TECHNOLOGY-ENHANCED LANGUAGE REVITALIZATION

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ACKNOWLEDGEMENTS

PREFACE

This is the second edition of our TELR training manual. The changes are primarily seen in the updating of specific technology and the addition of a tutorial on Publisher. These materials are designed for the true computer beginner who is also an indigenous language practitioner, teacher, student or advocate. In recent years, the plight of languages indigenous to the Americas has been repeatedly brought to light (Krauss, 1992, Hinton and Hale 2001). The startling facts, which all point to language loss on a grand scale, call for urgent efforts to document, preserve, teach and generally revitalize these languages. Broad based and local efforts are needed for this task. These include community commitments to expand indigenous language education, increased advocacy for community languages, integrating the work of dedicated elders, teachers, and students of these languages and a careful examination of how technology can assist in these efforts.

Digital technologies are quickly becoming an integral part of our every day world. Harnessing this technology can make it a viable tool for language learning. This training guide offers to help beginners create technology-enhanced language learning materials in support of indigenous language revitalization. It aims to acquaint them with basic computer technologies, which can be used towards language teaching and language documentation. Because this project has been supported by the Bill and Melinda Gates Foundation and its "Native American Access to Technology" program, these materials are designed to be consistent with the computers and most of the software currently used in the tribal libraries throughout the Southwest.

Part I of this guide presents a brief history on the relationship between indigenous languages and technology. Insights are provided as to how to acquire and use native language data as source material for instructional media. Part II reviews the basic parts of a computer and their functions. Part III is focused on those computer programs, which will allow for the creation of the most basic types of interactive language lessons. The users of these materials will need access to the Internet, Microsoft WORD 2003, MaxAuthor, Power Point 2003, Microsoft Publisher 2003, and Adobe Photoshop 7 to correctly apply the activities included here. Each discussion of a new program includes an explanation of what the program capabilities are in terms of indigenous language support, a graphic description of how to proceed with language-specific components offered within the program and exercises throughout to assist in training. Part IV discusses new directions in technology and additional resources.

Advocacy is a beginning point for all who venture into the world of endangered languages. To that end, these materials also contain stories and quotations aimed at supporting and enlightening those who function as language advocates for their own or another's endangered language.

These materials are very focused and were tested in a one-month long course at the American Indian Language Development Institute in Tucson, Arizona, summers of 2003-2005. We hope these materials are helpful and encouraging to beginning students. Our goal is to assist in the maintenance, documentation and revitalization of Indigenous languages. We see technology as a promising way to bring historically rich heritage languages into present, practical use.

PART I: THE PLACE OF TECHNOLOGY IN INDIGENOUS LANGUAGE REVITALIZATION

The world's Indigenous languages are immensely rich and diverse. Unfortunately, in the Americas as elsewhere, many of these languages are endangered and are disappearing at a rapid rate. Why is this happening? How do we save a dying language? The answers to these questions are as numerous as there are languages. Nevertheless, the challenge to preserve and revitalize our languages bears an enormous burden in the face of change. In this section, we look at the facts about Indigenous language endangerment. We also explore what it takes to be a language advocate for your language and discuss the place of technology in Indigenous language revitalization.

THE FACTS ON INDIGENOUS LANGUAGE ENDANGERMENT

"Of about 210 Indigenous languages still extant in the USA and Canada, 34 are spoken by speakers of all generations, 35 are spoken by the parental generation and up, 84 are spoken by the grandparental generation and up, and 57 are spoken by only a few aged speakers." (Michael Krauss 1992).

Current estimates predict that the 50 or more languages spoken by only a few elders over 70 will be extinct by the year 2010. By the year 2060, of those languages spoken by the parental generation, all but 20 would be extinct (Krauss 1998).

Those are the hard realities – and they are appalling and sad. We should be aware of these facts and not forget that reversing language shift calls for urgency. However, only focusing on the negative aspects of the problem tends to blot out the many positive things that are happening. There are success stories; there is hope!

The most successful are the languages, which stand as large state-recognized languages like Maori in New Zealand and Hawaiian. Smaller groups like the Mikasuki (Florida), Choctaw (Mississippi), some Lakota-Dakota communities have made good progress. Also, a number of Arizona and New Mexico Indigenous languages, namely Navajo, Western Apache, Tohono O'odham, Havasupai, Hualapai, Jemez, Eastern Keres, Northern Tiwa and a few others, can all speak to successes in preservation and revitalization. (Krauss 1998:14)

Success is determined a number of ways, mostly judged by those languages still being taught to children. Languages that are no longer taught to children are considered to be 'moribund', or dying. Certainly strong immersion programs, which promote real

fluency and generate a good number of young speakers are the hope of every endangered language community. But there are other measures of success as well.

Every time community members support a language program where classes are formed, lessons are generated, children are included, is a success. Even smaller successes matter – a new word learned today, a new student joining in, more of the language documented and recorded – it ALL matters! This is important to remember. Sometimes it is easy to get discouraged when the bigger picture and ultimate goals of a community plan seem distant and hard to reach. Never forget that every step toward that ultimate goal of revitalization counts!

Here are a few **SUCCESS STORIES.**

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        Love of Creek language inspires teacher to share
             By KEITH DINWIDDIE / The Norman Transcript


    NORMAN, Okla. (AP) -- In the American Indian language of Creek,
the  word  'mvhayv'  (pronounced  mu-high-ya)  means  teacher.  On  the
University  of  Oklahoma  campus,  Margaret  Mauldin  is  much  more  than
that.
    Mauldin, affectionately known as "Mvhayv" to her students at OU,
is  one  of  the  world's  foremost  authorities  on  the  Creek  language.  In
the   fall   of   1995,   Mauldin   became   OU's   first   Creek   language
instructor.  In  her  first  semester  as  a  university-level  Creek
instructor,  Mauldin  said  she  had  only  limited  homemade  materials  to
use.
    During  her  years  on  the  road,  Mauldin  said  she  found  herself
missing  the  Creek  language.  Once  she  returned  home  to  Okemah,  she
discovered fewer and fewer people were speaking Creek. "It struck me
that  I  wasn't  hearing  the  language  as  frequently  as  I  used  to,"
Mauldin  said.  "I  kept  wondering  why  'they'  weren't  doing  anything
about it, and then I thought why aren't I doing anything about it. I
decided  then  that  I  could  make  a  difference,  and  I  would  make  a
difference."

http://www.okmulgeetimes.com/display/inn_news/709.txt
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And, you can make a difference too!   Look at the next story.

In Her Own Tongue
by Gayle Goddard-Taylor

The dream started more than a decade ago. Cape Cod, Mass., resident Jessie Little Doe Fermino saw faces that seemed familiar, faces that looked like they belonged to her own tribe, the Mashpee Indians. "One day as I was driving to Woods Hole, I saw a sign for "Sippewisset" she recalls. "That's when I realized the words I was hearing had to be Wampanoag. Her vision began to take the form of a question: Would today's tribal members welcome back their native language, a tongue that had languished for more than 150 years?

She posed the question to the two area Wampanoag tribes, the Mashpee of Cape Cod and the Aquinnah of Martha's Vineyard, not convinced that she would get the unanimous support she was seeking. Amazingly, not a single tribe member was opposed. Some felt the vision hinted of an ancient prophecy that predicted the tribes would abandon their language but it would later return to them.

Undeterred, she applied for a one-year fellowship at the Massachusetts Institute of Technology to study with world-renowned linguist, the late Kenneth Hale. It was a productive partnership that would blossom into friendship. "He was my professor, my mentor, and my best friend," she says.

Today, Fermino has developed a language curriculum for her students, who range in age from 12 to 78. Some even come to class with infants in tow. Her dictionary-in-progress has grown to 6,800 words. Two of her advanced students have begun teaching, freeing her up for research. And on a personal level, Fermino converses with her children in Wampanoag, although, she quips, "they keep asking how to tell me to shut up."

http://www.americanprofile.com/issues/20040425/20040425_3859.asp

The above two stories speak to the work of internal advocates; the following story is about the contribution of an external advocate and linguist.

What is your story? Ask yourself how you fit into the efforts to revitalize the language you care about. There is work enough for everyone, but there isn't always much time. Remember that even small successes count – do something NOW!

ON BEING AN INDIGENOUS LANGUAGE ADVOCATE

Language advocates transform the world by being proactive, by becoming involved, and by taking action. The role of the language advocate should never be underestimated and is the beginning point for all those who are engaged in Indigenous language revitalization. You are a language advocate if you have an interest in preserving and revitalizing an endangered language and are willing to talk about it or act on it. Being an advocate does not require specialized training but it does require commitment. The language advocate is committed to speaking up for the state and status of the language at every available opportunity—public or private. This means everything from talking to your family about the importance of revitalization to speaking to a public forum like a group of elders, a tribal council, the local school board, or a

professional conference. It can also mean participating in classes, planning community meetings and doing the real hard work behind the scenes.

You do not have to know a language to advocate for its revitalization, but it does help to understand both the historical and current context of a language. There are different types of language advocates. *Internal* language advocates are those who are community members and who are speakers or the descendants of speakers of specific Indigenous languages. There are also *external* language advocates. These people are outside the community but offer support in the form of networking for the needs and interests of Indigenous languages. Linguists, anthropologists, educators and politicians, for example, can all function as *external* language advocates—people who are in a position to speak to the concerns for particular community languages in very public forums outside of the community itself. For the most part, external language advocates can only do what the community authorizes and requests. Ultimately, the fate of any given Indigenous language rests with the community itself and the community's vision for its preservation and practice.

To be a good language advocate, internally or externally, it is helpful to know the facts about language endangerment related to the Indigenous language you support. Ask yourself, how many speakers are there? How many of these are truly fluent? How many semi-speakers are there? What does the community want for this language? Is it documentation and/or revitalization? Is there a council or committee of elders to guide concerns about language and culture? Is the local political structure supportive of language revitalization efforts? Where do the schools fit in? And, this is just a beginning list of things to consider.

The role of the language advocate is not always easy. Be prepared to face questions and comments like, "What's the point of saving the language?", "Who cares?", "It's too much work.", "I don't have time, besides there IS no point – its part of the past." Others may want to help, but do not know where to begin—the task seems overwhelming. Just don't give up or give in. Find and build support inside and outside the community. Start a language preservation and revitalization group or program if there isn't one. Be committed!

Advocacy is born of passion for the cause of an endangered language and advocates need to be strong and clear in their convictions. Those closest to the language have many personal reasons for wanting to save it: It is the language of their grandparents; the language of their own youth. It is the language that encodes all the philosophy and culture that their beliefs about the environment, medicine, art and kinship are based on. It is the language of their music and song. These reasons may resonate with members of the community but may be still hard for others to appreciate.

Advocates also need to make others aware that the loss of even one language is a loss for all humanity. Each language represents a whole system of knowledge unlike any other. Leanne Hinton (2001:5) notes,

> The world stands to lose an important part of the sum of human knowledge whenever a language stops being used. Just as the human species is putting itself in danger through the destruction of species diversity, so might we be in danger from the destruction of the diversity of knowledge systems.

In addition, Hinton points to the human rights issue saying,

> The loss of language is part of the oppression and disenfranchisement of Indigenous peoples…Indigenous efforts toward language maintenance or revitalization are generally part of a larger effort to retain or regain their political autonomy, their land base or at least their own sense of identity.

<u>Advocate, whenever possible, for the right of all human beings to use, revitalize and preserve their own language!</u>

THE PLACE OF TECHNOLOGY IN LANGUAGE REVITALIZATION

Today, information and communication technologies are having a dramatic impact on Indigenous cultures. There is a lot of talk these days specifically about the relationship between Indigenous languages and technology. We should remember that technology, whenever available, has *always* been brought to bear on linguistic work with Indigenous languages; this relationship is not new.

Smithsonian / AP file

Beginning in the 1880's, the mass production of the Edison Wax Cylinder made it possible to record "live" speech. The first attempts at live field recording by anthropologists and linguists took place in various speech communities beginning with the Passamaquoddy in 1890. Language archives such the Library of Congress, the University of California Berkeley, and other institutions house thousands of these early language-based wax cylinder recordings.

Technologically speaking, we have come a long way since 1890. In fact, the contemporary situation is such that many endangered language communities are beginning to adopt advanced audio, video, and multimedia technologies as a means of revitalizing their languages. Two general trends are observed in the use of technology for language revitalization: language teaching and language documentation.

Language teaching is described as the act of teaching a language learner to speak and understand an Indigenous or heritage language. Incorporating technology into language teaching is often referred to as computer-assisted (or technology-enhanced) language learning. The field of computer-assisted language learning is a fast developing field due in part to continuing improvement and advances in technology. Three general types of digital media are commonly employed in language teaching. These are

presentational software (e.g. Power Point), authoring multimedia software (e.g. Flash, Director, Authorware, Claymation), and web-based programs (e.g. HTML software, Javascript, MOO, WebCT). The majority of these teaching tools are media driven in that they employ text, graphics, sound, and video in an interactive learning environment.

The field of language documentation is concerned with creating a documentary record of the linguistic practices of a speech community as well as creating a descriptive account of these practices. Three types of digital media are typically employed for this purpose: general purpose tools (e.g. word processors, simple databases), specialized tools (e.g. advanced audio software, linguistic databases, multimedia, electronic dictionaries), and digital tools (e.g. CD-Rom, DVD, MPEG, image capture). Media products that are generated from language documentation and description applications are often considered "authentic" materials and become the permanent resource of the endangered language community. In several dramatic examples, the Rumsien Ohlone, Nooksack, and Mutsun speech communities are reviving their once extinct languages from "authentic" documentary materials such as early wax cylinders and other language media.

Here, we have defined technology broadly to include digital recorders, digital still and video cameras, and a host of supportive devices such as printers, scanners and copiers. We can also count as technology the huge body of software and Internet support that is filtered through a computer. These training materials focus on the use of computers in the development of multimedia language lessons. And, the concept of 'multimedia', by definition, is inclusive of several kinds of technology, notably cameras, recorders and computers. It is the blending of these technologies, which allows for text, audio and video to meet in the construction of dynamic language lessons. When we add to that the available technology printers, scanners and copiers –and the ease of the production of materials is very impressive.

To develop a model for beginning users of these technologies, we worked with the Colorado River Indian Tribes in testing the included materials and determining the best ways to introduce beginning users to the creation of vivid multimedia language lessons to support revitalization efforts. Once again, technology as defined by today's standard, is being applied to Indigenous languages. Therefore, we can consider the work being done with these tools as just part of the historic continuum and strong tradition of Indigenous languages and technology.

THE CRIT PROJECT

In 2003, the Bill and Melinda Gates Foundation funded a collaborative project between the Colorado River Indian Tribes (CRIT) and the University of Arizona. This project was part of the Gates "Native American Access to Technology" program initiated in 2000 with tribal libraries. The aim was to provide training for tribal members in technology (specifically the computer technology the Gates Foundation provided to tribal communities) and language documentation and revitalization. Moreover, this project was focused on two highly endangered languages still spoken at CRIT, Mohave and Chemehuevi. A survey of these languages conducted at CRIT in 2001 determined that there were 42 fully fluent Mohave speakers and only 5 fully fluent Chemehuevi speakers. The fact that these languages both had orthographies with few diacritics made each language easily adaptable to a range of different software.

Amelia Flores (Mohave) and Johnny Hill, Jr. (Chemehuevi)

A major objective of this project was to work with tribal members who had little or no background in working with computers and to build a model for other communities based on what was learned. The materials generated here are, in large part, a reflection of what was applied during the CRIT project.

The participants learned to use the internet, to work with audio files and text material and to incorporate graphics into their lessons. They began with Microsoft WORD 2000 and Power Point and graduated to using MaxAuthor. Although we now recommend Audacity for the creation of sound files, the CRIT participants worked with CoolEdit. All of the participants were producing their own multimedia lessons within a few days of beginning their training. (For a sample of a Chemehuevi lesson using MaxAuthor, see www.cali.arizona.edu)

At the end of the project, all of the participants reported feeling much more confident and willing to keep trying new applications of technology. All were pleased at the final products of their efforts: complete multi-media language lessons!

Comments from CRIT Participants:

"I am very happy that I had the opportunity to get to use a computer because it's made me more aware of so much that can be done with our language. I am learning at a very fast rate….I can send an email, do my lessons, submit reports and keep in touch with ALL. …"   -Nora Vasquez, Chemehuevi

"I've been working on the laptop and putting in the lessons we worked on last summer. I introduced this computer work to [tribal elders]. I told them that I would be using them for a resource. I'm getting more confident with computers!"   -Dorita Drennen, Mohave

"After training and returning back to the reservation, a lot of thought was put into what could be included in language lessons on the computer. Sharing of training was made with the library staff in the afternoons. ….On May 1st, I made my power point presentation at the Museum Association!"   -Amelia Flores, Mohave

One of the requests of this project was that participants use their new-found knowledge to train others. This aspect was realized in the last training session when two of the participants brought their daughters. This connection between generations is vital in all circumstances of working with language – technology included!

Mother and daughter teams (left to right): Melissa and Dorita
Drennen (Mohave), Brenda and Nora Vasquez (Chemehuevi).

Working with the participants from CRIT helped us develop a model for using technology with Indigenous languages, which can be summarized as follows:

1. To train those who are interested in true revitalization of languages in the forms of technology which are compatible with the accepted language-teaching strategies. The preferred choice in many communities today is "Immersion

Language Teaching." This method requires instruction *only* in the target language. Technology, particularly with the audio software available today, certainly can support this type of teaching.

2. To develop materials modeled after the three elements of multimedia: text, audio and graphics. The marriage of these three elements in multimedia software supports immersion language teaching in unique and vivid ways.

3. To offer training materials that can be either self-instructive or used to support a language class. The content of these materials must always help the learner contextualize technology within the overall goals and process of language revitalization.

4. To offer support, tools and strategies to learners from tribal communities while recognizing that the content of materials developed is entirely under their control as native speakers and/or members of the culture and community.

5. To promote Indigenous language advocacy through the use of technology

6. To be in service to the desires of the community regarding the place of technology in language revitalization efforts. For instance, in some places this means involving the public schools; in others, language work is strictly community controlled.

7. To foster a sense of cooperation between communities and resource institutions.

8. To explore and test the most recent technological innovations in relation to what they might offer in the arena of language revitalization.

The field of what we now call *technology-enhanced language revitalization* is still very new – an uncharted territory in many ways. As native speakers begin to take control of technology as a resource, the hope for Indigenous languages grows. Our model is one, which sets the tone for sharing knowledge, for respecting community members for their knowledge and determination, and for exploring all the potential technology brings. We thank the members of the Colorado River Indian Tribes for their insight, willingness to learn, and for helping us understand the needs of Indigenous people who are engaged in language revitalization.

WORKING WITH PEOPLE AND DATA

Most of those who work with today's Indigenous languages will find themselves working with community elders. These are usually the most fluent speakers of the language and their knowledge is always respected. In fact, the central thing to remember when working with elders is just that: R-E-S-P-E-C-T! Of course, respect may be defined somewhat differently in each community, but generally, here are a few guidelines for consideration when working with elders:

▪ Be patient

- Don't interrupt
- Be flexible – Not only when considering time in scheduling appointments or meetings but also consider that time in conversation may vary – pause time may be longer than expected. Don't feel that you have to fill in the gaps.
- Recognize their expertise
- Don't underestimate their knowledge or ability
- Explain what you want to do very clearly
- Explain what you intend to do with the work very clearly
- Ask for permissions <u>in writing</u>
- Respect time limits- stick to the agreed-on schedule
- Direct eye contact isn't often welcome (for most groups)
- Food is almost always welcome!

Working with Data

Sources of Data

Data comes from lots of places: people, libraries, museums. When you are working with technology, which includes computers, cameras and recorders, the sources of data are very broad. Here are some basic steps:

- Look first to the elders to guide you in what is considered 'authentic' data.
- Ask the elders for guidance as to what is culturally appropriate to present in a language lesson.
- Seek out tribal sources first: a tribal library or museum: Be aware of copyright restrictions before using any materials.
- See if there are any already published materials, which could be incorporated into language lessons. Be prepared to consider intellectual property rights and <u>get written permissions for everything you collect from anyone!</u>
- Decide what level of language proficiency you are trying to document or reproduce. That is, be focused.
- Remember cultural data supports language lessons so be open to using photos, artifacts, books, and other resources to support your language work.

Types of Data

Linguistic data on Indigenous languages has long focused on the collection of word lists for forming dictionaries and grammars for sentence-level analysis. While these are certainly needed, they should be seen as a beginning of the kind of language data used for preservation and revitalization, not the end result. The scope of linguistic data should also include narratives and conversational data in the native language. In the

creation of language lessons, think beyond a list of colors, numbers, or days of the week – think of useful daily language presented in full sentences and stories! Think about collecting language that supports daily use like 'how to greet someone', 'how to apologize', 'how to make requests', 'how to leave – without saying *goodbye*', 'how to make commands', 'how to be polite when eating, visiting, or in the presence of elders', 'what to buy at the market', 'how to follow a recipe', and more. The goal is to bring the languages out of the past and into the present. Language learners need to see practical uses for the Indigenous language in their every day lives.

Once the data is collected and approved for use, you are ready to begin using it to support your language learning unit of study.

CREATING A LANGUAGE LESSON

One thing about language learning that is true, whether you are using technology to support your teaching or not, is that language is best learned when the student is having fun. Using computers to support language learning can be fun, visually exciting and even offer an immersion experience in oral language. Many of the things you need to consider apply to any kind of language teaching. For instance,

What is your purpose?

Of course the main purpose is to teach the language, but be clear about what aspects of language you are hoping to teach. For instance, are you going to teach vocabulary (numbers, animal names, foods)? Or are you going to teach sentences (focusing on verbs maybe)? Do you want your students to speak or write or both? Being clear about your purpose and goals dictates how you choose to structure your lesson.

If you are working with technology, consider what relationship the techno-lesson has to other types of teaching that are taking place. Are you going to support a language class by having related lessons on the computer? Or is the computer going to be the only source of language learning? Maybe the computer lessons will just offer additional individual practice?

Who is your audience?

Know your audience! If you are working with children, learn about how children best learn language. Use oral language if they are very young. If you are working with adults, realize that they might enjoy written language, more structured kinds of learning. Think about what your audience needs, how they might best learn language, what they will be comfortable with and then build your lesson to meet their needs. Consider the following:

- Who will be using the lesson you are creating?
- Are they comfortable with computers?
- Do they have access to computers?
- How old are the people in your audience?
- Are they really fluent, partially fluent, or new learners of the language?
- What are their interests?
- How much do they know about your subject?
- What will they want to learn about your subject?
- What is a good way to reach the audience?
- Will they want to hear a story?
- Will they want to interact and talk into the computer?

What are some ways of designing effective lessons?

Designing lessons depends on how you identify your purpose and your audience first. It also depends on basic things like the physical place you might be teaching (the shape of the classroom, available chairs, types of computers, etc). It very much depends on any extra materials you might have available. It also depends on you and how you see yourself as a teacher.

The most effective way to design lessons using computer technology is to enter the world of multimedia. You can then control the extent of oral and written language that is presented. You can make engaging visuals to keep students of any age involved in the language learning process.

Language Lesson Planning

Language planning takes place on several levels: the community, the school, the classroom. Here, we will talk about specific language planning for the class you intend to teach.

Planning a classroom lesson is important because plans will help you organize your materials, help you keep track of the learners' progress and give you confidence and direction. Most often, a single lesson is part of a larger unit. This is a good approach because it gives each lesson a context for the learner and it helps you build lessons that improve skill levels while keeping similar content. An important and unique feature of planning a language lesson is this fact: *Cultural content AND the language skills being targeted for learning must both be reflected in the lesson plan.* For example,

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                          ┌──────────────────────────┐
                          │     UNIT: Plants         │
                          │   THEME: Native Foods    │
                          └──────────────────────────┘
          ┌──────────────────────┼──────────────────────────┐
┌──────────────────┐  ┌──────────────────────┐  ┌──────────────────────┐
│ Language Skill:  │  │   Language Skill:    │  │   Language Skill:    │
│   Vocabulary     │  │  Words in Sentences  │  │    Conversation      │
└──────────────────┘  └──────────────────────┘  └──────────────────────┘
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| Lesson 1: Nouns (types of food – meat, plant…) | Lesson 2: Verbs (to eat, to drink, to cook, to buy…) | Lesson 3: Commands | Lesson 4: Requests | Lesson 5: Common Phrases | Lesson 6: Sample Dialogue | Lesson 7: Sample Dialogue |
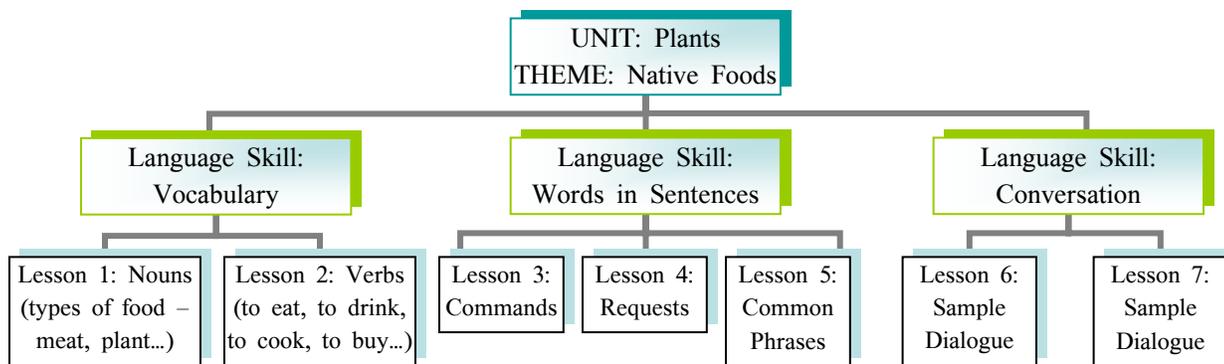
The Lesson Plan

A lesson plan outlines what you are going to do. The essential elements are:

- <u>Level</u>: (beginning, middle, advanced language learners or computer users; grade school)
- <u>Time</u>: (estimated length of the whole lesson)
- <u>Goals/Objectives</u>: (what you hope to accomplish in just this lesson in terms of both general content *and* language skills)
- <u>Language skills:</u> (what you are focusing on—listening, speaking, conversation, writing, and so forth.)
- <u>Organization</u>: (Small groups? Whole class?)
- <u>Activities:</u>
    Beginning activity: warm up/ice breaker
    Middle activity(s): core of lesson
    Ending activity: brief review and practice
- <u>Methods and materials:</u> If you want to include technology, specify what computers and what software you will be using. You will also want to address the level of technology your students are ready for.
- <u>Follow-up:</u> (ideas for what the next lesson that will continue to build language skills)
- <u>Variations</u>: (ideas for how to change the activities and still support the same goals. Here, using technology might be one variation on a lesson).
- <u>Standards</u>: Some school districts may require a reference to how the lesson meets the state standards for language instruction. We recommend that teachers of Indigenous languages also include how the lesson meets instructional standards for heritage languages.

Things to think about:

- Timing: A lesson should be short, focused, and fun
- A lesson should not be more than 10-20 minutes. This is true for adults as well as children.
- Present new material in small pieces with LOTS of repetition.
- Include some practice where the learners repeat the new material (individually and/or as a group)
- For younger learners, use oral practice. Immersion methods work well.
- For older learners, consider including writing exercises also.
- Be patient – learning a new language (including computer languages) takes time – don't force production
- Plan time for questions and discussion
- Choose subjects that are a part of daily life because they easier to practice
- Keep it simple and short
- Make lessons immediately useful
- Use humor and stories
- Include local culture and community for content

For lessons involving technology, all of the above apply, but consider emphasizing:

- Using audio and video tapes for oral language support
- Scanning in pictures and art from local sources
- Making it interactive

Always remember, for *any* lesson, to respect the learners, the teachers, and the languages.

Cherokee People Work To Save Language
Hundreds Of Adults, Children Studying Their Native Tongue

Indeed, very few members of the Cherokee Nation speak their native language -- and even fewer know how it looks on paper. But Cherokee language teacher Harry Oosawhee said a new trend among the Cherokee people may change that statistic. "What we're trying to do is create an epidemic, so people will want to learn and share," he said.

At Lost City Elementary School in eastern Oklahoma, every student in the Cherokee language immersion class is learning to speak Cherokee --and English is not allowed while class is in session.

6-year-old Hawk said his mother and grandmother speak some Cherokee, but his father does not. When he leaves school, Hawk said, he becomes the teacher at home. "It makes me feel more Cherokee," he said.

http://www.thehometownchannel.com/news/3316827/detail.html

Sample lesson plans from AILDI students:

This lesson plan was submitted by Kim Matheson, Coeur d'Alene. To support this lesson, Kim created a multimedia presentation in PowerPoint about counting apples

Title of lesson: _Haa'7sh2' Din4k'ehj7 b4eso dab7zhi' b7dahwiidiil'11[._ *(Lets learn the Navajo names for money denominatives)* Submitted by : **Benny Hale, Navajo high school teacher and AILDI student**	
Purpose ("why" of the lesson, where and how does it fit into the course/curriculum) In speaking the Navajo language students will be able to count money and give correct change	
Learning outcome(s) (what will students be able to do/know by the end of the lesson) Students will be able to say the Navajo words for coins, combination of coins and paper money. Students will be able to give back correct change while counting it.	
Bridge-in (focus student attention) Names of money denominatives 2. Counting in Navajos	
Pre-test (activate and diagnose prior knowledge) Knowledge of numbers	

Input from you (main content: ideas, information, concepts, principles, procedures and examples)	**Guided practice** (application of knowledge: classroom activities for students, problem to solve, etc.)
Show from power point pictures of money denominatives. Repeat in sound the names of money denominatives. Show by **power point** how to count back change by picture and sound.	1. Students will be given coins and paper money and they will name them. Do this in pairs. 2. Students will be given items with prices and students will say in Navajo how much it costs. (in pairs) Student select a different partner and do the same as 1, 2. **Show the power point again** for review.

Closure (recap key concepts, helps students consolidate knowledge) Students will take their coins out and name the coins, bills. Students will count other student's coins. Students will pretend that they sold something to someone and they will give money for payment and give correct change.	
Check for understanding (what questions will you ask and when to determine students understand) Show from power point on screen coins, paper money and have students call them out loud.	
Assessment (how does this lesson relate to assignments/homework/readings) *(Standard for State Requirements and/or Indigenous Language teaching could be stated here)*	

THEME: "Counting"

Learning Level: Beginner (Pre-Literacy)
Time: 15 minutes
Subject Area: Coeur d'Alene Language
Related Subject Area: Numbers, Kinship, Foods, Spatial

Goal: Students will be able to count to five and to use the names for relatives in Coeur d'Alene.

Objectives:
1. Students will be able to count to five or more.
2. Students will learn how to respond to *k'winsh?* ('how many?') with the correct number.
3. Students will be able to name five or more relatives in Coeur d'Alene.

Materials: apples—real or artificial or pictures depicting various numbers of apples. Pictures of family members. Note: to distinguish whether the individual is on the maternal or paternal side of the family or whether a boy or girl is referenced, include two or three individuals—one representing the person speaking, one representing the maternal or paternal side of the family and one representing the individual named

Background Information: The prefix *hn-* indicates the possessive pronoun my. Before the letters k, s, t, d and other "dentals" the *–n-* changes to *–i-* and sometimes to *–ii-*. Numbers 1-10: *nek'we', esel, chi'łes, mus, tsil, tewshecht, tsunchtm, he'i'nm, qhaqh'nut, upen; epls* (apple); relatives: *nune'* (mother); *pipe'* (father); *tstsi'ye'* (girl's younger sister); *'yukwe'* (girl's older sister); *chi'yukwe'* (girl's younger brother); *qitsch* (boy's older brother); *sintse'* (boy's younger brother); *sme'mulmkhw* (boy's younger sister); *'yukwe'* (boy's older sister); *cheye'* (maternal grandmother--*yeye'* child's word); *sile'* (maternal grandfather); *qine'* (paternal grandmother); *qhipe'* (paternal grandfather); *t'upye'* (great grandparent); *narye'* (great-great grandparent); *tikwe'* (aunt—father's sister); *'iqhwe'* (aunt—mother's sister); *puse'* (uncle—father's brother); *sisi'* (uncle—mother's brother)

Activities:

1. Students sit in a circle.
2. Teacher recites the verse showing pictures of the relatives and modeling the actions. Place the apples in the middle of the circle so that they are *techłu'* (over there) to everyone.
3. Students echo the verse counting the items purchased.

nek'we' he epls techłu'
One apple over there
uł nek'we' tegwmintsut khwe <u>*hiinune'*</u> *(e hntagwalpqwn)*
<u>Mother</u> bought another one (at the grocery store)...
esel he epls techłu'
Two apples over there
uł nek'we' tegwmintsut khwe <u>*hnpipe'*</u> *(e hntagwalpqwn)*
<u>Daddy</u> bought another one (at the grocery store)...
chi'łes he epls techłu'
Three apples over there...

4. Teacher adds up to five apples purchased
5. To end the story the last line says:

ekwn khwe <u>*hiinune'*</u>*, hoy! t'i' tsi'!*
<u>Mother</u> said, "Stop! That's enough!"

6. The second time through, pause before each line that says _*he epls techłu'* (_apples over there). Point to the apples in the middle and ask *k'winsh* (how many)? When one of the students gives the correct number response, teacher nods in agreement and repeats the number adding it to the following sentence.
7. The third time through give apples to students. Motion five students to put an apple in the middle of the circle by saying they bought another apple. (*Note: in the next lesson plan students will be given paper coins to buy an apple before putting it in the center*)

Variations of the game:

1. Teacher leaves out vital words letting the students fill in the appropriate responses.
2. Use different foods.

Assessment: Students are able to successfully call out the correct name for the relative when the teacher shows the picture and stops to anticipate it in the verse.

Standard(s): (to be added in by teachers)

EVALUATING WEBSITES

Indigenous communities are becoming increasingly visible on the World Wide Web. Among the many new sites are those that are devoted to discussions and displays of Native American languages. As a language teacher and language advocate, it is important to research these sites and to be able to evaluate their design and usefulness. As you begin to work with technology, you may well want to design your own materials for publishing on the web.

1. Purpose and audience: What the site is about? What kind of information does it have? And who is it intended for? These questions should be visibly and verbally answered on the opening pages.
2. Content: The most useful content is pushed toward the top of the site and is easy to locate.
3. Site maps or table of contents give the user a visual schema into the site's organization and context.
4. Users have a choice of search interfaces, between simple and advanced, in order to support first time and repeat users.
5. Examples of search technique and strategies, including the use of Boolean operators, are available so that users can learn how to maximize the power of the search interface.
6. The scope of searchable collection is visibly identified and clearly described on the search interface page, helping users know where they are within the site.
7. The scope of the searchable collection is visibly identified and described.
8. The search results page is clearly organized and thoroughly presented so that selection decisions are easy and the users do not have to sort through redundant, vague and incomplete result links.
9. Each page is clearly labeled with a header, date and source.
10. Menu options are limited to five to seven choices.
11. Links are underlined in blue for consistency and a phrase instead of a word is underlined so that users can recognize links and have more information on which to base a linking decision.
12. Links have meaningful and obvious labels; abstraction is avoided so that users do not have to second-guess each link's meaning.
13. Alternative methods of navigation exist, including navigational bars at the bottom and top of the page so that users have increased control over interaction.
14. Consistency exists throughout especially in layout, icons, terminology and placement of options and color.

15. Graphics are kept at a minimum and appear only when they add valuable meaning to the content on the screen. In some language sites, however, the visual effect of the graphics adds to language learning and discussions – the purpose of the site dictates the use of graphics.
16. Animation is used sparingly on descriptive pages so as not to distract users –but on language learning examples, animation is extremely effective.
17. Downloading time for graphics is minimized by showing thumbnails, which can be enlarged.
18. The 'Alt Text' tags give users the option to avoid images altogether but still know their meaning.
19. Pages are laid out so that white space and barriers are at a minimum.
20. Web writing is concise and objective, not promotional.
21. Pages with text do not exceed two or three full screens.
22. Users receive feedback about image size, loading time and processing time so they know whether the system is working.
23. Users have the option to contact the webmaster with a 'mail to' function.

This section was adapted from Alison J. Head. 1999. "Design Wise: A guide for evaluating the interface design of information resources. New Jersey: Information Today, Inc.

Recommended CD-ROMs

" Taitaduhaam: Western Mono Ways of Speaking." 2002. Paul
V. Kroskrity, Rosalie Bethel and Jennifer F. Reynolds. Norman:
University of Oklahoma Press. www.oupress.com.

**"Tsi' Thuwati'nikuhlalákhwa Ka'nihʌnáʔsa." Where they take care
of them, the little ones. 2003.** An interactive CD for Oneida
Language Learning. Oneida Nation Childcare. GreyFox CE.

EVALUATING CD-ROMS

Many Indigenous communities who are involved in language revitalization efforts have prepared CD-ROMs to support language learning. If you decide to create your own CD-ROM or if you are selecting some to buy, consider the following list. Learning to evaluate existing materials is the first step in creating your own exceptional CDs!

1. Users are presented with at least two interfaces, simple and advanced, insuring flexibility for users' skill levels (beginner vs. expert)
2. Consistency exists throughout the CD's design in layout, terminology, color, placement and order of basic functions (print, search, help…)
3. Menus are comprehensible so that users can make quick decisions.
4. Each screen has a restart, quit and help buttons, which are highly visible.
5. Prompts about 'what to do next' guide users through the interaction process.
6. Searching features include Boolean, field searching, and proximity operators which support all levels of users' skill….Search examples are included
7. Retrieval aids, especially indexing and a thesaurus are included and are browsable.
8. Feedback about users' processing status, especially the number of records found so far and percentage to go during searching appears so the users know the system is working.
9. Search histories can be saved for re-selection and editing to make more efficient use of processing time.
10. Search terms are highlighted; users can jump to next context so that navigation and processing time are efficiently managed.
11. Customizing options exist for output, download, print formats, font size, screen colors and record layout to meet users' special needs.

12. Menu bars include seven or fewer menu options per screen to limit clutter and help users absorb information.
13. Color is used sparingly, making information easy to process. Screens are not cluttered and overlapping windows are kept to a minimum (six) so that users' attention is visually managed for task support.
14. Font style and size is readable and can be customized to meet the needs of users with disabilities.
15. The help system is context-sensitive and concise, and offers step-by-step help so that beginning users can successfully interact with the system.
16. Help is available throughout the program by pressing FT, a universal Dos standard for help.

17. Error messages are comprehensible so that users do not get stuck
18. Tutorial is available at all times to help users learn the system at any point.

This section was adapted from Alison J. Head. 1999. "Design Wise: A guide for evaluating the interface design of information resources. New Jersey: Information Today, Inc.

ABOUT INTELLECTUAL PROPERTY RIGHTS

As you are about to begin developing your own materials, it is extremely important that you understand how to protect them. Copyright law is complicated but necessary. The Copyright Act of 1976 offers the 'fair use' of copyright protected works. This means that, although permission *may* not be required for use, credit must be given to the original author. Below we have summarized some of the key issues. This information is drawn from a paper by Leslie Barnhart (November, 2002) which was prepared for the Indigenous Language Institute (www.Indigenous-language.org - page numbers noted)

- 'Intellectual property' implies that knowledge is subject to ownership. (3)
- "Intellectual property has been defined as the transformation of ideas into tangible property." (5)
- Covers topics such as commercialization of traditional 'folk art', use of Indigenous peoples' symbols or art as trademarks, patenting of Indigenous peoples' ethnobotanical knowledge and traditional resources, and protection of linguistic diversity. (4)
- Copyrights protect music, art, movies, writings, web pages, sound recordings and computer programs. (4)

- In developing digital works, authors must be concerned with protecting their own creations but also with not infringing on other's work (including anyone else's work requires permission). (5)
- Intellectual property laws require the identification of a specific original author. (3)
- Copyrights are limited to an individual's lifetime plus seventy years. (3)
- Currently, there are no <u>community</u> rights to cultural knowledge.
- Copyrights protect the author's work by providing: the exclusive right to publish, distribute, and perform a work, the exclusive right to reproduce the work, the exclusive right to create new works based on the original. (5)
- An author can transfer these rights in writing to another person or publisher for a period of time. (5)
- Work does not need to be published to be protected by copyright.
- Works do not need to be registered with the copyright office (below) to be protected, but it helps. (5)
- Copyrights are administered by the U.X. Library of Congress Copyright Office (http://www.copyright.gov). Registration allows for a lawsuit under federal statute if a copyright is infringed. (5)
- Exemptions from copyright protections allow educational institutions, non-profit organizations, libraries, and others to use portions of a copyright protected work for non-commercial purposes. (6)
- Once a work is produced in a digital form, it is very difficult to ensure its complete protection from copying or use by others. "…there is no such thing as total security on the internet." (6)
- For multimedia productions (such as CD-ROMs with photos, graphics or new articles and software applications to produce sound and animation) authors and publishers must obtain permission to use the materials they plan to incorporate. (10)
- "Generally, the original author owns the 'electronic rights' to their work." (10)

The following sources are recommended:

For general legal information on intellectual property
- www.findlaw.com

For information on copyright administration:
- www.copyright.gov

For Tribal Law Intellectual Property Home Pate
- http://world.std.com/~iipc/

For recommendations on gaining permission to use copyright protected works:
- http://www.utsystem.edu/ogc/intellectualproperty/permissn.htm
  (University of Texas)
- http://www.k-state.edu/academicservices/intprop/howto.htm
  (Kansas State University)
- http://www.fplc.edu/tfield/copynet.htm
  (Franklin Pierce Law Center)

For information about online 'Distance Education' courses and copyrights:
- http://www.groton.k12.ct.us/mts/pt2a13.htm

For information about copyright protection for web pages:
- http://lcweb.loc.gov/copyright/circs/circ66.pdf

Also see:

Richard Stim.   *Copyright Law.* West Legal Studies, 2000.

Mayer, Brown & Platt, *Corporate Primer for Intellectual Property.* (1997).
     On website, www.mayerbrown.com.

Steven Fishman. *The Copyright Handbook: How to Protect & Use Written Works.*
     Nolo, 5th Ed. 2001.   See www.nolo.com

Rebirth of a language: Linguists,computer bring back nearly extinct Nooksack dialect

DEMING, Wash. _ When Quentin Charlie first tried to speak his grandmother's language, the complicated, singsong words didn't come naturally. But he kept trying at the Nooksack Tribe's Upriver Halq'emeylem language classes. The language was nearly extinct 30 years ago, but Nooksack language specialist Catalina Renteria thinks Charlie and the rest of her students may be fluent by next fall, when they become the program's first graduating class. They'll be the first Native language students in the country to learn with an interactive computer program she adapted to Halq'emeylem. Roland Holterman, director of the Nooksack Education Department, called Renteria's project a breakthrough and said he envisions local school districts offering the classes for foreign-language credits soon. "We've taken a nearly extinct language and brought it back to life," Holterman said. "You can actually not speak a single word ... and in the matter of a year you can be totally fluent." Linguist Brent Galloway came to the Nooksack Tribe's 21/2-acre reservation near Deming, about 15 miles northeast of Bellingham, in 1974 -- a year after the United States officially recognized the tribe. Because the Nooksacks refused to sign the Treaty of Point Elliott in January 1855, the tribe was allotted no land and its members were ordered to move to the Lummi Reservation.

But the Lummi and Nooksack people had little in common, except for their roots in what is now Whatcom County. Their languages were about as similar as German and English, Galloway said. So some Nooksacks settled in east Whatcom County and many others moved north to be with Halq'emeylem-speaking people of the Stolo Nation near Chilliwack, British Columbia. As time passed, the Nooksack's original language -- Lhechelesem -- withered away. The last fluent speaker, Sindick Jimmy, died in 1977.

Galloway, now a professor at Saskatchewan Indian Federated College in Regina, Saskatchewan, said Nooksack elders told him they made a conscious choice to abandon Lhechelesem.

"Since the language died that long ago, the elders that were left were speakers of Halq'emeylem," Galloway said. "So there was more hope they could bring it back." Halq'emeylem is one of 23 distinct Salish languages spoken by tribes from the Pacific Coast west to Montana and as far south as Tillamook, Ore. Upriver Halq'emeylem, the spoken language at Nooksack, is the only tonal language among them. Every vowel has three different tones that shift the meaning of the word.

For the past year, Renteria and Marcus Goodson, a Nooksack language intern, have videotaped discussions in Halq'emeylem, written sentences and tests, and entered them into the computer language program. To demonstrate, Goodson opened a window on one of the computers, and the Halq'emeylem alphabet popped up on screen. Another window opened with a video of a man in a pink shirt. As the video played, the man mouthed the popped and guttural clicks of the coastal languages. Goodson echoed the words, speaking into a microphone, and the program played a recording of his pronunciation back-to-back with the man in the video.

"You see it, you hear it, you say it," Goodson said.

Tribal elders who grew up speaking the language are getting very old now - a problem shared by tribes around the country. For decades, their languages were forbidden at many white-operated schools, and tribal members began using English instead. "I would ask the elders in the 1970s, when I was working on the writing system, how technical should we be?" Galloway said. "And they said, write in all the tones because we may not be able to understand it now, but our grandchildren will go to college and they will understand it.

"Sure enough, all the children use computers now."