curriculum, translated texts, and documented the elders. The conclusions and recommendations in this paper are, therefore, grounded in the most relevant literature in the field and draw from the experience I have in the field of language revitalization, especially in the adult immersion field as a student, instructor, university professor, curriculum developer and program designer.

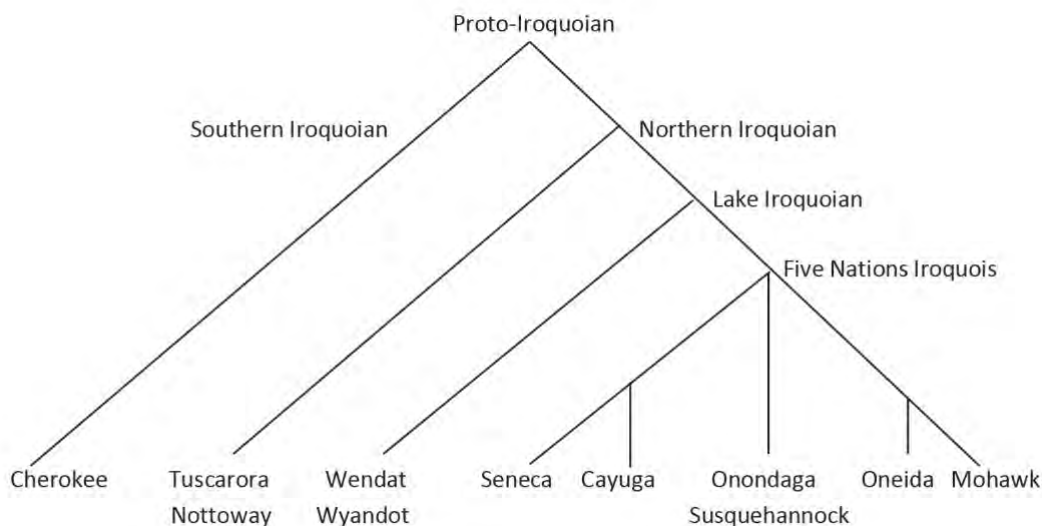
### About Kanien'kéha

Kanien'kéha is part of the Iroquoian language family, as shown in

Figure 1. The Iroquoian language family consists of two branches: Southern Iroquoian and Northern Iroquoian (Mithun & DeCaire, 2023). Kanien'kéha has the strongest vitality of all the Northern Iroquoian languages (Mithun & DeCaire, 2023).

**Figure 1**

*Iroquoian Language Family (Mithun and DeCaire, 2023)*

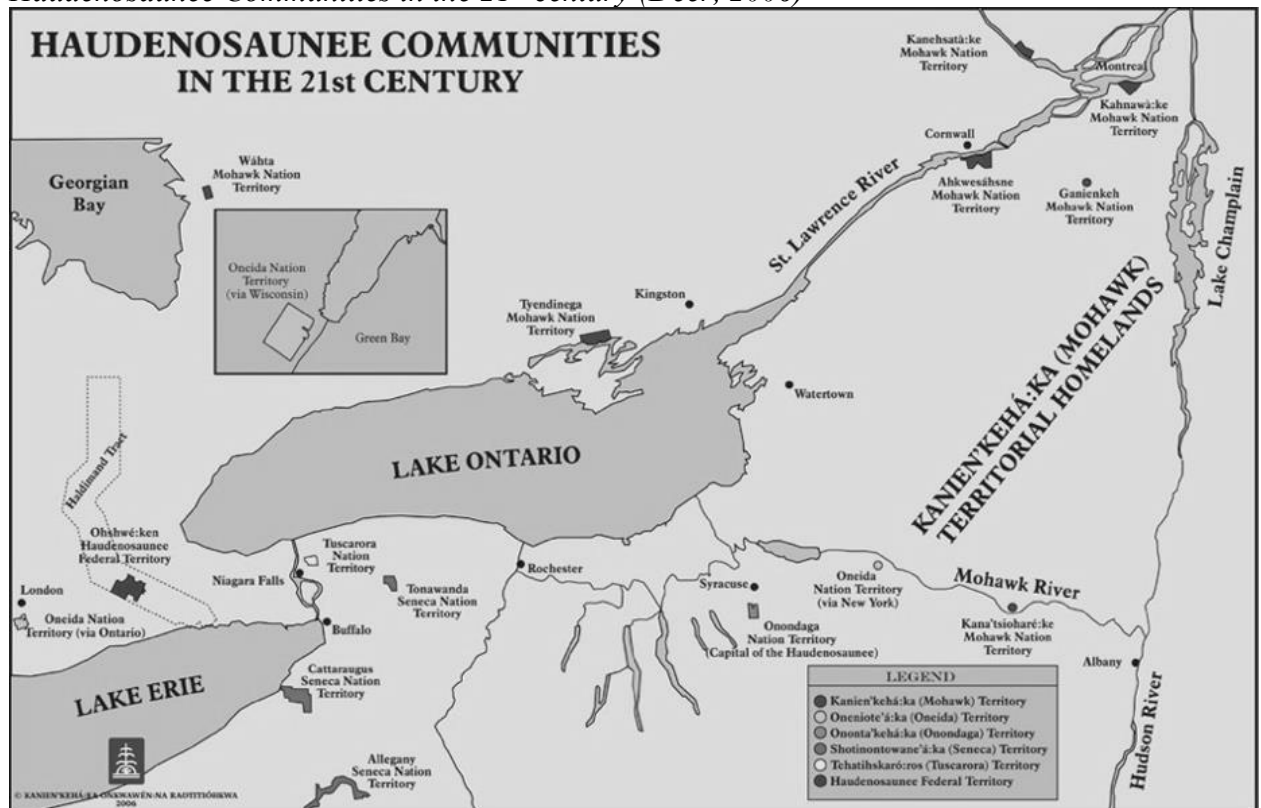


Kanien'kéha is currently spoken in all Kanien'kehá:ka territories, though the level of vitality differs in each. These territories include Ohswé:ken (Six Nations of the Grand River), Wáhta and Kenhtè:ke (Tyendinaga) in Ontario, Kahnawà:ke and Kanehsatà:ke in

Quebec, Ganienkeh and Kana'tsioharè:ke in New York State, and Ahkwesáhsne, straddling the borders of Ontario, Quebec, and New York State (see Figure 2, Haudenosaunee Communities in the 21<sup>st</sup> Century). The distribution of territories throughout multiple provinces in Canada and states in the United States, and the differences in location, demography, and experience of each territory adds to the political and cultural complexity and therefore to the complexity of language revitalization.

**Figure 2**

*Haudenosaunee Communities in the 21<sup>st</sup> century (Deer, 2006)*



Kanien'kéha is much different typologically than English, French and other Indo-European languages. This is critical to consider as it has strong implications for L2 acquisition by L1 English speakers. Most significantly, Kanien'kéha is often referred to as polysynthetic, as seen in (1), where words can be made up of many morphemes, often requiring just one word for expressing what would be a sentence in English.

- (1) Kanien'kéha polysynthesis  
*taionkwa'nikonhratihéntho'*  
 ta-ionkwa-'nikonhr-atihenthó-'  
 FACT-1PL.PAT-mind-pull-PUNC

"it pulled our minds" = "it interested us / caught our attention"

There are three lexical classes (types of words) in Kanien'kéha and other Iroquoian languages according to morphological structure: particles, verbs, and nouns (Chafe, 2012; Lukaniec, 2018; Martin, 2023; Michelson, 2011; Mithun, 2000; Mithun & DeCaire, 2023). Particles are pervasive; they are uninflected words, usually with no internal structure, that

are primarily used to modulate discourse. Although they often occur on their own, they can also be compounded. Basic particle use can be straightforward to learn in L2 acquisition when there is an equivalent in English. However, at more advanced levels particle use becomes more difficult in L2 acquisition by L1 English speakers because their function and distribution in discourse is challenging to isolate.

Morphological nouns have a relatively simple structure, consisting of a neuter pronominal prefix, a noun stem, and a noun suffix. Nouns can occur with possessive prefixes or locative suffixes. Morphological nouns can also be incorporated into verbs, a characteristic of Iroquoian languages termed “noun incorporation,” as shown in (2). This means that students of Kanien’kéha must learn both the stand-alone noun form and the noun stem to derive incorporated forms, as well as possessive and locative forms. Noun incorporation is used in creating words for significant concepts, often involving lexicalized (narrowed) meaning, idiomatic expressions, and new words. It also functions to manage the flow of information, such as backgrounding and focus (DeCaire et al., 2017; Mithun, 1984; Mithun, 1999).

- (2) Kanien’kéha noun incorporation  
*ranenstaiénthos*  
 ra-**nenst**-a-ientho-s  
 M.SG.AGT-**corn**-JOIN-plant-HAB  
 ‘he plants corn, he is a corn planter’

Verbs have a much more complex structure and can be made up of many different morphemes (meaningful parts); each of the morphemes can have several allomorphs, representing one of the major challenges of L2 acquisition. A particularly salient feature of Kanien’kéha verb morphology is the sheer number of pronominal prefixes (58 - with 328 allomorphs), as well as the number of distinctions, including three persons (first, second, and third), inclusive versus exclusive, three numbers (singular, dual, and plural), and gender (masculine, feminine, and feminine-zoic). Finally, there are three paradigms of prefixes: agent (subjective), patient (objective), and transitive paradigms.

### Measuring Language Vitality and Endangerment

The most common metrics that have been developed and used for assessing the degree of vitality or endangerment of a language include the Graded Intergenerational Disruption Scale (GIDS) (Fishman, 1991), the United Nations Educational, Scientific and Cultural Organization (UNESCO) Major Evaluative Factors of Language Vitality and Endangerment (UNESCO, 2003), and the Expanded Graded Intergenerational Disruption Scale (EGIDS) (Lewis & Simons, 2016).<sup>1</sup> The EGIDS attempts to combine the GIDS, the UNESCO system and a previously used system developed by *Ethnologue* to make up for each scale’s limitations and provide a more comprehensive means for understanding a language’s degree of vitality or endangerment (Gordon, 2005; Lewis & Simons, 2010). Unfortunately, these metrics on their own lack consideration for languages that have experienced language use decline or disruption but have since been on a path of revitalization. This means that these metrics have been concerned with measuring endangerment over increased vitality.

## **Kanien'kéha Vitality and Endangerment**

Measuring the vitality of Kanien'kéha, and Indigenous languages in general, is challenging for the following reasons: 1) Measuring the vitality depends on accurate estimates of speaker populations, as well as information about the proficiency of groups within speaker populations. Proficiency information for Indigenous languages is virtually nonexistent and census data is unreliable; 2) There is an archipelago of territories throughout Ontario, Quebec, and New York State where each territory has varying degrees of vitality due to their different locations and associated historical, political, social, economic, cultural, and demographic experiences; and 3) The evaluative factors developed for the most commonly used vitality/endangerment assessment tools are not sufficient for understanding the nuances of a language currently undergoing revitalization. For these reasons, it is not always beneficial to give a single assessment for Kanien'kéha as a whole. However, it is useful for territories to understand language vitality or endangerment in their individual territories relative to other communities and to the whole.

To compensate for the shortcomings and provide a more comprehensive evaluation of Kanien'kéha vitality, I have integrated the aforementioned metrics, incorporating the evaluative factors that they use to determine a languages degree of endangerment, with information from my own observations and experience as a practitioner. This is shown in Table 1 below.

**Table 1**  
*Evaluating Kanien'kéha Vitality in Kanien'kehá:ka Territories 2023*

Language Vitality Evaluative Factors		Ahkwesáhsne	Kahnawà:ke	Kanehsatà:ke	Ohswé:ken	Tyendinaga	Wáhta	Total
Vitality Metric Rating	GIDS	8	8	8	8	8	8	8
	UNESCO	Severely Endangered	Severely Endangered	Severely Endangered	Critically Endangered	Critically Endangered	Critically Endangered	Severely Endangered
	EGIDS	8a Moribund	8a Moribund	8a Moribund	8b Nearly Extinct	8b Nearly Extinct	8b Nearly Extinct	8a Moribund
Speakers on Territory <sup>1</sup>	L1 Speakers (advanced proficiency or higher)	350	150	60	0	0	2	562
	L2 Speakers (advanced proficiency or higher)	15	45	5	18	7	1	91
Proportion of Speakers	On territory	12,896 (2.8%)	7,950 (2.5%)	1,371 (4.7%)	5,535 (0.3%)	2,176 (0.3%)	157 (1.9%)	30,058 (2.2%)
	All membership	18,725 (1.9%)	10,905 (1.8%)	2,503 (2.6%)	11,259 (0.2%)	9,599 (0.06%)	796 (0.4%)	53,787 (1.2%)
Intergenerational Transmission	L1 Speaking Families	9	4	1	0	0	0	14
	L1 Children of L2 Parents	5	11	3	5	2	1	27
Domain Usage and Functions	Identity function beyond emblematic and symbolic function	Yes	Yes	Limited	Limited	Limited	Limited	Limited
	Community function beyond emblematic and symbolic function	Limited	Limited	Limited	Limited	Limited	No <sup>2</sup>	Limited
	Used to transmit essential bodies of knowledge	Limited	Limited	Limited	Limited	Limited	No	Limited
Government Attitudes & Policy	Federal	Protection by law	No	No	No	No	No	No
		Committed long-term funding	No	No	No	No	No	No
	Band/Tribe	Committed long-term funding	No	No	No	No	No	No
		Language Law/Policy	No	Yes	No	No	Yes	Some

	Band/tribal council language revitalization resolution of support	Yes	Yes	No	No	Yes	No	Some
Community Attitudes	Most support language maintenance	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Most actively promote language use	Yes	Yes	No	No	No	No	No
	Most actively oppose use of dominant language (English and/or French)	No	No	No	No	No	No	No
Literacy and Education Materials	Established orthography	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Orthographic standardization	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Written form supported by community	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Modernization (literature, materials, lexicon development)	Limited	Limited	Limited	Limited	Limited	Limited	Limited
	Adequate dictionaries, lexicons, and learning grammars	Limited	Limited	Limited	Limited	Limited	Limited	Limited
	Adequate documentation	Limited	Limited	No	No	No	No	Limited
	Adequate body of literature	Limited	Limited	Limited	Limited	Limited	No	Limited
	Available media (videos, recordings, etc.)	Limited	Limited	Limited	Limited	Limited	Limited	Limited
Maintenance & Revitalization Infrastructure	Established language revitalization body	No	Yes	Yes	Yes	Yes	Infant stage	Most communities
	Ongoing revitalization planning process in place	Yes	Yes	No	Infant stage	Yes	Infant stage	Some communities
	Immersion program for toddlers and/or children <sup>3</sup>	Yes (N-6)	Yes (N-6)	Yes (K-6)	Yes (K-6)	Yes (N-4)	No	Yes
	Immersion program for adults	Yes	Yes	Yes	Yes	No	No	Yes
	Non-immersion classes for children	Yes	Yes	Yes	Yes	Yes	Limited	Yes

Non-immersion classes for adults	Yes	Yes	Yes	Yes	Yes	Limited	Yes
Program support for families	Limited	Limited	No	No	No	No	No
Adequate visibility and community mobilization efforts	Fair	Fair	No	No	No	No	Limited

*Note.* <sup>1</sup>As of 2023. Speaker population data is approximated and is from personal communication with language experts in each community. These language experts are speakers of Kanien'kéha, highly involved in revitalization work in their own communities, and well versed in the proficiency assessment guidelines developed by the American Council on the Teaching of Foreign Languages (ACTFL). <sup>2</sup> Domain usage exists in ceremonies but rarely transcends symbolic function (e.g. memorized cultural speeches and statements). <sup>3</sup> N = Nursery, K = Kindergarten

### ***Number and Proportion of Speakers on Territory***

Data concerning speaker populations for Kanien'kéha have been gathered from personal communication with leading language revitalization practitioners in each Kanien'kehá:ka territory. The practitioners consulted were speakers of Kanien'kéha, highly involved in the revitalization movement within their own community, and well-versed in the proficiency guidelines created by the American Council on the Teaching of Foreign Languages (ACTFL) (2012). I have not relied on Canadian federal census data<sup>2</sup> because it is inaccurate for two reasons: 1) not all Kanien'kehá:ka communities participated in the most recent census; and 2) the self-report data is unreliable as individuals often differ in their understanding of what it means to speak, understand, or conduct a conversation in a language (Krauss, 1998; Yang et al., 2017). With this in mind, I have only counted an individual as a "speaker" when they have an approximated speaking proficiency<sup>3</sup> level of "advanced"<sup>4</sup> or higher, as defined ACTFL oral proficiency guidelines (2012).

I estimate there to be 653 speakers of Kanien'kéha at the 'advanced' level or higher, equaling approximately 2.2% of the total population that live in Kanien'kehá:ka territories (reserve/reservation communities). Most of these speakers are L1 speakers (born approximately between 1920 and 1950). Those teaching the language or attempting to use it completely in the home and in the community are almost all L2s. Communities with the highest number of L2 speakers are those that have established infrastructure for producing L2 speakers. These communities also have the highest number of new L1 speakers being raised by L2 speaking parents. There are very few speakers living outside of Kanien'kehá:ka communities, and those that do almost always work in a Kanien'kehá:ka community. In addition, there are over 1000 intermediate speakers throughout Kanien'kehá:ka territories, presenting a great opportunity to increase their proficiency to advanced levels rather quickly.

### ***Domain Usage and Functions***

The strongest domains where Kanien'kéha is used as primary are educational institutions (elementary immersion, preschool language nests, and adult immersion), followed by ceremonial events and festivals, followed by a few individual family homes, followed by limited media outlets such as radio. The communities that have established these domains most strongly are Kahnawà:ke, Ahkwesáhsne, Ohswé:ken, and Kanehsatà:ke, with Kahnawà:ke leading in this area. There are major obstacles for the language to be used within peer groups, between peer groups, and in the home. It is difficult to reclaim or strengthen current domains or create new ones throughout the community with a limited number of speakers. Social media and communication technologies are commonly used by some adults and young adults who use Kanien'kéha daily within their limited peer groups.

### ***Government Attitudes and Policy***

At the Canadian federal level there have been significant developments over the last ten years that have potential for positive impact on Indigenous languages. In 2015, the Truth and Reconciliation Commission of Canada investigated the effects of the residential school system and released a report detailing ninety-four calls to action for reconciliation,

with four of them directly concerning Indigenous languages (Truth and Reconciliation Commission of Canada, 2015). In response to Call #14, Canada passed its Indigenous Languages Act, Bill C-91 in 2019. Although it recognizes Indigenous language rights, the bill denies Indigenous languages national official language status<sup>5</sup> and thus important rights accorded French and its speakers, such as to publicly funded compulsory education provided totally in the minority official language.

At the Kanien'kehá:ka community level, most band/tribal governments are supportive, in spirit, such as making a statement that they are supportive of language revitalization, of language use promotion and revitalization. However, some communities stand apart by providing concrete, official support such as official language laws, policies, or resolutions to support language revitalization efforts.

Most noteworthy is the Kahnawà:ke Language Law which stated purpose is “to revive and restore the Kanien'kéha language as the primary language of communication, education, ceremony, government and business within the Mohawk Territory of Kahnawà:ke” (Mohawk Council of Kahnawà:ke, 2007). The Tyendinaga Mohawk Council in Tyendinaga has also recently passed an official resolution, *Resolution #2021/22-056*, which stated purpose is “affirming Kanyen'kéha (Mohawk) as the official language of the Tyendinaga Mohawk Territory and the original Mohawk Tract as a whole” and that the Tyendinaga Mohawk Council “will prioritize the development and implementation of initiatives that will work to incorporate Kanyen'kéha into all aspects of everyday life” (Tyendinaga Mohawk Council, 2021). Having official support sends a strong message to Kanien'kehá:ka about the importance of the language, garnering morale around the language and its use. It also helps to commit and hold local governing authorities accountable in continuing to support language revitalization endeavours.

### ***Community Attitudes***

I believe that most Kanien'kehá:ka would state that they are highly supportive of Kanien'kéha revitalization and recognize a strong connection between language and identity. There are also strong pockets within most communities who understand that the primary use of Kanien'kéha in their everyday lives is critical to their identity, health and wellbeing. Furthermore, in most communities, much of the population values the language as a marker or emblem of their identity, often using the language in symbolic ways. However, only a small fraction of Kanien'kehá:ka are engaged directly in revitalization efforts, and even fewer are focused on acquiring advanced proficiency and using it on an everyday basis within their peer groups. There are numerous barriers to becoming a speaker, so even those who believe strongly that language is important may never become speakers.

### ***Literacy and Education Materials***

The written form of Kanien'kéha dates to initial contact with Dutch explorers in the 16<sup>th</sup> century who were the first to write down the language (Gehring et al., 2013). Later, Jesuit missionaries in the 17<sup>th</sup> century began learning the language and translating the Bible. The orthography since evolved and became formally standardized in 1993 (Lazore, 1993). Written materials are continuing to be developed today, especially grammars, dictionaries, curriculum, stories, and translations of English written works. A substantial

body of literature is far from being established but use of the written language is growing among certain peer groups on social media platforms and in text messaging. Most language learners have indicated that literacy (reading and writing) in the language is necessary, or at least critically important, in advancing speaking proficiency (Green, 2017). Documentation of the language is generally limited throughout all communities although there has been a recent push to increase documentation specifically for use in present and future revitalization work (documentation for revitalization). Noteworthy documentation projects include *Ratiwennókwás*<sup>6</sup>, conducted by Brant (Forthcoming) and Tsi Tyónnheht Onkwawén:na, and the *Tewanónhstat ne Rotiksten'okòn: 'a Raotiwén:na* conducted by Wáhta Mohawks (Wáhta Mohawks, 2019).

### ***Maintenance and Revitalization Efforts and Infrastructure***

Prior to the late 1970s, Kanien'kéha was not taught or promoted in any formal education setting. Kanien'kehá:ka communities have now since established significant revitalization infrastructure, driven by community language and culture revitalization organizations, hubs, authorities, and schools, such as the Kahnawà:ke Education Centre and the Kanien'kehá:ka Onkwawén:na' Raotitióhkwa Language and Cultural Centre (KORLCC) in Kahnawà:ke, Tsi Tyónnheht Onkwawén:na in Tyendinaga, the Kanehsatà:ke Language and Cultural Centre and the Kanehsatà:ke Education Centre in Kanehsatà:ke, the Kanien'kéha Language and Resource Centre and Á:se Tsi Tewá:ton in Ahkwesáhsne, and the Six Nations Language Commission in Ohswé:ken. Of particular significance are the language nests, immersion and culture-based immersion models at the elementary level, adult immersion programs, and programs and classes offered by post-secondary institutions.<sup>7</sup>

Immersion education predominantly exists at preschool (language nest), and elementary levels, and has not yet extended to intermediate and high school, although, adult immersion programs that generally target young adults after high school are being offered in all Kanien'kehá:ka communities except for Wáhta.<sup>8</sup> For these reasons, Kanien'kehá:ka have been leaders in Indigenous language immersion education in North America. The most notable immersion programs in Kanien'kehá:ka territories are detailed in Table 2.

**Table 2***Notable Immersion Programs in Kanien'kehá:ka Territories*

Territory	Program Name	Type	Description
Ahkwesáhsne	Ahkwesáhsne Freedom School	Elementary Immersion	A culture-based elementary immersion program from pre-kindergarten to grade 8.
	Ahkwesáhsne Language Nest	Language Nest	Preschool immersion language nest.
	Skahwatsí:ra	Elementary Immersion	Public elementary immersion from pre-kindergarten to grade 4.
	Á:se Tsi Tewá:ton Ahkwesáhsne Cultural Restoration Program	Adult Immersion	First offered as a four-year culture and language apprenticeship program. Was intended that apprentices learn the language and use it while engaging within a chosen field of knowledge. <sup>9</sup> This program has now shifted to a two-year full-time adult immersion program.
Kahnawà:ke	Karonhianónhnha' Tsi Ionterihwaienstákhwa'	Elementary Immersion	Immersion from kindergarten to grade 6.
	Karihwanó:ron	Nursery / Elementary Immersion	Private nursery and kindergarten to grade 6 immersion.
	Iakwahwatsiratátie	Language Nest	Preschool immersion language nest.
	Ratiwennahní:rats	Adult Immersion	Two-year full-time adult immersion program.
Kanehsatà:ke	Ratiwennakéhte Tsi Ionterihwaienstákhwa'	Nursery / Elementary Immersion	Nursery to kindergarten immersion. English is incorporated in grades 1-6 with French taught as a second language.
	Ratiwennenhá:wi Adult Immersion	Adult Immersion	Three-year full-time adult immersion and teacher training program partnered with McGill University.
Ohswé:ken	Kawenní:io/Gaweniyo	Private Elementary Immersion	Private Gayogohó:no' and Kanien'kéha elementary and secondary language immersion. Offers 100% immersion from kindergarten to grade 6, 50% immersion in grades 6 and 7, and 25% immersion in high school.
	Everlasting Tree School	Private Elementary Immersion	Kindergarten to grade 6 immersion combining culture-based education with Waldorf education.
	Onkwawén:na Kentyóhkwa	Adult Immersion	Two-year full-time adult immersion program.
Tyendinaga	Totáhne	Language Nest	Preschool language nest.
	Kawenna'ón:we	Elementary Immersion	Kindergarten to grade 4 primary immersion.
	Shatiwennakará:tats	Adult Immersion	Two-year adult immersion program.

### ***Intergenerational Transmission***

The territories with the strongest intergenerational transmission status are Kahnawà:ke, Ahkwesáhsne, and Kanehsatà:ke (GIDS = 8, UNESCO = *Severely Endangered*, EGIDS = *8a Moribund*). Most speakers in these communities are within the grandparent generation or older. These communities have a small population of L2 speakers, with some of them raising L1 children. Kahnawà:ke has produced the largest population of L2 speakers and has the highest vitality of all communities. Those with the weakest intergenerational transmission status are Ohswé:ken, Tyendinaga, and Wáhta (GIDS = 8, UNESCO = *Critically Endangered*, EGIDS = *8b Nearly Extinct*). Tyendinaga and Ohswé:ken have no remaining L1 speakers but have a growing number of L2 speakers. Wáhta has one L2 speaker at an advanced level and the two remaining L1 speakers are in the grandparent generation or older.

Kanien'kéha as a whole is measured to be at level 8: "The only remaining speakers of the language are members of the grandparent generation" using the GIDS (Fishman, 1991), *Severely Endangered*: "The language is spoken by grandparents and older generations; while the parent generation may understand it, they do not speak it to children or among themselves." Using the UNESCO (2003) system, and level *8a Moribund*: "The only remaining active speakers of the language are members of the grandparent generation" using the EGIDS (2010). However, the situation is much more nuanced as processes to reverse language shift have already been working for some time to re-establish and strengthen intergenerational transmission and, as a result, higher degrees of vitality exist in small pockets of certain communities. To account for this nuanced situation, a sub-category of 7 (suggested *7b*) added to the EGIDS would make the metric more robust. This would incorporate language vitality situations characterized as: "some of the child-bearing generation knows the language well enough to use it among their limited peer group and some are transmitting it to their children."

### ***Analysis of Vitality Assessment***

Despite the significant gains since the 1970s in language revitalization, the reality is that Kanien'kéha is overall still experiencing a greater rate of speaker loss than new speaker creation. The greatest challenge for Kanien'kéha revitalization has been developing and maintaining the means for creating the necessary L2 proficiency so that such speakers can assimilate into the Kanien'kéha speech community and have the linguistic capacity to mend the intergenerational link and use the language as primary within and between peer groups. Communities with the highest number of L2 speakers are those that have established adult immersion programs and other infrastructure. These communities also have the highest number of new L1 speakers being raised by L2 parents. Communities that have focused solely or primarily on immersion for children have struggled at increasing their language vitality, as teachers and parents have generally not been proficient enough for creating full immersion environments.

Since Kanien'kéha language revitalization efforts began, concentration has largely been placed on elementary immersion, targeting children, with minimal consideration for the role of creating an adult generation that have the oral proficiency necessary to maintain primary use of the language both inside and outside of the home for children. These actions were well-intentioned, but misguided, as children are not capable using the language as

primary without a family and a community that supports them to do so. The outcomes are such that children who attended elementary immersion but did not have parents who used the language in the home, have rarely developed beyond rudimentary understanding and have struggled to produce or initiate the necessary language required to communicate fully. In retrospect, we would have been further along if during the 70s we started focusing on creating new adult speakers. This phenomenon is common in anglophone Canada as well, where many anglophone parents send their children to French immersion school with the desire for their children to become bilingual despite the parents not speaking nor having a willingness to speak French (Mukan, et al., 2017; Swain, 1997).

One of the primary reasons why adults have been left out of the revitalization effort in favour of children's programming is the common belief in the "critical period hypothesis" (Lenneberg, 1967; Long, 2013; Singleton, 2005) – the idea that there is an ideal time in the first few years of life for the brain to acquire a language if presented with adequate exposure. We assume that if children acquire a language during the "critical period," they would be much more likely to continue to speak it as a primary language in adulthood. There is growing consensus that this is only the case if exposure to the language at an early age is sustained over time at a high enough quality (DeKeyser, 2013; Muñoz & Singleton, 2011; Ortega, 2019). Therefore, without such sustained exposure to quality language, children will not maintain or increase their proficiency. Coupled with the fact that adults can benefit significantly from explicit language learning means that under the right conditions (enough quality and quantity of input) (McIvor, 2015), adults can not only learn the language more rapidly than children (DeKeyser, 2013) but that adult acquisition is necessary before L1 speaking children can be created.

With this in mind there are several elements necessary to consider in a comprehensive language revitalization strategy, such as documentation, language learning resource development (grammars, dictionaries), vocabulary creation for use in contemporary times, establishing law and policy, and increasing the number of language use domains, among others (Hinton, 2011; McIvor & Anisman, 2018). However, considering the focus of attention on childbearing-aged adults emphasized by Fishman (1991) and the current situation and vitality of Kanien'kéha, Kanien'kehá:ka territories must focus on creating young adult speakers. This is because without adults who acquire high proficiency in the language, no one can effectively create an immersion environment in the school or the home, maintain daily peer group use, and pass the language on to a new generation of speakers (Fishman, 1991; Genesee, 2011; Hinton, 2011; McIvor, 2015; Wilson & Kamanā, 2009; Wilson et. al., 2022).

### **Adult Immersion in Kanien'kéha Revitalization**

We have now learned that there is a need to strengthen pathways for adults to become highly proficient in Kanien'kéha as expediently as possible in order to re-establish critical community speech domains and repair the intergenerational link. Although there is now a long history of Kanien'kéha adult immersion (over 25 years), resources and opportunities for adults have been tailored to beginner and novice levels of proficiency development (e.g., night classes) instead of immersion. In general, adult language learning has not been a primary focus in Indigenous language revitalization work (Gordon, 2009; McIvor, 2015). This is represented in the academic literature as well, as formal studies and

accounts of adult learning pathways and their efficacy for Indigenous languages is relatively limited (McIvor, 2015).<sup>10</sup>

The most common pathways for adult language learning (self-directed learning, master/mentor apprentice programs (MAP), group classes and language camps) have been inadequate for ensuring that adults reach high levels of proficiency expediently. This is because they do not provide the required contact hours to achieve advanced levels of proficiency, they are rarely, if ever, integrated into a strategy to achieve advanced levels of proficiency, and they do little to foster the development of a speech community. This has spurred the development of adult immersion programs, which have sought to address and overcome the challenges experienced by these more common pathways.

Since the late 1990s Kanien'kehá:ka have been experimenting with adult immersion, making improvements along the way. Today, most Kanien'kéha adult immersion programs have been producing highly proficient L2 speakers within two school years, inspiring other Indigenous people across Canada and the United States to initiate similar programs.<sup>11</sup>

Adult immersion is a unique pathway or institutional framework for creating L2 speakers of Indigenous languages, which I define as having four primary qualities: 1) the school operates in complete immersion; 2) the program lasts one to three school years in length (approximately 30 hours per week, for eight months per year, totaling 1,000 hours of contact instruction per school year); 3) the curriculum is delivered in a classroom or other contrived setting; and 4) the school enrolls adult students, who are usually compensated for attendance as they would be in full-time employment. Kanien'kéha adult immersion programs that are currently in operation are detailed in Table 3.

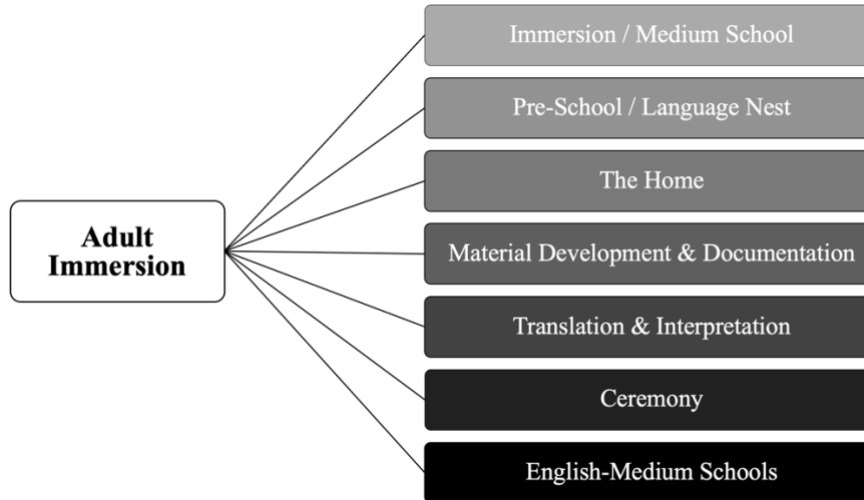
**Table 3**

*Kanien'kéha Adult Immersion Programs*

Program Overview	Description
Onkwawén:na Kentyóhkwa <ul style="list-style-type: none"> <li>• Location: Ohswé:ken, ON</li> <li>• Years of Operation: 1998-Present</li> <li>• Program Length: 2 school years</li> <li>• Students Per Cohort: 10-15</li> <li>• Simultaneous Cohorts: Yes</li> <li>• Total Graduates to Date: 212</li> </ul>	Began as a one-year program and now offers two years, with two simultaneously running cohorts. The mission is "To speak the Mohawk language of Ohswé:ken the way our grandparents used to." The goal is for students to reach 'intermediate-low' speaking proficiency by the end of the first year, and 'advanced low' speaking proficiency by the end of the second year, as defined by the ACFTL oral proficiency scale.
Ratiwennahní:rats: Kanien'kéha Onkwawén:na Raotitióhkwa Cultural Centre (KOR) <ul style="list-style-type: none"> <li>• Location: Kahnawà:ke, QC</li> <li>• Years of Operation: 2002-Present</li> <li>• Program Length: 2 school years</li> <li>• Students Per Cohort: 10-20</li> </ul>	Offered by the Kanien'kehá:ka Onkwawén:na Raotitióhkwa Language and Cultural Center. Began as a one-year program and has since expanded to two years, offering two simultaneously running cohorts. Seeks to foster "...the advancement of spoken language proficiency, empowering community to participate and contribute to the maintenance and vitality of Onkwehonwehnéha." The goal of

<ul style="list-style-type: none"> <li>• Simultaneous Cohorts: Yes</li> <li>• Total Graduates to Date: 179</li> </ul>	the program is for students to increase their spoken proficiency by three sub-levels (ACFTL oral proficiency scale) each year.
<p>Shatiwennakará:tats: Tsi Tyónnheht Onkwawén:na (TTO)</p> <ul style="list-style-type: none"> <li>• Location: Tyendinaga, ON</li> <li>• Years of Operation: 2004-2016</li> <li>• Program Length: 2 school years</li> <li>• Students Per Cohort: 10-15</li> <li>• Simultaneous Cohorts: No</li> <li>• Total Graduates to Date: 83</li> </ul>	Offered by Tsi Tyónnheht Onkwawén:na Language and Cultural Center. The program began as a one-year certificate program partnered with Brock University and became a two-year diploma program in 2006 partnered with Trent University and First Nations Technical Institute. In 2011, it became a non-accredited community-based program with no external partners. The program was not offered between 2016 and 2022 but resumed in 2023.
<p>Á:se Tsi Tewá:ton: Ahkwesáhsne Cultural Restoration Program (ACR)</p> <ul style="list-style-type: none"> <li>• Location: Ahkwesáhsne, NY</li> <li>• Years of Operation: 2014-Present</li> <li>• Program Length: 2 school years</li> <li>• Students Per Cohort: 10-15</li> <li>• Simultaneous Cohorts: No</li> <li>• Total Graduates to Date: 21</li> </ul>	Offered by the Ahkwesáhsne Cultural Restoration Program. First offered as a four-year culture and language apprenticeship program. The program has now shifted to a two-year full-time adult immersion program focused on developing advanced oral proficiency. The goals are for students to reach “intermediate-low” speaking proficiency by the end of the first year, and “advanced low” by the end of the second year.
<p>Ratiwennenhá:wi: Mohawk Language Custodian Association</p> <ul style="list-style-type: none"> <li>• Location: Kanehsatà:ke, QC</li> <li>• Years of Operation: 2016-Present</li> <li>• Program Length: 3 school years</li> <li>• Students Per Cohort: 10-15</li> <li>• Simultaneous Cohorts: Yes</li> <li>• Total Graduates to Date: 5</li> </ul>	Initiated as part of a succession plan to create a new generation of teachers, translators, and curriculum developers. First started as a two-year program and has since become a three-year program in partnership between the Mohawk Language Custodian Association (MLCA) and the Kanehsatà:ke Health Center (KHC) in Kanehsatà:ke and McGill University. Students, if they choose to enroll in the teacher education portion, will graduate with a certificate in Education for First Nations and Inuit, Specialization Language and Culture, certifying them to teach Kanien’kéha in elementary and high school.

As of the year 2023, Kanien’kéha adult immersion programs have graduated 500 students, with approximately 82 of those currently speaking at an advanced level or higher.<sup>12</sup> Adult immersion has also been adding to and reinforcing a system of structures that fortify Kanien’kehá:ka identity through primary use of the language within social groups, like the work that has been done in Hawai’i (Wilson & Kawai’ae’, 2007). In fact, almost all other structures that exist in the Kanien’kéha revitalization system currently depend on adult immersion programs to produce speakers to work in and run such structures, as represented in Figure 3.

**Figure 3***Adult Immersion Primary Populator of Other Revitalization Structures*

Almost all (approximately 90%) of current instructors in all Kanien'kehá:ka elementary immersion programs are graduates of adult immersion programs. Adult immersion programs are, therefore, “feeder programs” to other revitalization structures, and, by extension, are critical to the success of the Kanien'kéha revitalization system.

### **Foundational Components of an Adult Immersion Program**

The most basic adult immersion program can consist of one or two teachers, a few students, and a classroom. However, to be a well-functioning institution that achieves its goals, it requires more than just the bare minimum. The foundational components of adult immersion are summarized in Table 4. Not all components will be discussed in detail in this paper. These components are based on learning from over 25 years of adult immersion programming. I, personally, have been consulted for, or taught at, three adult immersion programs, and this combined experience, with a grounding in the relevant literature, has informed my recommendations for effective programming. This list is not exhaustive and there will be unique circumstances when designing and implementing any program. In the remainder of this section I expand upon only the *Why?*, *What?*, and *How?* components.

**Table 4***Foundational Components of an Adult Immersion Program*

Why?	Clearly defined mission	<ul style="list-style-type: none"> <li>• Create highly proficient Kanien'kéha speakers</li> <li>• Create a critical mass of highly proficient speakers to assimilate into and strengthen the Kanien'kéha speech community</li> </ul>
What?	Concrete, achievable goals	<ul style="list-style-type: none"> <li>• Graduate students at the 'advanced low' level of proficiency after 2 years or 2000 hours of instruction</li> </ul>
	Target group	<ul style="list-style-type: none"> <li>• Young adults (ideally before they have had children or not long after)</li> <li>• Live in and/or work in the community</li> <li>• Those likely to succeed in the program (assessed through admissions requirements)</li> </ul>
Who?	Support personnel	<ul style="list-style-type: none"> <li>• Program director</li> <li>• Administrative assistant</li> <li>• Financial coordinator</li> <li>• Curriculum worker</li> <li>• Board of directors</li> </ul>
	Instructors	<ul style="list-style-type: none"> <li>• Highly proficient L2 speakers with metalinguistic awareness (at least 2 per class)</li> <li>• L1 speaker as auxiliary instructor/advisor to demonstrate authentic speech (at least 1 full- or part-time)</li> </ul>
How?	Quality & quantity input	<ul style="list-style-type: none"> <li>• 30 hours per week from September - June for a minimum of two consecutive years (approximately 2000 hours)</li> <li>• Structural &amp; communicative instructional approaches</li> <li>• Qualified instructors</li> <li>• Access to advanced level speech</li> </ul>
	Assessments & evaluation	<ul style="list-style-type: none"> <li>• Formative assessments throughout the year</li> <li>• Summative assessments at end of year 1 and year 2</li> </ul>
Where?	Location and environment	<ul style="list-style-type: none"> <li>• Centrally located within the community where the speech community exists or is sought to be developed</li> <li>• Complete immersion setting</li> <li>• Physical space that encourages relationship building</li> </ul>

***Mission***

What often prevents revitalization initiatives from becoming strongly rooted and effective community programs is the absence of a clearly defined purpose or mission, along with explicit goals that could be achieved within the programs scope. It is important to have a well-crafted mission to know what you are trying to achieve. For example, the mission of the Onkwawén:na Kentyóhkwa program is "to speak the Mohawk language of Ohswé:ken the way our grandparents used to" (Onkwawenna Kentyohkwa, 2022). Without jargon, this mission is clear in showing to the community that the program seeks to recreate new

speakers of the Ohswé:ken dialect of Kanien'kéha. Better yet would be to have a purpose that aligns with a larger community language revitalization strategy that has identified adult immersion as one mechanism among many in a multidimensional strategy, or system of structures, to revitalize a language.

The mission must also be understood and embraced by the student demographic, because after many years in the field, I believe that the attitudes of the students play a strong role in language revitalization. Students that embrace the cause, rather than simply enrolling to learn the language for themselves, will prove to be more helpful in creating a more effective learning environment, as well as be more fruitful in the community's pursuit of language revitalization. This is one aspect that differentiates Indigenous adult language programs from non-native heritage language programs as Indigenous adult language programs are not just for personal development and enrichment, but for the benefit of entire communities.

Furthermore, it must be noted that Kanien'kéha adult immersion programs are principally concerned with language acquisition. Culture and traditional knowledge are not directly targeted as learning outcomes but are rather taught through the pervasive school structure and through meaningful and relevant curriculum content. Cultural principles, values, goals, and aspirations are often manifested simply by learning the language. Programs may wish to explicitly teach culture, which is completely acceptable – however directors and instructors should be aware that this will reduce the number of contact hours learning the language explicitly.

### **Goals**

When a mission is clearly defined, goals for achieving the mission should also be clearly defined. When a program has a mission to 'create speakers' and to build a community of speakers, the program must understand what it means for someone to be a speaker, what level of speaking proficiency they wish students to acquire by the programs end, and therefore know what tools are available to measure speaking proficiency.

The goals must be aligned within an appropriate scope and be supported by necessary resources. I believe that programs are prone to fail by setting unachievable goals, not because they are actually unachievable, but because they are not aligned with the necessary time and resources for achieving them. An unrealistic goal would be expecting to create advanced level speakers in less than 2000 hours of instruction and with limited funding to pay the instructors at equality. If only limited resources are available, such as enough funding to teach for one year, then the goals should align with those time and funding constraints.

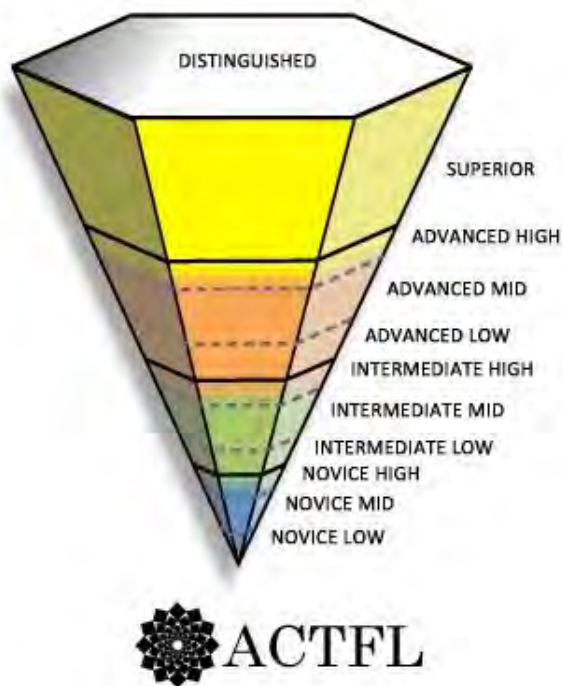
To meet program goals of attaining a certain level of proficiency, it is necessary to have a tool with which to measure proficiency. There are several guidelines and frameworks that have been created to describe and measure language proficiency. Of these, the most popular and relevant are the Canadian Language Benchmarks (CLB), the Interagency Language Roundtable Language Skill Level Descriptions (ILR), and the ACTFL Guidelines in North America, and the Common European Framework of Reference for Languages (CEFR) in Europe. All Kanien'kehá:ka adult immersion programs have adopted the ACTFL proficiency guidelines in setting goals for their programs.

The ACTFL proficiency guidelines are used as an instrument for testing and measuring an individual's functional language ability (ACTFL, 2012). Levels of

proficiency are portrayed in ranges, forming a hierarchy, where learners progress from lower to higher levels of proficiency, as shown in Figure 4 (ACTFL, 2020).

**Figure 4**

*ACTFL Guidelines Inverted Pyramid (ACTFL, 2012)*



In terms of oral proficiency, the goal of an adult immersion program should be for students to graduate with a functional ability to use the language as primary within their everyday lives. This is most aligned with the advanced level of speaking proficiency. Characteristics of this level include being able to speak in paragraphs of interconnected discourse (text type) and narrate and describe in major time frames (past, present, and future) dealing effectively with an unanticipated complication (tasks and functions) in most informal and some formal settings (context/content), all while being understood without difficulty by speakers unaccustomed to dealing with non-native speakers (ACTFL, 2020). Speakers with this level of proficiency can function completely in the target language, beyond symbolic function, within common professions (such as immersion teachers in K-12, nurses, social workers, and police officers) (ACTFL, 2015), though they will still be distinguishable from L1 speakers.

In an adult immersion program, summative assessments should be used to measure student spoken proficiency (i.e., what they can do) in the language, rather than just a sum total of formative assessments. In effect, summative assessments should be the major indicator of student success and program efficacy. In a program that is two school years in length, such summative assessments should be conducted at the end of each year. The assessment should be completed using a formal ACTFL Oral Proficiency Interview (OPI), a one-on-one interview that rates student proficiency performance according to the ACTFL proficiency guidelines. To conduct an OPI, teachers and/or program staff must receive OPI

tester training for English directly from ACTFL, although external testers can be hired as long as they have such training and the necessary level of spoken proficiency in the language.<sup>13</sup>

### ***Quantity & Quality of Input***

Generally, when it comes to adult acquisition of Indigenous languages, there is a lack of understanding regarding the amount of time needed for adults to reach an adequate level of speaking proficiency (Johnson, 2017; McIvor, 2015; Wilson, 2018). In the past, we have relied on tertiary programs, community classes, self-guided learning, and even MAP to create speakers but they often do not provide adequate contact time in the language. Adult immersion programs are becoming more successful at creating speakers partially due to the amount of time of instruction, which is a critical component for any learner (Carroll, 1967; Wilson & Kamanā, 2011). This requires thousands of hours of instruction and self-directed learning (quantity), and the instruction must be of sufficient quality to reach the level of functional proficiency required to use the language as a primary language within their everyday lives (McIvor, 2015).

**Quantity of Input.** Language Testing International (LTI) (2022), based on research conducted by ACTFL and the Foreign Services Institute in the United States, estimates the number of hours required to reach differing levels of oral proficiency in foreign languages by native English speakers and categorizes them into four levels based on difficulty. For example, a learner of *average aptitude* can be expected to reach *advanced low* proficiency in French (Group 1) in only 480 hours, German (Group 2) and Russian (Group 3) in 720, and Chinese (Group 4) in 1,320 (ILR, 2022). Indigenous languages like Kanien'kéha are not included in these groupings, but because of their extreme structural and cultural differences from English, their intricate phonologies and grammars, and few resources available for their learning and the limited opportunity for their use in natural settings, they likely fall within a category higher than Group 4. The time to reach differing levels of proficiency in Kanien'kéha and other Iroquoian languages by native English speakers is estimated in a proposed Group 5, shown in Table 5.

**Table 5**

*Expected Levels of Performance for Acquiring Iroquoian Languages*

Language Difficulty	Hours of Training (Average Aptitude)	ACTFL Level
Group 5 Languages Kanien'kéha (Mohawk), Onödowá'ga:' (Seneca), Onüda'gegá' (Onondaga), Onayote'a:ká: (Oneida), Gayogohó:no' (Cayuga), Skarù:rę' (Tuscarora)	1000	Intermediate Low
	1500	Intermediate Mid
	2000	Intermediate High/Advanced Low
	3000	Advanced Mid/High
	5000	Superior

This table of target levels performed aligns with the results of over twenty years of experience of the Onkwawén:na Kentyóhkwa and Ratiwennahní:rats programs. These programs have determined that it requires at least two school years, equal to approximately 35 weeks or 2000 hours of instruction, for L1 English speakers with limited to no previous knowledge of Kanien'kéha to reach an advanced level of speaking proficiency. This is provided that the learning process is contrived, full immersion, and scaffolded with a simple to complex structure with few lengthy gaps in program deployment. It is important to note that this is without travel abroad opportunities that many tertiary foreign language programs depend on for students to be exposed to the required hours of language use, as this is not available for Kanien'kéha and other Indigenous languages. Overall, adult immersion programs should structure their programs in a way that allows for at least 1000 contact hours per year for two years to best ensure students can reach an advanced level of oral proficiency. Additional years in immersion, MAP, or other programs, would be beneficial to take students to even higher levels of advanced and beyond.

**Quality of Input.** The instructional approach in Kanien'kéha adult immersion should be a combination of structural approaches (Ellis, 1993; Genc, 2018) with communicative language teaching (CLT) approaches (Spada, 2006). For Kanien'kehá:ka employing adult immersion, this has been determined through years of trial and error and independent linguistic investigation by program instructors, of which I am included, yet it is also supported by current Second-Language Acquisition (SLA) literature. SLA literature points to this type of combination, where *focus on form*, a structural approach, is combined strategically with a meaning-based CLT approach, as most effective for adult L2 acquisition (Lightbown & Spada, 2013; Spada, 2011). This blending of approaches is necessary for expediting adult student acquisition of the complex nature of a polysynthetic language like Kanien'kéha (the role of a structural approach), all while allowing for acquisition of meaningful, accurate language, that is as prosodically and pragmatically authentic as possible (the role of a CLT approach).

Structural approaches are generally concerned with noticing, focusing on, and mastering grammatical forms, rules, and structures. A structural approach should serve an important role in informing the scope and sequencing of the Kanien'kéha, or any Indigenous language, adult immersion syllabus and curriculum, whereby they are arranged in a simple to complex fashion according to the structural complexity of the language. One can appreciate the great utility of “focusing on form” (Lightbown & Spada, 2013) in this way for Kanien'kéha and Indigenous languages in general, where attention is brought to the internal structure of noun and verb morphology (i.e. the grammar), allowing adults to recognize patterns of allomorphy, thereby simplifying and expediting acquisition.

For this to be manifested within teaching methods, however, instructors and curriculum developers must not only have high proficiency in the target language, but also have a certain level of metalinguistic cognition to recognize and understand the range of basic structural complexities that exist within the polysynthetic nature of Kanien'kéha. This is why L2 instructors have proven most effective in Kanien'kéha adult immersion, as they naturally develop a certain degree of metalinguistic awareness simply from the act of acquiring the language themselves. It also explains why L1 speakers are best suited to being auxiliary teachers, advisors and mentors in the classroom to model authentic speech, correct errors, and aid in curriculum development – all tasks that are more aligned with a CLT approach.

This does not mean, however, that instructors need to be formally trained linguists, but instead require the following two criteria: 1) recognize morpheme boundaries and know the difference between morphologically simple versus morphologically complex words; and 2) know that not everything that seems simple in English is easy to describe in Kanien'kéha. Regarding the first criteria, this means, for example, that short words are not necessarily structurally simple, nor does it mean that long words are necessarily complex. This is shown in (3), where *téntke'*, a two-syllable word, contains six morphemes, and *ionkwanonnawen'towá:nen*, an eight-syllable word, contains just three morphemes.

- (3) a) A short yet morphologically complex word

*téntke'*  
t-en-t-k-e-'  
REP-FUT-CIS-1SG.AGT-go-PUNC  
'I will come back'

- b) A long yet morphologically simple word

*ionkwanonnawen'towá:nen*  
ionkwa-nonnawen't-owanen  
1PL.PAT-pipe-large  
'We have a large pipe'

In this case, to new learners and untrained teachers, it is easy to assume that shorter words are easier to acquire, even though the opposite may be true. Furthermore, the word with greater morpheme density is not just more challenging to acquire because of the quantity of morphemes in this single utterance, but because there is extensive allomorphy of each morpheme, their use being dictated by their respective environments. This means that *téntke'* has several hundred possible morpheme combinations that a student must master to communicate fully and effectively, indicating why a structural approach to verb (and noun) acquisition is integral to Kanien'kéha acquisition.

The second criteria that is important for instructors to know is that words, sentences or phrases that seem simple in English may have a Kanien'kéha equivalent with high morphological complexity. A sentence such as 'I went shopping', for example, may seem relatively simple in English and therefore worth learning in early stages, however, such an utterance is quite complex in Kanien'kéha, containing six different morphemes, as seen in (4).

- (4) *wakatkehrontakohòn:ne*

wak-at-kehront-ako-hon-hne  
1SG.PAT-SRFL-peddle-REV-STAT.PERF-RMT  
'I went shopping'

This suggests that the syllabus should begin with language that has relatively simple internal structure or perhaps even with words that have no inflection at all, such as particles, as long as they can be used to create meaningful and compelling (Krashen et al., 2017) utterances. Over time, simple verbs and nouns can be introduced to create more complex utterances. Students effectively can progress from using one simple verb to building complexity over time by adding different verb and noun affixes tailored to their

specific situation. (5) shows how this complexity is built using different affixes with one verb example, *to buy something*:

(5) Building verbal complexity	
enhahní:non'	<i>he will buy it</i>
enhatenhní:non'	<i>he will sell it</i>
ienhahní:non'	<i>he will buy it there</i>
enshahní:non'	<i>he will buy it again</i>
ienshahní:non'	<i>he will buy it there again</i>
enhahninónnion'	<i>he will buy many things</i>
enshahninónnion'	<i>he will buy many things again</i>
ienshahninónnion'	<i>he will buy many things again there</i>
enhatsi'tsahní:non'	<i>he will buy flowers</i>
enhshakohní:non'se'	<i>he will buy it for her</i>
enhshakotsi'tsahní:non'se'	<i>he will buy flowers for her</i>
ienhshakotsi'tsahní:non'se'	<i>he will buy flowers for her there</i>
ensehshakotsi'tsahní:non'se'	<i>he will buy flowers for her again</i>
iensehshakotsi'tsahní:non'se'	<i>he will buy flowers for her there again</i>
ensehshakotsi'tsahninon'sè:ra'	<i>he will go buy flowers for her again</i>
tentehshakotsi'tsahninon'sè:ra'	<i>he will come back to buy flowers for her</i>

Beyond the verbal complex, a simple to complex syllabus can also be created by restricting tense, aspect, mood, and verb and noun inflection. For Kanien'kéha, utterances can be restricted, for example, to the "present tense" or "stative aspect" in early stages of learning, allowing students to focus more on acquiring basic verb and noun structure, which all include a pronominal prefix, a root, and a suffix. When building understanding of this simple structure, students develop a better "sense" of the language and are therefore less likely to perceive every new form as a separate word (Richards & Maracle, 2002). Students come to understand early that, for example, pronominal prefixes, which indicate person, gender, number, and relationship (agent, patient, transitive), are required in any utterance that includes nouns or verbs, and therefore how integral learning pronominal prefixes is in furthering acquisition of a language like Kanien'kéha. Students furthermore come to understand that learning affixes and their patterns of allomorphy is an important tool for expediting vocabulary expansion.

This approach has become known in certain circles as the *root-word method* (Green & Maracle, 2019), for teaching and learning polysynthetic languages - an approach that breaks down whole words into their meaningful parts (morphemes) and teaches students the morphophonological patterns for creating new words on their own. The premise of the root-word method approach is that it is more efficient to learn patterns for word creation than learning individual words without "noticing" (Ellis, 2009) their internal structure. Students develop the capacity to create with the language rather than exhausting themselves in a pursuit to memorize a virtually infinite number of words, which polysynthetic languages like Kanien'kéha, arguably have. With this approach, students build meta-linguistic awareness progressively over the length of the program (Green & Maracle, 2019).

The use of structural based approaches like the "root-word method" does not necessarily result in an ability to speak the language well, however. For adults to benefit from such explicit grammatical instruction (DeKeyser, 2013), it must also be strategically

delivered within a communicative environment, thus combining it with a CLT approach. This is because research (Cook, 2016; Larsen-Freeman & Tedick, 2016; Lightbown & Spada, 2013), as well as years of trial and error delivering adult immersion, shows that exclusive use of structurally grounded methods, such as memorizing grammar rules through oral drills, chart creation, and pattern practice, or the exclusive use of CLT grounded methods, such as roleplays, reporting and storying telling, is ineffective for L2 acquisition. CLT places focus on meaning and communicative competence (Hymes, 1972) rather than linguistic or grammatical competence, delivered by engaging students through relevant and compelling communicative activities and tasks. It recognizes that being a speaker of a language is made up of much more than having the knowledge of grammar, but also the knowledge of how a language is used (functional and pragmatic language use), requiring learners to also develop comprehension skills, communicative ability, vocabulary knowledge, and communicative confidence (Spada, 2011; Lightbown & Spada, 2013). When delivered in this communicative environment, while giving opportunity to “strategically focus on form” (Benson, Forthcoming), adult L2 acquisition is optimized (Spada, 2011).

### **Challenges and Opportunities for Adult Immersion**

As successful as adult immersion programs are proving to be in creating highly proficient L2 speakers of Kanien’kéha, this is not without challenges, limitations, and areas for improvement. Most of the challenges are not faults of the adult immersion concept, but rather more linked to the inadequacies of their underpinning support systems and the vitality situation of the language. I have identified three challenges that stand out, as well as potential opportunities for remediation.

#### ***Funding and Support***

As discussed previously, adult immersion is acting as the primary mechanism for populating all other structures and interventions that make up the Kanien’kéha revitalization system. Yet, securing adequate, long-term, and stable funding sources is still their greatest challenge. Adult immersion programs struggle with securing funding support largely for the systemic reason that they exist outside of conventional education and language learning pathways where funding is already established and developed. They exist outside of these conventional pathways because students are neither conventional students attending post-secondary classes 10 to 20 hours a week, nor are they full-time employees. Because of this, there are few established funding pathways that will provide adequate funding for long-term stability and continued development of adult immersion programs. Furthermore, many in control of potential funding sources often lack an understanding of the value and efficacy of adult immersion programs to language revitalization, with funding dollars going to less effective initiatives. What this means is that most adult immersion programs are operating with budgets below what is needed to create and maintain their foundational components as well as operate at optimal levels. Adult immersion programs, in fact, often run on such low budgets that oftentimes teachers need to take on multiple positions simultaneously within the school (e.g. also acting as administrators) while also agreeing to do so at pitifully low salaries. Some full-time immersion teachers seek additional employment outside of regular work hours to accommodate for such low wages.

Unfortunately, sometimes teachers end up leaving the immersion school entirely and seeking employment in tertiary institutions or leaving the field altogether.

The lack of adequate funding support for the student body is equally as burdensome on the adult immersion program. Since it is required that students attend full-time, they must be compensated for their time to survive. Without compensation, most students must seek employment outside of class hours, which is difficult, especially for students with dependents (especially women) or greater economic insecurity. Students are also not eligible for education loan programs such as the Ontario Student Assistance Program (OSAP), in Ontario and are ineligible for Indigenous post-secondary education funding offered to status Indians.

Adult immersion programs have attempted to address funding challenges by considering working with and/or within nearby tertiary institutions to attach their programs to already established post-secondary funding pathways. Essentially, if adult immersion programs could be housed within an accredited tertiary institution, much of what is required to run a program (salaries and administration costs) could be the responsibility of the tertiary institution and greater financial resources could be more available to students. To create greater financial stability, Kanien'kéha adult immersion programs could also consider exploring working in partnership with one another, such as in establishing an adult immersion consortium, as well as working with other established community institutions, such as language nests and elementary immersion schools, especially since, as we have established, they are inextricably linked.

### *Speaking Authenticity and Attrition*

One of the most legitimate criticisms, concerns, and limitations of adult immersion programs today is that of authenticity, especially related to instructional approach and student performance. It is often believed that graduates of adult immersion programs speak a 'corrupted' version of Kanien'kéha, lacking adequate proficiency. Generally, L2 speakers may experience issues with linguistic form, grammar, prosody, pronunciation, pragmatic use, and cultural relevance and expression of traditional values. This is caused by an overdependence on structural approaches to teaching and learning (i.e. root-word method) and the lack of exposure to authentic L1 speech.

Programs can address these challenges by: 1) increasing exposure to authentic L1 speech used within a multiplicity of domains and registers either in person or in documented form inside and outside of the classroom; 2) better integrating methods grounded in a communicative approach which mimic more authentic language use tasks and functions; 3) increasing program contact time to more than 2000 hours; and 4) helping future graduates secure consistent language exposure and opportunity for use, such as through MAP or employment in immersion settings after graduation. Concerning 4), certain initiatives are now being employed to increase language use and exposure for advanced+ learning. A particularly noteworthy initiative is *Ionkwahronkha' onhátie – We are Getting Fluent* – which seeks to provide programming for adult learners to increase proficiency to advanced levels and beyond, especially after graduation from adult immersion programs.

### ***Student Challenges***

Unfortunately, many adult Indigenous students may struggle to succeed in an immersion program as they are more likely to be distracted by socio-economic inequality and psychological challenges associated with present and historical trauma and marginalization due to colonization (RCAP, 1996). This can contribute to the students' "affective filter" (Krashen, 2009), and may end up rendering them unable to take advantage of the quantity and quality of instructional input afforded to them. Therefore, creating a learning environment where students have fewer distractions and greater mental clarity, focus, and motivation, thereby increasing quality and quantity of input and exposure, is helpful to student success. This is difficult for adult immersion programs to accomplish because special attention needs to be paid toward the mental health and socio-economic well-being of students to increase the likelihood of success in the program. This is even more challenging if adult immersion programs are underfunded, which most are, as teachers and administrators are already over worked, and unable to address all pressures and obstacles experienced by students. Teachers are also not equipped with how to handle students presenting with issues such as anxiety. Under-resourced programs are exploring innovative ways to address these student challenges, such as in strengthening the student selection process (i.e. choosing students that better understand program requirements and are more prepared for program demands), as well as advocating for greater funding to increase student stipends, and make available greater professional support to address mental health challenges.

### **Closing Thoughts**

Kanien'kehá:ka have been working tirelessly to revitalize Kanien'kéha since the late 1970s. But even when considering the accomplishments and victories, it has been rare to see the creation of speakers who can use the language as a primary language in their everyday lives. Without a mechanism for producing proficient L2 speakers of Kanien'kéha, we would likely witness the complete loss of the language within the next generation. Fortunately, for Kanien'kehá:ka, this is now less likely due to increasing prominence of adult immersion programs. Even though these programs have certain shortcomings that can be improved upon, they are the driving force behind the creation of new speakers and a strengthened Kanien'kéha speech community. These L2 speakers are strengthening the system of revitalization structures in Kanien'kehá:ka communities, bringing the language back into the home and using it primarily within and between peer groups and throughout other critical domains in community. This is a new phenomenon since our grandparents were born, creating tremendous hope for the revitalization of Kanien'kéha and Indigenous languages generally.

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## Notes:

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<sup>1</sup> For more specific and detailed information on these specific metrics, see Lewis & Simons, 2010.

<sup>2</sup> See: <https://www12.statcan.gc.ca/census-recensement/2021/as-sa/98-200-X/2021012/98-200-X2021012-eng.cfm#tbl03n> for Canada federal census data on Kanien'kéha and other Indigenous languages.

<sup>3</sup> "Proficiency is the ability to use language in real world situations in a spontaneous interaction in a nonrehearsed context and in a manner acceptable and appropriate to native speakers of the language. Proficiency demonstrates what a language user is able to do regardless of where, when or how the language was acquired" (ACTFL, 2012).

<sup>4</sup> "Speakers at the Advanced level engage in conversation in a clearly participatory manner in order to communicate information on autobiographical topics, as well as topics of community, national, or international interest. The topics are handled concretely by means of narration and description in the major time frames of past, present, and future. These speakers can also deal with a social situation with an unexpected complication. The language of Advanced-level speakers is abundant, the oral paragraph being the measure of Advanced-level length and discourse. Advanced-level speakers have sufficient control of basic structures and generic vocabulary to be understood by native speakers of the language, including those unaccustomed to non-native speech" (ACTFL, 2012).

<sup>5</sup> Officialization of Indigenous languages in Canada is not always supported by Indigenous people as some do not wish to participate in colonial institutions.

<sup>6</sup> See <https://tto-kenhteke.org/ratiwennokwas/> for more information on the Ratiwennókwas project and to explore its entire documentation catalogue.

<sup>7</sup> Non-immersion programs and classes include the Six Nations Polytechnic Bachelor of Arts in Ogwehoweh Languages, Mohawk Language Stream, the Certificate in Mohawk Language and Culture offered in partnership between Queens University and Tsi Tyónneht Onkwawén:na, classes at post-secondary institutions such as the University of Toronto, the Toronto Metropolitan University (formerly Ryerson University), York University, and the University of Waterloo, and online classes such as the Onkwawén:na Kentyóhkwa online program.

<sup>8</sup> Wáhta offers non-immersion classes for adults.

<sup>9</sup> See Alfred (2014) for more information on the original language and cultural apprentice program.

<sup>10</sup> Literature pertaining to adult Kanien'kéha acquisition is limited to Maracle and Richards (2002), Richards and Maracle (2002), Maracle (2002), Richards and Burnaby (2008), Green (2017), and Green and Maracle (2019).

<sup>11</sup> These programs include, but are not limited to, the Seneca Deadiwēnōhsnye's Gējóhgwa' and Honōta:ōnih Hēnōdeyēsdaḡwa' adult immersion programs in New York, the DINLP Language Proficiency Diploma and Certificate programs at Simon Fraser University, British Columbia, the Syilx Language House in Penticton, British Columbia, the Chikasha Academy adult immersion program in Oklahoma, the Cherokee Language Master Apprentice program in Oklahoma, the Lakota Woiwahoye Gluotkunuzapi Hunkake and Lakolya Waoniya Project adult immersion programs in South Dakota, the Southern Tutchone Dān K'e Kwānjē Ghākenīdān adult immersion program in the Yukon, and the Mi'kmaq adult immersion program in Quebec.

<sup>12</sup> This number has been determined through communication with administrators of each adult immersion program.

<sup>13</sup> See <https://www.actfl.org/assessment-research-and-development/tester-rater-certifications/opi-tester-certification> for information on ACTFL OPI tester training and certification.

## References

- Alfred, T. (2014). The Akwesasne cultural restoration program: A Mohawk approach to land-based education. *Decolonization: Indigeneity, Education & Society*, 3(3). <https://jps.library.utoronto.ca/index.php/des/article/view/22233>
- American Council on the Teaching of Foreign Languages (ACTFL). (2012). *ACTFL proficiency guidelines 2012*. ACTFL Inc. <https://www.actfl.org/uploads/files/general/ACTFLProficiencyGuidelines2012.pdf>
- American Council on the Teaching of Foreign Languages (ACTFL). (2015). *ACTFL proficiency levels in the workplace*. ACTFL Inc. [https://www.actfl.org/uploads/files/general/OralProficiencyWorkplacePoster\\_2022-10-13-062609\\_ocga.pdf](https://www.actfl.org/uploads/files/general/OralProficiencyWorkplacePoster_2022-10-13-062609_ocga.pdf)
- American Council on the Teaching of Foreign Languages (ACTFL). (2020). *Oral proficiency interview familiarization guide*. ACTFL Inc. <https://www.actfl.org/uploads/files/general/OPI-Familiarization-Guide-2020-1.pdf>
- Benson, N. (Forthcoming). Promising trends in second language acquisition for Indigenous language revitalization. *The Proceedings of the 27<sup>th</sup> Stabilizing Indigenous Languages Symposium*.
- Brant, T. (2024). *Tó: nya'teká:ien' tsi entewà:ronke': Onkwehonwe'néha documentation for advanced adult Kanyen'kéha learning*. [Doctoral dissertation]. University of Victoria, British Columbia, Canada. <http://hdl.handle.net/1828/15770>
- Carroll, J. B. (1967). Foreign language proficiency levels attained by language majors near graduation from college. *Foreign Language Annals*, 1(2), 131-151. <https://doi.org/10.1111/j.1944-9720.1967.tb00127.x>
- Chafe, W. (2012). Are adjectives universal? The case of Northern Iroquoian. *Linguistic Typology*, 16(1), 1–39. <https://doi.org/10.1515/lity-2012-0001>
- Cook, V. (2016). *Second language learning and language teaching (5th ed.)*. Routledge. <https://doi.org/10.4324/9781315883113>
- DeCaire, R., Johns, A., & Kučerová, I. (2017). On optionality in Mohawk noun incorporation. *Toronto Working Papers in Linguistics*, 39. <https://twpl.library.utoronto.ca/index.php/twpl/article/view/28604>
- Deer, T. (2006). *Haudenosaunee communities in the 21st century* [map]. Kahnawà:ke Onkwawén:na Raotitióhkwa (KOR). [www.kahnawakelonghouse.com/images/content/Iroquois\\_map\\_2006.jpg](http://www.kahnawakelonghouse.com/images/content/Iroquois_map_2006.jpg)
- DeKeyser, R. M. (2013). Age effects in second language learning. In S. M. Gass, & A. Mackey (Eds.), *The Routledge handbook of second language acquisition* (pp. 442-460). Routledge. <https://doi.org/10.4324/9780203808184>
- Ellis, R. (1993). The structural syllabus and second language acquisition. *TESOL Quarterly*, 27(1), 91-113. <https://doi.org/10.2307/3586953>
- Ellis, R. (2009). Measuring implicit and explicit knowledge of a second language. In *Implicit and explicit knowledge in second language learning, testing and teaching* (pp. 31-64). Multilingual Matters. <https://doi.org/10.21832/9781847691767-004>
- Fishman, J. A. (1991). *Reversing language shift: Theoretical and empirical foundations of assistance to threatened languages*. Multilingual Matters.
- Gehring, C., Starna, W., & Michelson, G. (2013). *A journey into Mohawk and Oneida country 1634-1635: The journal of Harmen Meynderts Van Den Bogaert, revised edition*. Syracuse University Press. <https://www.jstor.org/stable/j.ctt1j1nw3c>

- Genc, Z. S. (2018). Structural approach. *The TESOL encyclopedia of English language teaching* (pp. 1-6). <https://doi.org/10.1002/9781118784235.eelt0164>
- Genesee, F. (2011). Reflecting on possibilities for immersion. In D. Tedick, D. Christian, & T. Fortune (Eds.), *Immersion education: Practices, policies, possibilities* (pp. 271-279). Multilingual Matters. <https://doi.org/10.21832/9781847694041-017>
- Gordon, C. (2009). *Anishnaabemowin pane: A qualitative exploratory case study of an Indigenous language immersion revitalization program*. (Publication No. 3360094) [Doctoral dissertation, Capella University]. Capella University ProQuest Dissertations & Theses. <https://www.proquest.com/openview/0dc49db93a967c033ecd5e7cda1bf653/1?pq-origsite=gscholar&cbl=18750>
- Gordon, R. G., & Grimes, B. F. (Eds.). (2005). *Ethnologue: Languages of the world, 15th edition*. SIL International.
- Green, J. (2017). *Pathways to creating Onkwehonwehnéha speakers at Six Nations of the Grand River territory*. Six Nations Polytechnic. [https://www.snpolytechnic.com/sites/default/files/docs/research/pathways\\_to\\_creating\\_speakers\\_of\\_onkwehonwehneha\\_at\\_six\\_nations.pdf](https://www.snpolytechnic.com/sites/default/files/docs/research/pathways_to_creating_speakers_of_onkwehonwehneha_at_six_nations.pdf)
- Green, J., & Maracle, B. (2019). The root-word method for building proficient second-language speakers of polysynthetic languages: Onkwawén:na Kentyóhkwa adult Mohawk language immersion program. In L. Hinton, L. Huss, & G. Roche (Eds.), *The Routledge handbook of language revitalization* (pp. 83-93). Routledge. <https://doi.org/10.4324/9781315561271>
- Hinton, L. (2011). Revitalization of endangered languages. In P.K. Austin, & J. Sallabank (Eds.), *The Cambridge handbook of endangered languages* (pp. 291-311). Cambridge University Press. <https://doi.org/10.1017/CBO9780511975981>
- Hymes, D. H. (1972). On communicative competence. In J. B. Pride, & J. Holmes (Eds.), *Sociolinguistics* (pp. 269-293). Penguin Books Ltd.
- Johnson, S. M. K. (2017). Syilx language house: How and why we are delivering 2,000 decolonizing hours in Nsyilxcn. *Canadian Modern Language Review*, 73(4), 509-537. <https://doi.org/10.3138/cmlr.4040>
- Krashen, S. (2009). *Principles and practice in second language acquisition*. Pergamon.
- Krashen, S. D., Lee, S. Y., & Lao, C. (2017). *Comprehensible and compelling: The causes and effects of free voluntary reading*. Libraries Unlimited. <https://doi.org/10.5040/9798400629846>
- Krauss, M. (1998). The condition of Native North American languages: The need for realistic assessment and action. *International Journal of the Sociology of Language*, 1998(132), 9-22. <https://doi.org/10.1515/ijsl.1998.132.9>
- Language Testing International (LTI). (2022). *How long does it take to become proficient?* Language Testing International. <https://www.languagetesting.com/how-long-does-it-take>
- Larsen-Freeman, D., & Tedick, D. (2016). Teaching world languages: Thinking differently. In D. Gitomer, & C. A. Bell (Eds.), *Handbook of research on teaching* (5<sup>th</sup> ed., pp. 1335-1387). American Educational Research Association. <http://dx.doi.org/10.3102/978-0-935302-48-6>
- Lazore, D. (1993). *The Mohawk language standardisation project: Conference report August 9-10, 1993*. Literacy Ontario. <https://www.kanehsatakevoices.com/wp->

- content/uploads/2017/04/The-Mohawk-Language-Standardisation-Project-1993-2.pdf
- Lenneberg, E. H. (1967). *Biological foundations of language*. Wiley.
- Lewis, M. P., & Simons, G. F. (2010). Assessing endangerment: Expanding Fishman's GIDS. *Revue Roumaine de Linguistique*, 55(2), 103-120.  
<https://www.lingv.ro/RRL%20202010%20art01Lewis.pdf>
- Lewis, M. P., & Simons, G. F. (2016). *Sustaining language use: Perspectives on community-based language development*. SIL International.
- Lightbown, P., & Spada, N. M. (2013). *How languages are learned* (4th ed.). Oxford University Press.
- Long, M. (2013). Maturation constraints on child and adult SLA. In G. Granena, & M. Long (Eds.), *Sensitive periods, language aptitude, and ultimate L2 attainment* (pp. 3-42). John Benjamins Publishing Company. <https://doi.org/10.1075/llt.35.01lon>
- Lukaniec, M. E. (2018). *The elaboration of verbal structure: Wendat (Huron) verb morphology*. [Doctoral dissertation, University of California Santa Barbara].  
<https://escholarship.org/uc/item/2ss758h8#main>
- Maracle, B. J. (2002). Adult Mohawk language immersion programming. *McGill Journal of Education*, 37(3), 387-403. <https://mje.mcgill.ca/article/view/8645>
- Maracle, D. K., & Richards, M. (2002). A native language immersion program for adults: Reflections on year 1. In B. Burnaby, & J. Reyhner (Eds.), *Indigenous languages across the community* (pp. 127-136). Northern Arizona University.  
<https://eric.ed.gov/?id=ED462240>
- Martin, A. (2023). *Tekawennahsonterónnion: Kanien'kéha morphology*. Kanien'kehá:ka Onkwawén:na Raotitióhkwa.
- McIvor, O. (2015). Adult Indigenous language learning in Western Canada: What is holding us back? In K. A. Michel, P. D. Walton, E. Bourassa, & J. Miller (Eds.), *Living our languages: Papers from the 19th stabilizing Indigenous languages symposium* (pp. 37-49). Linus Learning. <http://hdl.handle.net/1828/11709>
- McIvor, O., & Anisman, A. (2018). Keeping our languages alive: Strategies for Indigenous language revitalization and maintenance. In Y. Watanabe (Ed.), *Handbook of cultural security*, (pp. 90-109). Edward Elgar Publishing.  
<https://doi.org/10.4337/9781786437747.00011>
- Michelson, K. (2011). *Native languages: A support document for the teaching of language patterns Oneida, Cayuga, and Mohawk*. Ministry Education Ontario.  
[https://www.edu.gov.on.ca/eng/curriculum/secondary/NativeLangs\\_OneidaCayugaMohawk.pdf](https://www.edu.gov.on.ca/eng/curriculum/secondary/NativeLangs_OneidaCayugaMohawk.pdf)
- Mithun, M. (1984). The evolution of noun incorporation. *Language*, 60(4), 847-894.  
<https://dx.doi.org/10.1353/lan.1984.0038>
- Mithun, M. (1999). *The languages of Native North America*. Cambridge University Press.
- Mithun, M. (2000). Noun and verb in Iroquoian languages: Multicategorisation from multiple criteria. In P. Vogel, & B. Comrie (Eds.), *Approaches to the typology of word classes*, (pp. 397-420). Mouton de Gruyter.  
<https://doi.org/10.1515/9783110806120.397>
- Mithun, M., & DeCaire, R. (2023). Iroquoian. In C. Jany, M. Mithun, & K. Rice (Eds.), *The languages and linguistics of Indigenous North America* (vol. 2, pp. 1601-1626). De Gruyter Mouton. <https://doi.org/10.1515/9783110712742-060>

- Mohawk Council of Kahnawà:ke. (2007). Kahnawà:ke Language Law. <http://www.kahnawake.com/council/docs/LanguageLaw.pdf>
- Mukan, N., Shyika, J., & Shyika, O. (2017). The development of bilingual education in Canada. *Advanced Education*, 4(8), 35-40. <https://doi.org/10.20535/2410-8286.100924>
- Muñoz, C., & Singleton, D. (2011). A critical review of age-related research on L2 ultimate attainment. *Language Teaching*, 44(1), 1-35. <https://doi.org/10.1017/S0261444810000327>
- Onkwawenna Kentyohkwa. (2022). *Onkwawenna Kentyohkwa*. <https://onkwawenna.info/adult-immersion/>
- Ortega, L. (2019). SLA and the study of equitable multilingualism. *The Modern Language Journal*, 103(S1), 23–38. <https://doi.org/10.1111/modl.12525>
- Richards, M., & Burnaby, B. (2008). Restoring Aboriginal languages: Immersion and intensive language program models in Canada. In T. Fortune, & D. Tedick (Eds.), *Pathways to multilingualism: Evolving perspectives on immersion education* (pp. 221-241). Multilingual Matters. <https://doi.org/10.21832/9781847690371-014>
- Richards, M. & Maracle, D. K. (2002). An intensive Native language program for adults: The instructors' perspective. *McGill Journal of Education*, 37(3), 371-385. <https://mje.mcgill.ca/article/view/8644>
- Royal Commission on Aboriginal Peoples (RCAP). (1996). *Report of the Royal Commission on Aboriginal Peoples*. Supply and Services Canada.
- Singleton, D. (2005). The critical period hypothesis: A coat of many colours. *International Review of Applied Linguistics in Language Teaching*, 43(4), 269-286. <https://doi.org/10.1515/iral.2005.43.4.269>
- Spada, N. (2006). Communicative language teaching: Current status and future prospects. In J. Cummins, & C. Davis (Eds.), *International handbook of English language teaching* (pp 271-288). Springer.
- Spada, N. (2011). Beyond form-focused instruction: Reflections on past, present and future research. *Language Teaching*, 44(2), 225-236. <https://doi.org/10.1017/S0261444810000224>
- Swain, M. (1997). French immersion programs in Canada. In J. Cummins, & D. Corson (Eds.), *Encyclopedia of language and education: Bilingual education*: (Vol. 5, pp. 261-269). Springer. [https://link.springer.com/chapter/10.1007/978-94-011-4531-2\\_26](https://link.springer.com/chapter/10.1007/978-94-011-4531-2_26)
- Truth and Reconciliation Commission of Canada. (2015). *Honouring the truth, reconciling the future: Summary of the final report of the truth and reconciliation commission of Canada*. Truth and Reconciliation Commission of Canada. [https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Executive\\_Summary\\_English\\_Web.pdf](https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Executive_Summary_English_Web.pdf)
- Tyendinaga Mohawk Council. (2021, November 12). *TMC statement regarding Kanyen'kéha affirmation and commitments*. Mohawks of the Bay of Quinte Kenhtè:ke Kanyen'kehá:ka. <https://mbq-tmt.org/wp-content/uploads/2021/11/TMC-Language-Statement-Nov-12.pdf>
- United Nations Educational, Scientific and Cultural Organization (UNESCO) Ad Hoc Expert Group on Endangered Languages. (2003). *Language vitality and endangerment*. International Expert Meeting on UNESCO Programme Safeguarding

- of Endangered Languages (2003, March 10-12, Paris, France).  
<https://unesdoc.unesco.org/ark:/48223/pf0000183699>
- Wáhta Mohawks. (2019). *Tewanónhstat ne rotiksten 'okòn: 'a raotiwén:na / Preserving the voice of our language keepers: Wáhta Mohawks documentation project*. Wáhta Mohawks.
- Wilson, W. & Kamana, K. (2011). Insights from Indigenous language immersion in Hawai'i. In D. Tedick, D. Christian, & T. Fortune (Eds.), *Immersion education: Practices, policies, possibilities* (pp. 36-57). Multilingual Matters.  
<https://doi.org/10.21832/9781847694041-006>
- Wilson, W. H. (2018). Higher education in Indigenous language revitalization. In L. Hinton, L. Huss, & G. Roche (Eds.), *The Routledge handbook of language revitalization* (pp. 83-93). Routledge. <https://doi.org/10.4324/9781315561271>
- Wilson, W. H., & Kamanā, K. (2009). Indigenous youth bilingualism from a Hawaiian activist perspective. *Journal of Language, Identity & Education*, 8(5), 369-375.  
<https://doi.org/10.1080/15348450903305148>
- Wilson, W. H., & Kawai'ae'a, K. (2007). I kumu; i lālā: "Let there be sources; let there be branches": Teacher education in the college of Hawaiian language. *Journal of American Indian Education*, 46(3), 37-53. <http://www.jstor.org/stable/24398542>
- Wilson, W. H., DeCaire, R., Gonzalez, B. N., & McCarty, T. L. (2022). Progress, challenges, and trajectories for Indigenous language content-based instruction in the United States and Canada. *Journal of Immersion and Content-Based Language Education*, 10(2), 343-373. <https://doi.org/10.1075/jicb.21023.wil>
- Yang, C., O'Grady, W., & Yang, S. (2017). Toward a linguistically realistic assessment of language vitality: The case of Jejeuo. *Language Documentation and Conservation*, 11, 103-133. <http://hdl.handle.net/10125/24727>