

Article

How to Ensure Bilingualism/Biliteracy in an Indigenous Context: The Case of Icelandic Sign Language

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Abstract: The paper discusses the implementation of a bilingual education language policy in the context of endangered indigenous sign language—Icelandic Sign Language (íslenskt táknmál, ÍTM). Unlike other indigenous endangered languages (e.g., Sámi), or other sign languages (e.g., American Sign Language, ASL), ÍTM has received certain recognition typically associated with equitable language policy—by law, it is considered the “first language” of the deaf/hard of hearing Icelanders; further, Iceland overtly states that ÍTM-signing children must be educated bilingually. However, we show that as a country that has committed itself to linguistic equality as well as the support of indigenous languages under the United Nations Declaration of the Rights of Indigenous People, Iceland still has a way to go—both in terms of language attitudes and the associated implementations. We analyze the current situation focusing on the issues of bilingualism and biliteracy (vis-à-vis indigeneity and endangerment), explain the reason for the state of affairs by contextualizing the barrier to both for signers, and offer an explicit path forward which articulates the responsibilities of the power structures as well as potential outcomes related to revitalization, should these responsibilities be fulfilled.

Keywords: sign language; bilingualism; language policy; heritage language; audism; language attitudes; indigenous



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1. Introduction. Iceland: A Bilingual Landscape with “Sinkholes”

Iceland is known for its progressive values, including education (Knox-Hayes et al. 2020; Jónsdóttir and Ragnarsdóttir 2010; Halldórsdóttir et al. 2016, among others). Its cultural values have been described as equality, high work ethic, positive attitude, despite major societal changes (Minelgaite et al. 2018). Its official national primary language is Icelandic (*de facto* and *de jure*). Over 90% of Icelanders speak Icelandic natively, while about 10% of the present inhabitants are native speakers of recent immigrant languages: in descending order in terms of the number of users are Polish, Lithuanian and English (Hilmarrsson-Dunn and Kristinsson 2010; Stefánsdóttir et al. 2019), as well as Lithuanian Sign Language, Polish Sign Language, Portuguese Sign Language and Irish Sign Language (Communication Center for the Deaf and Hard of Hearing, Ivanova, p.c.). Home to 368,792 people (Statistics Iceland 2021), Iceland carefully tracks its populations across a variety of domains, including linguistic backgrounds of children in schools. Overall, according to Statistics Iceland 2020, 14.5–15.5% (preschool-compulsory) school children are exposed to languages other than Icelandic at home, representing every habitable continent and over 50 languages.¹ Approximately half of these children are likely to have been born in Iceland

¹ Statistics Iceland (2021) reports by “language other than Icelandic”. Such a path labels some languages as “other and undisclosed”, which technically misrepresents the number of languages in Icelandic schools. Luckily, the system also generates a report by “citizenship”. The latter results in a finding that 99 countries are represented in Icelandic schools, and, if one were to project languages that tend to accompany citizenships (though the matter is not uncomplicated), this count rises to 66.

and can be unequivocally expected to have the knowledge of both Icelandic and their other language(s); 54% are Icelandic citizens. The most well-represented languages outside of Icelandic currently represented in Icelandic schools are shown in the top part of the table, and the least well-represented languages are at the bottom.

Three things can be inferred from the data above. First, the traditional homogeneity of the population and the relative correspondence between the national language and culture has been changing: according to Ragnarsdóttir and colleagues, up to 80% of children in some Icelandic schools are growing up in multilingual households (Ragnarsdóttir and Lefever 2018; Ragnarsdóttir and Tran 2019, i.a.). We therefore may well expect this linguistic landscape to challenge the previously ubiquitously harmonious school assessment results (Thordardóttir 2020) which should, in turn, lead to revisiting of policies towards other languages and their speakers (Ragnarsdóttir 2018, a.o.). Second, unsurprisingly, Iceland remains to be commended: the country appears to have worked tirelessly in “keeping the hand on the pulse” of the schools. In this, we now know what languages are being used by the school children and, therefore, other members of the Icelandic society. Third, (and this is where matters take a turn): there is a whole group of languages missing from the count in Table 1—sign languages. Among these are immigrant sign languages used in Iceland (by children born in the country): Lithuanian SL, Polish SL, Portuguese SL and Irish SL (Communication Center for the Deaf and Hard of Hearing, Ivanova, p.c.). It is of course possible that these foreign sign languages all fall into the *Other and undisclosed* group. We doubt that this is the reason, however: in 2018, at least nine children were reported to be exposed to multiple sign languages in the home (Sverrisdóttir 2018). However, according to the official count, in 2018 the category *Other* totaled eight students across all schools. Among the compulsory school students, four are reported to use other sign languages in the home, and among the primary school students, two children are growing up in such environments. These numbers clearly indicate that the foreign sign languages are not being counted in the *Other* category, since the number of multilingual signers with multiple sign languages in schools (totaling six) is different from the number of the officially reported users of *Other and undisclosed* languages in the (Statistics Iceland 2021) (see Table 1).

Table 1. Most and least well-represented native languages other than Icelandic in Icelandic schools (pre-schools and compulsory), (Statistics Iceland 2021).

School Level: Primary Language	N	Compulsory (Mid + High) Language	N
Most well-represented			
Polish	1027	Polish	1833
English	240	Philippine lgs	370
Spanish	121	English	314
Philippine lgs	105	Lithuanian	279
Lithuanian	101	Thai	238
German	95	Arabic	219
Vietnamese	85	Spanish	214
Russian	74	Russian	153
Thai	72	Vietnamese	148
Least well-represented			
Czech	14	Hungarian	20
Italian	14	Nepali	19
Dutch	13	Turkish	19
Slovak	13	Singhalese	18
Faroese	11	Japanese	17
Bulgarian	10	Indonesian	13
Greek	10	Swahili	13
Finnish	9	Finnish	12

Table 1. Cont.

School Level: Primary Language	N	Compulsory (Mid + High) Language	N
Turkish	9	Faroese	11
Ukrainian	8	Macedonian	11
Singhalese	7	Estonian	10
Japanese	6	Urdu	10
Swahili	6	Greek	8
Slovene	5	Greenlandic	8
Persian	4	Korean	7
Indonesian	3	Hebrew	6
Urdu	3	Slovak	5
Estonian	2	Tamil	5
Other undisclosed	2	Mongolian	3
Greenlandic	1	Other undisclosed	3

Arguably, even more crucially, the language that is missing from the official count is Iceland’s autochthonous sign language—*Íslenskt táknmál*, ÍTM. This is all the more surprising given the legislature in (1).

- (1) *Article 3, Althingi Act no. 61/2011 (Law on the Status of Icelandic and Icelandic Sign Language)*

Icelandic sign language is the first language of those who have to rely on it for expression and communication, and of their children. The government authorities shall nurture and support it. All those who need to use sign language shall have the opportunity to learn and use Icelandic sign language as soon as their language acquisition process begins, or from the time when deafness, hearing impairment or deaf-blindness is diagnosed. Their immediate family members shall have the same right. (Althingi Act. No. 61/2011)

Icelandic Sign Language (ÍTM) is a natural language indigenous to Iceland (Hilmarrsson-Dunn and Kristinsson 2010). It is used by fewer than 1700 people (~0.5% of the total population) and is the primary language of about 300 individuals, 250 (~15% of all signers) of whom are deaf, 52 (3%) are hearing children of deaf adults at various ages,² and, according to Thorvaldsdóttir and Stefánsdóttir (2015), 1000–1500 (58–89%) are hearing native-born Icelanders who sign at various levels of proficiency. Additionally, 50 (3%) of Deaf “new Icelanders” are proficient in both ÍTM and a variety of other SLs (Polish SL, Lithuanian SL, ASL, etc.). A number of these signers are in Icelandic schools. Two ÍTM-Icelandic bilingual schools exist in the capital city Reykjavik (Sigurðardóttir et al. 2019). Stefánsdóttir et al. (2019) report 12–17 ÍTM-signing students attended a bilingual school in 2016. Most recent reports suggest that the numbers of ÍTM-signing bilinguals ought to be hovering right in the middle of each of the columns in Table 1: N = 8 at Sólborg (preschool) and N = 11 at Hlíðaskóli (compulsory) (H. A. Haraldsdóttir, Project Manager at the Sign Language department at Hlíðaskóli, p.c. and R. Rögnvaldsdóttir, Director of Special Education at Sólborg, p.c.). Yet, there is no evidence of the presence of ÍTM in the Statistics of Iceland at all. All of this points to the following: it is not the case that the entire goal of the tracking system by Statistics Iceland is to focus on the so-called “immigrant languages”, despite the label “another tongue other than Icelandic” (<https://www.statice.is/statistics/society/children/children-education/> Accessed on 10 May 2020). Instead, Iceland, like many other countries, gathers data on *spoken* languages only—the point to which we will return.

Three related questions arise: (a) why ÍTM is missing from Table 1 (i.e., the language count in the Statistics Iceland); (b) what the effects of this clear oversight on the language and the community are, in particular when it comes to viewing its members as bilingual,

² These figures date as of September 2019.

bicultural, biliterate; (c) what must be done to change the situation, should the change be warranted. We take these questions as the points of departure. In Section 2, we expose the fact that by all markers, ÍTM-signing children are indigenous children; therefore, their education, including education and assessment of literacy, ought to proceed in line with what has been argued to be appropriate for the education of indigenous children learning a Heritage language (HL). This section answers question (a). In Section 3, we shed further light on the current domestic policy towards ÍTM (and answer question (b)) vis-a-vis the promises Iceland has made to the international community as the signatory of the United Nations Declaration of the Rights of the Indigenous People (UNDRIP, https://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf, Accessed on 10 March 2020). In particular, 3 articles of the UNDRIP make direct reference to language (13, 14, and 16), and 2 of them to the education of indigenous children. We discuss the latter explicitly and demonstrate that Iceland's current "bilingualism" stance towards its indigenous population must be revisited; the UNDRIP (and a careful implementation thereof) provides a direct path forward. In other words, this section also answers question (c). Section 4 summarizes the implications for the biliteracy policy; Section 5 offers a more broad discussion for both Iceland and other countries interested in turning the tide against the forces that are known to affect languages like ÍTM.

2. Problem. ÍTM as an Indigenous Heritage Language. Which Policies Are Enough?

The numbers of ÍTM users in Iceland vis-a-vis record-keeping in Table 1 suggest a particular language status—that of a *minority* in more than one sense. In principle, this framing itself is not enough, for it does not obligate the country to act in any particular manner unless it has already taken legislative action related to minority-only languages. However, in the foregoing section, we demonstrate that something additional must be said of ÍTM—namely that it is an Indigenous Heritage language of Iceland. As such, certain promises Iceland has made to both the international community and domestically *necessarily* apply. These promises directly concern the education of children acquiring Indigenous Heritage languages.

2.1. Sign Language Peoples as Indigenous People; ÍTM Is an Indigenous Language

In the past 40 years, many researchers have argued that Deaf and Hard of Hearing (DHH) communities should be viewed as socio-cultural and socio-political spaces. One term encompassing these communities is *DEAF^WORLD* (Reagan 1985, et seq; Padden and Humphries 1988, et seq., and many others), another is "Sign Language Peoples" (Batterbury et al. 2007, et seq.). The former makes direct reference to the culture of Deafness; the latter, technically, to the socio-linguistic framing that has arisen within these communities. Whichever term is being utilized, vast literature has demonstrated that this community is clearly minoritized in a similar manner we find other oppressed groups to be, with the resulting, well-documented, effects on the languages. For example, the most recent publication of the Minority Rights Group International iterated the urgent need for global recognition and support of all sign languages as natural linguistic systems (<https://minorityrights.org/> Accessed on 10 March 2021, (Minority Rights Group International 2020)), considering it under its purview to discuss these languages. Further, on the 22 September 20, the Office of the High Commissioner of the Human Rights at the United Nations, in the person of F. de Varennes, a Special Rapporteur on Minority Issues, stated that Sign Languages, as fully-fledged languages, with "their own rich cultures and identities (and) are entitled to the full range of human rights as members of a linguistic minority" (<https://www.ohchr.org/> Accessed on 10 March 2021, (United Nations Human Rights Office of the High Commissioner)). Some sign languages have been granted such a status by the governments of the countries where they are used—the status they share with minority spoken languages. This is, for instance, as the case of British SL (BSL) in Scotland, currently considered on par with Scots and Gaelic, at least in terms of policy (<https://www.gov.scot/policies/languages/> Accessed on 10 March 2021), al-

though whether the move to grant such a status to the language has actually resulted in the sovereignty of either sign or spoken language communities is a separate matter altogether.³ In other words, the fact that Sign Language Peoples (SLPs, adopting the terminology from Batterbury et al. 2007) are a linguistic minority/linguistic minorities is well accepted at this point.⁴

Researchers have also argued that *in addition to* the “minority” framing, SLPs must be considered “indigenous” and, thus, are directly comparable in the relevant sense to the First Nations (Humphries 2004; Batterbury et al. 2007; Padden 2010; Reagan 2018⁵). The 2019 publication by the United Nations State of the World’s Indigenous Peoples states: “A definition of the term *indigenous peoples* is neither necessary nor useful, as no single definition can fully capture the distinctive characteristics of widely diverse indigenous populations” (p. 4); this is because the same document affords the indigenous people the right to self-determination (2).

(2) *Article 33(1), UNDRIP* (<https://www.refworld.org/docid/471355a82.html>, p. 9, accessed on 10 March 2021, (UN General Assembly 2007)) Indigenous peoples have the right to determine their own identity or membership in accordance with their customs and traditions. This does not impair the right of indigenous individuals to obtain citizenship of the States in which they live.

However, following others, suppose one were to adopt a clearly complicated definition from the International Labor Organization (ILO) as well as its extensions in May (2001) (3):

(3) *Article 1.1, ILO Convention 169*

- a. existing in independent “social, cultural and economic conditions [that] distinguish them from other sections of the national community, whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations; and
- b. regarded as indigenous on account of their descent from the populations which inhabited the country, or geographical region to which the country belongs, at the time of conquest or colonization” (www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C169 Accessed on 10 March 2021)

Ordinarily, such framing is used for spoken languages only, such as Mohawk and Hawaiian in the USA, Cree in Canada, Evenki in Russia, Sámi in Sweden, and so forth—the languages of the peoples that have been argued to pre-date the current dominant sociolinguistic structures on a particular territory. However, the same must be said of sign languages (SLs) as well: Crow SL in the USA and Canada, Martha’s Vineyard SL in the USA, Swedish SL in Sweden, Israeli SL and Arab-Bedouin SL in Israel, Irish SL in Ireland, as well as the Sámi variety of Norwegian SL in Norway, Innu Sign Language in Canada (for discussion, see McKay-Cody 2019). Further, consider, for example, (4), which describes Sign Language Peoples’ geography.

(4) SLPs [. . .] locate themselves [. . .] within the spaces of linguistic and cultural SLP “territories”, which draw sustenance from more than 2000 years of SLP history. Shielded by sensory impasse from the communicative flow of spoken languages, these interactive spaces initially emerged as a self-sustaining ecosystem of language and belonging which land-formed within the interactive spaces of multigenerational

³ For sign languages in general (De Meulder et al. 2019) and for BSL in particular (Jones 2016), it has not. One possibility is that the policy is simply too young. The other possibility is that, more broadly, a “minority”-based policy status may yield an “empty promise” generally associated with the “minority” status. Here are some obvious reasons: first, simply acknowledging a *minority* does not necessarily result in any legislative action unless the country commits itself to a status planning program for (all) minority languages.

⁴ This = is also the case in every country where DHH/SLP communities exist.

⁵ As an anonymous reviewer points out, unlike other authors, Reagan (2018) suggests that the status of SLPs in terms of indigeneity is ambiguous. The complication that arises here is that an individual can be indigenous “twice”—a member of the SLP and another indigenous group (Quechua, Crow, etc). This complication in labeling points to the discussion of intersectionality, which is clearly non-binary in the oppressed communities (see, e.g., Gillborn 2015, among others).

SLP families and their associative relationships. These “SLP spaces” developed into a network that was not merely the hearing world replicated in sign language, but a separate, SLP-authored reality within which they lived and died—an autochthonous space in which the communities and sign languages were symbiotically reliant upon each other for the well-being of all their members. (Batterbury et al. 2007, p. 2902)

Batterbury et al. (2007) further demonstrate that the *indigenous* frame is applicable to the SLPs for several reasons. First, SLPs, much like other indigenous peoples navigate through discourses that parallel indigenous and autochthonous groups in various parts of the world in their “struggles to validate their own spaces in the face of linear, neocolonial imaginings of ‘progress’” (p. 2902), sharing with the indigenous people the vocabulary: “nativism”, “genocide”, “lost generations”, “the need to protect territory”, etc. Second, just like other indigenous peoples, SLPs carry a 300-year history of description and ensuing policies by the colonialist-like majority as “savage”, “primitive”, “feeble-minded”, etc. Consider, for instance, a slew of works published in 2021 by the prime scientific publishing house Springer that still contains such terminology: https://scholar.google.com/scholar?as_ylo=2021&q=deaf+dumb&hl=en&as_sdt=0 (accessed on 10 March 2021).

Other parallels between SLPs in general and indigenous people are evident in the “orality” of text, the manner of cultural transmission via multigenerational lineage, encroachment of the colonizer into the traditional territory to which SLPs are autochthonous,⁶ challenges of the decolonization praxis. Batterbury et al. also cite one other piece of evidence for the current status of SLPs, their languages: despite the clear articulation of the “self-determination” stance in the indigenous language literature, many in the indigenous research field would not extend indigeneity discourse to the SLP community.⁷

To the long but far from comprehensive list in Batterbury et al. (2007), we add the following: because the people that use those languages are minoritized in both policy and general public view (Krausneker 2003; De Meulder et al. 2019), including access to the right of the native language itself, language instruction associated with sign languages is best described as utilitarian (Snoddon and Meulder 2020), reminiscent of the so-called “cognitive imperialism” structures (Battiste 2018, a.o.). In short, Batterbury et al. (2007), among others, demonstrate that the term “indigenous” in (2) is directly applicable to SLPs and, by extension, to their languages. Let us come full circle: a language that is *natural*, exists independently from any other sociolinguistic layers in a given societal structure, and the experience of its people demonstrably parallels the experience of other indigenous peoples, (2) is clearly applicable, and so are its consequences. Crucially, whether this one allows the aforementioned frame to extend to the *entire* SLP community is irrelevant; if the language is autochthonous, the matters are settled—even the narrow definition ((2), which, we remind, according to the UN is not needed or helpful, due to the right to self-determination) applies. The aforementioned is true for the Icelandic SLP community as it is for others.

2.2. ÍTM Is a Heritage Language

With much research, we define a Heritage Language (HL) as a minority language used in a specific sociocultural context, one in which a different language is dominant in the community. HL speakers are often defined as second-generation immigrants who live in bilingual contexts, with the HL being the language of the home. Note, however, this is not the only possibility. The term is also directly applicable to indigenous languages precisely for the same reasons: the language is often limited to a particular socio-cultural environment; formative education in the language is typically unavailable or at least greatly

⁶ This discussion is potentially complex because of the definition of geography of the DEAFWORLD. Yet, as in the case of Iceland, the ramifications of such a complication can be set aside: quite literally, one can *also* speak of literal, physical territories to which SLPs and, therefore, their languages are autochthonous.

⁷ To our chagrin, we too must report exactly the same experiences, having offered this argument to a well-know jornal, the scope of which is matters of Indigenous and Minority matters. We were told that the SLPs did not constitute an indigenous population and, therefore, the main thesis did not apply.

reduced; intergenerational transmission is usually threatened by the dominant language (cf. [Campbell and Christian 2003](#), among many others, encompassing the current literature, as in [Rothman 2009](#); [Polinsky and Scontras 2020](#), among others). In these terms, one can refer to Sámi as HL both in Norway (where it is indigenous) and in the US where it is not ([Pesklo 2018](#)). Among the many things that one can say about HLs, two stand out: (i) HLs tend to present different grammars than their dominant counterparts (e.g., Russian developed in the US is markedly different from Russian developed in Russia, arguably under the influence of English, etc., see [Polinsky 2018](#); [Montrul 2016](#), i.a.); (ii) HLs must be supported because they are necessarily “weaker” due to reduced input. In the foregoing sections, we hope to have demonstrated that Iceland is home to a number of non-dominant languages that are definable in such terms, such as Mongolian spoken by Icelandic children (see [Table 1](#)). Additionally, however, adopting the aforementioned reasoning, something similar must be said about Iceland’s sign languages in general (Lithuanian SL, Polish SL, i.a.) and ÍTM in particular—the focus of this paper.

Further, [Chen Pichler et al. \(2018\)](#) and [Polinsky \(2018\)](#) argue that the definition of “heritage language user” extends to (a) hearing children raised by Deaf signing parents and (b) deaf children raised by the Deaf signing parents but who still receive cochlear implants at a young age (see also [Isakson 2018](#) for American Sign Language (ASL) and [De Quadros 2018](#) for Brazilian Sign Language (Libras)). These children use their sign language in the home and other community environments; however, intergenerational transmission is not ensured. At least three other characteristics are of note: the membership in the linguistic community intersects with the membership in other communities (Disability, immigrant, etc.)⁸; schooling is typically not conducted in their home sign language. Finally, due to the variability in the input and the pressure from the dominant language, markedly different linguistic patterns arise in HLs when compared to the patterns of users of dominant language(s) (cf. [Polinsky and Scontras 2020](#) and references therein). Again, this argumentation is expected to extend for users of ÍTM.

2.2.1. Complexity of Intergenerational Transmission and Intersectionality

Among the signers for whom ÍTM is the first/native SL, and who grew up in Iceland, fewer than five Deaf children have Deaf parents; hereditary deafness has been reported in fewer than three families (Ivanova, p.c., September 2019). This situation has remained the same for over one hundred years. In the immigrant families, this number is higher: three families report hereditary deafness, and nine deaf children have Deaf parents ([Sverrisdóttir 2018](#)). Yet, even with the change brought by the immigrant population, almost no Deaf child in Iceland becomes exposed to ÍTM as their first language by the natural caregivers—parents. It also means that the language is not passed along via the route a language typically takes: from parents to children. With it, also not passed directly are the culture and ways of being.

Considering the issue from a different angle: the vast majority of Icelandic deaf children are fitted with various sound-augmenting devices—from hearing aids to cochlear implants. Most deaf children undergo cochlear implantation. According to [Stefánsdóttir et al. \(2015\)](#), this move towards almost universal implantation has led to the endangerment of the sign languages in many countries and, in particular, in Iceland. While no published research exists that manipulates this variable in terms of language acquisition or educational outcomes, some literature shows that some of these children attend the schools where ÍTM is used for instruction and learn the language itself, though others do not ([Stefánsdóttir et al. 2019](#); [Guðmundsdóttir and Ísleifsdóttir 2006](#); [Diego 2020](#); [Koulidobrova and Ivanova 2020](#)).

Finally, while the number of Deaf children is actually findable (though not widely reported, see [Table 1](#)), the number of hearing children who also use ÍTM in the home is not known. In order to discover the number of hearing children of d/Deaf adults in Iceland,

⁸ We thank an anonymous reviewer for bringing this to our attention.

one must undertake a mathematical procedure: (i) count the number of deaf individuals, (ii) within the set (i), count the number of users of ÍTM; (iii) within the set (ii), count the number of individuals with children. This procedure yields the number of Codas—the hearing members of the latter subset.⁹ Such potentially problematic math of course works only under the assumption that (a) the parents/caregivers choose to expose their hearing children to ÍTM in the first place¹⁰; and (b) if the numbers are small enough to undertake such a calculation with relative accuracy (vs. the US, e.g., where the number of Codas range between 137,000–188,000, [Compton 2014](#)). As a result of this calculation, we arrive at the current number of Codas in Iceland: 52. However, the level of ÍTM proficiency of these individuals is unknown: their ÍTM is not assessed on a regular basis.¹¹ In other words, this population remains overlooked, both legislatively and practically (cf. [Koulidobrova et al. 2018](#) for ASL users in the US). These numbers, however approximate, illustrate the complexity of the ÍTM learner profile and the complexity of ÍTM transmission.

Let us also consider the following: after school, almost all signing children in Iceland go home into the environments where they encounter ÍTM as L2—for both deaf and hearing caregivers, ÍTM is an additional language. This means that the quality of input the children receive is variable irrespective of the hearing status of the input-provider simply because the level of ÍTM proficiency is variable, but also, we expect ÍTM signers to infuse new life into the language which will lead to language changes (see, e.g., [Snoddon and Meulder 2020](#)).¹² Thus, given the profile of the typical ÍTM learner in Iceland, the language is constantly (and especially recently) under pressure from (a) non-native input from L2 Deaf learners, (b) non-native input from L2 hearing learners, (c) cross-language interaction by sign bilingual children, (d) influence of spoken Icelandic and other languages, and (e) generalizing power of children learning their L1 at every cohort. In Iceland then, [Batterbury et al. \(2007\)](#)'s definition of SLPs is especially crucial: the authors argue that the identifying characteristic of the SLPs is not the physical ability to hear; in fact, some SLPs are expected to (and do) have more physical hearing than those who consider themselves deaf. In small(er) linguistic communities, like in Iceland, this is particularly clear: the *language* gets passed along to generations below by people who are both Deaf and not deaf. In other words, despite the apparently limited number of “native” users and the complexity of the transmission mechanism, the language as a stable system survives.¹³ A picture emerges that is starkly familiar to what is typically reported in the literature on indigenous languages: (spoken) indigenous languages tend to be minoritized, and they are influenced by the multilingualism of their users but also privilege intergenerational transmission in terms of revitalization ([Fishman 1991](#); [Muysken 2013](#); [McCarty and Wyman 2009](#); [Smith-Christmas et al. 2018](#), a.o.). They are affected by various ideologies *about* language, including “vitality” ([Snoddon and Meulder 2020](#)). They must be supported both by voluntary efforts from within the community but also by policy. This is because indigenous HLs are often under threat, and supporting balanced bilingualism/biliteracy-

⁹ We thank the Deaf Association of Iceland for assistance with these numbers.

¹⁰ In the US, for example, medical professionals often discourage deaf parents from teaching their children with any access to sound to sign, suggesting instead that they use English with the children ([Mauldin 2016](#)). What happens in Iceland with respect to this has not been studied, to our knowledge.

¹¹ Although see [Jónsdóttir 2010](#) for an examination of the linguistic development of codas in both ÍTM and Icelandic.

¹² One immediate consequence here is that one might expect a difference in the input by the hearing versus deaf parent. First, the hearing parents' knowledge of the Deaf culture and understanding of the deaf experience is necessarily more limited than that of a deaf parent. Let us set aside the fact that the hearing members of the sign language community are unlikely to become full members of the Deaf culture (typically associated with sign languages, see [Reagan 2018](#); [Lu et al. 2016](#), and many others), and, therefore, many aspects of the cultural framework become inaccessible to the hearing parent. In the case of Iceland in particular, deaf parents report using their Sign L1 with their ÍTM-signing deaf children (Ivanova, p.c.) while hearing parents of the ÍTM-signing deaf children report using ÍTM in the home, which is their L2.

¹³ For instance, as research on ÍTM shows, members of the linguistic community, both deaf and hearing, are able to identify whether a sentence, or word, is acceptable in any given situation, or whether it appears to have “migrated” into ÍTM from the one of the languages the Deaf children are exposed to at home, in addition to ÍTM, as has been shown for other sign languages ([Plaza-Pust and Morales-López 2008](#); [Lillo-Martin et al. 2016](#) and references therein). See, for example, [Jónsson et al. \(2015\)](#) and [Brynjólfssdóttir \(2012\)](#) for wh-placement in ÍTM (disconnected from their knowledge of Icelandic), [Thorvaldsdóttir \(2011\)](#) for features expressed by various types of verb classes; [Sverrisdóttir and Thorvaldsdóttir \(2016\)](#) on the analysis of vocabulary items, i.a.

focused education ensures the survival of such languages (Vizenor 2008; Grenoble and Whaley 1998).

2.2.2. The (Lack of) Bilingual/Biliterate Education for ÍTM Signers

The 2013 version of the National Curriculum Guide for Compulsory Schools explicitly states that “[a] solid knowledge of one’s language is the principal foundation of a durable education” (Icelandic National Curriculum, p. 97). According to the Guide, ÍTM is no less critical than Icelandic as a key to societal participation, and the home and the school are expected to cooperate in “nurturing and maintaining the interest of pupils, especially in practising reading visual material in Icelandic Sign Language, [. . .] and in overall language cultivation” (Ibid, p. 109). The Curriculum Guide offers instruction on organization of a bilingual school, with ÍTM as an integral subject similar to Icelandic as the L1, with education in the language, literature and usage. In addition, all compulsory school subjects in such a school would be expected to be delivered in ÍTM, and in written and spoken Icelandic (if children use it for communication). In summary, the Guide states that sign language students should have an opportunity to use ÍTM in their studies in all subjects. Given that this is a *bilingual school*, students who do not have full command of this language will need to have direct instruction in it, in order to be able to succeed academically and, more generally, participate in the culture associated with the language. In this, the Guide recognizes ÍTM as a language of a daily communication language and instruction, in addition to Icelandic, or at least written Icelandic.

(5) The National Curriculum Guide

- a. “Reading” of sign language literature is important—literature that reflects life and
- b. history of “sign language speaking people”.
- c. Good knowledge of deaf culture is important for “self-understanding” and to gain respect for ÍTM. (The Icelandic National Curriculum 2013, Greinasvið 2013 (The Icelandic National Curriculum 2013))

Let us concede that all of the above looks remarkably good. On paper.

Ytra mat (2016) (an official school evaluation report) notes that Hlíðaskóli, the only school in Iceland officially focused on ÍTM, is described as “fully bilingual”, where Icelandic and ÍTM are expected to be equal. However, the reality is different; this reality has also been described in the most recent report Frumkvæðisúttekt (Sigurðardóttir et al. 2019) and in Stefánsdóttir et al. 2019. According to Stefánsdóttir et al. (2019), the school, which at the time of the publication housed 450–480 hearing and 12–17 deaf students, “provides hearing impaired and deaf pupils with specialized teaching and services where they are included in general classes” (p. 241). Despite the “bilingual” label, the school is not fully integrated: ÍTM signing children attend a school-within-a-school—the Sign Language Department. As Stefánsdóttir et al. (2019) note, the main goal of this department, which ought to be to immerse children into the language and the culture of ÍTM has been to provide access to Icelandic. That is, ÍTM signers do not become immersed in the signing culture and language or receive the necessary language instruction directly. Among other concerns, Stefánsdóttir et al. expose the issue of linguistic (im)balance: Deaf history and culture are introduced during ÍTM coursework, all the rest of the school subjects are taught in Icelandic with the aid of an interpreter or a deaf (co-)teacher—i.e., the students “receive interpreting services to be able to follow general classes” (Ytra mat 2016; ctd. Stefánsdóttir et al. 2019). Further, according to Stefánsdóttir et al. (2019), at the time of the 2016 report, the school numbers at grades 1–5 indicated five deaf students being enrolled in Icelandic (360 min) and in ÍTM (80–160 min) per week—twice/three times the difference in contact hours. Further, the hearing children in grades 1–7 can optionally enroll in one weekly ÍTM lesson (20–40 min). As Stefánsdóttir et al. (2019) argue, these numbers should be seen in the context of the general curricular requirements for Icelandic children. For instance: 1–7 graders are expected to receive 1800 min of weekly instruction in Icelandic or Icelandic as

a second language as a subject or ÍTM for the deaf or hard of hearing children (p. 96) en toto—a clear imbalance towards the spoken language, which is the goal, unless one has no natural access to it. Further, in grades 8–10, ÍTM is an optional subject as a language; for comparison, other “foreign languages” (i.e., English and Danish) are obligatorily assigned 800–900 min per week, in total. For an extended discussion, see [Stefánsdóttir et al. \(2019\)](#) and [Frumkvæðisúttekt](#).

What immediately becomes clear is that the main audience in the ÍTM classes is the deaf children, and the goal of these classes is access to Icelandic: no obligation is made regarding linguistic development/teaching of ÍTM-signing children. Instead, what is seen throughout the various reports as well as the Curriculum Guide is the obligation regarding the teaching of the deaf. Those children who are simply interested in taking the language as a course in this bilingual school, or who are bilingual and would like to continue to foster cultural ties, may do so for 1–3 hours a week. While better than none, this number does not constitute instruction *in* the language—i.e., delivery of other content material, such as math, social studies, etc. In particular, Coda children do not get instructed in the ways of knowing and the cultural values of their indigenous community (i.e., the Deaf, not deaf community), which ought to be embedded into the curriculum from the indigenous standpoint, or the complexities of the issues facing the community.¹⁴ The “ÍTM-based education” for Coda children in Iceland begins and ends at a few hours of language teaching a week, optionally provided for those whose families are interested in such an approach to education. No assessment tools exist that allow tracking the linguistic development of bilingual children who sign this combination of languages. In terms of their L1-based education, Icelandic Codas perhaps receive more than many other Codas in the world, yet still significantly less than they both deserve and require. It is no wonder then that the research conducted on the languages of the Icelandic Codas ([Jónsdóttir and Einarsdóttir 2004](#); [Jónsdóttir and the Communication Centre for the Deaf and Hard of Hearing 2010](#)) appear to indicate that school-age Codas’ ÍTM skills do not match those of the deaf members of the ÍTM community; these data are in line with the literature on Codas which have named this population to be a prime example of Heritage language paradigm (see [Polinsky 2018](#) and references therein).¹⁵ These observations should be seen in light of the general findings that early signing is beneficial for all, including hearing, children, and is just as crucial for young children of Deaf adults as it connects them to their familial circles ([Thompson et al. 2007](#); [Humphries et al. 2012](#); [Koulidobrova et al. 2018](#), among others).

In other words, it seems that systematically, what happens in Iceland has not resulted in true support for both languages at all. The aforementioned highlights the focus on the (non-)hearing of the ÍTM-signing children, rather than their linguistic contribution. In the bilingual school, ÍTM (the language and culture of its community) is essentially mandatory for the children without access to sound, but it is optional and greatly reduced in terms of the number of hours of instruction for students with access to it (signing or non-signing). Nor is it instructed as a subject matter or assessed normatively, which is particularly crucial given the lack of generational transmission. The sign language department is essentially reserved for deaf students and exists as a program facilitating access to content. What the aforementioned points to is that the only ÍTM bilingual school in Iceland is truly not bilingual at all, since the students of the schools do not have opportunities afforded by typical balanced bilingual instructional approaches ([Stefánsdóttir 2014a, 2014b](#)), and the school that specializes in ÍTM-based education currently does not offer an environment fundamental for language development ([Stefánsdóttir et al. 2015, 2019](#)). The problem is exacerbated by the fact that the vast amount of teaching materials in Iceland are in Icelandic, very few teaching materials exist for ÍTM-Icelandic bilingual learners in terms of their ÍTM

¹⁴ To the degree that the ÍTM broadly represents the larger Deaf community, the path to articulating the values sustainably are described in [De Clerck \(2017\)](#) but for a different European sign language with a similar status—Flemish SL.

¹⁵ We interpret these data cautiously since the reports are not widely available, and the fact that at least some of the assessment tools used in the studies are adaptations from a different language (e.g., a BSL test), the validity of which we were unable to check independently. However, the conclusions of the report are not at all surprising and consistent with much literature on effects of subtractive bilingualism.

or Icelandic, and no credentialed professional development opportunities can be offered to teachers and other in-school professionals in order to be able to successfully teach bilingual pupils in accordance with the national curriculum. This demonstrates a particular view (and, arising from it, treatment) of the language by the political structures of Iceland as a communication system of the people defined biologically, not culturally. These findings also suggest what all needs to be done to change the situation.

2.3. Other Effects of “Colonization” Practices in Education of ÍTM-Signing Children

To reiterate: the SLP population in Iceland, whose language is ÍTM, is a linguistic minority. ÍTM-signing SLP community is the only minority autochthonous to Iceland. The language has been named “indigenous” in the literature (Hilmarsson-Dunn and Kristinsson 2010). ÍTM-signing population has long fought for (and won) recognition of their language, but the struggle continues (see Stefánsdóttir et al. 2019, a.o.), as is often the case with other indigenous peoples in the world. To date, ÍTM signers remain “invisible” (in the official count, for instance, see Table 1). Setting aside all the other barriers ÍTM users have had to overcome and continue to do so over the years, this is very much in line with what is typical of indigenous populations in other parts of the world and is one of the reasons for states to intervene, for the effects of this invisibility and exclusion are detrimental to the community and to the survival of the language itself. Additionally, while linguistic vitality of the other languages in Iceland is indisputable, matters are different for ÍTM. The conclusion of the Icelandic Sign Language Council (2015 report, see Stefánsdóttir et al. 2015) is that ÍTM is threatened, as is often the case with indigenous languages. This creates an additional complication in the instruction of indigenous children and youth and requires a particular type of effort on behalf of the state, by policy.

However, indigenous *SignLs* in general and their users face additional difficulty. What makes matters independently complex for SLPs, in particular, is that even if a legislature exists that protects this population in any sense (as in (1)), it tends to focus on the (non-)hearing characteristics of the language community—i.e., not on the cultural contributions of the language to the collective knowledge but on the access it provides to the majority culture (at best). In this, SLP children experience a particular type of oppression that has long been associated with indigeneity—audism, a parallel of which is racism, which has been observed in a variety of indigenous discourses, including the so-called “bilingual education” of indigenous children. Audism is an attitude and a set of practices that presuppose the normalcy of hearing and, thus, the superiority of hearing people over deaf people. In this, audism resembles racism—the belief that European *white*-ness is superior, and that all others must assimilate into its frame of reference. Both audism and racism are related to violence against a person’s personality and human dignity (see Bahan et al. 2008 and references therein). Its effects are typically visible in the structuring of education of signing children (Lawyer 2014).

Let us return to Act 61/2011 in (1) and the language attitude encapsulated within it. As Stefánsdóttir et al. 2019 (a.o.) have pointed out, it underscores the power dynamics between the sign and spoken languages. The dual identification of ÍTM as a language and a “special support” in cases when such is required results in an implementation dissonant with the policy and, therefore, instruction of children and youth. For instance, someone must decide that the individuals in question “*have to rely on*” the use of sign language. Who is credentialed to make that decision, and how is this decision made? For instance, one reasonable criterion for “*having to rely*” on a particular language in an educational environment is that this language bonds the learner to their parents and their culture (and the parents make such a choice). Such would be an argument from a multilingual standpoint. Another is that the language immerses the learner and her family into the language of their cultural heritage, turning both the entire family into the agents of language revitalization known as the “*new speakers*” (see, e.g., McCarty and Wyman 2009; especially Smith-Christmas et al. 2018 and references therein). This too is typically, though certainly not always, decided by, or at least with an influence of, parents. However,

neither of these, we assume, represent the intent of the [Althingi Act no. 61/2011 \(2011\)](#); and, crucially, it is definitely not what the Act has been used for. Instead, ÍTM is considered to be something that is *needed* (Article 13 of the Act) due to a *diagnosis* (Article 3 of the Act) that marks the relevant individuals medically different (disabled or *impaired*)—i.e., not culturally or by choice.¹⁶ In fact, the Act uses the “impairment” terminology explicitly, which leads to an implicature that SL in general and ÍTM, in particular, is something that, from a medical point of view, the “affected” (read: “broken, in need of fixing”) people necessarily must rely on as a solution. This discourse situates the Deaf community (in Iceland and in more generally) “at the mercy” of the medical community in search for such a solution—something that the Deaf community has opposed vehemently ([Stefánsdóttir 2005, 2014b](#)). In essence, such an attitude creates a barrier to both active multilingualism and language revitalization in any progressive-identifying country, including Iceland.

Given the stance above, it is perhaps not surprising, that just like in other Nordic countries, the application/implementation of the ÍTM-related legislature in Iceland has been viewed as selective, and so is any data collection and reporting related to it. For instance, while other languages present in the country’s schools are carefully tracked and reported as “another mother tongue”, ÍTM is not. Further, while legislatively mandated SL support does not differentiate between hearing and deaf individuals, in practice something else happens: numbers of the signing children are easily obtainable, but given the phrasing of the Act, these children are also necessarily deaf.

In compliance with the legislature, the Icelandic Parliament funds the Communication Center for the Deaf and Hard of Hearing in Reykjavik (Samskiptamiðstöð heyrnarlausra og heyrnarskertra, SHH¹⁷). One of the crucial functions of SHH is to consult local stakeholders (schools, families, and the municipal governments) on ÍTM acquisition, interpreting, and the grammar of ÍTM. SHH also creates and administers ÍTM assessments and holds ÍTM lessons for families and playgroups for deaf and hearing children (meant to enrich their signing skills). Cudas have always been welcome to the weekly ÍTM instructional activities (Gaman saman) and family lessons, but SHH is under no obligation, from the municipal authorities or any other funding body, to undertake any action for this population; moreover, it is ultimately the school’s recommendation that places the hearing ÍTM-signing children in the ÍTM classes/playgroup at SHH. That is, if such recommendation is not given, it is unlikely that a hearing ÍTM-signing child would attend the sessions (N. Ivanova, Director of Research, p.c.).

Moreover, while both deaf children and hearing children of deaf adults are eligible for (bilingual) instruction in ÍTM, according to the recent report *Frumkvæðisúttekt (Sigurðardóttir et al. 2019)*, the bilingual school cannot be considered a provider of the requisite environment for signing students: (a) the language is not present in the school in the manner that highlights ÍTM users as a linguistic minority; (b) the school staff is unclear on what qualifies as a bilingual school (yet, they report an intuition that the school is not bilingual); (c) deaf and hearing signers of ÍTM receive different types of language-based instruction which align most directly with their hearing status: for deaf children, this type of instruction results in ÍTM-based content, but hearing signers, receive one hour of ÍTM a week in the form of “linguistic support offered only if parents are interested” (the issue to which we will return). Historically, they have not been (Heiddis Dögg Eiríksdóttir, p.c.).

What the implementation pitfalls above have in common is this: hearing vs. deaf signers of the same language are treated differently, and so is the language itself depending on the population. As is most clearly indicated in the *Frumkvæðisúttekt*, even in the bilingual school ÍTM is *administratively* a “special service” rather than a language—i.e., it is an *accommodation provided due to the lack of access to Icelandic, vis-a-vis language proper*, to which all children should be exposed universally (as in Humphries et al. 2012). Reframing this point: despite the existence of legislation that is at first glance positive for ÍTM and

¹⁶ Although of course, medical transformations can be achieved by choice.

¹⁷ SHH 1990, Act 61 2011.

its people, ÍTM remains minoritized by the general framework that views hearing as the norm and anything as other than hearing—a problem that must be solved. This, of course, is not the first language to be in danger of a decline in user interest for this exact reason. Languages cited in such contexts attempt to resist the onslaught of the dominating forces that have to do with socio-economical and political imbalance: i.e., Spanish, Portuguese, French, Mandarin, Russian, and, of course, English—all push at many languages spoken around them.

Research has shown that just like racist attitudes, audist “attitudes attend to much that is irrelevant, erase much that is important, and create many traps and pitfalls, while, simultaneously, problematizing and interiorizing, marginalizing, and giving rise to complex social systems of domination and inequality” (Hill 2018, p. 6), that development of anti-audist projects, just like the development of anti-racists projects, appears Sisyphean (see, e.g., Bauman and Murray (2014) and many others). Yet, despite the complexity and the inherent difficulty of such tasks given the existing power structures, it must be done. Similarly, the literature on equitable, bilingual/biliterate language education and revitalization of indigenous HL children has shown that while a long and arduous road, a path forward exists (Hinton 2010, a.o.).¹⁸ This path is directly articulated in the United Nations resolution on the Rights of the Indigenous People (UNDRIP) and, clearly, given the critical role of children in language revitalization, should involve educational institutions and related policies. In what follows, we apply the pertinent articles of the UNDRIP to ÍTM, thus, simultaneously offering Iceland (and other countries in a similar situation) a path towards revitalization and equitable bilingual biliterate policy the focus of which is a socio-linguistic community rather than its medical status.

3. Solution. A Path to a True Bilingual and Biliterate Policy for Iceland’s Indigenous Children: Lessons from the UNDRIP

The United Nations resolution on the Rights of the indigenous people (UNDRIP) sets “[. . .] the minimum standards for the survival, dignity and well-being of the indigenous peoples of the world”. (UNDRIP, Art. 43). UNDRIP obligates signatory states to ensure that the rights articulated within the declaration are respected, and the relevant measures are enacted by domestic law (Dylan 2019). The resolution is something that participating countries have signed willingly, some earlier than others. While states have demonstrated various degrees of commitment and success in implementing the UNDRIP (Gunn et al. 2017; Lenzerini 2019), the UN offers both the guidelines and the “state of affairs” documents: <https://www.un.org/development/desa/indigenouspeoples/> (accessed on 7 April 2021). It should be noted that Iceland was among the first wave of signatories (2007). Therefore, nothing new is expected here; as a signatory, Iceland has already made the relevant set of promises to the international community.

UNDRIP contains 46 articles, the first one of note is Article 33(1), previously cited as (2). Several of the articles reference “language” directly and carry two types of statements: rights of the indigenous community and the responsibility of the state; two of them focus explicitly on language and education: Articles 13 and 14.

3.1. Literacy and Language Preservation

Article 13(1) makes a direct reference to the oral histories, written systems, place names, etc. In this way, it commits the Icelandic government to support ÍTM preservation efforts as well as its cultural transmission to the younger generation. Both of these require literacy samples. Article 13(2) ensures a follow-up on this promise (italics are ours).

(6) *Article 13, UNDRIP* (<https://www.refworld.org/docid/471355a82.html> (accessed on 10 March 2021), p. 5)

¹⁸ Hinton (2010) documents the case of reclamation of Wampanoag by Jesse Little Doe Baird, which is currently taught as a heritage indigenous language. Currently, Wampanoag is offered as an L2 option in some public schools in Massachusetts, US, on par with other modern languages.

1. Indigenous peoples have the right to revitalize, use, develop and transmit to future generations their histories, languages, oral traditions, philosophies, writing systems and literature, and to designate and retain their own names for communities, places and persons.
2. States shall take effective measures to ensure that this right is protected and also to ensure that indigenous peoples can understand and be understood in political, legal and administrative proceedings, where necessary through the provision of interpretation or by other appropriate means.

Recall the complexity of the passing ÍTM along—unlike any other sign language, it is typically not transmitted from a Deaf person to another Deaf person. Unlike any other language (in general), it is typically not transmitted from a parent to a child. Such a situation makes the cultural transmission pathways much more vulnerable. This means that the ÍTM community must (community internally) designate elders/language carriers and models based on something other than familial belonging. These elders, further, must be supported in language modeling explicitly through documentation efforts and instruction. That is, given the body-politicking interfering in the dissemination of ÍTM, it is all the more reason that the government which has made a promise to support transmission pathways should do so. This means overtly injecting into various curricula the Sign Language Peoples' ways of perceiving the world around them, as well as various other cultural characteristics of the DEAF^WORLD (see an overview of programs in [Ackerman et al. 2018](#) and references therein).

The promise resulting from the signature under Article 13 also commits Iceland to support ÍTM in education, including in developing ÍTM literacy. Let us take a moment to see what this would look like. The first thing that must be mentioned—and which is commonly misunderstood in reference to sign languages—is this: ÍTM literacy cannot be equated with “literacy in Icelandic” or “literacy in Icelandic through ÍTM”—ensuring that ÍTM signers have access to the dominant language. In fact, while Article 13 does in fact reference such access via interpretation (6.2), the goal of the *literacy* terminology utilized within it is to ensure that the signatory states support the development of literacy of the indigenous languages themselves, not the dominant ones via indigenous. Let us unpack this further.

Both in research and in common understanding, *literacy* is viewed in (at least) two ways: one is “the ability to read and write” (e.g., “to write something down”, i.e., with reference to writing systems), and the other as the ability to engage with language. The first definition is somewhat outdated and, one might argue, irrelevant: traditionally, SLs are not written.¹⁹ On the second approach, *literacy* is best defined as “a way with words” ([Bagga-Gupta 2012](#)), which means that an ÍTM-literate individual will show a certain level of proficiency on narratives, story-(re)telling, character manipulation, morpho-syntactic maneuvering of the language to fit various genres, etc. For this to happen, of course, two things are necessary: first, the language must be documented and described; second, assessment norms must be established.

In regards to the first, ÍTM corpus construction has been initiated ([Muncie 2017](#)), but no official corpus of ÍTM exists. The literature on ÍTM has emerged but the progress is slow. It must be explicitly funded both at graduate, undergraduate, postgraduate, and other levels. The promise of such funding is in the signature of the Icelandic government under the UN resolution to support the rights of the Indigenous people and in the Althingi Act 61/2011. In regards to the second, proficiency assessments of signers producing such texts (as well as various other tasks) must be undertaken, much as the text creation efforts across various genres. To date, the Communication Center for the Deaf and Hard of Hearing is tasked with developing such assessment tools for DHH ÍTM users (such as a non-word repetition task and other measures which have been associated with developing language proficiency, see [Koulidobrova and Ivanova 2020](#)); however there is no expectation that these

¹⁹ Though a number of glossing systems have been created, e.g., HamNoSys ([Hanke 2004](#)).

instruments will be administered to hearing ÍTM bilinguals, and in fact, there is no way of ensuring this. Data must be publicly available (and not just archived); researchers must be encouraged and incentivized to collaborate across different languages and institutions.

3.2. From Transitional (at Best) to Active Bilingualism

One other section of the UNDRIP references language, making an explicit statement regarding education appropriate for the indigenous cultural frame and in the indigenous language—Article 14.

(7) *Article 14, UNDRIP* (<https://www.refworld.org/docid/471355a82.html> (accessed on 7 April 2021), p. 5)

1. Indigenous peoples have the right to establish and control their educational systems and institutions providing education in their own languages, in a manner appropriate to their cultural methods of teaching and learning.
2. Indigenous individuals, particularly children, have the right to all levels and forms of education of the State without discrimination.
3. States shall, in conjunction with indigenous peoples, take effective measures, in order for indigenous individuals, particularly children, including those living outside their communities, to have access, when possible, to an education in their own culture and provided in their own language.

That is, in tandem with the domestic legislature (Althingi Act 61/2011, (1)), here is Iceland's promise to the community of individuals for whom ÍTM as L1: they are eligible for instruction in ÍTM with ÍTM-appropriate cultural references and ÍTM-based assessments in the same content as other Icelandic children; their hearing status does not matter but their language status does—i.e., any child raised with ÍTM as L1, either deaf or hearing should/could be attending ÍTM-based instructional programming. In this instructional programming is expected to maintain both of the languages of the child—i.e., the goal of such instruction should be both L1 (ÍTM here) as well as L2 (Icelandic).

In fact, Iceland has an explicit educational policy that reveals precisely this, positioning itself among the other Nordic countries that profess an “active bilingualism” stance; see Althingi Act 91/2008, italics are ours)²⁰.

(8) *Althingi Act 91/2008 (Act on Compulsory Schools)*

Students with a different mother tongue than Icelandic are entitled to instruction in Icelandic as a second language. The teaching is aimed at the *active bilingualism of these learners* and that they can attend primary schools and participate actively in the Icelandic community. Primary schools may recognize proficiency in the mother tongue of students with a different mother tongue but Icelandic as part of compulsory education is replaced by compulsory schooling in a foreign language ([Althingi Act no. 91/2008 2008](#))

In having legislatively adopted *active bilingualism*, Iceland aligns itself with research-based practices. Consider: in the past several decades, much research has been devoted to models of bilingual education and which of the available models lead to better outcomes for each of the languages (see an overview in [Baker and Wright 2017](#)). Whether the linguistic support for each of the languages is achieved via immersion, explicit language teaching, or translanguaging in biliteracy remains a matter of debate and is largely contingent on the appropriateness of the model given a particular socio-linguistic context. With a number of controversial issues at play resulting in dynamic integration (see [García and Wei 2015](#) for a discussion), one thing that all researchers tend to agree on is this: any educational framework and ensuing instructional programming claiming support for L1 must be *additive bilingual*, the main goal of which is acquisition and development of L1 in addition to L2. The flipside of such a choice is the presence of the L1 only insofar as it assists the

²⁰ Note: here we make no claims with respect to whether Iceland has achieved this in other contexts. See [Svavarsson et al. \(2019\)](#) and references therein.

learning of the L2, and gradual reduction of access to the L1 in direct relationship to the increase in proficiency in the L2. This type of scenario, known as a “transitional model”, has been argued to be *subtractive*. By definition, the goals of the two models are different; in particular, support for L1 is not among the goals of the *subtractive* model. The literature on the difference between the two types of models is robust and we will not do it justice in engaging in an overview here. Instead, we note one thing: only the former and not the latter has been shown to result in fine-grained morphosyntactic knowledge and productive use of both languages. That is, quite simply, if one is interested in “active bilingualism” (rather the use of bilingualism as a *means to* some other language), “subtractive bilingualism” is a wrong path.

According to (8) then, *any* child with a language other than Icelandic is eligible for *Icelandic as L2* instruction as well as for being viewed as bilingual, with all the consequences of this framing. That is, a child whose L1 is Japanese, English, ASL or ÍTM, be this child deaf or hearing. What the aforementioned amounts to is that by the Acts 61/2011 (1) and 91/2008 (8) and the UNDRIP, Iceland has committed itself both domestically and internationally, to full support for ÍTM for both deaf and hearing signing children in the educational system on par with Icelandic or other languages, with a promise of additional support to ÍTM given the history of minoritization.

4. Discussion. Implications for Educational Policy with Direct Implementation Procedures for Bilingualism/Biliteracy and Assessment

Two pictures emerge. First, the overview of the state of affairs in Section 2 has demonstrated that the linguistic repertoires of hearing and deaf students within the nominally bilingual schools are not treated on a par by the system which designs the curriculum in the field rather than in policy—i.e., in the implementation of the relevant Acts. Icelandic takes precedence over ÍTM; ÍTM is “allowed” if “chosen” because it is “needed for communication”. That is, students whose education is ÍTM-based are still approached from a very different ideological stance—the language is there to equip them with the so-called tools for general education under the assumption that they necessarily have no access to the material otherwise. In this, the implementation of the educational policy meant to be linguistically equitable, unlike what we find in other countries, eventually results in exactly what we find in other countries. Even if the design were different (bilingualism, with the overt acknowledgement of the native language), the expected outcome remains problematic—if bilingualism begins to develop, this bilingualism is *subtractive*, with the sole intent being access to content in Icelandic. That is, whatever the good intentions, the “bilingualism” practices are misaligned with the legislative promises, both domestic, and international ones. In other words, what Iceland has to do is unambiguously articulate and implement an additive bilingual policy towards its signers.²¹ Many models are available in the literature on how one might want to proceed (see Baker and Wright 2017 for an overview). Until it does, no changes can be expected: as Skutnabb-Kangas has argued in various works (e.g., Skutnabb-Kangas and Dunbar 2010 and in, most recently, Skutnabb-Kangas et al. 2020), transitional bilingual programs for indigenous children tend to amount to cases of linguicism at best and linguistic genocide at worst.

Second, the country that requires particular agencies to pay for assessment tools and administration for majority languages should do the same for minority languages as well. To clarify: if the development of curricular tools in the dominant language (e.g., Icelandic as L1, or Icelandic as L2, or English as L2 for Icelandic schools) is necessarily funded by government agencies, so should be non-optional minority language curricular development. The country that requires certain levels of training from teachers of written Icelandic and other languages (e.g., English) for children who use the majority language should do the same for teachers of written Icelandic and other languages (e.g., English) for children who use minority languages. If dominant language literacy rises to the top of the

²¹ This is of course true for the spoken language bilingualism as well, but we set this issue aside here focusing on ÍTM-Icelandic bilinguals.

agenda of the dominant language taskforce, so should the non-dominant language literacy. This is especially true if that language has been historically minoritized in a country that proudly considers itself a proponent of equity, as is the case of a sign language in Iceland. Crucially, as the literature on minority languages has shown, curricular expectations of indigenous people, on par with those of non-indigenous people, ought to be reflected in the educational system.

What then comes out from Article 14 of the UNDRIP (7) is a different type of commitment of educational policies and concomitant funding—a non-optional approach to ÍTM-based schooling and curricular/assessment development and delivery. This also means an investment in pre- and in-service teacher training, for three languages (ÍTM, Icelandic and other languages, e.g., English) as well as instructional content. All of the aforementioned would demonstrate the country's commitment to its people (Althingi Acts) and to the international community (UNDRIP). Given the fact that ÍTM is under threat, one clear outcome of the articulated commitments is this: whatever Iceland does to further Icelandic, the efforts must be doubled for ÍTM and, therefore, its multilingual users, thus fully embracing them as members of the Icelandic community. This is the only path towards true equitable “active multilingualism” articulated in The Icelandic National Curriculum, and thus, the only possible path towards multiliteracy as well. Note: by offering true additive programming in bilingual schools, Iceland would most likely increase the circle of signers, thus contributing to revitalization. We suspect, once again other countries will follow suit (De Meulder et al. 2019).

5. Outlook. How to Ensure Bilingual/Biliterate Education of Signing Children as Indigenous Heritage Language Learners

Just as it is in the case of spoken indigenous languages, the power imbalance created by the dominant language is difficult to tilt. Nevertheless, the task, albeit apparently Sisyphean in nature, must be attempted. Over the years various lines of research have made evident overt and covert discriminatory policies towards Indigenous individuals and especially children in the media, education, and other areas of the public sphere; some of these policies are explicit while others are implicit (Shohamy 2006, among others). We looked to the country that has claimed that its signing citizens, and especially children, have the same linguistic rights as its speaking citizens—Iceland. We closely considered what it means to be a user of Icelandic Sign Language and exposed that by a variety of metrics, including the United Nations Resolution for the Rights of the Indigenous People, this population can and has been defined as “indigenous”. This definition carries a number of consequences, among which is a country's stance on bilingual and biliteracy education of such children. We additionally demonstrated that the language is definable as Heritage, which too contributes to the complexity of the linguistic profile of the learner as well as the potential vitality of the language itself. We have thus far demonstrated that ÍTM is a heritage language in Iceland (true for all minority languages in any given country), that it is indigenous (true for many heritage languages in any given country), and that it is endangered and are in a special need of state support (true for many indigenous heritage languages). We have also shown that the current policy and its implementations cite bilingualism and biliteracy but fall short of this target due to the currently non-linguistic framing of ÍTM. We offered a solution that relies directly on extending the previous definitions of the language as indigenous. This move offers the country and this heritage language community a path that (a) is consistent with Icelandic progressive values in education and other spheres and (b) leads to language revitalization through biliteracy.

We have also considered, with others, some paths for survivance for ÍTM. This discussion has revealed that revitalization of ÍTM has an additional barrier—the current “bilingual” policy drives the focus away from the language itself and, instead, perpetuates the narrative of (non-)hearing/(lack of) access to sound, and so forth. That is, it defines the ÍTM community in general and its children in bilingual school contexts in particular in physical/medical terms, and in this, despite the progressive legislatures, Iceland inadvertently propagates the medical model of Sign Language. By doing so, Iceland

undermines its own commitments articulated internationally (in the UNDRIP) and falls short on implementing the plans it has made domestically (in the Althingi Acts). In this, the current domestic policy and the lack of action promised internationally cuts across language attitudes associated with the medical model of sign languages, which carries detrimental effects for the users of ÍTM and the language itself, including documenting its literacy practices. Crucially, to the degree that ÍTM is considered (simply) a tool for learning Icelandic, the problems will persist. This problem is not new—it has been evidenced in a number of cases documenting subtractive bilingualism cross-linguistically; further, it exists in dissonance with the current “active bilingualism” stance featured in the legislature and educational materials in Iceland. Considering the nature of the prejudice we have observed, as a result, SLPs in Iceland are not afforded the opportunity to fully develop their abilities and such prejudice against them is constantly being recreated. Other Nordic contexts, where local sign languages are considered indigenous and/or minority languages (like Norway, Finland and Sweden), exhibit similar patterns of minoritization and its consequences (Haualand and Holmström 2019; De Meulder 2015, 2017). It turns out, however, that in many ways, the injustice associated with being a non-dominant indigenous community where the language, as well as the community that uses it, is a minority precisely because it is *minoritized*. When a country takes a stand on its policy regarding the community and its rights, including ensuring the preservation of the community’s language, certain implications fall out. Some of these are community-internal; others—top-down, community-external (Borrows et al. 2019). The fact that Iceland has recently signed the World Federation of the Deaf Charter distancing itself from the medical model while also being a signatory of the UNDRIP makes us hopeful that the country plans to begin passing new legislations as well as implementing its promises on the legislations it has already passed (<http://wfdeaf.org/news/resources/wfd-charter-on-sign-language-rights-for-all/> accessed on 10 March 2021, (World Federation of the Deaf, WFD Charter on Sign Language Rights for All 2020); www.stjornarradid.is/efst-a-baugi/frettir/stok-frett/2020/02/11/Island-undirritar-fyrst-rikja-althjodlegan-sattmala-um-rett-allra-til-taknimals-/ accessed on 7 May 2020, (Ministry of Education and Culture of Iceland 2020)).²² What will ensue is truly bilingual education of ÍTM-signing children—which, for us, also means biliterate (Bagga-Gupta 2012)—and, as a consequence, revitalization of ÍTM.

Sverrisdóttir (2018) points out that the ÍTM community itself has raised its own concerns about its needs. Since 2015 there have been attempts, both by the Deaf Association and by individuals, to attract the attention of the members of the ÍTM community to the issues of preservation and revitalization. Hauksson (2018) states that ÍTM is facing extinction if no changes occur to prevent that from happening. Hauksson, who himself is a child of Deaf parents and grew up in the Deaf community, analyzes discourse arising from two governmental institutions and comes to the conclusion that there is a widespread societal ignorance about the role and function of ÍTM in the lives of deaf people; that is, despite the commitment at the top (see (5)–(6)), in the mainstream Icelandic society, medical model prevails. Consider, however, what would happen if what Iceland had promised to do actually happened. For instance, if, per Article 16 of UNDRIP,²³ a typical hearing Icelander saw both ÍTM being used on national television and people for whom ÍTM is L1 represented daily, this typical Icelander, having become a government official, would be expected to be more understanding about and conversant within the community of ÍTM users (contra the findings in Hauksson 2018). This increased visibility would further provoke more interest in both ÍTM and its culture in both children and teachers (pre- and in-service), leading to the creation of curricular and assessment materials, per Article

²² At the time of writing of this manuscript, one such legislation is being drafted for the attention of the Parliament by the members of the Language Council.

²³ Article 16, UNDRIP. 1. Indigenous peoples have the right to establish their own media in their own languages and to have access to all forms of non-indigenous media without discrimination. 2. States shall take effective measures to ensure that State-owned media duly reflect indigenous cultural diversity. States, without prejudice to ensuring full freedom of expression, should encourage privately owned media to adequately reflect indigenous cultural diversity.

14 of the UNDRIP. If the materials and assessments are funded, administered, and are accountable to, by the same agencies as for Icelandic and other languages (e.g., English), the impetus for the paramount quality of delivery would be present without question. Finally, if the government offers grants for language documentation (and preservation) efforts, this means that more individuals may become involved in learning both the language and about the language, which has been shown to extend the “health” of the language itself. Among such efforts (Article 13 of UNDRIP) are “the language nest”-type schools or “language showers”, known from other successful indigenous language revitalization programs (Hinton et al. 2018) as well as funds for theoretical and applied graduate studies on and in ÍTM itself. One thing this set of efforts clearly excludes is offering parents a choice to deprive a child of language during the first year of their life by *optionally* providing a deaf child with ÍTM, or giving municipalities a chance to not fund certain assessments or other educational activities. Instead, the Icelandic government’s position articulated in the various Althingi Acts is to ensure that quality ÍTM-based education, comparable to that of Icelandic-based education is to be given to a DHH child and his/her family as soon as the process of language acquisition can begin, both for the children and their family members (i.e., entry at various age points). This means that the government plans to fund a quality ÍTM-based education agenda. Further, as indigenous children and adults should see themselves represented in the media, so should they see themselves represented in the educational and statistics for the country (see Table 1). These are just a few examples of the directions for language revitalization that are plottable from the commitments Iceland made in the early 2000s. We suspect that the series of steps we propose for Iceland will lead to a more general interest in the language by the non-members of the ÍTM community as well. Other countries have demonstrated that increased visibility of sign languages and Deaf experiences, despite the continued audist practices, result in concomitant increase in societal interest in learning these languages and their cultures (Looney and Lusin 2020). In this, as research on indigenous languages shows, schools (can) serve as hotbeds of language revitalization (Baird 2020; Vangsnes 2020).

Thus, we remain hopeful: as long as Iceland’s ÍTM signers continue to exist as a community, so will signing (Bickford et al. 2015). The question is whether it will give in to Icelandic (on the hands)²⁴ or be revitalized and will thrive as ÍTM. The latter can and will only happen through the efforts of the individuals, the community of users, and outside political support. For the language not only to survive but also to prosper, embodied experiences of the community must be recognized, which means that both the language users, language activists, linguists working on documenting of ÍTM as well as other agencies involved in the work must demonstrate the renewed commitment to include history and collaboration at every legislative cycle. Given the history of the movement for the rights of its signing community, and its general commitment to equality and equity both in the workplace and education for all its citizens, we expect that Iceland’s governing bodies and other relevant agencies regularly assess and review the policies outlined here while collaborating with the representatives of the ÍTM community to ensure that the goals articulated by the country in its various legislative acts are met. Describing the policy towards the education of the signing community in the US, Lawyer (2014) calls for the “removal of the colonizer’s coat” (Lawyer 2014). She argues that ultimately, the US approach to the education of the DHH children is oppressive in a very particular way: any improvement of educational and social outcomes of the Deaf community resulting from audist practices can only be achieved through explicit decolonization procedures and practices—the narrative that is familiar from indigenous language literature and actively bilingual education of indigenous children.²⁵ We agree with Lawyer wholeheartedly. As perhaps has become clear, we suggest an amendment to Lawyer’s thesis: the aforementioned is true for the educational outcomes of the *indigenous signing* community (as well as the DHH community,

²⁴ Here we refer to something like Signed English/Manually Coded English (MCE) vs. Australian Sign Language (AusLan) in Power et al. (2008).

²⁵ Note, Lawyer (2014) focuses on the US, which has not yet recognized its signing community as a linguistic community per se and, therefore, a bona fide minority; thus, a longer road is ahead.

given the partial overlap in membership). As soon as we pivot the focus on the linguistic community, we can remind the country in question of its responsibilities and overtly articulated commitment to decolonization and dismantling oppression which, in turn, are socially created so that the privilege is constantly maintained and strengthened. With maintaining the privilege, one cannot hope to have true bilingualism. Further, one cannot hope to support a language. We have thus argued that only by pivoting the focus towards literacy (and therefore language) practices of ÍTM stingers (in the larger sense) can Iceland expect to a) fulfil its promises its own and international communities and b) once again become a beacon of progressive legislature and public/educational policy it has become known for.

Therefore, if the equal status of languages in *practice* and bilingual education in them has not (yet) been obtained, it should certainly be done (De Clerck 2017, a.o.). Crucially, this is not because the ÍTM community members are Disabled or somehow medically different/lesser. It is also not because the community is small and the language might be on the verge of extinction if Iceland does nothing (see Davis 2017 and many others against this line of argumentation). It is because Iceland has made some promises to both its own and the international community; thus, we hold its executive and legislative bodies (Althingi as well as the local offices it directly influences) to these promises for the future. This is all the more urgent now, given that the bilingual compulsory school has seen a reduction in enrollment of ÍTM-signing students: this year, only 11 signing students are enrolled in Hlíðaskóli—the compulsory school (compare these numbers with Stefánsdóttir et al. 2019, who report 12–17 students, see Section 2.2.2). We are, however, excited to see how Iceland plans to enact its equitable policies and change the currently inequitable ones toward ÍTM, and whether the eight ÍTM-signing children currently enrolled in Sólborg (the bilingual pre-school) will grow up in a different Iceland—the Iceland that “puts its money where its mouth is” or, rather, where its hands are, as the case might be. Whether other countries will follow is an open question.

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