



CHECK BEFORE YOU TECH!

A GUIDE FOR CHOOSING LANGUAGE APPS & SOFTWARE AS PART OF YOUR PLAN TO RECLAIM, REVITALIZE AND MAINTAIN YOUR INDIGENOUS LANGUAGE

WHAT DO WE NEED TO KNOW ABOUT LANGUAGE AND TECHNOLOGY?

Language apps, online dictionaries and similar technology all look like they could be helpful for language work. The First Peoples' Cultural Council has learned from our successes and mistakes with technology, and we want to share our experiences and advice with you.

Before you invest in a new language app or software, there are a few things to consider. We can't tell you which technology is right for you – that is up to you and your community. But we can help you to ask the right questions before making your decision. Here are some questions to think about so you can “Check Before You Tech!”



WHO IS THIS CHECKLIST FOR?

This checklist is for language team leaders and coordinators in Indigenous communities who are considering language apps or software to help with language revitalization. **There are a lot of technical terms in this document.** Language technology providers will use these technical terms so it's important that you are familiar with them so that you can ask the right questions. It is helpful to have someone on your team who is comfortable with this terminology to make sure the best decisions can be made.

If you would like more detailed information to inform your conversations with technology providers, please contact us at info@fpcc.ca.

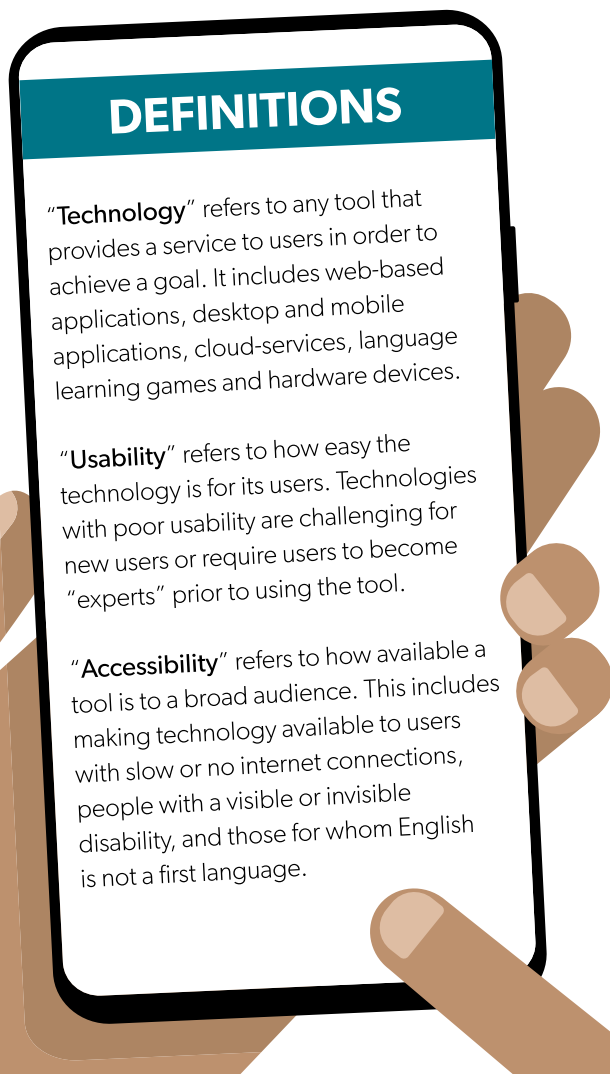
If you are assisting a community with the selection of tech tools, we strongly recommend that you involve the community at all stages of the project and ensure that all decisions are made by the appropriate community language teams.

Technology is just a *tool* to support the work of learning and teaching.

HOW WILL THE TECHNOLOGY HELP?

Technology is just a tool to support the work of learning and teaching. A language app or online dictionary won't revitalize your language – that can only be done by people who speak the language to each other daily.

Choose a technology based on whether it will support your goals for your language. For example, if your goal is to have beginner learners learn to speak your language, an online dictionary is not going to help. On the other hand, if your goal is to provide resources for fluent teachers and advanced learners, an online dictionary might be useful.



✓ CHECK: NEED

- What is our goal? How will this technology meet our goal?
- Have we considered other solutions that don't use technology?
- Who will use the technology?
- What kind of phones, tablets or computers do people need to use the technology? Do they have those devices?
- Does the technology work on mobile devices like phones or tablets?
- Do people need Wi-Fi to use the technology? (In other words, does the data need to be cacheable so that people can use it offline?)
- Will our language's writing system work with the technology?
- How will this technology affect our community and the people who use it? Make a list of possible good and bad effects.

WHO IS PROVIDING THE TECHNOLOGY?

Language tech tools are usually built and provided by an outside company or developer (the "provider"). Here are some important questions to make sure you find the right provider for your needs.

✓ CHECK: PROVIDER

- Do we get to meet with the provider and talk to them?
- Do we know who is using this technology already, and what they are doing with it?
- Does the provider and technology meet all the needs we've defined, especially what is most important to us?
- Do we know the provider's long term plan for this technology?
- Will the provider charge us fees if we want to switch to a different provider? (You can ask about "vendor lock-in".)
- Do we get a demo to see it in action?
- Have we received good answers to our questions from the provider?
- What will it cost initially and over time?
- Do we have experts in-house, or can we easily hire people who will be able to work with this technology?



For B.C. First Nations' communities, First Peoples' Cultural Council offers free access to FirstVoices, an internationally-recognized language archiving and teaching platform that allows First Nations community teams to document their languages for future generations. FirstVoices includes online multimedia dictionaries and mobile apps. First Peoples' Cultural Council is committed to maintaining the ongoing security and functionality of this platform, while ensuring that First Nations communities retain full control of and access to their own data.

Check it out at:
www.firstvoices.com

ARE WE READY TO MAKE A LONG-TERM COMMITMENT?

Every technology requires ongoing maintenance and will eventually become out of date. Make sure that your community and the provider have a long-term plan to support the product or service for as long as you need it.

✓ CHECK: COMMITMENT

- Are the tools, people, and resources to run this technology available for as long as we will use it?
- How new is the company and what is their commitment to maintaining the technology?
- Are there hidden costs for the ongoing expenses of development and maintenance? For example, is there an annual licensing fee?
- How often will changes to the technology be needed?
- How will the technology be affected by updates to operating systems and mobile device security?



DATA OWNERSHIP, CONTROL AND ACCESSIBILITY

Data ownership is very important for a technology project. Carefully examine how to protect and maintain control over your data and its use. Even if your community retains copyright and ownership of your data, if the way the data is stored makes it difficult to access and use, your ownership is less meaningful. Consider Ownership, Control, Access, and Possession or OCAP® for short ¹. (See the First Nations Information Governance Centre www.FNIGC.ca/OCAP or Schnarch, 2004.)

✓ CHECK: OWNERSHIP

- Does our community retain full ownership of all our data?
- Is the provider asking for or claiming ownership of any of our data?

✓ CHECK: CONTROL

- Does our community have the power to make all decisions on the use and management of the data? Does the technology allow us the control over our data that we would like?
- What skills, tools and people do we need to transfer, control and manage our data in a secure and reliable way? What kind of support is the provider offering?

¹ OCAP® is a registered trademark of the First Nations Information Governance Centre (FNIGC). See: www.FNIGC.ca/OCAP

How often will changes to the technology be needed?



✓ CHECK: ACCESS & POSSESSION

- Who can access the data: From our community? From the public? From the provider?
- Where is the data going to be stored and how is it going to be used? Working with Canadian companies and having data in Canada is generally a recommended option. This link from the Office of the Information & Privacy Commissioner of BC may be helpful: <https://www.oipc.bc.ca/news/in-the-clouds-and-beyond-navigating-access-and-storage-outside-of-canada/>
- Has the provider given information on how they will use or change the data? How will they ask for permission?
- Is the data in a format we can use? If the tech provider takes our data to create a tool, will they return it to us in an accessible format?
- How will we get our data if we decide to switch to a different technology and/or provider later?

SECURITY AND PRIVACY

There are two types of security to consider for any technology you choose. One is the security of the software itself, such as requiring secure logins. The other is the security practices of the people who use the software, such as choosing passwords that can't be easily guessed. It is important to keep systems up-to-date and have staff and users trained on security best practices.

✓ CHECK: SECURITY & PRIVACY

- What do we know and what do we need to learn about security and privacy best practices?
- Who can we turn to if our data or access is compromised?
- How "security-minded" is our provider or technology?
- What kind of security is built into the technology and how often is it updated?

DISASTER RECOVERY PLANNING

A disaster recovery plan deals with how to recover data after a disastrous event such as fire, flooding, cyber attacks or sabotage. Recovery plans help you to be more prepared if a disaster happens. How will you work on the technology after the disaster? How will you help the people who are using the technology for their language work if a disaster happens?

✓ CHECK: RECOVERY

- If we provide a service, will we have a plan for when that service is unavailable?
- If we lose our data or access to our data, what will the impact be?
- If a natural disaster were to occur, how would our data be impacted?
- Do we have back-ups of our data? How often do back-ups occur and where are back-ups stored?
- Who is the person in our organization (or outside of it) who can be contacted in case of a problem?
- What commitments will our technology providers make to support us?

How much do we know about security and privacy best practices?



USABILITY AND MAINTENANCE

The technology tool will only help your language efforts if people can use it and if it doesn't break or become outdated over time. Think about what might keep people from using the app or software, such as slow internet connections or not displaying the font correctly. Also think about ongoing maintenance for the tool to make sure it stays up-to-date and functional.

Having a maintenance plan in place ensures that technology stays relevant and usable.

✓ CHECK: *USABILITY*

- What might keep people from using the technology? (e.g. slow connections, older browsers, and tech savviness of users?)
- What can we learn from other technology tools people find easy to use, or have a hard time using?
- What is our plan for maintaining the technology over time?
- Do we have the knowledge and people to do maintenance in-house?
- What commitments will our technology provider make to support us?

WE ARE HERE TO HELP!

If you have questions about language technologies contact us at info@fpcc.ca



REFERENCES

Brand, P., Nevin, D., & Yona, D. (2019). *FPCC tech policy: Adoption/partnership guidelines and principles*. Ms., First Peoples' Cultural Council.

Schnarch, Brian. (2004). Ownership, control, access, and possession (OCAP) or self-determination applied to research. A critical analysis of contemporary First Nations research and some options for First Nations communities. *Journal of Aboriginal Health*, (1)1, 80-95.



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