Abstract

This article shares findings from the first phase of program evaluation of Antle, a holistic language resource for teaching, learning and assessment. The program evaluation was guided by understandings that appreciate the interconnections of literacies and identities and is situated within a decolonizing framework that recognizes the transformation of Indigenous knowledges as essential. A quantitative and qualitative analysis was conducted. Analysis revealed the educators valued Antle but did not use the resource consistently. Recommendations include providing information to teachers about connections between literacies theories, curriculum outcomes, and program activities, and additional support for implementation. This article serves as an invitation to researchers and educators across Canada to rethink literacy assessment practices.

Keywords: oral language; assessment; Mi’kmaw learners; Indigenous methodologies; program evaluation

Introduction: Antle’s Birthday Party

The office was buzzing with activity as the vice-principal and the director of education prepared for the day’s big event. The grade primary1 teacher, the administrators, and the office staff had worked together to put up decorations announcing today as Antle’s birthday. The cake was decorated and the pitewey (tea) was hot and ready for guests. Birthday party invitations had been sent home, and the children were in their classroom anxiously waiting for family members.

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1 In Nova Scotia, grade primary is equivalent to Kindergarten.
to arrive. Everyone was excited to celebrate with Antle, a moose character from the oral language assessment and learning resources used in the class, as he turned 6 years old!

Once the party began, the classroom was filled with people who were laughing, chatting, and playing games with children. Parents and grandparents, older brothers and sisters, and aunts and uncles joined in the activities. At one table, a mom and dad played with blocks with their son, a student in the class. At another table, a mom, grandmom, and great-grandmother sat with a little girl as they completed an activity from the Antle online portal that encouraged practicing letters and sounds. All the women spoke in Mi’kmaw to the little girl and to the teacher. They laughed together as they enjoyed their cake while speaking in Mi’kmaw and English languages and learned about Antle and why his birthday is so special to this group of children.

As families explored the activities around the classroom during the birthday party celebrations, the teacher spent time with each parent, grandparent, and family member and invited them to complete the survey that shared information about the children and their experiences with oral language at home. This survey was part of the Antle resources and formed assessment data that would inform classroom instruction. At the end of the party, each family received a parting gift – a game from the Antle resources that they could play at home to support oral language in Mi’kmaw and English. They also received information for accessing the Antle online learning portal where the teacher will continue to share information about their child’s oral language learning and suggest activities to reinforce their learning at home.

Antle’s birthday party was a time for sharing and celebrating the richness of languages, families, and cultural knowledge each child brings into the classroom. It was also an opportunity for educators and families to join together to assess and support language learning, supported through the Antle resources. The party celebrated Antle as well as the cultural and linguistic gifts each child brought to the class.

This vignette highlights elements from the Antle Discovers His Voice resources (Antle). Antle is a holistic oral language program designed to assess and support oral language learning for children aged 3-6 years in both English and Mi’kmaw, and in the home, school, and community. The Antle program was developed locally with input from Mi’kmaw Kina’matnewey (MK), a school authority supporting Mi’kmaw learners in Nova Scotia, its teachers and literacy support staff, Mi’kmaw Elders, and representatives of the Nova Scotia Department of Education and Early Childhood Development with the support of Sprig Learning. Antle was first implemented in MK schools in 2017-2018. Antle was designed to support three key goals: acquiring and assessing literacies in Mi’kmaw and English, nurturing home and school connections, and supporting educators in developing pedagogies that respond to children’s cultural and linguistic funds of knowledge, with a view to improving literacy performance overall.

Antle is a multi-faceted instructional resource that combines books and puppets that feature a moose named Antle and digital interfaces that include an iPad assessment app, as well as a cloud-based online learning portal. The assessment app asks teachers, parents, grandparents, Elders, and students about their uses of English and Mi’kmaw (Figure 1). The resulting data is shared through a cloud-based learning portal that teachers and families can access. This portal identifies personalized learning to promote oral language learning in both languages.
The puppet and books are used in classrooms to further build on the assessment data and to provide opportunities for children to practice both languages and respond to stories of locally relevant themes (Figure 2). *Antle* is not a prescriptive program, but instead invites educators and families to select and use activities from the online portal they identify as useful.

With the aim of evaluating the effectiveness of the program, MK administrators shared *Antle* with a group of university researchers. From the researchers’ informal observations of the digital interfaces, instructional supports and suggested activities, including the birthday party, the researchers agreed with MK administrators that *Antle* has the potential to support authentic and engaging oral language learning opportunities in Mi’kmaq and English, in the classroom and beyond. Despite these potentials, MK administrators identified that *Antle* is used inconsistently between classrooms. In response, we conducted a program evaluation of *Antle* within a partnership
between university researchers, MK, and Sprig Learning. In this article, we share preliminary findings from the first phase of program evaluation, exploring the educators’ descriptions of the potentials and uses of the resource, alongside their perceptions of the enablers and barriers to its uses. The goals of this phase of the program evaluation are to identify recommendations to support educators in developing pedagogies that respond to children’s cultural and linguistic funds of knowledge (Moll et al., 1992) and provide opportunities for acquiring and assessing literacies in Mi’kmaq and English in ways that can be supported through the Antle resources they have in their classrooms.

Theoretical Framework

We situate the program evaluation within a decolonizing framework that recognizes that transformation rather than integration of Indigenous knowledges is essential as we work toward decolonization and reconciliation (Battiste, 2013). Within the program evaluation team comprised of university researchers, MK and Sprig Learning, we engaged in mawikinutimatimk (Lunney Borden & Wagner, 2013), a Mi’kmaw term meaning coming together to learn together. Such a process is rooted in ethical relationality (Donald, 2012) and helps to break down colonial logics, bringing all involved into the conversation in equal partnership where the strengths of each individual are honoured to create collective understanding. This approach ensured that our work centred Mi’kmaw values and knowledges.

The Mi’kmaw concept of mawikinutimatimk recognizes the value each person involved in the study brings to the collective and also recognizes that each has something to learn from the others (Lunney Borden & Wagner, 2013). Such an approach does not position researchers, administrators, and educators in a hierarchy but rather sees all as part of a learning community whose understandings are deepened by coming together and learning from one another. Additionally, our approach commits to centring Indigenous knowledges and elevating Indigenous voices in all aspects of the program evaluation. Thus, as we searched the literature, created survey questions, and designed a process for collecting data, we did this in ways that are consistent with Mi’kmaw ways of knowing, being, and doing. In the literature, this looks like ensuring Indigenous voices are prominent and that the literature recognizes the unique experiences of Indigenous communities in developing oral language. In survey design, this requires considering how the questions are phrased in a way that also values Mi’kmaw knowledge systems and thus the survey was co-designed with our MK partners and a Mi’kmaw Research Assistant (RA). In data collection, this looks like meeting people in ways that are culturally consistent and having a fluent Mi’kmaw RA do that work. This approach ensured that invited educators were able to move between English and Mi’kmaw languages as they discussed their uses of Antle and that the educators were valued as experts in their classroom and community context. Related to literacy teaching and learning, we looked for ways Antle could support Mi’kmaw ways of knowing, being and doing and reflect the diverse ways children acquire and use oral language (e.g., Street, 1984).

2 We use the term educators to include both teachers and administrators.
Literature

In the academic literature, the importance of oral language instruction has been long established as critical in the early years of schooling given the links between oral language proficiency and later reading and writing success (Moats, 2020; Whorrall & Cabell, 2016). Oral language processes are multi-faceted and include “vocabulary (receptive and expressive), syntactic and semantic knowledge, and narrative discourse processes (memory, comprehension, and storytelling)” (NICHD, 2005, p. 428), processes which are visible in the Nova Scotia English Language Arts curriculum (NS, 2019). The importance and complexities of oral language take on special significance in Mi’kmaq communities as learners draw on the history of an oral society while seeking to support literacy learning in accordance with the provincial curricula and revitalizing the Mi’kmaq language (NS, 2015). Educators’ knowledge of the multiple dimensions of oral language can be helpful in selecting and using supportive assessment measures and using the information from these assessments to guide instruction (Heppner, 2020). However, challenges exist in locating classroom assessments of oral language that reflect the complexities of multilingual learning of Indigenous children in Canada (Eriks-Brophy, 2014; Malec et al., 2017; Peltier, 2011; Peterson et al., 2021). We next review literature related to oral language learning in Mi’kmaq communities, and classroom assessments of oral language.

Oral Language in Mi’kmaq Communities

Oral language in Mi’kmaq communities is an essential element of language revitalization. The Mi’kmaq language is considered threatened and declining (Nova Scotia, 2022), due in part to the legacy of residential schools in Canada where Indigenous children across Canada generally, and Mi’kmaq children attending Shubenacadie school in Nova Scotia specifically, were prohibited from speaking their language (Knockwood, 2015). For many years, MK has been actively working with chiefs, staff, parents and educators to “protect the educational and Mi’kmaq language rights of the Mi’kmaq people” (Mi’kmaq Kina’matnewey, 2023, np). With national recognition of support for Indigenous language revitalization through Bill C-91 (Government of Canada, 2019) and the provincial Mi’kmaq Language Act (Nova Scotia, 2022), the time is ripe to continue to work toward revitalizing Mi’kmaq in Nova Scotia in schools and communities.

Working toward language revitalization requires an understanding of the Mi’kmaq language. The Mi’kmaq language “is predominantly an oral language” (NS, 2015, p. 4), that is interconnected with culture. Inglis (2004) explains that “the Mi’kmaq language grammatically encodes details concerning how speakers experience the world and how a speaker and the person spoken to connect with and evidence this experience” (p. 400). For the Mi’kmaq people, oral language extends beyond a means of communication simply expressed through systems of semantics, syntactics, and comprehension (NICHD, 2005) and is “the very essence of the Mi’kmaq ways of knowing and being” (NS, 2015, p.ii) and the medium through which “Mi’kmaq values, customs, beliefs, and attitudes are passed on from generation to generation” (NS, 2015, p. 4). Oral language for the Mi’kmaq people is foundational and interconnected to cultural identities, literacies acquisition, and learning in all subject areas in school (e.g., Lunney Borden, 2011; 2013). This more theoretical description of language comes to life within the Foundation for Mi’kmaq Language Curriculum document (NS, 2015) through the voices of Mi’kmaq Elders and educators in its Introduction:
‘The Mi’kmaw language is the essence of who we are as a nation, as a people…’ Melody Googoo….

‘Mi’kmaw language is a foundation of cultural competency’…. Mary Sylliboy….

‘Without our language, our culture becomes weaker….’ Carol Anne Johnson…..

‘Oral language is innate in our very being’ Mary-Ellen Googoo (NS, 2015, p. 1).

In this way, language revitalization is an act of reconciliation that restores and revitalizes cultural connections and ways of knowing, being, and doing. As such, language revitalization cannot be achieved by schools alone; rather, the school, home, and community can be partners (Hinton & Hale, 2001).

Recognition of the importance of language revitalization, the encoding of Mi’kmaw language as interconnected with identities, and consideration of language learning as happening in the home, communities, and classrooms has implications for early literacies classroom instruction. In MK schools, young children are often learning Mi’kmaq and English concurrently. This multilingual language learning can be an additive process that can allow for the transfer of literacy skills including phonological awareness (sounds of language), language pragmatics (how language is used in different situations), and syntactics (structure of language) between languages even when language morphology (how words are formed from sounds), and orthography (written scripts) are diverse (Cummins, 2005). This tenet has been affirmed by Paul-Gould & Sock (2012) who found that a focus on building students’ Mi’kmaw language in a Mi’kmaq immersion program also supported their English language. The connections between languages are further strengthened when home literacy practices in multiple languages are recognized in classrooms; in this way, one’s understandings in their first language serve as funds of knowledge (Moll et al., 1992) or resources for learning their second language. Funds of knowledge can “become funds of identity when people actively internalize family and community resources to make meaning and describe themselves” (Esteban-Guitart & Moll, 2014, p. 33). This kind of language learning is based on an ideological model (Street, 1984) of literacy learning which is grounded in how language is used (Pahl & Rowsell, 2005) and recognizes that language is acquired in particular ways reflective of the child and their contexts. Oral language learning in Mi’kmaq and English are entangled together, nested within home, community and school locations, expressions of culture and identities, and supportive to Mi’kmaq language revitalization. The complexities within this conceptualization of oral language present challenges for oral language assessment in early literacy classrooms.

**Oral Language Assessment in Classrooms**

Many oral language assessment measures for use with young children exist. These assessments often inform instructional practices. Oral language assessment measures are often norm-referenced, expensive, time-consuming to administer (Heppner, 2014; Malec et al., 2017), focus on selected elements of oral language, and may be administered through questionnaires, conversations, photo-elicitation, and story-telling (Heppner, 2020; Malec et al., 2017). Oral language assessments are often built upon an autonomous model of language learning that considers that oral language development occurs in the same way for all regardless of the context (Street, 1984). Oral language assessments have been normed with children using Mainstream American English (MAE) (Malec et al., 2017) in urban settings (Eriks-Brophy, 2014; Peltier, 2011). These assessments “require that children have experience with typical European American
heritage middle-income families’ lifestyles” (Malec et al., 2017, p. 378) and are familiar with interaction patterns (Eriks-Brophy, 2014) and story-telling norms of a dominant culture (Peterson et al., 2021). Thus, children whose home languages and practices do not reflect middle-class, urban, and/or European norms may be disadvantaged in the assessment (Malec et al., 2017). This renders these assessments invalid for many children in Mi’kmaw communities who live in rural and socio-economically diverse communities. In recognition of these concerns, the literature calls for more culturally valid approaches to oral language assessment of Indigenous children in Canada (Eriks-Brophy, 2014; Heppner, 2020; Malec et al., 2017; Peltier, 2011).

The literature highlights studies of oral language assessments that strive to honour cultural and linguistic diversity within Canadian Indigenous communities (Eriks-Brophy, 2014; Peltier, 2011; Peterson et al., 2021). For example, Peterson et al. (2021) describe an approach to oral language assessment that united a speech-language pathologist (SLP) with educators to modify a norm-referenced assessment to be more culturally responsive to children within an Oji-Cree community in northern Ontario, Canada. With these modifications, “children could demonstrate their morpho-syntactic knowledge…using topics that were relevant to their experience” (p. 5). The SLP administered the revised assessment and provided suggestions to the classroom teacher for intervention. Then, the classroom teacher administered the intervention with a play-based approach and the SLP re-assessed the children using the modified assessment and found that the children’s oral language in English grew. Peterson et al. (2021) recognize the potential of this assessment and of SLP and teachers working together to support oral language learning. However, they identified that the norms of the original assessment were not valid due to modifications. Peterson et al. (2021) caution that this modified assessment cannot be inserted into a different Indigenous communities without adaptation to reflect the language uses of that particular community.

The literature highlights the interconnectedness of the Mi’kmaw language and identities and highlights that encoding and expressing the Mi’kmaw language (Inglis, 2004) is different than the English language, but no studies reviewed examined ways to assess and work with both languages. Further, the literature identifies a great need for approaches to oral language assessment that are reflective of local language uses (e.g., phonology, morphology and syntactics) as well as language practices (e.g., turn taking, storytelling norms) in Indigenous communities (Eriks-Brophy, 2014; Heppner, 2020; Malec et al., 2017; Peltier, 2011). The literature shows recent examples of assessments that move toward culturally responsive assessment practices in Indigenous communities that take into account the knowledge of the teacher (Peterson et al., 2021), but no studies reviewed incorporate perspectives of the family and Elders into assessments, and no study examined culturally responsive oral language assessments that were connected to a larger body of culturally responsive resources. This program evaluation resides in this gap.

**Program Evaluation Methods**

The program evaluation plan is rooted in Indigenous research methodologies that, “by their nature, evoke collective responsibility” (Kovach, 2009, p. 178). As such, university researchers partnered with MK leadership and educators to conduct a program evaluation to examine educators’ perceptions of any benefits/drawbacks of Antle, the ways that teachers in early elementary classrooms are using Antle, what they identified as obstacles to using Antle, and ways that these obstacles might be addressed. The goal of this evaluation was not to promote Antle, but
consider how educators’ might be able to use Antle to design pedagogies that respond to children’s cultural and linguistic funds of knowledge (Moll et al., 1992).

This article reports on the first phase of the program evaluation. The first phase of the program evaluation drew on semi-structured interview methods. In this phase, a Research Assistant (RA) (an educator and a fluent Mi’kmaw speaker) conducted interviews with early elementary educators who have been part of the Antle implementation team. Interviews took place over Zoom, and in English and/or Mi’kmaw according to the educators’ preference. Interview data were audio-recorded and categorized on an electronic form that reflected qualitative and quantitative data. The electronic form listed interview questions to support the RA in conducting the semi-structured interviews. As the educators explained their answers, the RA took descriptive notes on the form in both languages. When a question gave categories for answers in a multiple choice format (e.g., the frequency of uses of different resources), the RA read the question and selected the response on the form that the educator indicated. In total, nine educators, three of whom were administrators, were interviewed. Educators could opt to not answer particular questions if they were not comfortable. In keeping with program evaluation guidelines, data from educators were anonymized.

Analysis of qualitative and quantitative data responded to the questions about program use and quality. Analysis of qualitative data included reading and re-reading the data and identifying emergent themes across administrator and teacher groups. Quantitative data included calculating percentages related to the answers in particular categories (e.g., the frequency of the uses of Antle resources, that is whether the resources were used always (daily), frequently (weekly), sometimes (monthly), rarely (a few times a year), or never) and the number of responses to that question given the small number of respondents. The analysis and recommendations in this first phase of program evaluation will lead to the next phase of program evaluation designed to identify ways to support educators in developing pedagogies that respond to children’s cultural and linguistic funds of knowledge and provide opportunities for acquiring and assessing literacies in Mi’kmaw and English as supported through Antle.

**Findings**

Analysis revealed that teachers varied in the particular Antle resources that they used in their teaching and in the frequency which they incorporated the resources in their classrooms. All teachers reported using the books, puppets, and assessment app in their classroom with varying frequencies (See Table 1). Most teachers used the learning portal activities (75%), but with less frequency overall. Only one teacher (25%) reported using the data from the learning portal to guide instruction in their classroom.

Table 1
**Frequency of Teachers’ Uses of Antle Resources**

<table>
<thead>
<tr>
<th></th>
<th>Daily</th>
<th>Weekly</th>
<th>Monthly</th>
<th>A few times/year</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books</td>
<td>66.6%</td>
<td>33.3%</td>
<td>-</td>
<td>16.7%</td>
<td>-</td>
</tr>
<tr>
<td>Puppets</td>
<td>50%</td>
<td>-</td>
<td>33.3%</td>
<td>16.7%</td>
<td>-</td>
</tr>
<tr>
<td>Assessment app</td>
<td>-</td>
<td>33.3%</td>
<td>33.3%</td>
<td>33.3%</td>
<td>-</td>
</tr>
<tr>
<td>Learning portal activities</td>
<td>25%</td>
<td>-</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Data from learning portal</td>
<td>25%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>75%</td>
</tr>
</tbody>
</table>
Though the teachers varied in their uses, the educators valued Antle and considered that these resources were consistent with their beliefs about early literacies teaching/learning. They valued Antle for the support it provided for children’s learning in oral language, literacies, and culture in ways that were culturally appropriate and highly engaging for children. However, the teachers identified that they struggled to use Antle consistently and have not realized the full potential they saw in the resources due to challenges with time and issues with engaging parents and Elders. We next explore the ways the educators valued Antle and the barriers to implementation they identified.

Valuing Antle

The educators all identified that they believed Antle was valuable in supporting the students in their grade primary (Senior Kindergarten) classrooms. The educators collectively recognized the importance of oral language in English and Mi’kmaw for supporting children to be successful in learning to read and write and in their futures at school and in the community. Further, they identified connections between children’s oral language expression and identities as Mi’kmaw people and valued using playful, conversational approaches to support oral language in both languages. The educators viewed Antle as compatible with their existing classroom goals, practices, and playful teaching/learning approaches and identified the potential for the resources to support the children in learning about languages, literacies, and culture in ways that were culturally responsive and engaging.

Opportunities for Learning about Language, Literacies, and Culture with Antle

The teachers identified that Antle created learning opportunities for children to learn Mi’kmaw and English languages, literacies (oral language, reading, and writing), and culture in interconnected ways. One teacher identified that she believed that when the children were engaged in Antle activities, they were learning “about their culture, and the importance of their culture. They identify themselves as being Mi’kmaq, know they are unique and special, and the importance of language and family”. Another teacher explained that when the children are interacting with Antle, they “are learning culture, how to speak Mi’kmaw.” Still another teacher explained that the children know Antle is there to listen and to hear Mi’kmaw, so right away they are thinking about how to speak, what to say, how to answer, and they are using the Mi’kmaw perspective when they are using Antle.

The educators valued Antle for its potential to support oral language learning in Mi’kmaw and English. These uses of oral language were inseparable to expressing cultural identities while also supporting literacies learning in reading and writing. For the educators, the connection between language and identities within Antle was paramount to their value of it.

Culturally Appropriate and Responsive Activities

The educators recognized Antle as culturally appropriate and responsive. For example, one administrator identified that “Antle resources are the most culturally appropriate and responsive in our school” and another administrator explained that the Antle resources were preferred over other programs in place in their school that claimed to be culturally responsive but, in her view, were “not culturally connected”.

The teachers agreed that Antle was supportive, relatable, and helpful in explaining cultural activities and celebrations with which the students may have varied experiences and knowledges.
For example, one teacher explained that the book called *Nitap Day* [Friendship Day] was an entry point for discussing this celebration of friendship held each Fall. Following the reading of the story, the children (who all wore matching t-shirts to celebrate Nitap Day) dressed the Antle puppet to wear a Nitap shirt and created an imaginary kindness soup that was made of kind words.

The teachers were very positive about the content of the Antle resources, and one teacher commented, “it [Antle] is already alright, *tepatqtek kowey*”. However, the educators suggested that there was room for expanding *Antle* to better reflect the diversity of their students’ experiences in their particular communities. For example, several teachers mentioned that their students had varied experiences and didn’t fully understand some of the stories. Specifically, they identified that some students had not attended Powwow or Treaty Day celebrations and didn’t understand their significance. One teacher explained, “[the children] didn’t know that while you’re dancing, you’re praying, they didn't know the drum was the heart.” This teacher went on to suggest, “they [the publisher] need[s] to add those kinds of things for information for children to know, because right now… they think it’s a [fictional] story”. While the teachers considered more content could be added to *Antle*, they did not identify this as a barrier to use, but as a way to build upon the foundation of cultural responsiveness already embedded in the resource.

**Engaging for Children**

The educators recognized that the Antle character, the puppets, and books were highly engaging for their young students. An administrator identified that “the kids connect with Antle—they care about him”. The teachers agreed and explained that the children could relate to Antle, with one teacher explaining that, “they see themselves because Antle is young… they see that ‘oh Antle is this age, he speaks Mi’kmaw, he’s young, he’s trying, he’s nice in the books, he’s nice to his friends, has grandmother, grandfather, sisters, brothers, aunts, uncles’”. Another teacher explained that this relatability supported language learning as the children

try to speak to [Antle], they do their best even though they are not fluent and their parents are not fluent [speakers of Mi’kmaw language], they try… even if they have challenges in learning, they know Antle and they love him.

Another educator explained that taking care of Antle and holding him was an incentive for the children to speak Mi’kmaw. In some classrooms, the children’s love for Antle led to some teachers inviting the children to hold Antle during literacy assessments. In other classrooms, teachers described Antle as “a student in our class” and involved throughout the day in English Language Arts as well as other subject areas and in play. The teachers identified that this engagement supported children who had different experiences with the languages, as some children spoke only English at home, or spoke mostly Mi’kmaw at home.

**Barriers to Using Antle**

Though the educators valued Antle and considered that these resources were compatible with their existing beliefs and practices, they did not use all resources consistently as identified above. Teachers identified time as a key barrier to implementation within the classroom. Related to the barrier of time were teachers’ concerns with understanding ways they could implement *Antle* in connection with the other programs in use (e.g., published programs supporting English phonics), and barriers in engaging parents and Elders to use the resources.
Barrier of Time

The educators all recognized the time to implement Antle as being a barrier. The teachers identified that it took time to learn how to navigate the website, know what activities were possible, and how they aligned with curriculum outcomes. One teacher identified that “I don’t have much time to use Antle…because Language Arts is demanding and you only have so much time to prep”. Another teacher identified that due to the time constraints, she “depended on the materials that ‘are right there’ [and] I just used what I had in front of me”. Another teacher also identified that she “wished Antle came with more lessons” to make it easier “to incorporate him in.” The teachers identified that the time to learn what was available within Antle and how to use the resources was a barrier to use.

The teachers identified time as a barrier to completing Antle assessments. One teacher explained that “it took about 5-6 minutes depending on the day” to complete each assessment. Another teacher explained, “I am usually done assessments in two days because I can only do so many at a time and then I have to get the other students back on task”. Another teacher explained that she could complete the assessments when a substitute teacher came to teach the class so that she could complete the assessment without interruption. Other teachers recognized that having a substitute teacher teach the class was helpful to completing the assessments, but not always possible, saying “I can ask for a substitute teacher, but subs[titute teachers] are scarce these days.” Other teachers agreed and 66.6% of teachers identified that a lack of substitute teachers to support the completion of assessments was a barrier to using the resource.

Implementing the Resource Alongside Other Literacy Programs

The teachers identified that it was difficult to find the time to implement Antle as they had several published programs, kits, digital applications, and teaching resources available to support early literacy instruction. Some of these programs/resources could be used at the teachers’ discretion (including Antle), and the teachers explained that others were expected to be implemented as the school had committed to using the program for several years in exchange for access to books and other resources. One teacher described that she had a 60 minute literacy block and the first 40-50 minutes were directed by a published, scripted program. In addition to that program, she named an additional scripted phonics program that also needed to be completed within the day. Another teacher explained the challenge of implementing Antle with the other programs in place as “it’s [a challenge] finding the opportunity to bring them [Antle activities] in above other resources.” This teacher went on to explain that it was a challenge in “finding the time to connect it [Antle to other programs]. It was hard to distribute the time.” The teacher went on to suggest “maybe if they had the Antle books…connected to the [curriculum] outcomes…like these books would cover these outcomes, I would be able to integrate them into our daily lives more easily”. The teachers identified challenges of finding the time to implement Antle with other more prescribed programs already in place.

Barriers Engaging Parents and Elders

Teachers identified challenges in engaging parents and Elders within/through Antle. Teachers explained that it took a great deal of time to reach out to parents and explain what Antle is and how it could support their child’s literacy learning. Teachers identified that they attempted to reach out to parents through email, Facebook, and letters home inviting the parents to complete
the information in the portal and complete the literacy activities with varying success. Several teachers identified that the parents may have had challenging experiences with their own schooling which could result in having “guards up about school”. Another teacher explained, “There are a lot of factors why people are not going on the portals: because they are scared, or shy, or are scared they might do something wrong, there’s a lot!” Other barriers identified included a lack of access to iPads or consistent wifi in their communities. While we know from our own experiences in communities that many parents and Elders are regular users of technology and are active on social media, we wonder if the requirement of going to a different app to seek out the at-home learning activities presents an additional barrier for engaging parents and Elders. Teachers who were the most successful in engaging parents with the Antle activities held open house events like the birthday party and engaged parents in learning about the portal while they were in the school. In this way, building relationships with family could help mediate the multi-faceted issues of supporting parents in engaging with Antle. However, this too required an investment of time.

Teachers also identified barriers in engaging Elders in the Antle activities. Some teachers identified that the Elders might need support to navigate the technological interface as they might have less experience with technology. One teacher explained that she did not have time to schedule home visits with the Elders to support them in completing the survey. Another teacher identified that some Elders did not feel comfortable reading the questions in English and the teacher didn’t feel that some of the comments made about children would be confidential. The teachers who were most successful in engaging the Elders were those who already had Elders working in the school environment as Educational Assistants or teachers. One teacher identified these Elders as being their “go to” because they already knew the children. Where there was no Elder available in schools, teachers found it difficult to engage the Elders consistently.

All teachers identified time as a barrier to implementing Antle. The barrier of time reflected uses of Antle within a school day as there were many other resources and programs available as well as reaching out to families and Elders to support gathering information about oral language uses outside of school.

*Mawikinutimatimk: Coming together to learn together*

In this article, we share preliminary results from a program evaluation of Antle to explore educators’ descriptions of the potentials and uses of the resource, alongside their perceptions of the enablers and barriers to its uses. This program evaluation was rooted in *mawikinutimatimk* (Lunney Borden & Wagner, 2013), a Mi’kmaw term meaning coming together to learn together as university researchers, MK, and Sprig Learning united in recognition of the potential Antle holds for supporting oral language learning in Mi’kmaw and English in ways that reflect Mi’kmaw ways of knowing, being and doing, and consideration that the resource was not consistently used in classrooms. We build on the notion of *mawikinutimatimk* to discuss findings of the program evaluation in relation to the literature and offer recommendations to support MK in their work with Antle. Then, we expand on the notion of *mawikinutimatimk* to identify ways that our coming together to learn together may support other educators and researchers in uniting to identify and support culturally responsive language and literacies teaching.
Discussion

*Antle* is a unique resource in the ways that it invites connections between home (parents, grandparents), school (teachers), and community (Elders) through the assessment app and learning portal. These opportunities for connections affirm the literature that identifies that language revitalization is enriched through partnerships between the school, home, and community (Hinton & Hale, 2001). Gathering assessments about a child’s language uses in Mi’kmaq and English within the home, community, and school has the potential to provide educators with valuable information about a child’s cultural and linguistic *funds of knowledge* (Moll et al., 1992) and nurture *funds of identity* as family and community resources coalesce within the school environment (Esteban-Guitart & Moll, 2014). The goals of *Antle* and the ways the information is gathered is in stark contrast to many oral language assessments that privilege language uses of Euro-centric, middle class (Malec et al., 2017) people in urban settings (Eriks-Brophy, 2014; Peltier, 2011) and rely solely on educators or interventionists to gather information about children’s language uses (Peterson et al., 2021).

The uniqueness of the resource in assessing and supporting oral language learning across the domains of home, school, and community can also present challenges. Though the resource provides great potential to unite teachers, families, and Elders to support language learning (and this tenet is essential to promoting language revitalization (Hinton & Hale, 2001)), this does not happen automatically and the teachers report assuming this responsibility. The teachers reported challenges with reaching out to families given that parents may have had negative experiences with schooling, which may be due in part to the legacy of residential schools (Knockwood, 2015) and may have different proficiency levels in each language. Further, Elders and families may need support to use the digital application, and access to the internet may be inconsistent. The involvement of families and Elders is important as they may offer unique insights into a child’s language learning and its interconnections with identities (e.g., Inglis, 2004; NS, 2015).

*Antle* promotes culturally enabling language teaching. The teachers all valued *Antle* as a culturally responsive resource that resonated with their beliefs and practices of oral language learning. The teachers identified that the children wanted to speak to the character of Antle as “they care about him” and viewed Antle as “a child in the class”. The teachers envisioned the students as being able to move fluidly between both languages in ways that might be reminiscent of how the educators moved between both languages in their interviews during the program evaluation.

The educators understood languages as connected to identities. The educators recognized the importance of phonology but identified that speaking the Mi’kmaw language was more than just practicing language systems of semantics, syntactics and phonology (NICHD, 2005); through speaking the language, the children “[identified] themselves as being Mi’kmaq”. In this way, the educators recognized that as the children engaged with *Antle*, they expressed “the very essence of the Mi’kmaw ways of knowing and being” (NS, 2015, p.ii) echoing educator Melody Googoo’s statement that “The Mi’kmaw language is the essence of who we are as a nation, as a people” (NS, 2015, p. 1). The educators recognized the potential of Antle for supporting languages and identities (Inglis, 2004; NS, 2015) as significant and unique.

*Antle* was more than a standalone assessment or program in classrooms that regularly used *Antle*; this moose became a character in the children’s lives and learning inside and outside of school. Further, *Antle* promoted an expansive view of language where identities were valued while also assessing oral language components including phonics and letters. This opens spaces for
reconsidering how resources for teaching can feature into children’s lives in home and school locations and the ways that a resource can support identities as well as language skills.

All educators recognized that implementing Antle required time within the school day. Though the teachers valued Antle for the ways it honoured the interconnectedness between language and identities (Inglis, 2004; NS, 2015), they identified the time to complete the assessments and align the teaching activities with the curriculum as a barrier for using Antle. This finding is similar to other research studies of oral language assessments that recognize the time consuming nature of conducting oral language assessments one-on-one within a busy classroom environment (Heppner, 2014; Malec et al., 2017). This finding may take on special significance in consideration that the educators greatly valued Antle, and still were not able to implement it. Additionally, we recognize in teachers’ comments that those products that are readily available will be chosen first, and we note that the time to find, print, and prepare activities on the portal adds to the time challenge. While this finding is not novel, it reinforces the need for teachers to have supports to successfully implement meaningful, individualized assessments with young children.

Compounding the time to administer meaningful assessments in classrooms is finding the time to use Antle activities with so many resources available. The teachers reported challenges in implementing Antle activities given the other literacy programs already in place, with one teacher hinting at a perceived hierarchy of programs saying, “It’s [a challenge] finding the opportunity to bring them [Antle activities] in above another resource,” and perceived that some programs were mandated, and others (like Antle) were implemented at the teacher’s discretion. The programs that teachers identified as competing with Antle for instructional time are premised on an autonomous model of literacy learning (Street, 1984) that assumes that all learners will follow the same trajectory in their learning, whereas Antle is built on an ideological model that reflects the particularity of literacy learning (Street, 1984). The diverse models of literacy learning underpinning the programs may add a challenge for teachers in knowing how the programs are compatible (or not) with one another.

Recommendations

We offer the following recommendations to support teachers who are using Antle in designing responsive literacies pedagogies arising from this first phase of program evaluation.

1. We recommend that MK and/or members of the research team provide additional information to teachers about the ways Antle attends to the language systems (e.g., phonology, syntactics, semantics, etc.) and uses of Mi’kmaw and English languages, and how this may support language revitalization (Hinton & Hale, 2001), affirm identities (Inglis, 2004), and support language learning in both languages (Cummins, 2005). This recommendation is designed to increase teachers’ understanding of Antle and affirm their understandings of the resource gained in practice. It may also help educators identify overlaps between literacies programs they are using in their classrooms, which may help address the issue of time needed to implement Antle.

2. We recommend that teachers have opportunities to discuss the successful ways that they have used Antle in their classrooms and how it has supported children’s learning in Mi’kmaw and English and on their identities. This sharing of successes celebrates the knowledges teachers have and provides opening for other teachers to envision other
creative uses. The sharing of ideas offers a way of uniting educators so that they can support one another in implementation.

3. We recommend that MK clarifies the uses of different programs in schools (i.e., whether programs are mandated or optional). We further recommend that teachers have opportunities to discuss with other educators how they can schedule the different programs within the literacy teaching time. Further, since these programs are operating on different models of literacy learning, with some operating on ideological or autonomous models (Street, 1984), teachers should have opportunities to discuss the commensurability of the programs.

4. We recommend that kits of learning materials to support the Antle program be developed with MK teachers to ensure that portal activities are close at hand so that teachers might make better use of these materials in their daily planning. This collaborative building of kits would increase educators’ familiarity of the resource and its alignment with curriculum outcomes while also addressing time pressures associated with creating learning materials.

5. During the assessment phase, we recommend that support is provided to teachers (e.g., substitute teachers) so that they can complete the assessments. These completed assessments will provide teachers with opportunities to access the information about children’s cultural and linguistic funds of knowledge (Moll et al., 1992). Further, we recommend that an inventory of portal learning activities aligned with curricular learning outcomes is created and shared with teachers so that they might use these resources.

6. Given the importance of and uniqueness of including families and Elders in assessment, we recommend that school personnel (e.g., educational assistants, administrators) be provided to support families in completing the assessment data and learning how to access and use the portal activities where needed. Further, we recommend that events like the birthday party that invite families into the school are planned by the school team several times a year to facilitate home/school connections.

Though this program evaluation was specific to Antle and related to Nova Scotian contexts, there may be elements within this article that resonate with researchers, teachers, and community partners across Canada. We present this article as an invitation to other researchers and educators to:

- Recognize and celebrate the complexities of early language teaching and learning and support educators in negotiating these complexities.
- Evaluate the various literacy programs used in classrooms along with their theoretical underpinnings, considering ways these programs support (or don’t support) Indigenous learners.
- Rethink literacy assessment and instructional practices as opportunities to connect school, home, and community.

Our hope is that this article may be a catalyst for opening spaces for authentic, engaging literacies learning in early childhood classrooms as in the birthday party vignette. We believe that the strength of the Antle program and this review of it, lies in the collective way we have come together and learned together, and how this process will continue as the program continues to grow. Rooted
in Mi’kmaw ways of knowing, being, and doing, this collective approach allows all involved to collaboratively build programs that will revitalize Mi’kmaw language and culture.

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References


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Blaire Gould is the Executive Director of Mi’kmaw Kina’matnewey. She comes from the Mi’kmaq district of Unama’ki and is a proud L’nu’skw and speaker. She strives to advance the educational opportunities and rights for the Mi’kmaq people. Blaire has continued to pursue new and innovating ways to infuse language and culture into the 21st century.

Jarrett Laughlin is the Founder and CEO at Sprig Learning, where he co-designs socially innovative and community-based early learning programs with educational partners across North America. Prior to Sprig Learning, Jarrett worked at Canada’s national lifelong learning research organization, the Canadian Council on Learning, where he was responsible for developing holistic approaches to researching and reporting on Indigenous learning, as well as managing the implementation and dissemination of the country’s Composite Learning Index. Jarrett has also worked for the Ontario Ministry of Education and for the Assembly of First Nations Education Secretariat, conducting research and developing education policy and programs.

Ramona Morris is a Mi’kmaw Educator from Eskasoni First Nation. She graduated with a Master of Education in Administration and Policy in Indigenous Education from St. Francis Xavier University. Ramona, a fluent speaker, was fortunate to grow up in a community during a time when Mi’kmaw language was strong and used by all who surrounded her. One of Ramona’s Favorite projects was working with Mi’kmawey Debert Cultural Centre and The National Museum of American Indians as a language facilitator looking at archival notes associated with Mi’kmaw traditional items, returning to community to collect additional terms and stories about the traditional items. She gained an interest in community led first language research using language and story as a foundation to strengthen first voice, perspective and interpretation. Ramona is dedicated to working for her people building bridges one word, one story, at a time.