How to write a lesson

Here is a guide for how to add a new lesson to the Learn Mi'gmaq website.

Let's pretend you have a lesson already planned, called "Numbers". You want to teach the Mi'gmaq words for numbers 1-10. You know the Mi'gmaq words, and you have sound recordings. You even have pictures showing the different numbers of fingers.

Start

All lessons for the website are in master.xml, so you should start by opening this file.

You'll need a program to edit files in. Your computer should have one for free: Notepad on Windows or TextEdit on Mac.

You can also download a program online for free that will do some formatting to make it easier for you, for instance, it may have something like spell-check, or autocomplete. One free option that you can download online is Sublime. It'll give you messages about buying a license, but you can use it for free as long as you like.

Location

Next, decide where the lesson should fit. It needs to be nested under a unit, which in turn should be nested under a section.

Once you've figured out which lesson you want your lesson to follow, type an opening and closing tag for it:

(I'll show what you're adding at each step in green.)

Name

The first thing in each lesson should be a title.

There's no need to number the lesson--- that'll happen automatically.

(It makes code easier to read if you indent each nested item. For instance, the title is inside the lesson, so I have indented it.)

Intro

Next, you might want to write a note to introduce the lesson. Any text you want to show to explain the content should go in a note at the top of the lesson.

Each note will display as a separate paragraph, so if you have a lot of sentences, consider splitting them into separate notes.

Vocab Section

If you want to teach new vocabulary words, you'll want to create a vocab section. A vocab section is a set of lines.

Each line has a Mi'gmaq line, an English line, a sound file, and, eventually, an image.

```
<lesson>
    <title>Numbers</title>
    <note>Let's learn how to count.</note>
    <vocab>
        line>
        </line>
    </vocab>
</lesson>
```

Dialog

A dialog is an ordered series of lines that forms a conversation. It is structured like a vocab, but it is displayed differently on the website, so you should still think about whether you want a dialog or a vocab.

If the lines go together as an exchange between different speakers, then it should be a dialog. If the lines are just individual words and their order doesn't matter, then it should be a vocab.

Line

Each line represents a single sentence, word, or phrase in Mi'gmaq. A line should have a Mi'gmaq text element, an English text element, a sound file element, and an image.

However, it's ok if the image is blank for now. You can just **comment** it out if that's the case.

You can comment out XML code by putting it inside of "<!--" and "-->". A comment is a signal to the computer to ignore whatever you put inside of the open and close symbols.

The img below is commented out.

```
<migmaq></migmaq></english></english></soundfile></soundfile><!--<img></img>--></line>
```

Mi'gmaq

A line of Mi'gmaq text in a dialog or vocab should be marked with a <migmaq> tag.

```
<migmaq>ta'pu</migmaq></line>
```

English

The English translation of the Mi'gmaq should be placed in a <english> element.

```
<migmaq>ta'pu</migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq></migmaq>
```

Audio

The audio recording of the Mi'gmaq should go in a <soundfile> element.

We only use MP3 recordings on the website. If the audio recording that you have is some other format, like WAV, you will need to convert it.

Because all the audio files are MP3s, you don't need to put the .mp3 file ending on the name. The computer program will assume it is an MP3 file. For instance, let's say the recording we have for 'ta'pu' is named Tapu.mp3. We only have to type Tapu as the name.

```
<migmaq>ta'pu</migmaq>
<english>two</english>
<soundfile>Tapu</soundfile>
</line>
```

<u>Image</u>

If you have an image to go with the line, it should go in an element.

We have several different types of img files used on the site: GIF, JPEG, PNG, etc. So you *will* need to put the file type ending on the file name of an image.

```
<migmaq>ta'pu</migmaq>
<english>two</english>
<soundfile>Tapu</soundfile>
<img>two.png</img>
</line>
```

Activity

Most lessons will be focused on teaching new material, and will consist of dialogs and vocabs. However, you can also write a lesson that is an activity to review vocabulary.

This can be a matching game of any sort. You can match images with audio files, Mi'gmaq with English, or even multiple items, like Mi'gmaq and audio files with images.

All you need is to make a list of pairs and some intro text to introduce the activity.

```
<lesson> <activity>
```

List

For the activity, you will need a list of pairs. Each pair will have an item to put in the first column of the game and an item to put in the second column of the game--- its match.

Each <first> and <second> can have any number of items inside, although in practice, you probably won't put more than one or two things in each.

For instance, if we wanted to match audio and Mi'gmaq in one column with images in the other column, we might write:

```
t>
      <item>
            <first>
                  <migmaq>newt</migmaq>
                  <soundfile>Newt</soundfile>
            </first>
            <second>
                  <img>one.png</img>
            </second>
      </item>
      <item>
            <first>
                  <migmaq>ta'pu</migmaq>
                  <soundfile>Tapu</soundfile>
            </first>
            <second>
                  <img>two.png</img>
            </second>
      </item>
</list>
```

This would be a boring game, because it only has two items to match.

Design notes

If you want to make notes for other developers, you can write in a <designnote>. This is a good way to leave notes about what you're planning to do later.

You can write a design note anywhere in the document, as long as it's inside the <lessonset> tags.

<designnote>Need to add numbers three through ten.</designnote>

Unit

You might eventually want to create a new unit for your lessons. All a unit needs is a title, an introduction, and a set of lessons.

Units are usually arranged around a theme. Your introduction notes should explain what the unit covers, and the title should be more useful than the fake one I put below:

```
<unit>
    <title>Exciting new lessons</title>
    <note>This unit will teach you everything I know.</note>
    <lesson>
    </lesson>
</unit>
```

Section

You might even want to create a new section. A section is a set of units at a certain skill level.

A section should have a title, an introduction, and set of units.