Learn Mi'gmaq Website Plan

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The intention of this project is to create a free-to-use website where individuals can learn Mi'gmaq with no previous exposure to the language. This plan will provide a broad outline of the structure of the website, as well as a closer look at what individual pages will look like and how they will perform. The contents of this plan are motivated by two major factors: what is best for language learners and what is least time-consuming for programmers/designers. Naturally, there are many unforeseeable problems that can arise when actually coding the website. This plan should serve as a loose guide and problems should be tackled so as to minimize difficulty for programmers while retaining similar functionality to that described below. This plan is organized into the following sections:

- 1. Site Navigation and Structure
- 2. Elements common to every page
- 3. Lesson Planning
- 4. Examples, dialogues and exercises.
- 5. Progress Tracking

1. Site Navigation and Structure

This section outlines how the website will be structured and how the user can navigate to various pages on the site. The navigation sidebar and nested subsections are visualized in figure 1. below.

(1.1) Navigating the Site

The primary way a user can navigate the site is through the navigation sidebar (depicted on the left side of fig 1. below). Every page on the site is accessible through the sidebar. The sidebar automatically extends into the page when a user moves their cursor to the left side of the browser and the side bar retracts when the user moves the cursor off of the sidebar. Ideally, extension and retraction of the sidebar will be a smooth animated slide. When the sidebar is extended, the page that the user is currently viewing will be greyed out to put visual focus on the sidebar. When the sidebar is hidden, the blue tab will remain visible on the left of the screen (see (2.4)) as a reminder of the fact that the sidebar is always available. Note also that the particular example/exercise, unit, lesson and chapter that the user is currently looking at will be bolded and colored blue in the sidebar. Also note that subsections are "nested" and will only appear in the sidebar upon clicking on their mother subsection. For example, clicking on a chapter would reveal the nested lessons of that chapter, clicking on a lesson would reveal the nested units of that lesson and so on (see 1.3).

Each page will also feature a "back" and "continue" button for easily navigating to the next and previous page of the site (see 2.3).

(1.2) "About this site" & "My Account" pages

The "About this site" page is the first page a user sees upon visiting the site. The page will briefly explain the philosophy behind lesson plans, offer words of encouragement for learners and describe how to use the site most effectively.

The "My Account" page is where a user may log in and out (though an account is not required to use the site), change their password and adjust settings such as the volume of

sound clips and font size. In addition, the user may track their progress using this page (see 5) for details.

(1.3) Chapters, Lessons and Units

The largest subsection type on the site is a "chapter". Chapters are divided thematically based on typical topics of conversation. Chapters become increasingly advanced as later chapters introduce more complex grammar.

The subsections directly beneath chapters are "lessons". There are typically five to seven lessons in a chapter - each of which focusses on the subtopic of a chapter topic, except for the final lesson of a chapter which reviews the material of the whole chapter.

The subsection under lessons are "units". A single unit is the smallest amount of material a user should study at one time. A unit either contains examples and exercises, a dialogue, or just exercises (see 3.2).

While it may appear that dividing content into units, lessons and chapters serves only to ease site navigation, this also serve a psychological purpose. Users, if confronted with a long list of exercises and examples, will become acutely aware of the large amount of work ahead of them and how slow their progress may be. By dividing the content into subsections, users can regularly feel a sense of accomplishment from having reach the end of a section (whether a mere unit, or a full chapter).

In addition, the first page of any given subsection may contain information on what the user is about to learn, what grammatical patterns to look out for or why what they are learning is useful. While oftentimes it is better to allow the user to discover the patterns on her own without direct guidance, explaining challenging and alien grammatical points (e.g. obviation or animacy) is crucial so as not to confuse the user.

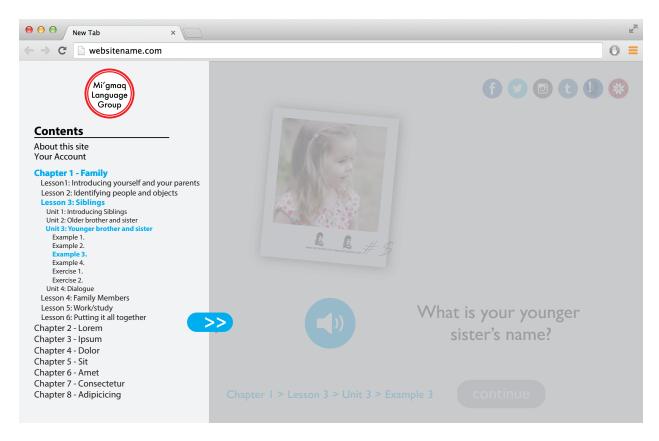


Figure 1. An example page with the navigation sidebar extended.

2. Elements common to every page

Before moving into how pages will vary depending on their content, this section will outline what is common to every page of the site. Figure 2. below shows a typical "example" type page which displays all of the features discussed in this section. All "linking" described below is intended to open a new tab or window, not to direct the user away from https://learnmigmaq.org.

(2.1) Logo

In the top left hand corner is the site logo. The placement of this logo is in keeping with many commonly used websites (i.e. YouTube, Facebook, Duolingo etc.). This logo is generic enough to be used for a variety of purposes such as business cards and email signatures. It is bold, simple and recognizable and thus fits with the general theme of the site. This logo will link to https://migmaq.org, the main page of the Mi'gmaq Research Group.

(2.2) External Links

In the top right are six images, each of which is a link to a particular Mi'gmaq resource. These logos are situated as they are so as to be unobtrusive and yet easily accessible. They are arranged in order of presumed familiarity to the user. The following are brief descriptions of the functions of each of these resources (from left to right):

- 1. Facebook https://www.facebook.com/groups/learnmigmag/.
 - for communication among learners and updates about resources.
- 2. Twitter https://twitter.com/learnmigmag.
 - auto-cued word/phrase of the day and updates about new posts on https://migmaq.org.
- 3. Instagram http://instagram.com/learnmigmaq.
 - · videos and photos which teach words/phrases.
- 4. Tumblr http://learnmigmag.tumblr.com/.
 - Mi'gmag news.
- 5. Quizlet http://quizlet.com/learnmigmag.
 - vocabulary learning resource.¹
- 6. Mi'gmaq Language Wiki http://wiki.migmaq.org/index.php?title=Main Page.
 - provides in depth information on particular areas of Mi'gmag grammar.

That the content of these links may not be obvious to a user is an unfortunate side-effect of not wanting to clutter the site with extra text. For this reason, there will be a separate "resources" page on the site (accessible through the side-bar) which will provide users with descriptions of how, why and when to use these resources.

¹ This link, which will appear on every page of the site, will lead to a general page where a user can choose which vocabulary items (s)he would like to learn. This is not to be confused with occasions on which the site will directly encourage users to explore a particular section on Quizlet at an appropriate time, providing a direct link to that section.

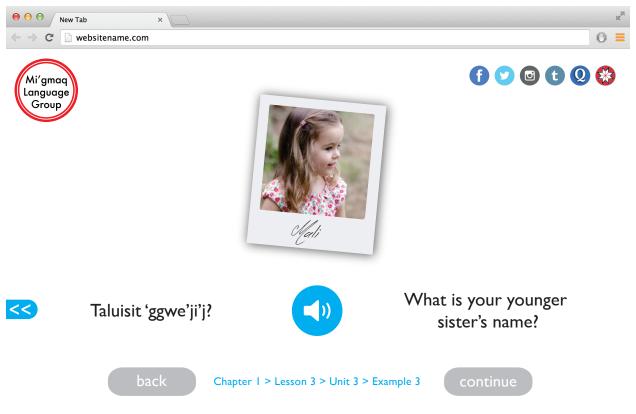


Figure 2. An "example" page.

(2.3) Moving Between Lessons

On the bottom center of the page is an indicator of what chapter, lesson, unit and example the user is on. On the bottom right is the "Continue" button which will move the user to the next page of the site (whether that be the next exercise or next unit/lesson/chapter if the user has reached the end of a particular subsection). On the bottom left is the "Back" button which moves the user to the previous page. On the first page of the site there will be no back button, on the last no continue button. Again, these elements are intended to be unobtrusive and intuitive, directing the focus of user to the real content of the page rather than a distracting icon.

(2.4) Navigation Sidebar

On the far left of the page is a tab, a simple reminder of the retracting navigation sidebar described in (1.1). The tab appears moves rightward with the sidebar when it is opened.

3. Lesson Planning

This section describes the structure of a given lesson, general principles behind making content for this site as well as where material should be drawn from.

(3.1) Source of Material

In general, this site replicates material one would learn in class at the Listuguj Education Directorate with Marie-Anne Metallic. Carol Little has taken extensive notes on Marie-Anne's classes and Conor Quinn has used these notes to formulate over one hundred coherent lesson

plans that will serve as the starting point for content creation. However, these lesson plans require reworking as they are not interactive (they contain no exercises).

(3.2) Structure of a Lesson

A lesson will typically contain five units. The first three units are similar in structure, these are "standard units". The fourth unit is a dialogue unit and the fifth is an exercise unit. Section 4 details how examples, exercises and dialogues look and work, this section merely describes how they fit together.

Standard units contain four examples and two exercises, below is an outline for the content of one standard unit. This unit teaches some new vocabulary and how verbs alternate depending on whether the subject is 1st or 2nd person. Note, however, that this alternation is not explicitly stated but should recognized by users and tested in the exercises portion. Example pages consist of Mi'gmaq written text, recorded sound and an English text translation. There are a variety of types of exercise but each requires user input (whether written or multiple choice). Standard units are designed to teach a user an easily digestible amount of new information while reinforcing old. As exercises require the user to produce forms, rather than passively absorb, the user is more likely to commit the new information to memory. In an ideal world, exercises would allow speech input from the user because the overarching aim of this site is to teach users to speak Mi'gmaq rather than merely read or write. Unfortunately, developing reliable enough speech recognition software for Mi'gmaq is an unfeasible goal. Below is an example standard unit with four examples and two exercises.

Example 1. Taluisin? - What's your name?

Example 2. Teluisi Joseph Noel. - My name is Joseph Noel.

Example 3. Tami tett tleiawin? - Where are you from?

Example 4. Listuguig tleiawi. - I am from Listugui.

Exercise 1. Taluisin? [Teluisi X] (answer the question, allow for anything in place of X)

Exercise 2. Tami tett tleiawin? [Tleiawi X] (answer the question, allow for anything in place of X)

Some lessons will focus more heavily on vocabulary rather than grammar. For some of these lessons, in lieu of example units, the website will link to the relevant section of Quizlet. Quizlet.com is a site where individuals can upload any sort of material on any subject and allows users to test themselves on the material. There are already 27 vocabulary sets on *quizlet.com/learnmigmaq*. Quizlet automatically generates quizzes (with a variety of question types) and games that the user can play to learn material. As such, it would save a great deal of effort and and be more effective for users to simply provide a link to the relevant vocabulary set when vocabulary is the focus of a lesson. (The reasoning behind not relying entirely on Quizlet for teaching Mi'gmaq in the first place is that Quizlet does not allow for structured lessons and is not ideal for teaching grammar.)

A dialogue unit consists of a sound file and transcript of a natural conversation between two speakers which heavily uses the vocabulary and grammar taught in the lesson up to that point. Dialogues allow users to hear natural context, intonation and pronunciation for the forms and vocabulary they are learning. They also are an excellent place to introduce small words like conjunctions and discourse particles. More than this, they should be funny to make the learning process more enjoyable.

An exercise unit consists only of exercises (around five). These exercises should be more challenging than those contained in a standard unit and should cover everything learnt in the lesson. Again, producing forms is an essential part of committing them to memory so this is

the unit in which a user ensures that they have mastered the content of the lesson before moving onto the next.

(3.3) General Principles

The following are some general philosophies behind curriculum development in no particular order. This is by no means a complete list, nor should these rules necessarily be followed to the letter - common sense may trump any of these in a given instance. Many of these "principles" come from conversation with Conor Quinn.

- 1. Users should almost never be given tables of endings.
 - Large tables of information rarely inform and often scare and discourage learners. Users should be taught new information slowly and naturally. Only after teaching a student a set of grammatical forms might it be useful to show them a table, in part for their future reference, in part as a confidence booster to show the user how much they have accomplished.
- 2. Technical terms should be avoided
 - Technical terms are useful for linguists but also scare and discourage learners. In almost all cases, technical words and phrases (e.g. obviation, VAI, evidentiality, animacy) can and should be explained in clear, simple terms with no reference to them. For specific ways to handle this issue see Quinn's Algonquian grammar without all the grammar: making Algonquian language patterns accessible to all.
- 3. No written Mi'gmaq should appear without sound recordings
 - As the aim of the site is to teach users how to speak the language, hearing how every word sounds is essential to ear-training. This allows users to become more comfortable with long Mi'gmag words which are often more daunting on paper than when heard.
- 4. Avoid vocabulary lists
 - Once again, this rule is so that learners will not be discouraged. If a user were to see a
 long list of animal names, for example, it is unlikely that they will remember more than a
 few. Instead, only teach them a few at a time and direct their efforts to using these words in
 context.
- 5. All lessons should be directed toward real conversation
 - Lessons should focus on teaching material that is likely to come up in real life situations, particularly material that is likely to arise in conversation with existing Mi'gmaq speakers. In this vein, obscure, rarely used forms and unusual topics should be largely ignored until a user is confident with the basics.
- 6. Lessons should be fun
 - Learning a language can be tedious. Examples and exercises should aim to be fun and exciting. This can be achieved by making the content of the examples interesting and ensuring that exercises are neither too challenging (discouraging) or too easy (boring).
- 7. Avoid use of English
 - This point is more contentious than others as some users may learn better when they fully
 understand what they are about to be taught and read summaries of what they have
 already learned. Certainly, some complex grammatical points with no analogue in English
 need to be explained. However, in general, English text pulls users out of any sense of
 immersion they might feel on the site and serves as a crutch.
- 8. Pronunciation cannot be taught outright
 - Pronunciation and prosody develop over time as a learner becomes more exposed to a language. For this reason, correct pronunciation should not be taught from the beginning and expected to be mastered, but should be constantly reinforced and reminded.

- 9. Exercises should require thought, not just memorization
 - An exercise should not ask a user to reproduce or recognize a form that they have already seen and heard before. Rather, it should require that the user remembers necessary vocabulary and recognizes the grammatical pattern taught in the unit. For example, if a user has seen the forms *gmijgamij* ("your grandfather") and *nugumij* ("my grandmother") they should be asked to produce a form such as *nmijgamij* "my grandfather" requiring them to remember vocabulary and recognize a grammatical alternation.

4. Examples, Dialogues and Exercises.

The majority of pages on the site are examples, dialogues and exercises. This section describes the look and feel of all three as well as the potential variety of exercises.

(4.1) Examples and Dialogues

As can be seen in figure 2. above, an example page consists of Mi'gmaq text on the left, an English translation on the right and a sound button in the centre that, when clicked, plays a sound file of the Mi'gmaq phrase recorded by a native speaker. Recordings should be made by a number of native speakers so that the user can hear what constitutes appropriate variation in pronunciation (and so that a single speaker need not make thousands of recordings alone). Dialogues will be presented in much the same way, though appropriately arranged to make room for the greater amount of text.

Also note the image in the centre of figure 2. In this particular example, the image serves no purpose other than to make the screen more visually stimulating. However, some examples may not require an English translation and may only require an image as a prompt - so long as the user is already familiar with the item of vocabulary represented by the image. (This would also be appropriate for single vocabulary items, though Quizlet is a superior tool - see (3.2)). That said, it may be that using images on the site is more effort than it is worth. Finding high resolution, relevant images in the creative commons and then resizing them is extremely time consuming. Alternately, stock image sites would cut down on this time significantly but tend to cost upwards of \$200 per month.

(4.2) Exercises

This section outlines five of the different possible exercise types. Section 5 will go into detail on progress tracking though this need not be implemented for the site to be fully functional. Until it is, a correct answer to an exercise will give the user positive feedback and prompt the user to continue to the next page. A wrong answer will encourage the user to try again and reset the page. However, this system will not prevent users from moving to any page on the site as they wish.

1. Answer the question

• The prompt for this question type will be a question in Mi'gmaq (either recorded and written or just recorded) and the user will be required to enter an appropriate answer.

2. Translate

• The user is presented with a phrase or sentence in Mi'gmaq (either recorded and written or just recorded) or in English (written) and the user is required to translate into English or Mi'gmaq. Figure 3. is an example of a translation question.

3. Fill in the blank

• The user is presented with a Mi'gmaq phrase where either a word or ending is missing and are required to fill it in. Often, it is likely that an English translation of the intended phrase will be required to complete the exercise. Sometimes, however, there will be enough

information within the Mi'gmaq sentence (or as indicated by an image) such that the user will be able to correctly answer the question without an English translation.

4. Multiple Choice

 Multiple choice questions could come in many forms. Users could pick between the best translation of an English sentence, the best translation of a Mi'gmaq sentence, the most appropriate ending of a verb, the image that best represents the meaning of a sentence etc.

5. Correct the sentence

 Here, a user is given a flawed Mi'gmaq sentence and asked to write out a corrected version of it.

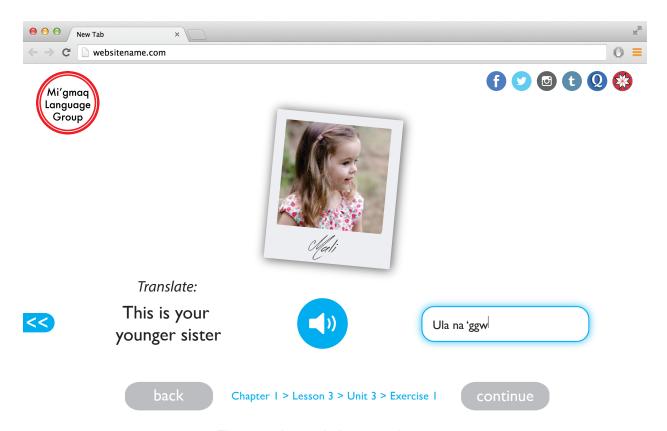


Figure 3. A translation exercise page

5. Progress Tracking

Up to this point, this plan has given an outline for a fully functioning website. The functionality described above should be implemented before beginning on any progress tracking features. That said, progress tracking is a useful tool that will help users to learn faster.

The simplest form of progress tracking is simply for the site to remember where the user last left off. This can be done by automatically directing the user to their most recent page when entering the website or by visually highlighting (in the sidebar) all the uncompleted sections.

Another form would be to allow the user to view statistical information about their progress on their "My Account" page. Information like percentage of questions answered correctly or percentage of overall course completed.

The most potentially beneficial system is progress tracking within lessons. Say a user is given three "lives", like in a video game (these could be visualized with hearts), at the beginning of each lesson. Every incorrect answer would cause the user to lose a life until the user has lost all their lives and are forced to restart the lesson. Upon completing the lesson, however, their lives refresh. This has the major psychological advantage of treating learning Mi'gmaq like a game, making it fun and addictive. It also ensures that users will not move on before mastering their material as this system would prevent users from freely moving around the website. However, users who already know some Mi'gmaq before using the site could take a placement test of sorts, so that they need not trudge through material they are all too familiar with before moving onto more challenging content. Naturally, users would be permitted to review and redo successfully completed lessons.