

TECHNOLOGY-ENHANCED LANGUAGE REVITALIZATION

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CONTENTS

ACKNOWLEDGEMENTS	4
PREFACE	5
PART I: THE PLACE OF TECHNOLOGY IN INDIGENOUS LANGUAGE REVITALIZATION	6
THE FACTS ON INDIGENOUS LANGUAGE ENDANGERMENT.....	6
ON BEING AN INDIGENOUS LANGUAGE ADVOCATE.....	9
THE PLACE OF TECHNOLOGY IN LANGUAGE REVITALIZATION.....	11
THE CRIT PROJECT.....	12
WORKING WITH PEOPLE AND DATA.....	15
Working with Data.....	15
CREATING A LANGUAGE LESSON	16
Language Lesson Planning.....	18
The Lesson Plan.....	18
EVALUATING WEBSITES.....	24
EVALUATING CD-ROMS.....	26
ABOUT INTELLECTUAL PROPERTY RIGHTS.....	28
PART II: COMPUTER BASICS.....	32
THE COMPUTER.....	32
Hardware.....	32
Other Hardware to Know.....	40
Software.....	42
PART III: DEVELOPING MULTI-MEDIA LANGUAGE LESSONS... 	46
MEET THE WORLD WIDE WEB!.....	46
CyberSpeak – Learning the Language.....	47
ESTABLISHING AN EMAIL ACCOUNT	56
MICROSOFT WORD 2003	59
Writing Your Language with Microsoft Word	62
Using Navajo Fonts.....	64
Adding Graphics To Your Language Lesson!.....	65
Using MSWord Dictionary functions with Native Languages	71
AUDIO ELEMENTS IN LANGUAGE REVITALIZATION.....	74
The Basics of Sound.....	74
Sound Considerations in Language Revitalization.....	74
Analog Sound.....	75
Digital Sound	75
Digitizing Sound from Analog Sources.....	75

Audacity.....	78
WORKING WITH GRAPHICS.....	82
Multimedia Graphics.....	82
Resolution and Bit Depth.....	82
True Image Formats.....	82
Compressed Image Formats.....	82
Adobe Photoshop 7.0.....	83
Making Videos with Your Camcorder.....	97
POWERPOINT 2003.....	103
MICROSOFT PUBLISHER 2003.....	122
MAXAUTHOR.....	125
FRONTPAGE 2000.....	141
CD CREATION.....	151
Burning CD's in Windows Explorer.....	151
Roxio Easy CD Creator.....	154
UNIVERSITY OF ARIZONA TECHNOLOGY SUPPORT FOR INDIGENOUS LANGUAGES	155
The Moo.....	157
The MBS Board System:.....	159
PART IV: RESOURCES.....	164
SOFTWARE RESOURCES.....	165
SELECTED ONLINE SOFTWARE TUTUORIALS & ONLINE COURSES.....	169
FUNDING SOURCES.....	172
Government Based.....	172
Private Foundations.....	173
SUGGESTED CURRENT READINGS ON LANGUAGE REVITALIZATION.....	178
GLOSSARY.....	180
WORKS CITED.....	193
EDITORS AND CONTRIBUTORS.....	195

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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**.

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>

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.

Linguist bringing dormant Indian language to life:
UA assistant professor has spent years working with tribe
4/10/04 ARIZONA DAILY STAR By Gerald M. Gay

Natasha Warner has committed herself to bringing new life to a once-dormant language. For the past seven years, the assistant University of Arizona linguistics professor has dedicated her time to the Mutsun tribe of central coastal California - helping revive a dialect whose last fluent speaker died in 1930.

She recalled a personal triumph she experienced last winter break on a visit to the Mutsun community, where she, her assistant Lynnika Butler and, Quirina Luna-Costillas, head of the Mutsun revitalization movement, made a small but important breakthrough. We were trying to work on getting to where we could speak the language," Warner said. "By the end of the week, the three of us were sitting around telling stories. There was a lot of hesitation and it wasn't fluent, but at least we were doing it! It means we are really on the brink of using the language productively."

Warner has dabbled in other language projects but has no plans to leave the language she has grown to love.

"This isn't something you do for a little while and just stop," she said. "This is the sort of project that tends to take up your whole life."

<http://www.dailystar.com/dailystar/accent/17419.php>

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.

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

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 as 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 in writing
- 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 get written permissions for everything you collect from anyone!
- 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.

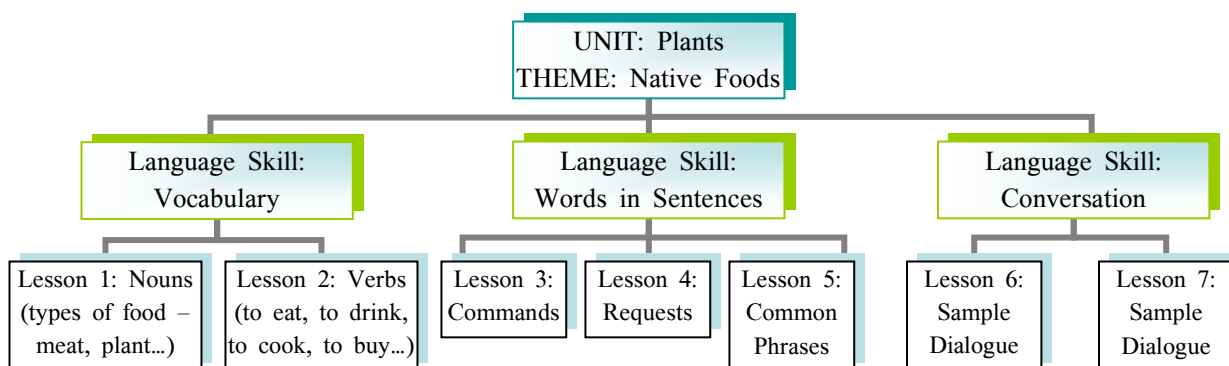
The most effective way to design lessons using computer technology is to enter the world of multimedia. You can then control the extent of oral and written language that is

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,



The Lesson Plan

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

- Level: (beginning, middle, advanced language learners or computer users; grade school)
- Time: (estimated length of the whole lesson)
- Goals/Objectives: (what you hope to accomplish in just this lesson in terms of both general content *and* language skills)
- Language skills: (what you are focusing on—listening, speaking, conversation, writing, and so forth.)
- Organization: (Small groups? Whole class?)
- Activities:
 - Beginning activity: warm up/ice breaker
 - Middle activity(s): core of lesson
 - Ending activity: brief review and practice

- Methods and materials: 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.
- Follow-up: (ideas for what the next lesson that will continue to build language skills)
- Variations: (ideas for how to change the activities and still support the same goals. Here, using technology might be one variation on a lesson).
- Standards: 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.

Exercise 1:

Write a response to this question: In your opinion, what is different about constructing lessons which exclusively involve computer-assisted language instruction?

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 are 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:

<p>Title of lesson: <i>Haa'7sh2' Din4k'ehj7 b4eso dab7zhi' b7dahwiidiil'11[.</i> <i>(Lets learn the Navajo names for money denominatives)</i></p>	
<p>Submitted by : Benny Hale, Navajo high school teacher and AILDI student</p>	
<p>Purpose (“why” of the lesson, where and how does it fit into the course/curriculum)</p>	
<p>In speaking the Navajo language students will be able to count money and give correct change</p>	
<p>Learning outcome(s) (what will students be able to do/know by the end of the lesson)</p>	
<p>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.</p>	
<p>Bridge-in (focus student attention)</p>	
<p>Names of money denominatives 2. Counting in Navajos</p>	
<p>Pre-test (activate and diagnose prior knowledge)</p>	
<p>Knowledge of numbers</p>	
<p>Input from you (main content: ideas, information, concepts, principles, procedures and examples)</p> <p>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.</p>	<p>Guided practice (application of knowledge: classroom activities for students, problem to solve, etc.)</p> <ol style="list-style-type: none"> 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) <p>Student select a different partner and do the same as 1, 2.</p> <p>Show the power point again for review.</p>
<p>Closure (recap key concepts, helps students consolidate knowledge)</p> <p>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.</p>	
<p>Check for understanding (what questions will you ask and when to determine students understand)</p> <p>Show from power point on screen coins, paper money and have students call them out loud.</p>	
<p>Assessment (how does this lesson relate to assignments/homework/readings) <i>(Standard for State Requirements and/or Indigenous Language teaching could be stated here)</i></p>	

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

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'les*, *mus*, *tsil*, *tewshecht*, *tsunchtm*, *he'i'nm*, *qhaqh'nut*, *upen*; *epls* (apple); relatives: *nune'* (mother); *pipe'* (father); *ttsi'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 *techtu'* (over there) to everyone.
3. Students echo the verse counting the items purchased.

nek'we' he epls techtu'

One apple over there

uf nek'we' tegwmintsut khwe hiinune' (e hntagwalpqwn)

Mother bought another one (at the grocery store)...

esel he epls techtu'

Two apples over there

uf nek'we' tegwmintsut khwe hnpipe' (e hntagwalpqwn)

Daddy bought another one (at the grocery store)...

chi'yes he epls techtu'

Three apples over there...

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

ekwn khwe hiinune', hoy! t'i' tsi!

Mother said, "Stop! That's enough!"

6. The second time through, pause before each line that says *he epls techtu'* (_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.

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.

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’niháná?sa.” Where they take care of them, the little ones. 2003. An interactive CD for Oneida Language Learning. Oneida Nation Childcare. GreyFox CE.

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 community 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 Page

- <http://world.std.com/~iipc/>

For recommendations on gaining permission to use copyright protected works:

- <http://www.utsystem.edu/ogc/intellectualproperty/permisn.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."

PART II: COMPUTER BASICS

THE COMPUTER

The world of computers is exciting and ever expanding. Real beginners often enter this world with trepidation. Our goal is to make this transition painless. In this section, we will introduce the basic parts of the computer. Learning the language of computers is the first step towards understanding how they work and what they can provide. Always remember that our goal is to acquaint beginners with the most basic knowledge, which will enable them to support Indigenous languages with technology. Expanded definitions of technical terms can be found in the glossary at the end of this manual.

Hardware

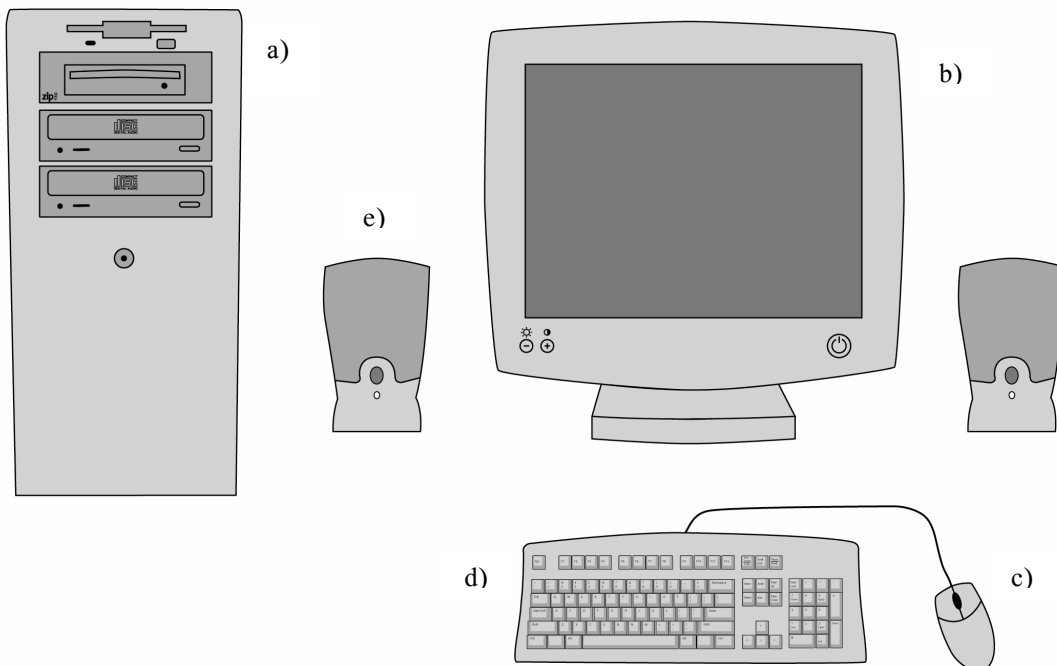
Hardware is any part of the computer you can physically touch.

The computer consists of five main components:

- a) The Central Processing Unit (CPU)
- b) The monitor
- c) The mouse
- d) The keyboard
- e) The speakers

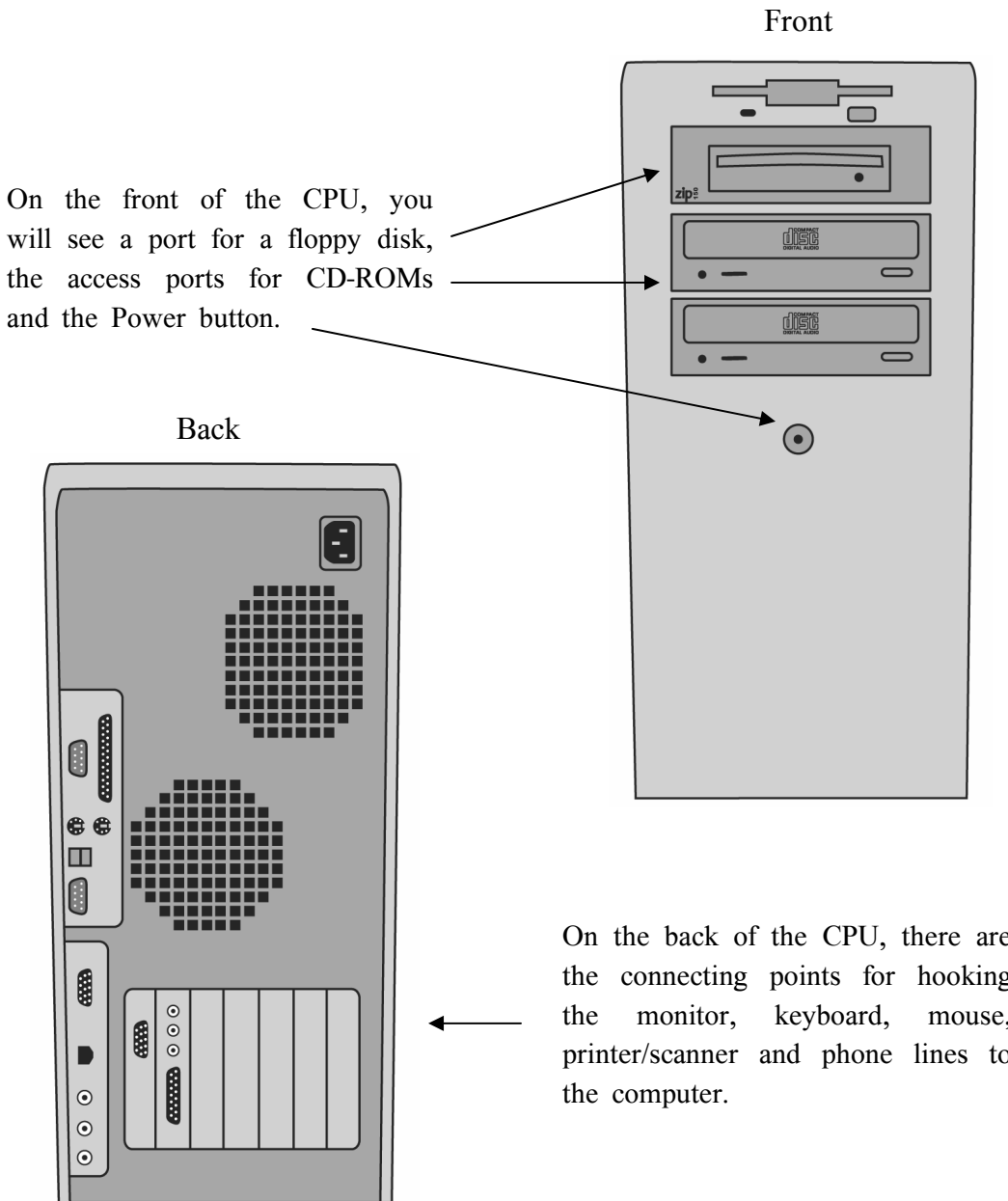
Language choice is part of the right of Indigenous peoples to their own land, to autonomy, and to cultural and economic self-determination.

Hinton and Hale, The Green Book.(4)



The Central Processing Unit (CPU)

You can think of the computer as being similar to a car. The 'CPU', otherwise known as the 'box' or 'tower', functions as the engine. It *drives* the computer. The CPU contains the operating systems for the computer. This includes the hard drive, connecting points for hardware like the keyboard, mouse, phone lines, microphones, connections for speakers and special ports for software like CD-ROMs or floppy disks and more.

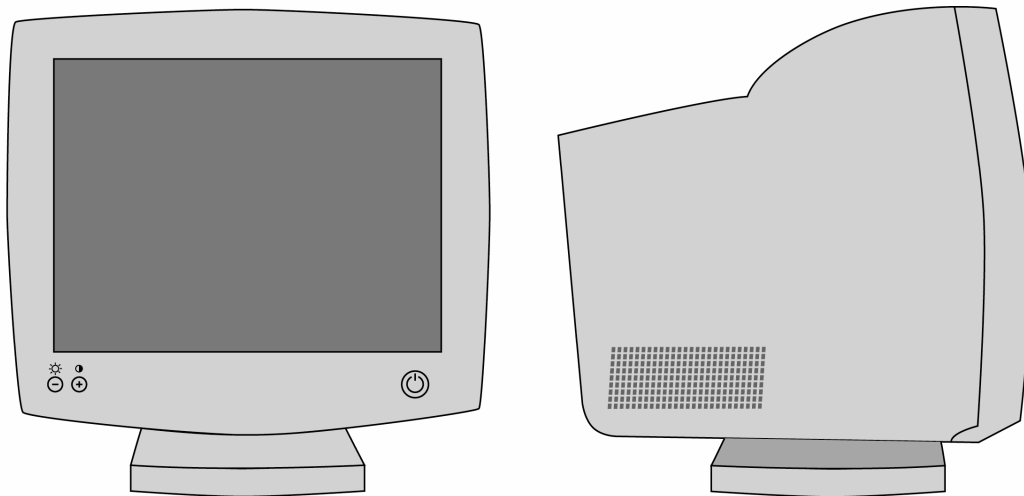


The Monitor

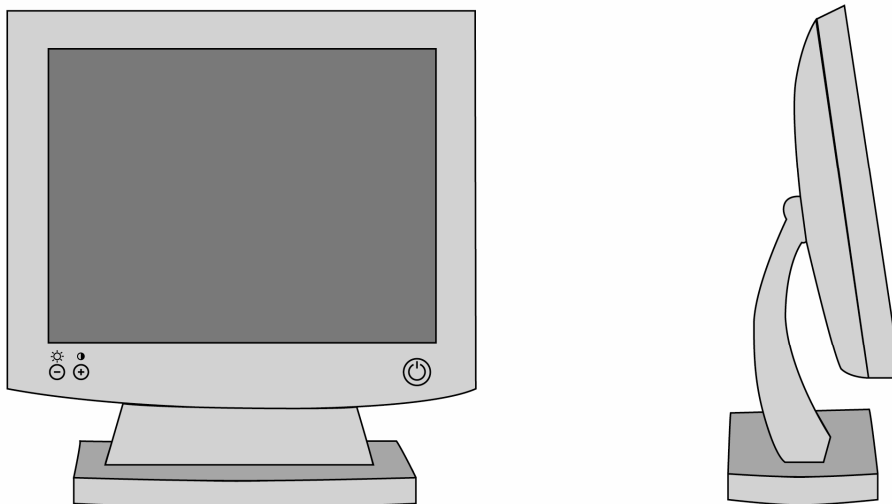
The monitor is the display screen for the work you are doing on the computer. Think of it as the dashboard – the place where everything you need to know for your immediate job is displayed. On the front, you will see an on/off button and other buttons, which allow for adjustments of contrast and brightness and sometimes more detailed changes.

There are two types of monitors available today: traditional and flat screen

Traditional

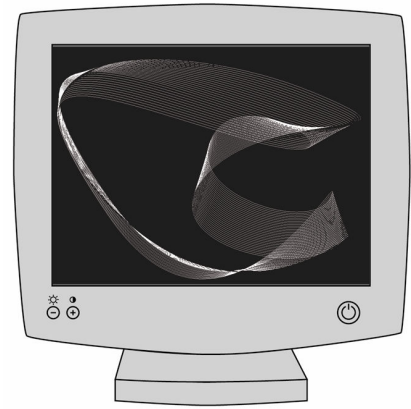


Flat Screen



Points to ponder when buying a monitor:

The flat screen monitors will soon replace the older models because of special benefits. Monitors are evaluated based on their size, which is measured diagonally across the screen, like a TV. The most popular size is usually a 17" monitor. Dot Pitch is the distance between each pixel (dot) on the screen--the more dots, the sharper the image. You want to buy one with a .28 mm or less dot ratio. The refresh rate determines how quickly the monitor updates the image on the screen – higher rates are therefore better. The best have a refresh rate of 72 Hz (hertz = the number of times per second the monitor redraws the entire screen) or better.



Screen savers appear on the monitor when your computer is on but you haven't used it for awhile. They were designed to prevent phosphor burn on early computers; now, phosphor burn is not usually a problem for newer monitors, but most people still enjoy have a screen saver.

Tribal Rebirth

4/6/03 Stephen Magagnini - Bee Staff Writer - San Diego County

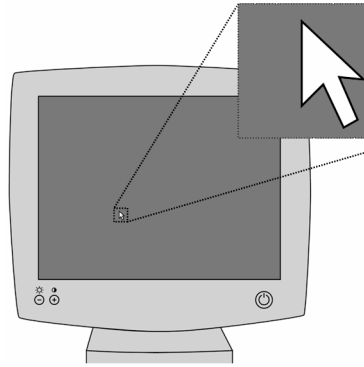
At the Pechanga reservation pre-school, Indian boys and girls sing "Ten Little Monkeys Jumping on the Bed" in a language that's 10,000 years old. Native languages die off yearly in the Americas, but the Pechanga Band of Luiseno Indians -- born again with casino profits -- is breathing life into Luiseno, a language on the brink of extinction. Preschoolers speak nothing but Luiseno in school.

http://www.sacbee.com/content/news/projects/nations_within/story/6408828p-7360908c.html

The Mouse

The mouse is similar to a steering wheel – It steers you to the place you need to go on the monitor. It is an input device, which lets you 'talk' to your computer. You can also use the keyboard sometimes in the same way, but once you get used to the Mouse, most people find it easier. The mouse is a hand control, which allows you to move and point the cursor – the blinking item on your screen. The cursor is a place-marker, which you move by manipulating the mouse. As you hold the mouse and move your hand, an arrow will appear on the monitor and you can point it to the functions you wish to employ.



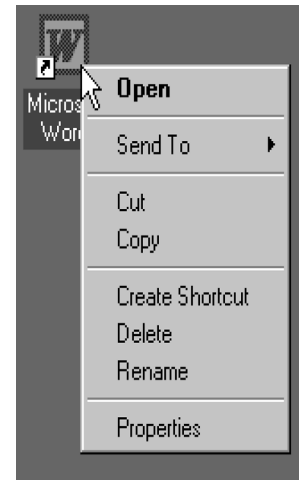


Example from a single right click on a program icon

The mouse has several controls, which will give you different options. Users simply have to learn to ‘point and click’ –meaning choose a target for the arrow and then left click on the mouse to enter the program or to move items on the screen.

When you point the arrow to the menu item you want, you can then choose to make a **right click** or a **left click** on the mouse. It is very important to understand how the mouse works and to know what the difference is between ‘right’ click and ‘left’ click functions.


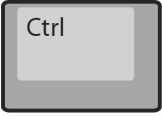


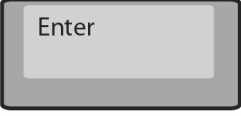
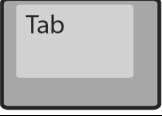
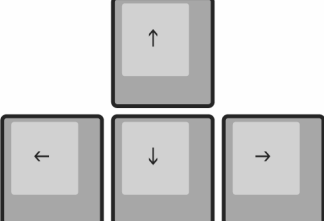
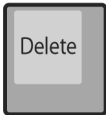
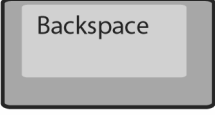
Using the mouse just takes practice!

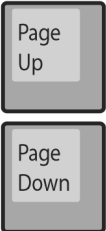

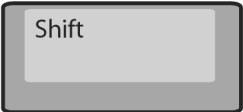
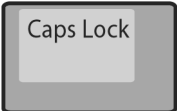


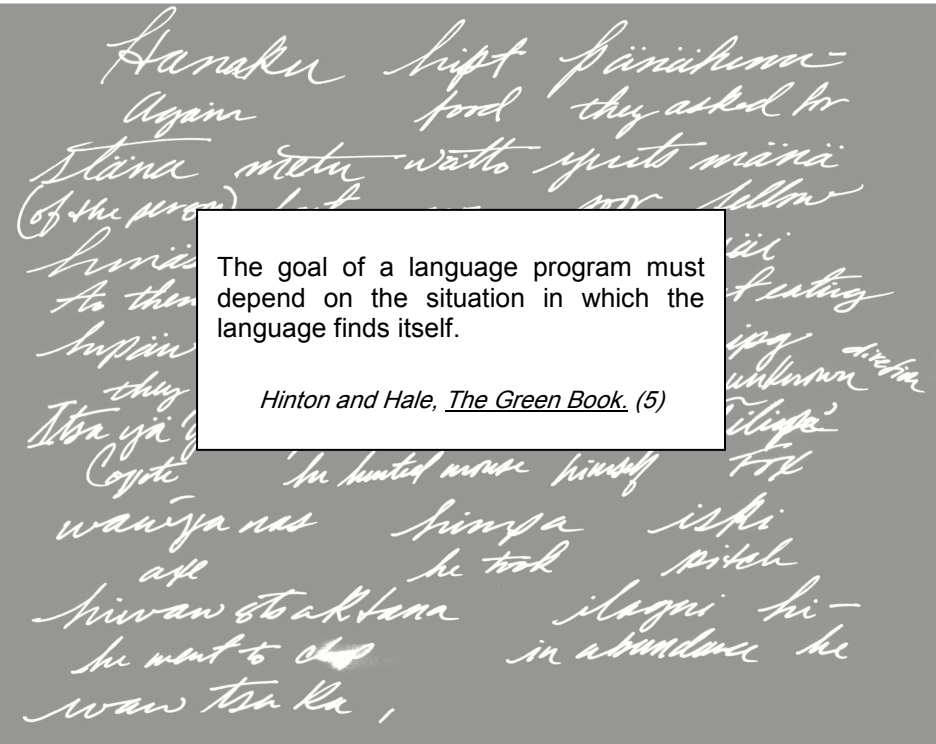
The Keyboard



The keyboard is another avenue you use to communicate with your computer. The keyboard functions primarily like a typewriter, but also contains lots of hidden functions. Many of the functions you can achieve with the mouse can also be done through the keyboard. Below is a short list of some main keyboard functions:

Special Keys	Description and Functions
Alt 	The 'Alt' key doesn't work alone – it needs other keys to make things happen. For instance, press the 'Tab' key while holding down the 'Alt' key causes the computer to switch between programs that are currently running.
Ctrl 	The 'Ctrl' (control) key also work with other keys – If you press the 'X' key while holding down the 'Ctrl' key, you will cut whatever you have selected. You can then press 'Ctrl' and 'V' and paste the material in a new location.
F1 	The 'F1' key is the HELP key – if you press it, it will give you some help with whatever you are working on.
Esc 	The 'Esc' (Escape) key allows you to change your mind – and escape or cancel what you are doing.
Enter 	The 'Enter' key is your command function – It tells the computer that it is OK to go ahead with whatever you have asked it to do
Tab 	The 'Tab' key works two ways: 1) just like on a typewriter, it jumps to the nearest tab stop you have set and 2) if you are in a dialog box (or online order form), it moves the cursor to the next field.
Arrow keys 	These move the cursor across the screen in the directions indicated
Delete 	You can guess what this does – it erases what you tell it to erase (that is, anything you have selected)
Backspace 	This key erases anything to the left of where you are typing.

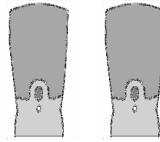
<p>Page Up/Page Down</p> 	<p>These keys move the entire view of the page up or down one screen.</p>
<p>Home/End</p> 	<p>The 'Home' key jumps to the beginning of the text line you are working on and the 'End' key, moves the cursor to the end of the text line you are working on.</p>
<p>Shift</p> 	<p>As on any word processor or typewriter, this allows you to make capital letters.</p>
<p>Caps Lock</p> 	<p>This key types all the letters as capital letters, without having to hold the 'Shift' key down.</p>



The goal of a language program must depend on the situation in which the language finds itself.

Hinton and Hale, The Green Book. (5)



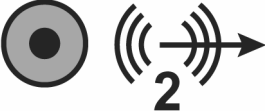

The Speakers and Microphones



Speakers are important to understand for the purpose of working with oral language on your computer. New computers have sound capability built into the motherboard; older computers relied on a sound card, which plugged into the motherboard. You will need to connect a pair of speakers or a set of headphones to your computer if you want to hear sound.

The sound capability on your computer (whether it uses a sound card or not) allows for two things: it plays and records digital sounds. When you are working with languages, you can either enter the sound directly using a microphone, in which case the sound can be saved on the computer as a digital sound file, or you can import (enter) sound from an outside source such as an older cassette tape. You have some choices about how to digitize older tapes (see section on digitization below).

Sound ports (or jacks) are sometimes confusing because they all look similar. The following table should help:

Port or Jack	Description
 Speaker	The place to connect your speakers or headphones.
 Microphone	Connection for a microphone to record sounds or to use speech recognition software.
 Line Out	This lets you listen to your computer through your home stereo system.
 Line In	You can record a cassette audio CD or radio by plugging in a stereo system into this port (jack).

Exercise 1:

1. Study the main components of your computer
2. Identify, open and close the ports on the front of the 'CPU'

Other Hardware to Know

Modem

Virtually every new computer has a built-in internal modem. A modem translates computer information into audio tones so that it can be transmitted over phone lines to other modems. Modems can be internal or external.

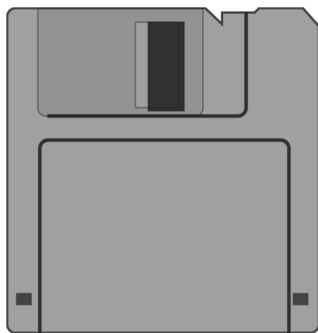
Internal modems are cheaper than external modems and usually come built into the computer.

External modems plug into the computer's serial port. New broadband modems usually plug into the USB or Ethernet port. These are different than traditional, older modems in that they transmit information directly, without having to convert it into audio tones, and are therefore much faster. The most common types of broadband connections are DSL or Cable.

Hard Drive

The hard drive is the computer's main storage area. This is hidden in the CPU – you can't see it but you can usually hear it running when you start the computer. External hard drives are also available and normally plug into a USB port. Think of the hard drive as a giant file cabinet with all the files neatly saved in folders. The main hard drive is labeled 'C' on your computer (so when someone refers to the 'C' drive, which is where most information is stored and saved). Other hard drives are labeled 'D' and 'E' – these support the storage of additional information if needed and connect to information provided for the computer on CD's. The 'A' hard drive is designated for floppy disks. Modern hard drives can store anywhere from 20 GB to 250 GB (GB = Gigabytes) – which is simply a HUGE amount of information.

Floppy Drive

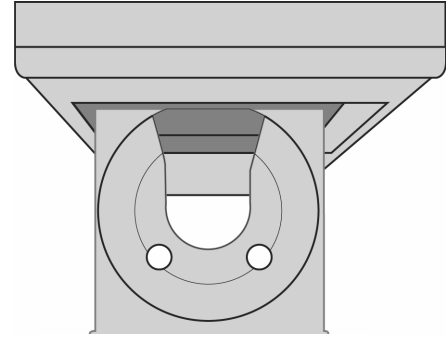


Most desktop computers have a floppy drive, though many laptops have dropped them. The floppy drive is labeled as the 'A' drive on most computers. The floppy drive reads the 3 ½ - inch floppy disks (which aren't really soft or floppy!). These store much less information than a CD, but are still useful for transferring and storing small documents. Though they will soon be considered relics of the past, they are really cheap and easy to use and transport.

CD-ROM Drive

The CD-ROM drive is usually labeled as the 'D' drive on most computers. Uses for a CD-ROM drive include:

- 1) *Installing new programs*: new program software frequently comes in the form of a CD-ROM because of the large storage capacity.
- 2) *Running CD-ROM programs*: CD-ROMs offer high quality, multimedia content including music, videos and animation. They are easily searchable and offer vivid displays.
- 3) *Playing audio CD's*: Just like using your home stereo, your computer's CD-ROM drive will play you latest, favorite CD while you work!



Top view of an opened
CD-Rom Drive

CD-ROMS

CD-ROM (*Compact Disk-Read Only Memory*), are played through the CD-ROM drive and holds a lot of information. Those you want to play, the same as you play in your home stereo, are 'read only' – you can not re-record on these. Others, known as CD-R (Compact Disc Recordable) and/or CD-RWs (Compact Disc Re-Writable) can be written on or burned, as the terminology goes. These are the most important to learn to use for the purposes of working with Indigenous languages. Once the native language information is 'burned' onto a CD-RW, then it can be permanently produced as a CD-ROM, which can't be written over.

Remember:

CD-ROM: Read only, no new information can be added.

CD-R: New information can be written or burned, but it is permanent and can't be changed or erased.

CD-RW: Can be written to many times and can be modified and erased if you choose to do so.

DVD Drive

Newer computers contain DVD (**Digital Versatile Disk**) Drives. A DVD can hold as much as seven times the information of a CD-ROM. Like CD-ROMs these come with

options for read-only (DVD-ROM), DVD-R (Recordable) and DVD-RW (Re-Writable) which you can use if you have a DVD-ROM drive on your computer.

Yet more technology for Indigenous languages...Big databases
By Tom Nugent, Special to the Tribune/ October 12, 2003.

EAST LANSING, Mich. -- Drop by Professor Helen Roy's Native American linguistics class at Michigan State University ... and you'll probably find her drilling a dozen students on difficult-to-pronounce words such as bmijigoe. "I'm teaching a language, but I'm also teaching a way of life," Roy said. "If we lose the [Ojibwe] language, the danger is that we'll also lose the culture to which it belongs. I don't think anyone one wants that to happen, and that's why we work so hard in class every day." As a Native American, she is engaged in a passionate struggle to save her tribal language, a Michigan version of the Algonquin-family language, Ojibwe, from vanishing within the next few decades. But teachers such as Roy face an uphill battle, said Wayne State University linguistics expert Anthony Aristar, who is directing efforts to build a nationwide, \$2 million database aimed in part at preserving dying languages. Aristar and other researchers say that at least half of America's 200 remaining native languages will vanish within the next century.

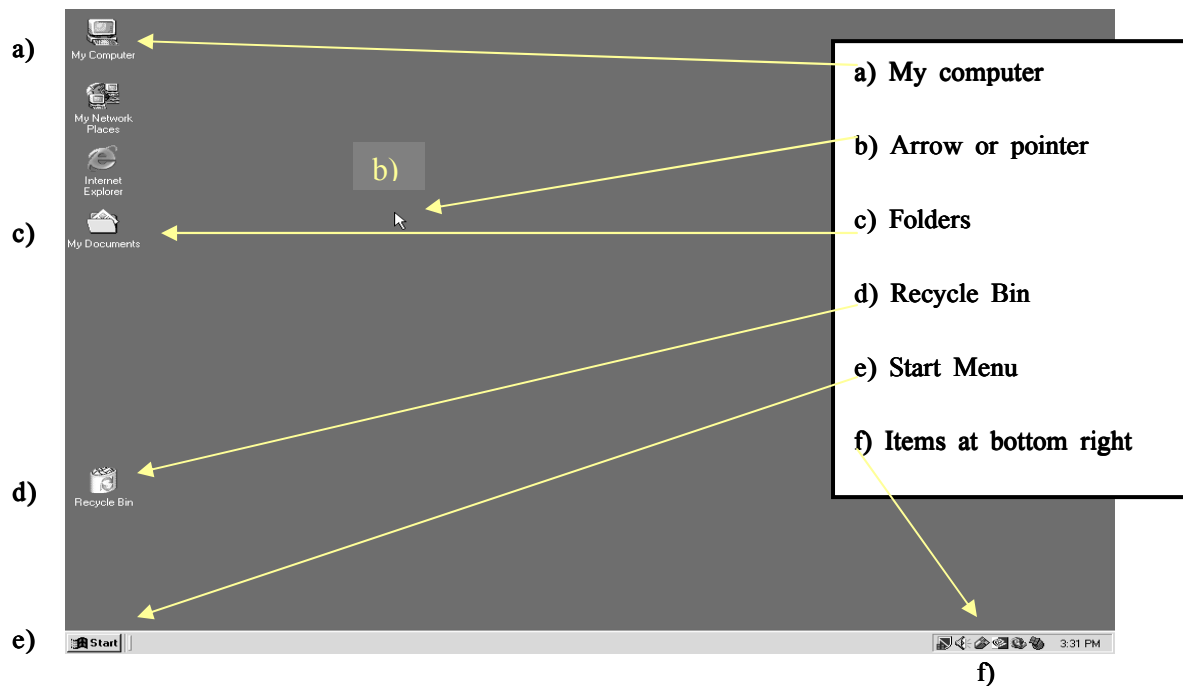
<http://www.chicagotribune.com/news/nationworld/>

Software

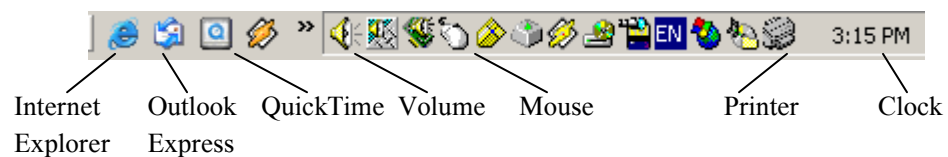
Software refers to anything that instructs the hardware how to operate or perform. There are two very basic types: operating systems, like Windows XP or Windows 2000 and application systems, like Excel or PowerPoint, which have very specific tasks to do. New software comes out periodically and it is sometimes hard to keep up with the latest version. Whether you use a PC or a Macintosh, today most software is compatible with both. The software that we have found to be most helpful for work with languages includes: Microsoft Word, PowerPoint, FrontPage and Adobe Photoshop. For work with sound files, we support the use of Audacity, a free download from the internet. There are many sophisticated software products, which are worth exploring as your skills with computers increase. We will be discussing specific additional software which supports work with language in Part IV. We will also discuss how to save files independent of specific software programs so that you will not lose data when switching computers or when updating your own system.

The Desk Top

The desktop is the window, which appears as you open a Windows program. The desktop screen has the main items that dictate how the computer will operate or perform at the user's discretion. The icons and text indicate what software is available. The user just needs to learn to 'point and click' on whatever is needed to put the computer to work. On very old computers, the information was text only. Today, pictures (images are known as icons or graphical user_interfaces) are displayed for users to 'point and click' on to open a window or program.

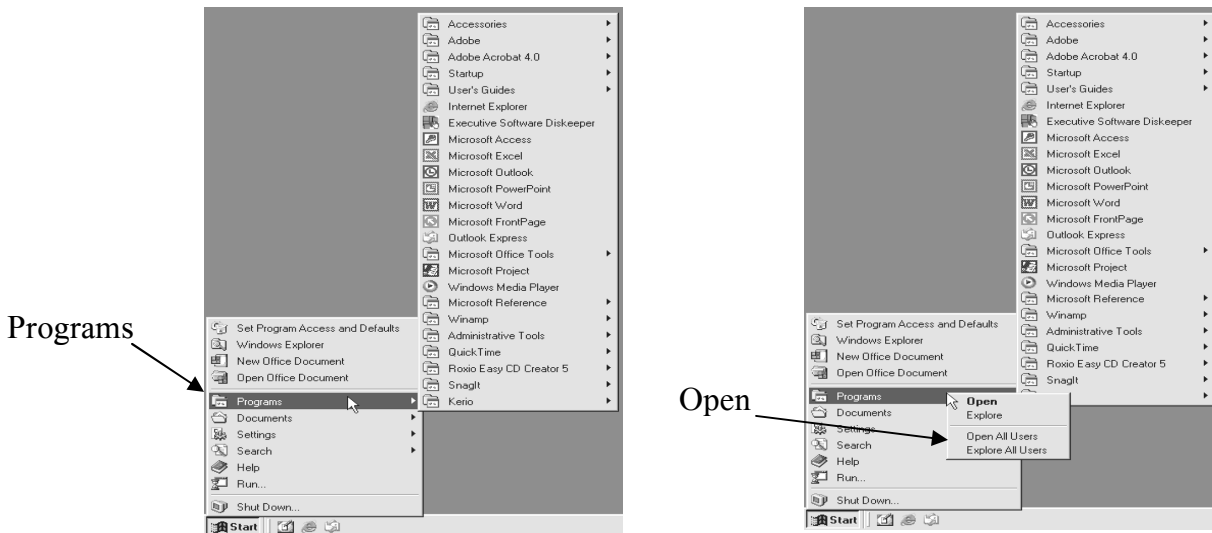


The bottom of the desktop screen:



Programs

If you would like to know what software is installed in your computer, left click on the 'Start' menu and then click on 'Programs'. You can then select the program you want and right click, at this point, choosing 'Open' to enter the program.



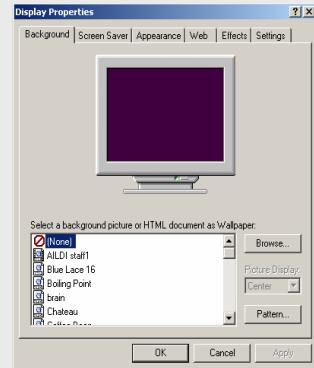
Exercise 2

1. Explore the desktop – and do the following:

- **Point and click** on the 'Start' button and study what programs are on the computer you are using.
- **Point to a program and open it**
- **Close the program by pointing and clicking on the 'File' menu--**, scroll down to 'Exit' or 'Close'... and click. Some items do not contain a 'File' menu – in this case, close the window by clicking on the 'X' in the upper right hand corner of the window.
- **Try opening and closing** other programs
- **Optional:** Try moving icons around on the desk top by clicking on and then dragging the icon.

Exercise 3

- **Point and click on the 'My Computer' icon** on the desktop or on the 'Programs' menu.
- **Study** the features included here.
- **Experiment** with opening and closing some of the icons.
- **Open** the 'Display' icon on the 'control panel'. Here you can control the picture chosen for your desktop or for the change any settings.
- **Choose** a screen saver



Exercise 4

You can choose to either **right or left click** on the 'Program' menu. When you 'left' click, you access the list of available programs; when you 'right' click, you have a different, but very useful set of options. Try this...

- **Right click** on 'Program' menu
- **Point and click on 'explore'**: This will show you all the items contained in the program you are looking at. As you begin to work more with your computer, you will find that this is a very useful way to see and organize the materials in your files. Items displayed here can be moved from one side of the screen to the other, or shifted within the same window.

Technology is a tool

The term 'technology' can refer to a computer, a video camera, a digital or tape recorder. The goals for using technology will differ with each community's situation and technology can be used in conjunction with other community language revitalization efforts.

How will you use technology in your community?

PART III: DEVELOPING MULTI-MEDIA LANGUAGE LESSONS

“I think that an important human purpose is the fullest use of the mind in creating intellectual wealth or products of intellectual labor. An enabling condition for this is linguistic and cultural diversity, since it is that condition above all others that permits the exploration of the widest range of paths of creation...thus, the loss of a language is a certain tragedy for the human purpose, not just locally but the human purpose in general. And the loss of a language, if it can be prevented, must be prevented.”

Dr. Ken Hale, speaking to a congressional committee in support of the Native American Languages Act in 1992. (Arnold 47).

This section is devoted to a discussion of the programs beginning users need to know in order to create effective multimedia language lessons. Each section addresses only those parts of the computer programs, which lend themselves to the presentation of language work for teaching, learning or documenting indigenous languages. The computer software we will include are the Internet, creating your own email using ‘Hotmail’, Microsoft Word 2000, Audacity, Adobe PhotoShop, PowerPoint, MaxAuthor, FrontPage and CD creation software. Some of these may not be on tribal library computers but are recommended for use with indigenous languages. Each of the programs presented have multiple uses. Our focus is on how these software programs can support language revitalization; additional tutorials are recommended in Part IV.

MEET THE WORLD WIDE WEB!

Learning to use the World Wide Web (WWW), also called the Internet, opens up unlimited possibilities for sharing and enhancing work with indigenous languages. Many tribal communities offer web pages for their communities and their languages. These web pages illustrate everything from dictionaries to multimedia interactive language lessons. The Internet offers you the opportunity to view what others have done and to share your own work. We will focus on four things:

1. Knowing the Language: CyberSpeak¹
2. Internet Safety & URL Resources
3. Hoaxes, Etiquette & File Extensions

¹ <http://www.ftc.gov/bcp/conline/pubs/online/sitesee.htm#CYBERSPACE#CYBERSPACE>

4. Establishing a personal email account

CyberSpeak – Learning the Language

You don't have to be a computer expert to book a trip into Cyberspace, but it certainly helps to know a few words of cyber-speak. Before long, you'll sound like a native and get around like an experienced traveler.

BOOKMARK – an online function that lets you access your favorite web sites quickly.

BROWSER – special software that allows you to navigate several areas of the [Internet](#) and view a web site.

BULLETIN BOARD/NEWSGROUP – places to leave an electronic message or share news that anyone can read and respond to. Marketers or others can get your e-mail address from bulletin boards and newsgroups.

CHAT ROOM – a place for people to converse online by typing messages to each other. (Once you're in a chat room, others can contact you by e-mail. Some online services monitor their chat rooms and encourage children to report offensive chatter. Some allow parents to deny access to chat rooms altogether.)

CHATTING – a way for a group of people to converse online in real-time by typing messages to each other.

COOKIE – when you visit a site, a notation may be fed to a file " known as a "cookie" in your computer for future reference. If you revisit the site, the "cookie" file allows the web site to identify you as a "return" guest — and offer you products tailored to your interests or tastes. You can set your online preferences to limit or let you know about "cookies" that a web site places on your computer.

CYBERSPACE – another name for the [Internet](#).

DOWNLOAD – the transfer of files or software from a remote computer to your computer.

E-MAIL – computer-to-computer messages between one or more individuals via the [Internet](#).

FILTER – software you can buy that lets you block access to web sites and content that you may find unsuitable.

INTERNET – the universal network that allows computers to talk to other computers in words, text, graphics, and sound, anywhere in the world.

ISP ([Internet](#) Service Provider) – a service that allows you to connect to the [Internet](#). When you sign up (it takes special software and a modem), you'll be asked to enter a screen name, a secret password and your credit card number. Usually, online charges are billed to your credit card. Most providers allow you to review your monthly expenses online instead of sending you a separate itemized bill. If you note unexpected charges from your ISP, call for an explanation. If you're not satisfied with the explanation, or think you may be the victim of fraud, write a letter to your credit card company and your state Attorney General.

JUNK E-MAIL – unsolicited commercial e-mail; also known as "spam." Usually junk e-mail doesn't contain the recipient's address on the "To" line. Instead, the addressee is a made-up name, such as "friend@public.com." Or the address on the "To" line is identical to the one on the "From" line.

KEYWORD – a word you enter into a search engine to begin the search for specific information or web sites.

LINKS – highlighted words on a web site that allow you to connect to other parts of the same web site or to other web sites.

LISTSERV – an online mailing list that allows individuals or organizations to send e-mail to groups of people at one time.

MODEM – an internal or external device that connects your computer to a phone line and, if you wish, to a company that can link you to the [Internet](#).

ONLINE SERVICE – an ISP with added information, entertainment and shopping features.

PASSWORD – a personal code that you use to access your account with your ISP.

POPUPS – advertisements which are like commercials that will direct you away from the site. Pop-up ads are a form of online advertising on the World Wide Web intended to increase web traffic or capture email addresses. It works when certain web sites open a new web browser window to display advertisements.

PRIVACY POLICY – a statement on a web site describing what information about you is collected by the site, and how it is used. Ideally, the policy is posted prominently and offers you options about the use of your personal information. These options are called opt-in and opt-out. An opt-in choice means the web site won't use your information unless you specifically say it's okay. An opt-out choice means the web site can use the information unless you specifically direct it not to.

SCREEN NAME – the name you call yourself when you communicate online. You may want to abbreviate your name or make up a name. Your ISP may allow you to use several screen names.


SEARCH ENGINE – a function that lets you search for information and web sites. Using a search engine is like accessing the main card file in a library, only easier. A few keywords can lead you almost anywhere on the [Internet](#). You can find search engines or a search function on many web sites.

URL (Uniform Resource Locator) – the address that lets you locate a particular site. For example, <http://www.ftc.gov> is the URL for the Federal Trade Commission. All government URLs end in .gov. Non-profit organizations and trade associations end in .org. For example, <http://www.naag.org> is the URL for the National Association of Attorneys General. Commercial companies now end in .com, although additional suffixes or domains may be used as the number of businesses on the [Internet](#) grows. Other countries use different endings.

VIRUS – a file maliciously planted in your computer that can damage files and disrupt your system.

WEB SITE – An [Internet](#) destination where you can look at and retrieve data. All the web sites in the world, linked together, make up the World Wide Web or the "Web."

Activity 1: Internet Safety & URL Resources.

Getting to know Internet Explorer. **Double Click on the Internet Explorer icon on the screen.** This will open the Internet Browser and will connect to the World Wide Web. 

Uniform Resource Locator (URL)

The address of a Web page allows people to find a page on the Internet. A Web page address is called a URL; that is an acronym that stands for uniform resource locator.

In the Address, type <http://pbskids.org/license/> this is also called an URL Address.

Hit the enter key on the keyboard, located on the right side or use the mouse and click on the green arrow that is next to GO at the end of the Address box.



Address box

First thing we learn about navigating the internet is to **READ** all the screen. As you get more familiar with the internet, your navigation skills will increase. For this activity, you'll enter in your name and learn some basic safety rules.

You'll be getting your Web License. This is designed for kids, but adults need to know this information too and monitor internet usage for their children. Just like visiting a new city there are places one needs to be aware of.

These rules are for my **safety**. I will honor them when I go **online**.

- I can go online at _____ (time of day) for _____ (how long?)
- It's ___ OK ___ not OK for me to go online without a parent.
- I understand which sites I can visit and which ones are off limits.
- I won't give out information about myself or my family without permission from my parents.
- My password is my secret. I won't give it to anyone.
- I will never agree to meet an online pal, or send my picture, without permission from my parents.
- I know an advertisement when I see one. I also know that animated or cartoon characters aren't real and may be trying to sell me something or to get information from me.
- I will follow these same rules when I am at home, in school, or at the library or a friend's.

Now you are ready to use a search engine! Type in one of the following Addresses

- www.google.com
- www.yahoo.com
- www.msn.com

Using the search engine, type in “your tribe’s name”.

- What do you see?
- Do you agree with the information?

Add another keyword “language” to your search inquiry.

- Is the information the same

Type in your name.

- Are you on the World Wide Web?



Most search engines have advertisements and the first listed web page could be there because the company paid for that spot. Google labels the paid sites as “Sponsored Links” and are located in a column to the right of the web page.

Activity 2: Book Mark your Favorite Sites.

Go to the toolbar click on **Favorites** and then click on **Add to Favorites**.

- **Explore the Internet** by visiting the following sites:
 - Cree for Kids: <http://www.creeforkids.ca/frontintro.htm>
 - Kumeyaay Site: <http://www.kumeyaay.org/>
 - Indigenous Languages and Technology: <http://www.u.arizona.edu/~cashcash/ILAT.html>
 - Sealask Heritage Institute: http://www.sealaskaheritage.org/flash/my_house.swf
 - The Tulalip Tribes: <http://www.tttculturalresources.org>
 - Technology-Enhanced Language Revitalization: <http://projects.ltc.arizona.edu/gates/TELR.html>

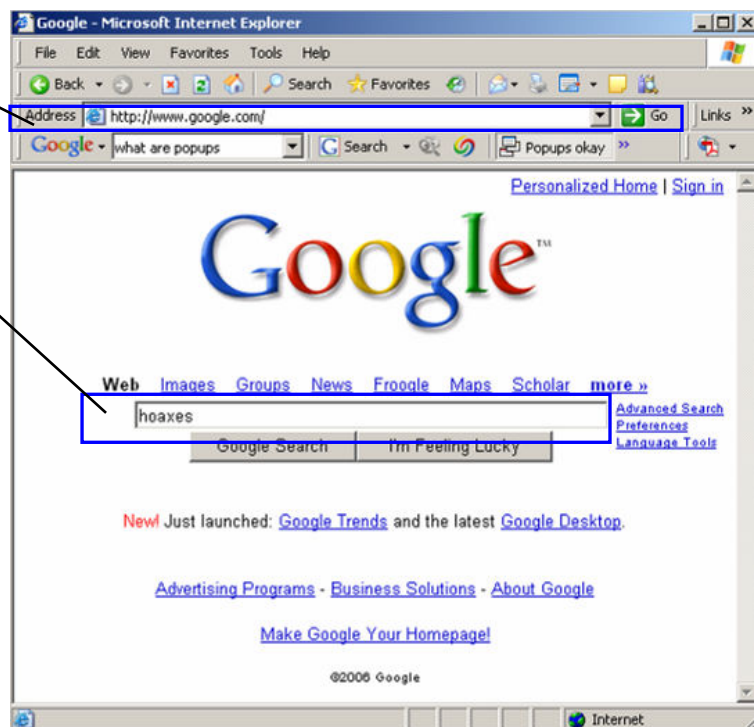


Activity 3: Hoaxes, Etiquette & File Extensions

Before we sign up for an Email account we need to learn some etiquette and common hoaxes that come with email. In this activity we will also learn about file extensions.

We'll use the Google Search Engine. Type “google.com” in the Address box. In the Google Keyword box type “hoaxes”.

- Hit the Google Search bar.
- Click on the link HOAXBUSTERS
- Read: What Are Internet Hoaxes and Chain Letters?



Now use the search engine to type in the keywords: “email etiquette”. Read the links and click on one. Reliable sites usually have an file extension of .edu or gov.

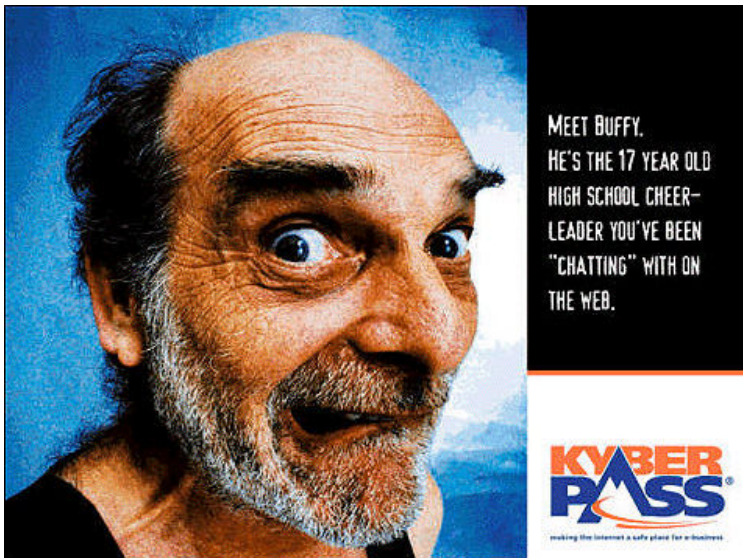
Tell Tale signs: File Extensions on URL addresses

These File Extensions are the tale end of the home of a URL address. They tell us if the hosting site is supported



Can you think of more?

- Go Here to learn more: <http://www.skeeterbytes.com/glossary1.htm>
- Or use your new skills and keyword in a search engine “file extensions glossary”.



*Never
divulge your
user name
or password
to others.*

Activity 4: Establishing a personal email account

Email is a way to connect with people in remote areas, exchange research, share information, and create cultural exchanges between people globally. In this section we

will learn about Email Etiquette, Email Attachments, File Extensions and sign up for your own email account.

Email Etiquette

- Immediately delete email with attachments from senders you do not recognize. It is most likely "spam". Do not click open web links in messages from unknown sources.
- Never run an executable file (e.g., .exe) from an email. The university has security precautions in place for most of these situations, but computer hackers are getting more sophisticated all the time.
- Do not forward personal email without the author's knowledge and permission
- Do not forward chain letters. Delete them.
- Keep acronyms to a minimum. They can be confusing to your readers.
- Delete unwanted messages to conserve space.
- Never answer "spam". Your response will confirm your email address. Delete the message instead.

Tell Tale signs: File Extensions on attachments

Be cautious when opening any attachment, especially if you don't know who the sender is. Attachments and images can inform the sender that an email address is good and that you opened it. With a little knowledge about what the file is you can see if you can read/open the attachment that your friends and family sends you. The next exercise will be a short quiz to test what you might already know!

File extensions can tell us what software program we need to view a file such as:

- Adobe Photo Shop *.psd
- Adobe Acrobat *._____²
- *.jpeg or *.jpg
- *.gif

Which file extension opens an image file? _____³



² *.pdf

³ Adobe Photo Shop, *.psd

Which file extension opens a sound file?

- *.avi _____⁴
- *.mp3 _____⁵

Do not worry if you are not familiar with the file extensions, this is just to increase your awareness of file types. For the most part, the computer will find the correct program to open your attachments.

Techie skills:

These are what us nerds call, “keyboard shortcuts”. They are designed to be used when the mouse is not convenient for you. Remember there are many ways to navigate a



Expand Your Techie Skills:

Windows Keyboard Shortcuts

- CTRL+Z: Undo
- CTRL+C: Copy
- CTRL+V: Paste
- F1: Help
- CTRL+ESC: Open Start menu

computer. Your input tools (input tools are ways to interact with the computer) are the mouse and the keyboard. You can also set up a computer for verbal commands which assists people with vision problems or Star Trek fans.

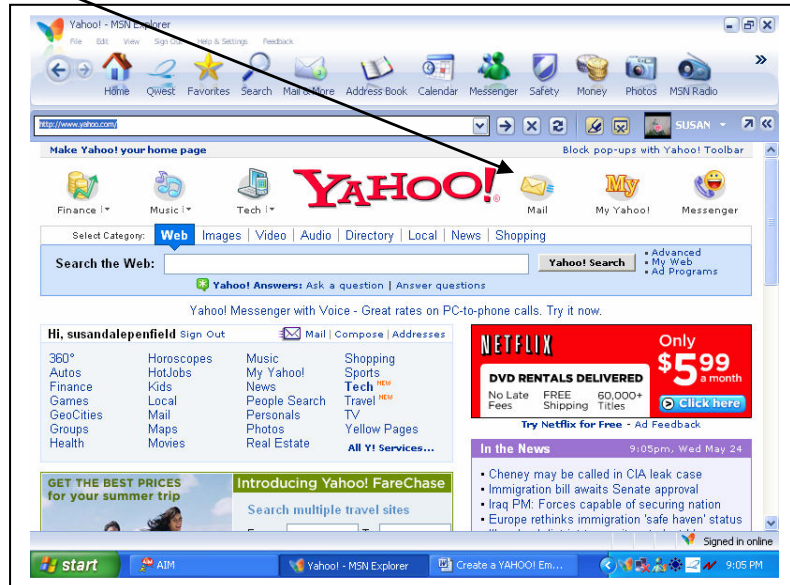
⁴ Audio Video Interleave

⁵ audio

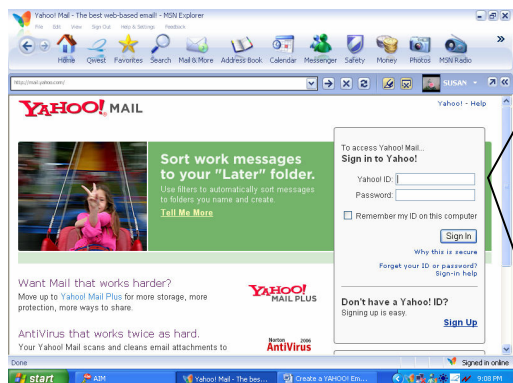
ESTABLISHING AN EMAIL ACCOUNT

We will use the search engine, www.yahoo.com, to create your own email account in 'Yahoo'. Follow these steps:

1. Double-click on the Internet Explorer icon.
2. Type www.yahoo.com in the dialogue box and you will get the following screen.
3. Click on 'Mail', (follow the arrow!)



4. Click on 'Sign up!'"
5. This is the page that will open each time you log in to Yahoo! Mail...only the next time, you will need to use your Yahoo ID and password to 'Sign In'...



To access Yahoo! Mail...
Sign in to Yahoo!

Yahoo! ID:

Password:

Remember my ID on this computer

Why this is secure

Forget your ID or password?
[Sign-in help](#)

Don't have a Yahoo! ID?
Signing up is easy.

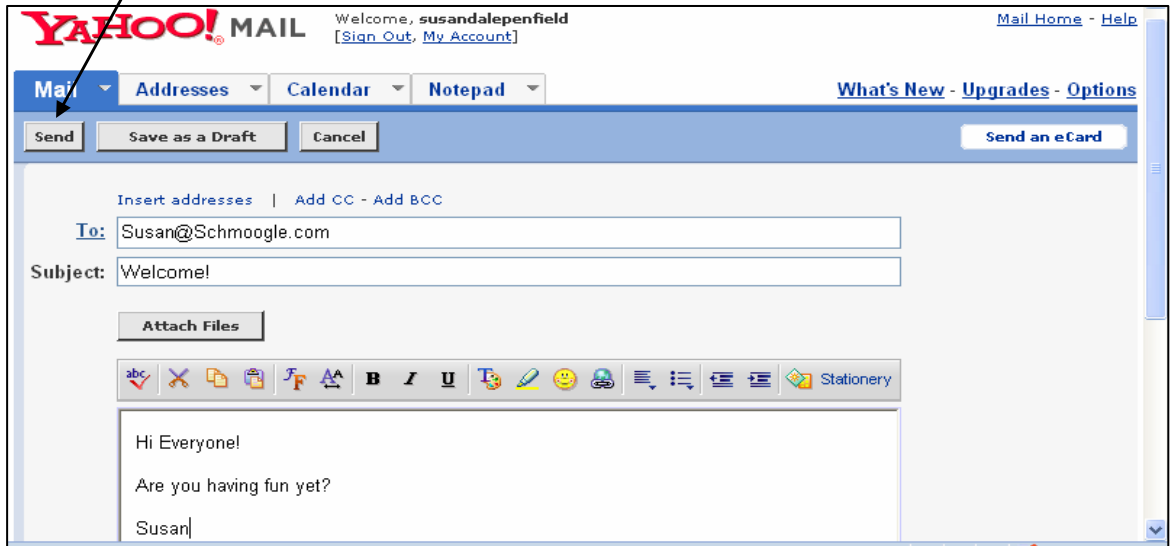
[Sign Up](#)

6. On this screen, fill in the required information:

7. At the bottom of that screen, click on "I agree"....

8. The next screen welcomes you to Yahoo! Mail.... If you want to read your mail, click on 'Inbox' on the left of the screen. To create an email, click on 'Compose'.

9. Type and Send a message to someone (the address below won't work 😊)



That's it! You are ready to join the world of email!!

Exercise 1: Compose a Message

Give it a try:
Compose a message and send it to a friend
Copy it to yourself! (Put your own address under the line marked as Cc:)

Important Email Addresses:

**“To never hold any book of his language:
the grammar a thesis, never published,
the words still slips, not a dictionary...**

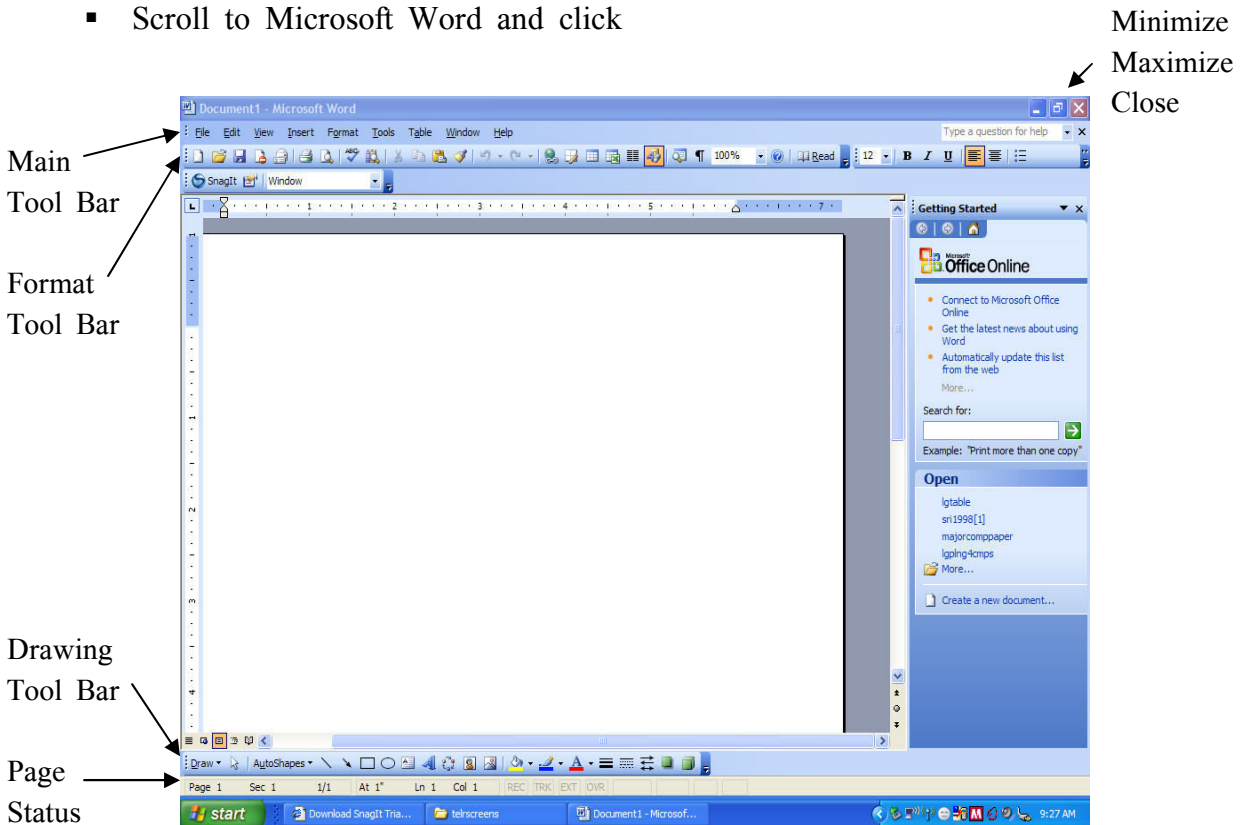
Dell Hymes, *In Vain I tried to tell you.* (210)

MICROSOFT WORD 2003

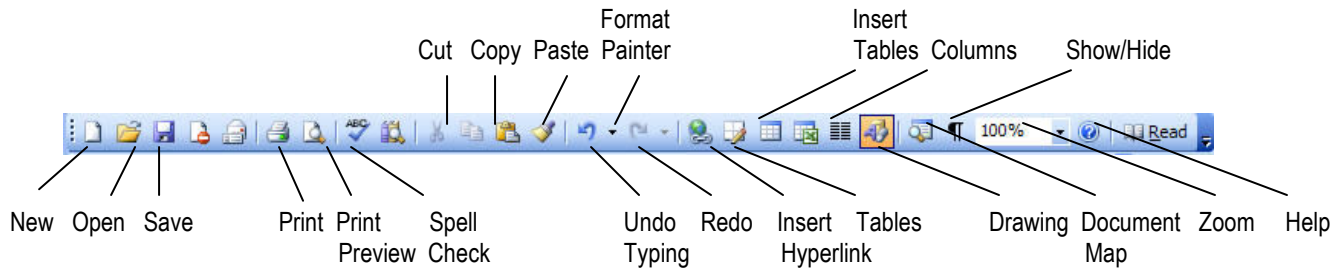
This program, Microsoft Word, is the most widely used document-producing program for PC's. For the purposes of working with language, you can use Word to write a language using special symbols found in the Unicode chart, you can create lessons and include pictures, you can write dictionaries or word lists, you can publish these documents to a web page and you can make your own language-advocate newsletter using a Word template! In short, you can create any document you need to support your efforts toward language instruction or documentation.

Step 1: Open Microsoft Word

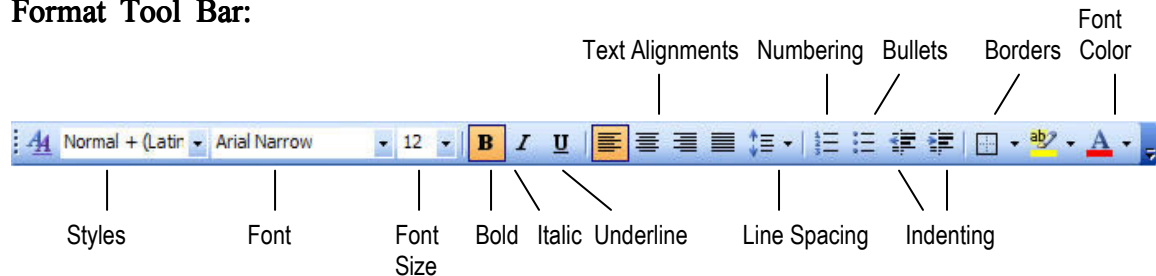
- Click the START menu
- Click on Programs
- Scroll to Microsoft Word and click



Main Tool Bar in MSWord:






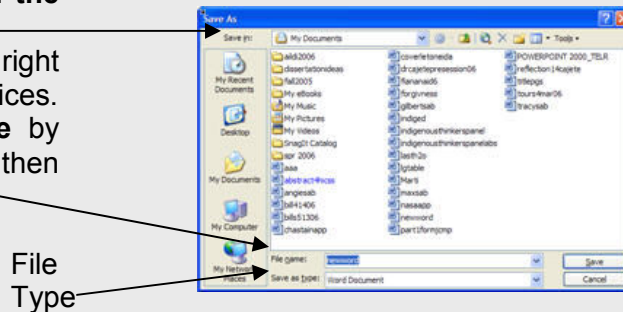
Format Tool Bar:



Let's begin to write!

Exercise 1: Saving

- Open Microsoft Word from the Start Menu  (you may have an icon already on the desk top).
- Select 'Start', left click on 'Programs' and then left click on 'Microsoft Word'
- Point and click on the 'new document' icon  when the Word window is open. (Note: You can also click on 'File' and then 'New'.)
- Type in some text of your own on the new blank document
- Click on the disk icon to 'Save' 
- Locate the box at the top of the window marked "Save in."
- Click the small arrow on the right to bring down the menu of choices.
- Give the document a name by typing in the 'File Name' box then click 'Save'.




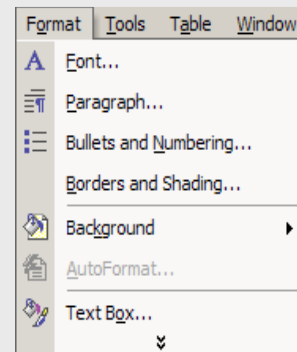
Exercise 1: continued

Look for 'Save as Type':

- For language work especially for those of you working with languages which have varied symbols, click on the small arrow on the right hand side of this box and then click on 'Rich Text Format' (RTF file) – this will save your work so that it is easily transferable to other formats.
- For English documents, simply saving as a 'Word Document' is ok for most use. You might also consider the value of saving as a 'plain text' document which will make your text readable for the HTML files used on web pages.

Exercise 2: Formatting

- **Open a new word document** 
- **Study the 'format' tool bar** by moving the cursor over the different icons.
- **Click on the 'Format' menu** and scroll down to 'Background'
- **Choose a background color** for your document
- **Type in several questions** you would like to raise about language revitalization!
- **Save your document**





BE FEARLESS!

If you do not like the changes or made a mistake, go to 'Edit' and click on the first menu item, "Undo". Or, you can also click on the undo icon



Exercise 3: More Formatting

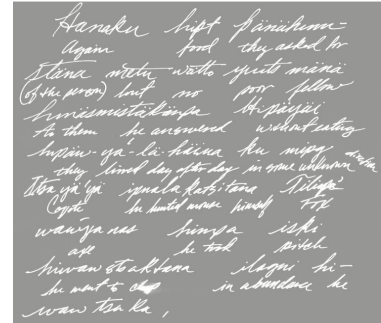
- **Highlight one question** from Exercise 4 by:
 - placing the cursor at the end of the question,
 - left clicking and holding the button while you drag the cursor over the question
 - release the mouse button when you have highlighted the entire question
 - **Experiment** with the format toolbar:
 - 'B' – **bold**, 'I' – *italic* and 'U' – underline
 - Fonts allow you to change the style of type
 - You can also change the **font size**
- 
- **Save your changes**

"Immerse yourself totally in your own language and you'll get culture as a byproduct,The soul and culture of a people are reflected in their language."

(Calvin Fast Wolf, Sioux language teacher at Stanford University, quoted in Sioux language at Stanford by Lyn Dearborn (lyn@anchor.esd.sgi.com) Wed, 3 Mar 1993 12:11:07 -0800)

Writing Your Language with Microsoft Word

Microsoft Word is quickly becoming one of the most widely used word processing programs today. However, as many of you are well aware, representing an indigenous language in a word document still remains a daunting challenge.



Why is this? A common fact is that most indigenous languages in the Americas possess their own unique set of sounds that often require a unique set of characters to represent them. This is coupled with the fact that “font” makers, or those people who make character sets for others, simply do not take into account the character needs of small minority languages.

UNICODE

This is where “Unicode” comes in.

Unicode is a system of encoding that allows the representation of a language in a Word document. For example, take a look below at the following two letters.

[X̣] [Ḷ]

These two characters are common in many indigenous languages of the Northwest Coast and interior, however, they are very unfamiliar and hard to find in any font set that may be contained in a word processing program.

Thus, Unicode is a system of encoding that provides the ability to “encode” the characters of the world’s languages. What this means for many indigenous languages is that the possibility exists that Unicode will have some, most, or all of the characters needed to represent the full spectrum of sounds and how they are represented in a text document.

Unicode in Microsoft Word

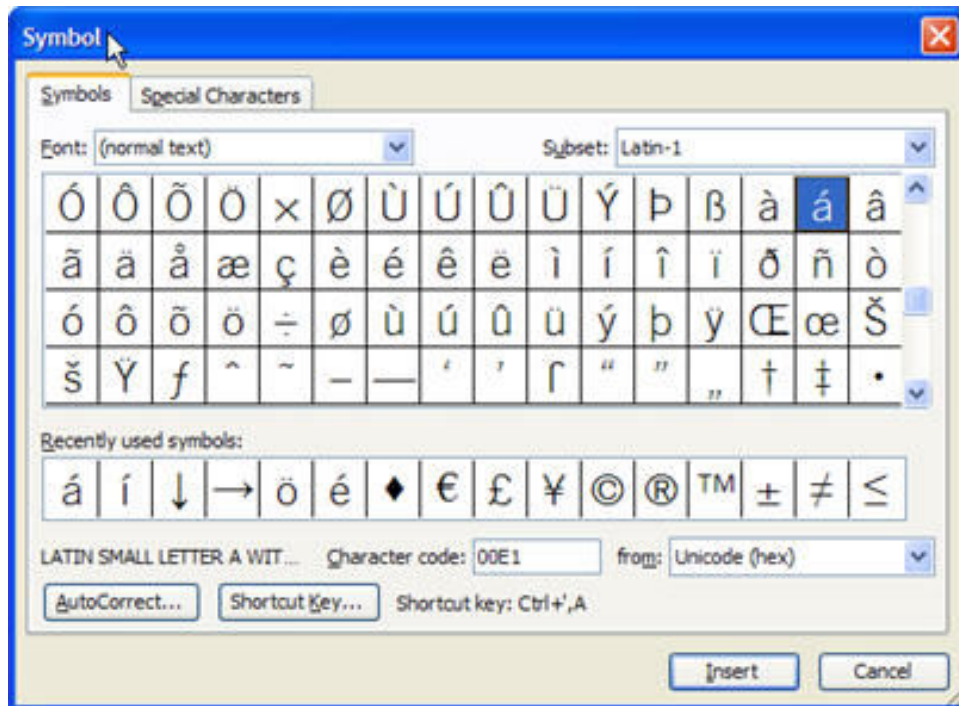
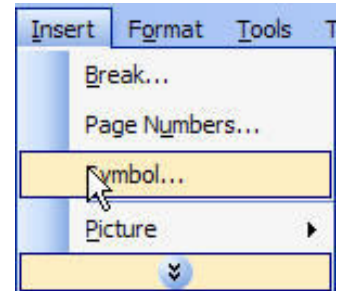
Unicode is usually present in Microsoft Word in at least the two following “fonts.”

- Arial Unicode MS
- Lucid Sans Unicode

The means of accessing these “fonts” is pretty straight forward. Give it a try.

Step One

- Open Microsoft Word and a new document. From the “Insert” menu select “Symbol.”
- Once this is done, a menu will appear like the one below.



Step Two

Now search to see if “Arial Unicode MS” or “Lucid Sans Unicode” is listed. If they are, choose Arial Unicode MS to start with. Once you have selected Arial Unicode MS, a full range of characters will appear. On the right side scroll bar, scroll down to see what is contained in this set of characters.

Step Three

Once, you have found a desirable “character,” just click on it (it will enlarge and be highlighted in blue) and then click the “Insert” button to enter it into your Word document. That’s it! So every time you need a special character just repeat the above steps.

Exercise 4: Unicode

Haa’íshą́ Dinék’ehjí béeso dabízhí’ bídahwiidiil’ááł.

- **Open a new Word document**
- **Try typing a word in your native language—are special symbols needed?**
- **Click on ‘Insert’**
- **Click on ‘Symbol’ on the drop-down menu**
- **Explore this window:** Try different fonts to access a different range of symbols.
- **Click on the symbol you want and then on ‘Insert’** at the bottom of the window, to add the symbol to your word.

Another choice for working with fonts for indigenous languages is the use of Navajo Fonts described below by Gilbert Brown (Navajo) Ph.D. student at the University of Arizona.

Using Navajo Fonts

The Navajo font is from Chinle Unified School District’s #24 for PC users only. The font is free and downloads by the following the instruction after the ‘log on’ to the Chinle School District’s web address: <http://www.chinleusd.k12.az.us/NavajoTR>.

The Chinle School District is located in the central part of the Navajo Nation near Canyon De Chelly National Monument. The park has many cultural connections, and attracts visitors locally and nationally. Chinle School District has seven schools and 4000+ students and is the largest school district in the Navajo Nation. Chinle School

District supports and encourages Navajo language maintenance and their students take Navajo language and culture. One of the primary goals of the district is to increase the Navajo language and culture into all curriculum areas of their school district.

To download Chinle Navajo font, go to their web site listed below, find the Navajo Font button for PCs, and follow the instructions. <http://www.chinleusd.k12.az.us/NavajoTR>

It is recommended that if you do not have a directory named "downloads", you create one on your drive when you download this file, then use it for future downloads as well. [Download Navajo Font File for Windows](#) to **"Downloads" directory**.

Click on the left window to return to the drive where you want to make a download directory. Use the middle icon on the right to create a new directory.


Select this directory as where you want to put the downloaded font file. Once the file has downloaded, then do the following steps to install it.

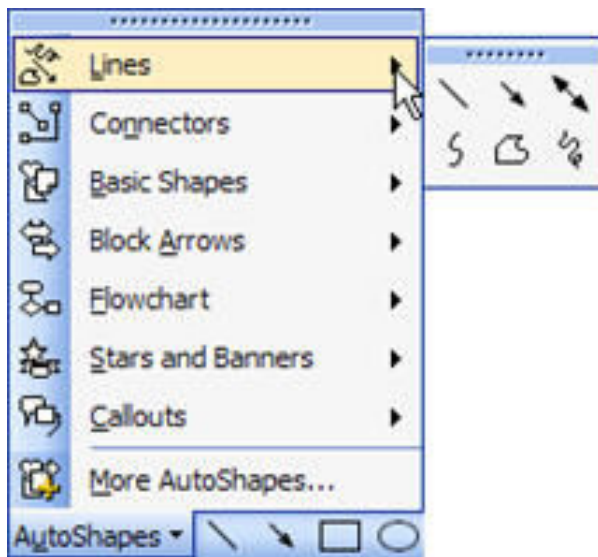
1. **Go to Start**
2. **Control Panel**
3. **FILE** (Pull Down Menu, Upper Left)
4. **INSTALL NEW FONT**
5. **Select Font** by using the windows to select the disk and directory where you downloaded the font. The name of the Navajo Font should appear in the upper window when you find the correct directory.
6. **Click on the font name** to highlight it.
7. Make sure the option **"Copy Fonts to Font Folder"** at bottom of page is checked.
8. **Click on OK**
9. **When installed, close all Windows!**
10. To use the Navajo Font, go into a word processing application and select the Navajo Times Roman Font and the type size. Begin typing in Navajo!

Adding Graphics To Your Language Lesson!

There are a number of ways to add graphics (pictures or drawings) to your documents. The exercises below will include how to add graphics using the drawing tool bar and how to import graphics from web-based sources. We will also explore how to create boxes for text or graphics within a document. You can include your own artwork later by scanning it into your computer and then importing it into your documents. Let's go!





Exercise 5: The Drawing Toolbar

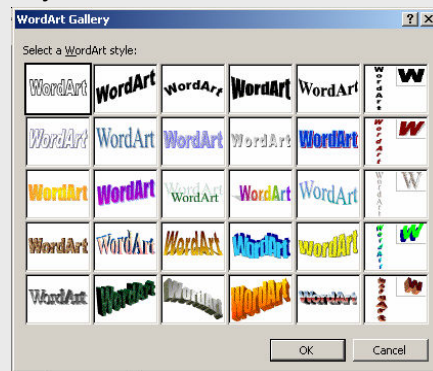
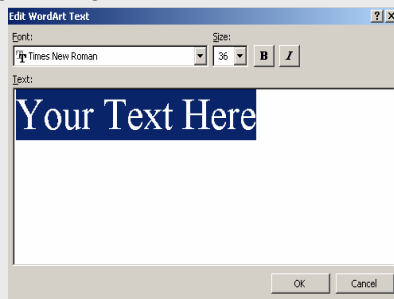
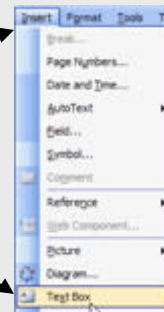
- **Open a new document** 
- **If the drawing toolbar is not on your screen**
 - click on 'View'
 - scroll down to 'Toolbars'
 - click on 'Drawing'
- **Explore the drawing toolbar** by clicking on each icon




Click on 'AutoShapes' for extended choices on the drawing tool bar.

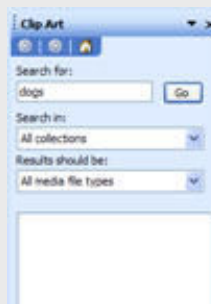
Exercise 6: Importing a Picture



- **Open a new document** 
- **Create a text box** using the drawing menu:
 - Click on the 'Text Box' icon  on the Drawing Tool Bar, or click on 'Insert' on the main formatting menu and then 'text box'.
 - Place your cursor where you want the image to be
 - Left click and hold the button down while you move your mouse over the screen – make the box as small or as large as you want
 - Release the button and the text box should appear
- **Insert Word Art** – Put the cursor inside the text box, click, and type a word in your language. Highlight the word and click on the 'Word Art' icon . You can now choose from a variety of different word art styles.
- **Select a style then click 'OK'** 
- **Type in your own text on this window**

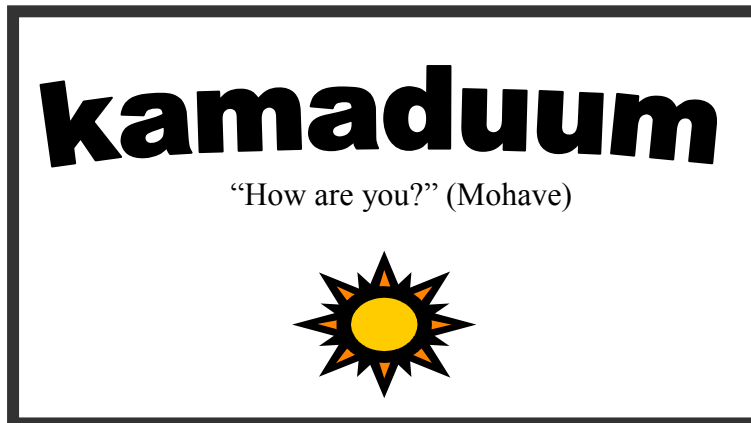


Insert Clip Art

- Put your cursor inside the text box again and click on the 'Clip Art' icon. 
- You can now search for various types of clip art. You can even look online for many more images.

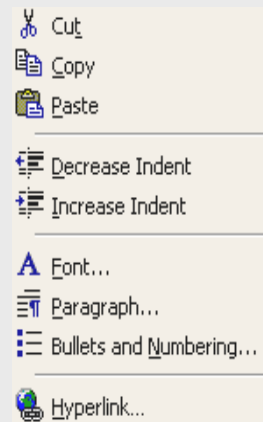


Create a border – While your cursor is inside the text box, click on the ‘Line Style’ icon  and choose the size of your border. You can also choose a color for your border by clicking on the ‘Line Color’ icon . By clicking on the small arrow to the right of this icon, you can access many more border colors.



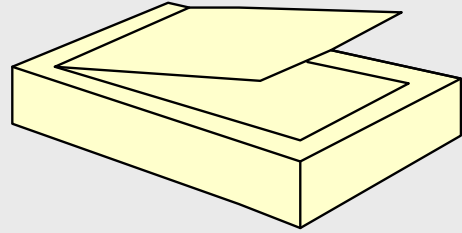
Exercise 7: More Clip Art from the Web...

- Open Internet ‘Explorer’ from the desktop
- Type www.msn.com or www.google.com
- Type in ‘Clip Art Images’ and search.
- Search for an image (drawing or picture) of your choice
- Select the picture by clicking on it.
 - For the **copy/paste** menu, right click on the mouse
 - On the ‘File’ menu, click ‘Save As’ and put your picture into your own ‘Folder’ titled ‘(your name)_pictures’. Or, if you want to copy something directly from the Web into your document, and not save it in a picture file, you can ‘right click’ –Choose ‘**Copy**’
- Return cursor to your WORD document and ‘**Paste**’ the picture in



Exercise 8: Scan in your own pictures!

- Set up the picture in the scanner
- On the 'Insert' menu, click on 'Picture'
- Then, click on 'From Scanner'
- Choose 'Web Quality' if you want to publish your document on the Web (this lowers the resolution-needed for online sources)
- Choose 'Print Quality' if you want to publish your document in a hard copy printed version (this allows for higher resolution).
- Edit your picture using Adobe Photoshop if needed



Exercise 9: Inserting a picture into a document


- Open a new Word document and type a sentence or two about a picture you would like to use.
- Click the cursor on the place, within the document, where you would like the picture to be.
- Point to 'Picture' and click 'From File' on the 'Insert' menu
- Locate the picture you want
- Double-click on the picture to insert it.

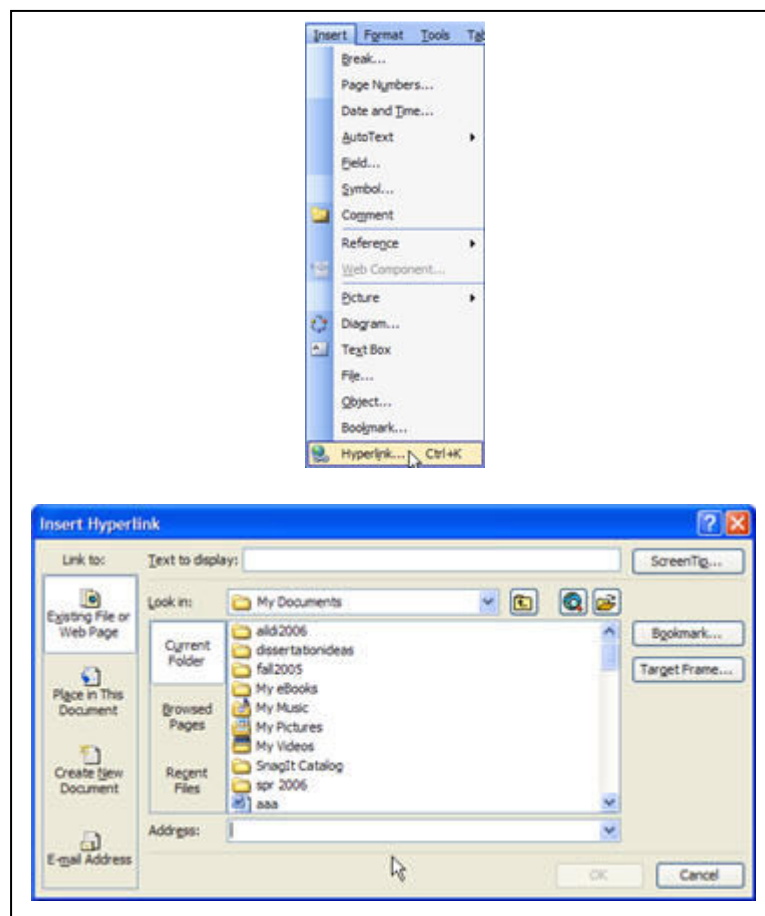
**Let us put our minds together and see what
kind of life we can make for our children.**

---Sitting Bull (Oglala Sioux Chief, 1834-1890)---

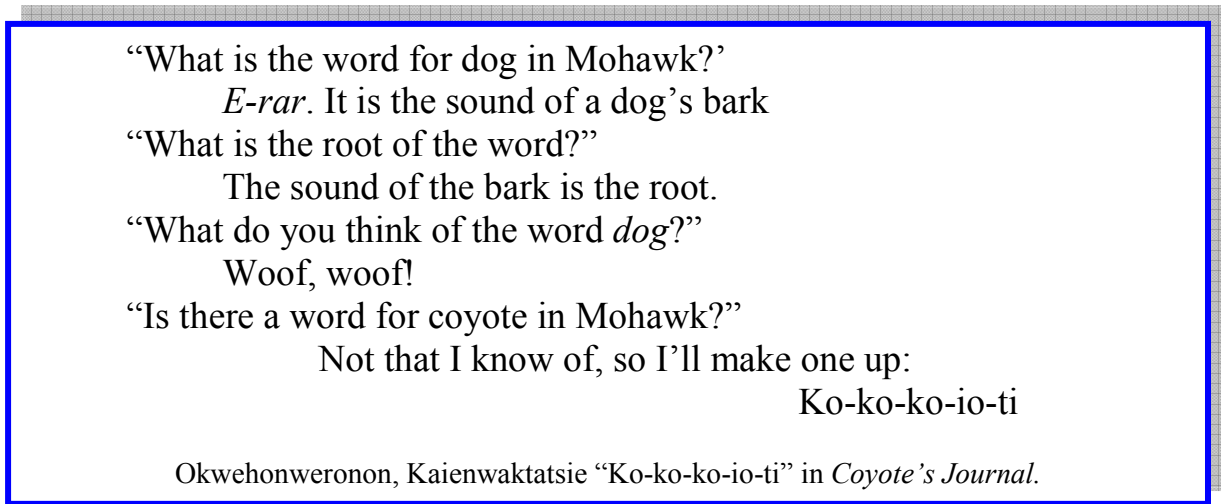
Inserting hyperlinks into a document. You can use the same process. If you want to send a Word document as an email attachment or publish it on a Web page, you can insert links into the document so the reader can 'click' on them and connect to the Web site directly.

Exercise 10: Inserting Hyperlinks into Word documents

- Click Insert > Hyperlink  on the Standard toolbar.
- Under Link to File or URL, click Browse.
- Double-click on the file you want to link to and click 'OK'.
- When the 'Save As' HTML dialog box appears,
- Type a name in the 'File Name' box and then click Save. *Note that the text is now underlined, showing that it is a hyperlink.*
- Move your pointer over the hyperlink. When the hand appears, click to go to the linked document.



Using MSWord Dictionary functions with Native Languages



Remember, Microsoft Word is the most widely used text creation and editing software. Built into MSWord are many functions to assist with the creation of accurate documents. Among these features is the **Spelling and Grammar checking** function. It can be accessed under the ‘Tools’ drop down menu from the MSWord toolbar. We will show here how to enable the MSWord spell check dictionary to recognize native language terms. This will only work if the native language being targeted is written using a standard alphabet, without extra diacritics.

When using the Spell checker, words that are not in the dictionary provided by MSWord will be shown in a popup window and will be as illustrated below. Suggestions for correct spelling of the term are given in a window at the bottom of the popup. If the correct choice is in the Suggestions, it can be highlighted and the Change button on the right side of the popup will replace the incorrect with the correct spelling.

To the right of the popup, there is also a choice of ‘Add to Dictionary’. This function is one way to create the ability of MSWord to include Native Language terms in the spell check dictionary. When the option is chosen when using spell check, the highlighted word is added to the ‘custom’ dictionary in MSWord.



There are two possibilities:

1.

Exercise 11

- With the spell check window open, click on the 'options' button. On the screen that appears, there will be a drop down window labeled 'custom dictionaries'. The default custom dictionary is titled CUSTOM.DIC. When the 'Add' choice is made with the spell checker, the highlighted term is added to the CUSTOM.DIC dictionary file.
- To create a native dictionary for spell checking in MSWord, run the spell checker and click on the 'Add' option for each term. (While this method will work, it could be time consuming if the number of terms is large.)

2.

Exercise 12

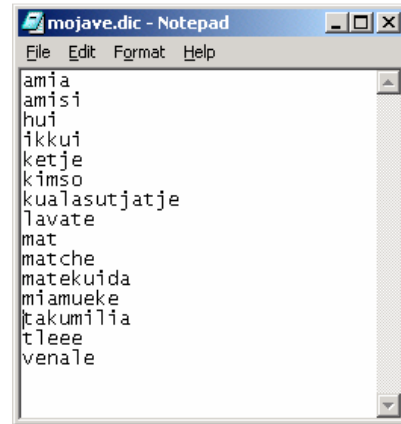
- Create a text file containing all the native terms
- Import it into the MSWord spell checker, any number of native terms could be included using this method. The first and hardest part of this is to collect the terms to be used, taking into consideration that the spelling that is used for these terms will be considered the correct spelling by MSWord.
- Open Notepad to create the text file that will be used.

Have a vision not clouded by fear.

--Cherokee Proverb--

If the terms are already in electronic format they should be copied into a Notepad file. If they are not in electronic format but only in print, they can be scanned and Optical Character Recognition (OCR) software can be used to convert the text to an electronic format.

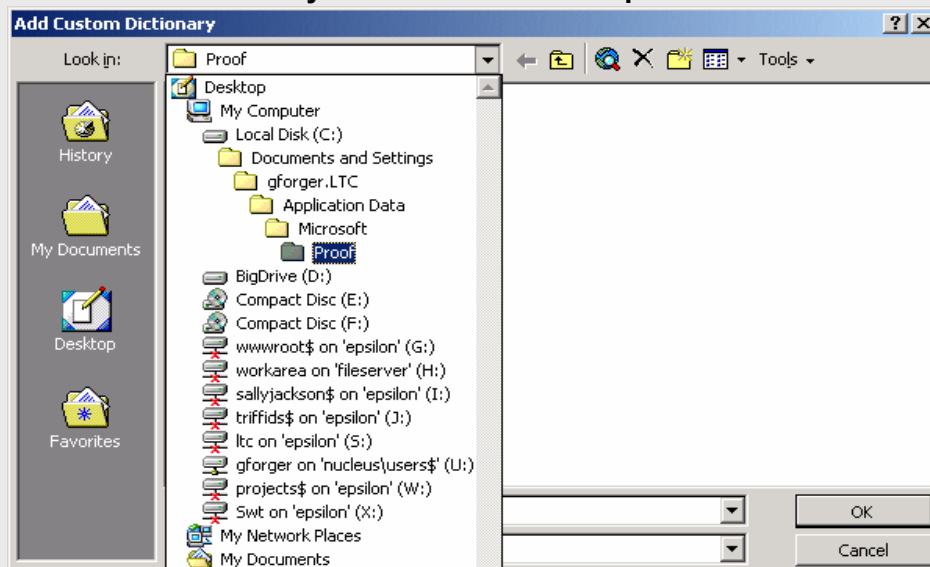
NOW TRY THIS!



Exercise 15:

- **Open 'notepad'**
- **Create a list** of words as in the above example. Notice that the file is named **Mojave.dic**. The file must have the '.dic' file name.
- **Save it** to the folder where the installation of MSWord has stored the CUSTOM.DIC file. (To find out where this is, go the 'options' area of the spell checker and click on 'dictionaries'.)
- **Click on 'Add'** from this window.
- **Click on the down arrow** to locate the file path where the CUSOM.DIC file is stored. (Figure 3 shows that in our installation the file is stored on a folder called 'Proof' that is five folders in from the root folder. The location may vary with installation of MSWord. Make a note of the exact folder location for your installation.)
- With the location of the folder noted, **save the Notepad file with the .DIC extension to this folder**.
- From MSWord, **return to the spell check** options area, choose dictionaries,
- **Chose 'Add' and click on the .DIC** file that you created.
- **Click on 'OK'**. The .dic file should now be in the "Custom Dictionary" window.
- Make sure that the box next to the new file is checked. **Click on OK**.

The custom dictionary is now active in the spell check for MSWord

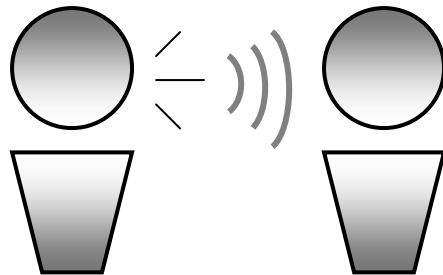


AUDIO ELEMENTS IN LANGUAGE REVITALIZATION

The Basics of Sound

We are immersed in a world of sound. What our ears hear as sound is simply the detection of vibrations and changes in air pressure in the surrounding air or what is otherwise known as a **sound wave**. Our inner ear converts this information into impulses which we then perceive and interpret as sound. Thus, from our own experience in hearing the world around us, we know that the human ear is an extremely sensitive and complex instrument.

Human hearing is concerned with two primary sound elements: its frequency and its pressure level. The measure of frequency in the amount of change in a sound wave is called its **hertz** (Hz). Similarly, the measure of the air pressure level present in a sound wave is called its **decibel** (dB). Each of these elements can be measured as a single unit of sound called a **signal**.



Acoustically, the human ear is capable of hearing sound in the range of 20 to 20,000 Hz. Human speech, on the other hand, occupies a much smaller range in this sound continuum and extends from 500 to 3,000 Hz. As sounds carry through the air, the frequency and decibel levels constantly change to reflect the signal variation. This signal variation can be visualized as a **waveform**, the plotting of a sound's values across time.

Sound Considerations in Language Revitalization

Our interest in the basic characteristics of sound is important when we consider that one of our fundamental language documentation goals is to represent the varieties of human speech as accurately as possible. This includes the reproduction of live speech as digitized sound. This section looks at the basic steps that are needed to capture and represent sound in a digital environment.

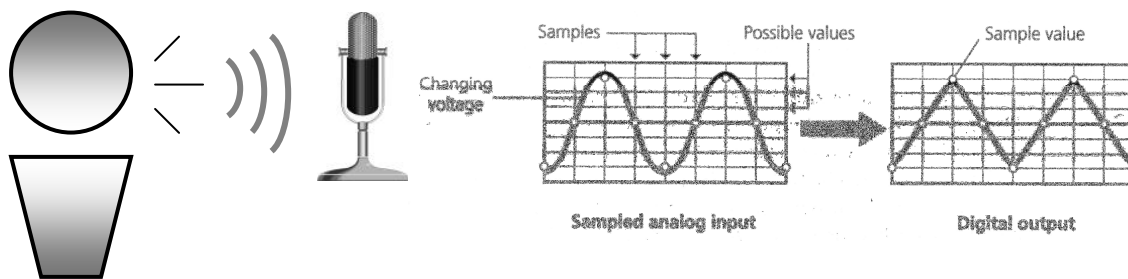
Analog Sound

Recording live speech commonly employs technology such as a microphone and some type of recording device such as a cassette tape recorder or a reel-to-reel recorder. The input of live sound is captured by the microphone as a continuous electrical pulsation in the form of a sound wave. Recording sound in this manner is called **analog recording** and the recording devices are simply referred to as analog recording technology. The sound is later replicated for playback by means of a magnetic tape or as grooves in a vinyl record.

Because analog sources are typically transferred onto a physical, tactile medium (such as a tape), they are vulnerable to deterioration and degradation.

Digital Sound

The modern alternative to analog recording is digital recording. When sound is digitally recorded, the originating sound wave is converted from its analog form to its digital equivalent. Rather than capturing sound as a continuous electrical pulsation, digital recording replicates a sound wave in discrete chunks called **bits**, the basic unit of digital data. The manner in which these bits are replicated is a process called **sampling**.



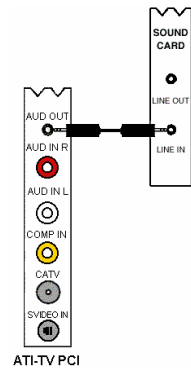
Digitizing Sound from Analog Sources

Transferring an analog recording to digital format is called analog-to-digital conversion. Analog-to-digital conversion is a three part process involving 1) the playback of the analog source recording or “live” speech event, 2) the sampling of the analog input, and 3) the creation of a new analog-to-digital audio recording. This three-part process can get complex very quickly, so it is always advisable to obtain technical advice both before and during your analog-to-digital conversion.

Step 1. In our first step, we can capture and digitize audio from two sources: playback or as a “live” audio signal. To do this, we must first capture and “sample” the electrical impulse that underlies the audio signal itself. This is done by interconnecting the analog recording device or a microphone directly to a computer with a cable plug.

Capturing an analog sample or playback from a tape recording is possible with bare minimum computer equipment, however, it is best to obtain additional devices (audio mixer and/or advanced sound card) that are designed specifically for this purpose.

Capturing “live” recorder speech, however, is much easier to obtain with only minimal equipment such as a microphone and a desktop or laptop computer. For purposes of recording speech for language documentation and language teaching, we highly recommend that you download Audacity (<http://audacity.sourceforge.net>), a free audio software. Once this software is in place and your internal record settings properly set, plug in a microphone and you are ready to record “live’ speech.



Step 2. Sample or assign values to the input audio signal. Sampling the audio input places a set of numeric values to the originating audio input. These numeric values indicate the sampling rate that is to be assigned to a raw audio signal. Keep in mind, the higher the sampling rate the better the sound. At the same time, higher sampling rates also mean bigger audio file sizes. Make sure you have dedicated storage space on your computer for your audio files.

When you are using the digital recording for language documentation purposes, it is desirable to maintain a high sampling rate in order to preserve the quality of the speech input. However, when you use a digital recording for multimedia or web-based applications, a high sampling rate is disadvantageous because of their large file size. It is desirable to apply a compression value which reduces the file size but maintains a reasonable quality of sound.

One such compression value is the MP3 standard. When applied to an audio signal or recording, the MP3 standard eliminates the overall redundancy of unnecessary sound frequencies contained in an audio signal. The result is a compressed audio sample that perceptually similar to the original but the file size is dramatically smaller.

Step 3. Create a new audio file. Once an audio signal is ready for capturing and a sampling rate chosen for the input signal, you are ready to create a new digital recording. If you are capturing audio from an analog source, operation of both the playback device (i.e. analog tape player or other recording device) and the audio editing

software (i.e. Audacity, SoundForge, etc.) must be timed to coincide with the start and end of the audio data that is being captured. Once the audio input signal is recorded, a new digital audio file is created.

A brief note on file types: Recorded sound is simply a digitized, audio recording of an actual sound. As mentioned previously, a digitized audio recording can be formatted in several file types. The most common audio file types are often represented by their file extensions **.aiff** (or **.aif**), **.au**, **.wav**, and **.mp3**. AIFF (Audio Interchange File Format) is the default uncompressed audio format for the Macintosh computer. AU is the default audio format for the Sun Microsystems computers and is widely recognized by most computer systems and browsers. WAV (Windows Wave Format) is the default audio format for Windows-based computers. The **.wav** format is the format of choice worldwide and is a common feature in most audio editing software. Finally, as mentioned previously, **.mp3** is a compression standard that eliminates redundant sound frequencies from a **.wav** file or audio signal and creates smaller file sizes. In all likelihood, you may encounter each of these file types as you begin to create your own digital recordings whether they are recorded from analog sources or from "live" speech.

State's Indians uncover the past

Mon, 14 Jun 2004 - By Jack Chang - CONTRA COSTA TIMES

BERKELEY - In front of hundreds of Indigenous people and linguists from around the world, California Indian Bill Combs held a sheet of paper in front of him Friday and nervously spoke the lost language of his ancestors. While his cousin Norma Yeager translated, he read the Wintun words for frog, deer and other animals, complete with the glottal stops, or deep-throated clicking sounds, that he had practiced all week.

The 34-year-old man wearing a T-shirt and shorts finished his presentation by looking up at the audience gathered in UC Berkeley's Pauley Ballroom and telling them in Wintun what he had recently learned to do after being denied the opportunity all his life.

"I am speaking my language."

For many "Breath of Life" conference participants, the experience has been emotional as they dig through the university's archive of language recordings to find traces of their lost tongues. In some cases, they have come across recordings of grandparents and other family members speaking their languages decades ago into the microphones of UC Berkeley anthropologists. Some have become the first people to speak their ancestral languages since the early 20th century.

Some Nomelaki words: Transcribed by California Indian Norma Yeager and UC Berkeley graduate student Jenny Lederer. Nomelaki was spoken among Northern Californian natives.

tree -- mee	deer -- nopoom	flowers -- kalal
bear -- waymahl	jaybird -- chiek-chiek	rabbit -- patkeele

<http://www.contracostatimes.com/mld/cctimes/news/8913180.html>

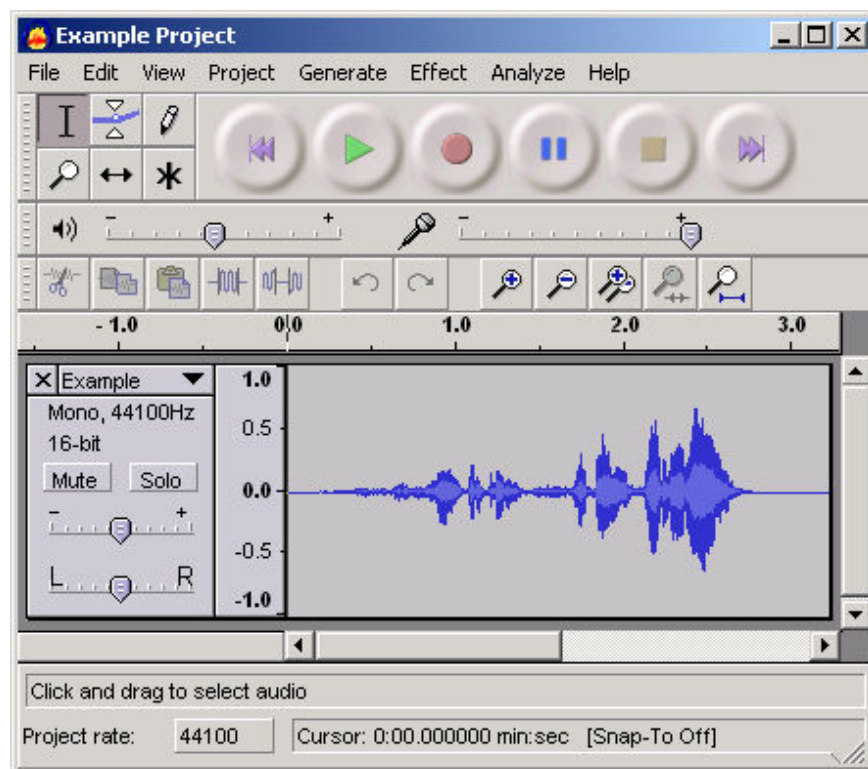
Audacity

An Introduction

Audacity is open-source audio editing tool for creating multi-track digital sound recordings. As a free audio editing tool, Audacity can play an key role in supporting endangered language documentation and revitalization by recording and capturing “live” speech. Audacity can be downloaded onto any computer with a Mac OSX or Windows operating system. Just go to <http://audacity.sourceforge.net/> to download.

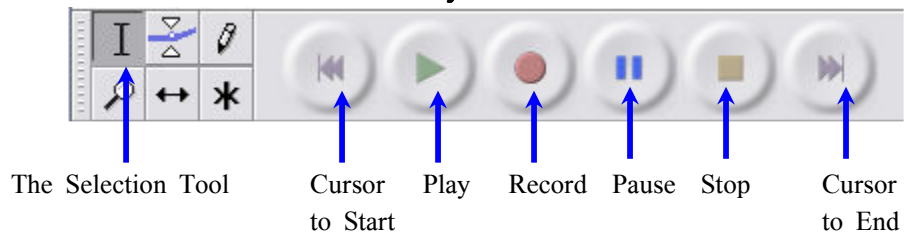
Audacity can be used to record, play, and import audio sources such as: WAV, AIFF, and MP3 files. It can also be used to edit your digital sound recordings using Cut, Copy and Paste, mix tracks as well as apply sound effects to your recordings.

Audacity Screen Shot



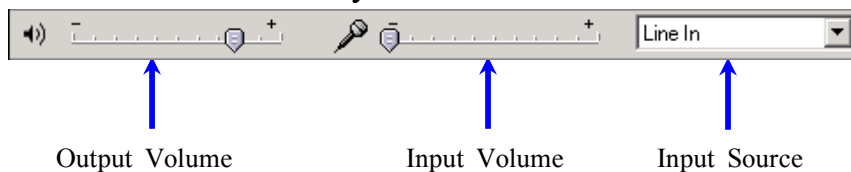
When you first launch Audacity, the Audacity Control Toolbar is prominently displayed. The Audacity Control Toolbar is the main control which governs the playback of your audio file as you listen to and edit sound data. In this introduction, we will briefly look at the most basic elements in Audacity beginning with Audacity’s Control Toolbar which will enable you to begin editing an audio sample.

The Audacity Control Toolbar



- The **Selection Tool** is the main tool you use to select audio data in an opened audio file. You will notice that when you move your mouse pointer over a waveform, the selection tool automatically appears. Click inside a track to position the cursor, or click and drag to select a segment of audio.
- The **Cursor to Start** button places the cursor at the start of an audio file.
- Pressing the green **Play** button will play back the sound in an opened audio file. Playback will always start wherever the cursor is positioned. When a segment of audio is selected, playback will only play the region selected.
- Pressing the red **Record** button will record the input of “live” sound using the computer’s sound input device. Input can be recorded in stereo or mono and can be set at various sampling rates with 44100 Hz being the most common sampling rate.
- Pressing the blue **Pause** button will pause the playback of an open audio file. Press the **Pause** button again to continue from the current position.
- Pressing the yellow **Stop** button will stop the recording or playback of an open audio file. The cursor will return to its original position prior to recording or play back.
- The **Cursor to End** button places the cursor at the end of an open audio file.

Audacity Mixer Toolbar



- The **Mixer Toolbar** shows three controls, these are the Output Volume, the Input Volume and the Input Source. The Output volume is the volume heard during playback. The Input Volume is the volume that determines the input level of an audio signal. The Input Source determines how an audio signal is recognized in Audacity. For recording purposes, simply choose

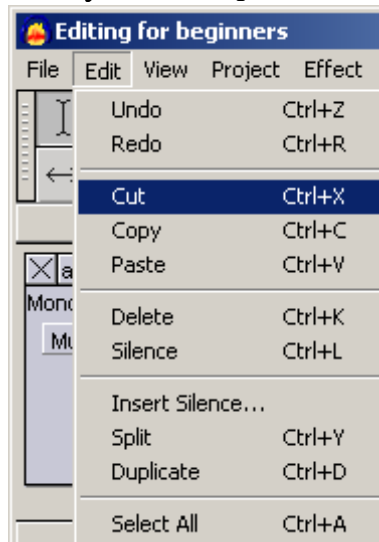
“Microphone” and, to obtain a clear signal, set the Input Volume in the “+” range.

Audacity Edit Toolbar



- Audacity’s **Edit Toolbar** offers a visual access point to basic editing functions found in Audacity’s dropdown Edit menu.

Audacity Edit Dropdown Menu



Editing in Audacity is the process of manipulating and adjusting audio data using various editing actions. The primary editing actions are Cut, Copy, and Paste.



Using **Cut** allows you to select audio data and remove it from an open audio file. The “cut” audio data is placed inside the clipboard.



Using **Paste** allows you insert cut or copied audio data into an open audio file. Paste inserts whatever is in the clipboard to the current cursor position.



Using **Copy** copies the selected audio data and places it into the clipboard. It does not remove data from an open audio file.



Using **Trim** deletes everything outside of the selected audio data.



Using **Silence** erases any section of selected audio data and replaces it with silence.



Using **Undo** will undo the last editing action you performed on any segment of audio data. A unique feature of Audacity's Undo is that it supports unlimited Undo until it reaches the last time the audio file was saved.

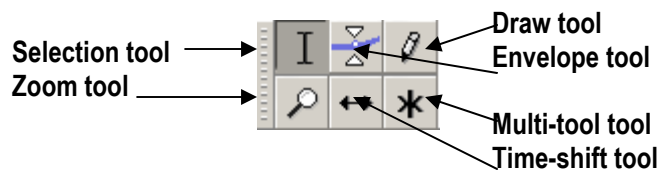


Using **Redo** will redo any editing action you performed on any segment of audio data that was taken using Undo. Redo is limited only to current editing actions.



Using the **Zoom** tools are not really editing actions. They are simply actions that apply to how your audio data is viewed within your work area.

Some additional functions are graphically represented here:



Once you become more familiar with recording and editing audio in Audacity, you will notice that Audacity has an internal file format which stores some audio files in a project “data” folder with audio files labeled as **.aup**. This type of formatting is unique to Audacity and is designed to allow highly optimized audio editing. Typically, Audacity's **.aup** file type cannot be read or “played” outside of Audacity and it is necessary to export finished edited samples by using the “Export as WAV” or “Export as MP3” commands in the File dropdown menu.

Audacity also has a number of editing effects which allow you to manipulate an audio sample in various ways. Effects editing is simply the process of reconstructing the sound of an audio sample to obtain a desired effect. You can find the editing effect options in the “Effects” dropdown menu in Audacity as well as descriptions of each effect in the “Help” menu dropdown menu.

WORKING WITH GRAPHICS

Multimedia Graphics

Multimedia graphics refers to the technology and process of creating, modifying, and displaying 2-dimensional images in digital form. Graphics play a vital role in almost all multimedia environments because they not only allow for the display of visual information but forms the core framework for multimedia design and presentation.

2-dimensional images come in many forms. At the start, we must distinguish between non-digital vs. digital images. Non-digital images typically consist of photographs, drawings, and illustrations on paper. Digital images are computer-based images stored as an array of pixels, short for “picture element,” which are simply a series of points in a digital image. When a digital image is presented in a computer display monitor, these tiny pixels are arranged in rows and columns each containing their own color value. Because pixels are the building blocks of a graphic image, the general rule is that the more pixels there are the better the image quality.

Resolution and Bit Depth

Resolution refers to the way in which an image depicts fine, spatial detail. Resolution is measured as the number of dots per length, such as dots per inch (dpi). This is also referred to as pixels per inch (ppi). Bit depth refers to the number of bits (binary digit) a pixel can store. For example, pixels in a bi-tonal image will store 1 bit per color. A grayscale image pixel will contain 2 to 8 bits while a color image pixel will typically contain 24 bits or more.

True Image Formats

True image formats accurately store image values for future editing and use. The most common true image file formats are TIFF (Tagged-image File Format) and PNG (Portable Network Graphics). These two file formats are intended to replace the older BMP (Bitmap) and PICT (Macintosh-based format) true image file formats. Generally, true image file formats are bigger in file size due to the retention of all original image values. This is called ‘lossless data compression’.

Compressed Image Formats

Compressed image formats refer to the ways in which an image file is reduced in size with minimal image distortion. The most common compressed image file formats

are JPEG (Joint Photographic Experts Group) and GIF (Graphic Interchange Format). The compression consists of abbreviating the number of bits contained in an image using a standard compression algorithm. This is called 'lossy compression'. This file format is ideal for creating graphics for the web, multimedia, and word documents due to their reduced file size and image quality.

Adobe Photoshop 7.0

Using graphics to support language lessons provides for a richer learning environment. While many graphics can simply be imported through Clip Art, using your own art work or working with actual photos is best done with Adobe Photoshop. The Photoshop topics covered here are the most basic. This is a powerful program capable of very sophisticated graphics work. Here we are most interested in establishing the fundamental choices you might need to make your image more interesting in terms of color, texture or size. First, here are some examples of the changes photos can undergo in Photoshop.

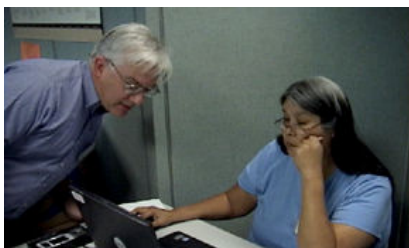
1. **Cropping** = Selecting the part of the photo you wish to use.



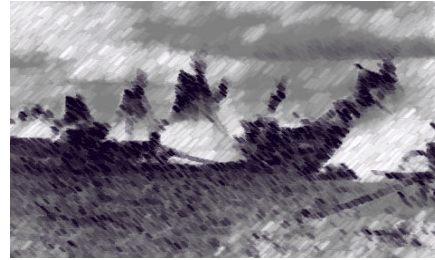
2. **Rotating the image**



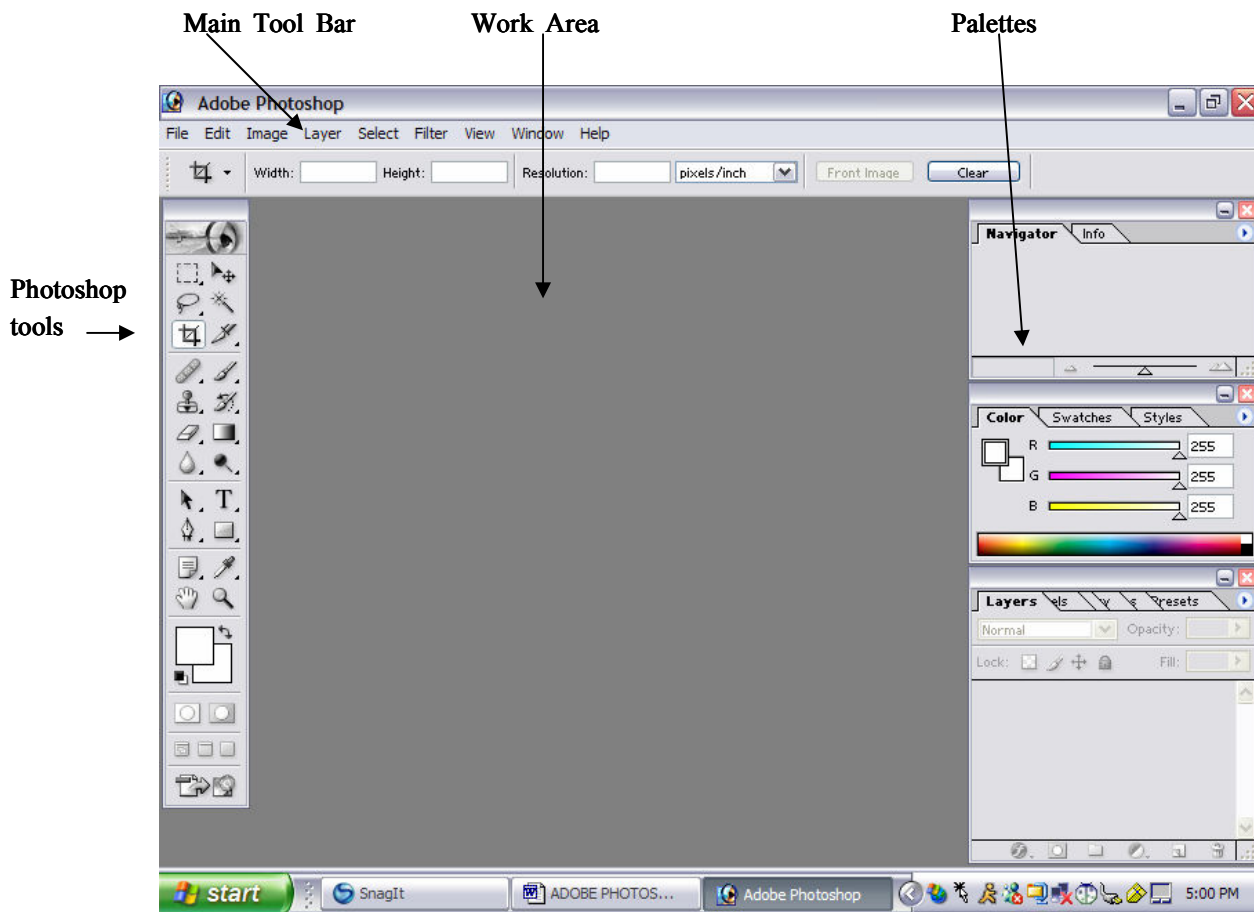
3. **Adjusting levels**



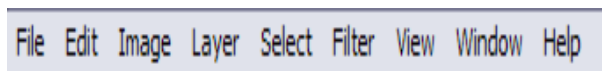
4. Changing art styles



Understanding the Photoshop Screen:



Main Tool Bar:



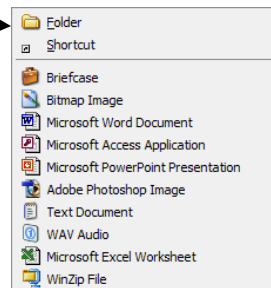
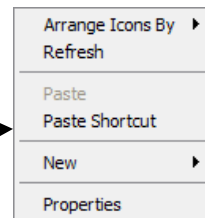
Working with an image:

To practice with the following exercises, you will have to have a picture scanned into a file and saved as a .JPG. .JPG files work with Power Point. Be sure you know where you saved your picture! If you can't remember, use the 'Find File' function which you can locate by using 'Help' on the main menu.

Step 1: Create a folder for your work

First, create a folder on your desktop in which to keep your work.

- Right click while on desktop to get this menu: Click 'New'
- On this menu, click on 'Folder' and give it the name 'Work'.



Step 2: Scanning into Photoshop

Key terms:

DPI = Dots Per Inch. DPI means how much information is packed into every square inch of the image you scan. Computer monitors see everything at 72 DPI. Therefore, if you scan an image at 300 DPI, it will appear larger on the screen than the actual size. If you scan an image at a high DPI, then the file size is likely to be larger than you desire.

USB = Universal Serial Bus. The USB was developed to create a better serial port. Newer machines have these ports on either the back or front or both.

SCSI = Small Computer System Interface. Pronounced 'scuzzy', this is one of the oldest and fastest ways to transfer information on a personal computer. The machine should always be turned off before you plug an SCSI device in.

Note: The scanner should be turned on and connected. It is important that the connections are correctly in place. Unplug and re-plug if you have to. Re-boot if you are not using a USB.

Your images should be clear images. The size of your image is important. Factory defaults are 800 x 600 so keep your images below 760 x 450. The is particularly true if you want to use the images on a website.

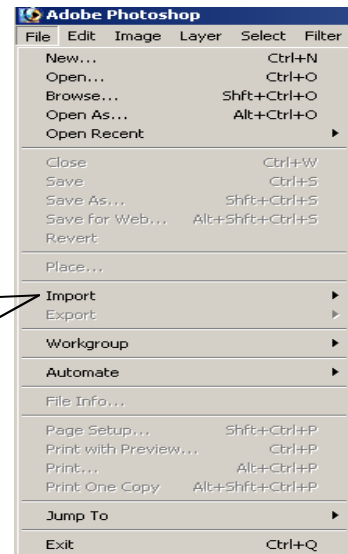
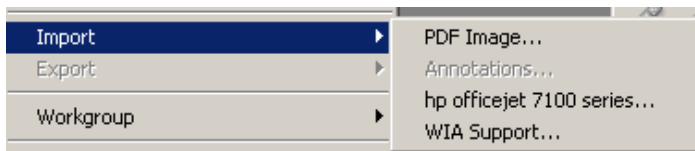
Checklist before beginning:

- Is the computer on?
- Is the scanner connected?
- Is the power to the scanner on?
- Do you have materials to scan?
- Are you ready to scan?

Remember, there are many different types of scanners. The steps here are very general and you may have specific requirements for your particular scanner. Flatbed scanners are the best for use with graphics.

To start scanning:

- Open Photoshop
- Start Menu > Programs > Adobe Photoshop
- Click on 'File'
- Choose 'Import'

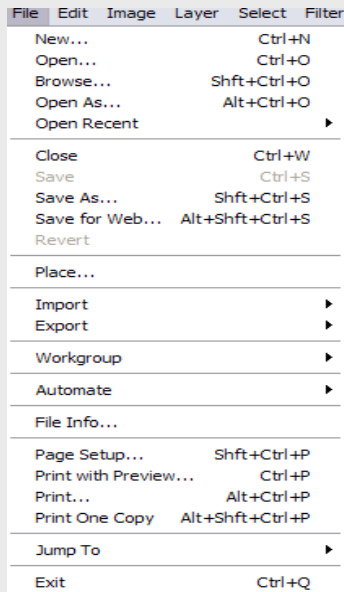


This will connect your computer to the scanner...Your scanner may have selections for you to choose from such as: Scan to Adobe Photoshop or MSWord, etc. Be sure to check the scanner for options. Your image should appear in the work area of the Adobe Photoshop screen.



Now the fun begins!

Step 3: Within Photoshop
Click File on Main menu
Click Open



Step 4:
SAVE this first image in your 'WORK' folder on the desktop.

Step 5:

Three things are important for creating a picture that you will use in a document.

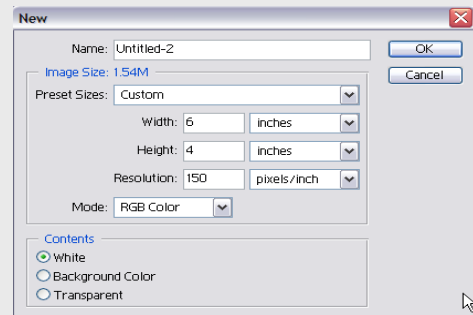
Size- set in pixels, inches or others.

Background- transparent, colored or white

Resolution- this determines how much information is in your document

FOR CREATING NEW IMAGES (not those imported from a scanner):

Click on **File > New** to get this window



Coloring with Photoshop using the paint bucket

Illustrations from the Mohave Coloring book, compliments of the CRIT Library



Photoshop Tools:

This tool bar will allow you to work with many aspects of your image. It is a very, very dynamic system. Notice the small arrows on the bottom right of some of the symbols. If you click on those, you will be given additional tool choices.

Marquee tools: Make geometric selections

Lasso tools: Make freehand selections

Crop tool: Trims images for size

Healing Brush tool: Repairs imperfections in images

Clone Stamp tool: Paints with a sample of the image

Eraser tool: Erases pixels and restores the image

Blur tool: Blurs hard image edges

Path Selection tools: Shows start points and direction lines

Pen tools: Draw smooth-edged paths

Annotation tools: Makes notes and audio notations that can attach to an image

Hand tool: Moves an image within its window

Select **foreground color**, set **background color**

Move tool: Moves selections and layers

Magic Wand tool: Selects similarly colored areas

Slice tool: Creates slices

Brush tool: Paints brush strokes

History brush tool: Paints a copy into current window

Gradient tools: Blends between colors

Dodge tool: Lightens areas in an image

Type tools: Creates text on an image

Rectangle tools: Draws a rectangle

Eyedropper tool: Samples colors in an image

Zoom tool: Magnifies or reduces view of image

Choose **Standard Mode** or **Quick Mask Mode**

Edit with **standard screen**
Edit with **full screen and menu bar**
Edit with **full screen**



Jump to **'Image-Ready'** (an image editing program which comes with Adobe Photoshop)

Things you can do:

Manipulate your picture

Crop: Cropping is used for selecting the portion of your image you want to work with. This tool helps you control the content of your image.

Steps:

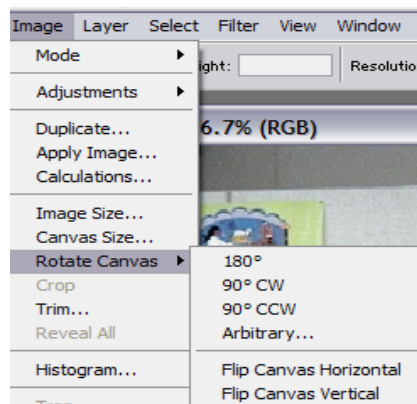
1. Open your picture within Adobe Photoshop
2. Click on the crop tool icon 
3. Using your mouse, click on the place in your picture where you would like to begin capturing your picture content
4. Hold the left click button down and drag the tool across the picture. You will see the selected portion outlined in dotted lines
5. Right click on the mouse and you will see this small menu 
6. Left click on 'crop' if you like your selection



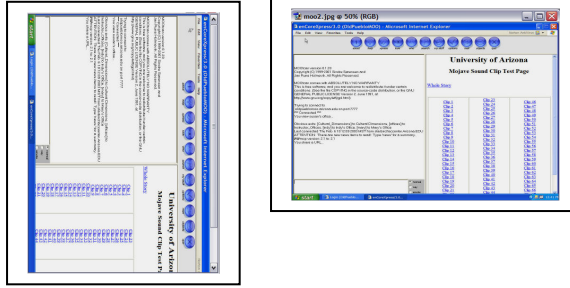
Rotate

Steps:

1. Click 'Image' on main tool bar
2. Scroll to 'Rotate Canvas'
3. Choose the degree and direction
CW = Clockwise
CCW = Counter Clockwise
Arbitrary allows for finer tuning



Rotating allows you to change the direction of your image or scanned document



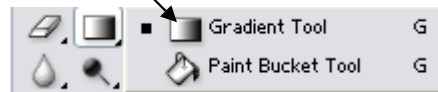
Use tools

Photoshop tools allow you to make many changes in your image. Don't be afraid to experiment...you can always undo.

EDIT...Undo

Do not forget this function! Every step you take in Photoshop can be undone. You can also use the key combination of 'control' and 'Z' to undo your work.

There are many tools and some have additional hidden menus. For instance, the 'Paint Bucket' in Photoshop is hidden under the gradient tool. To access these tools, left click on the small arrow at the bottom right corner of the tool.



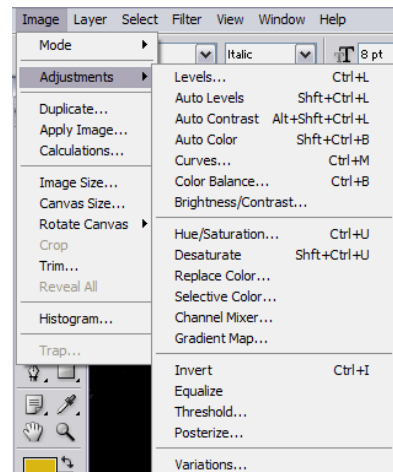
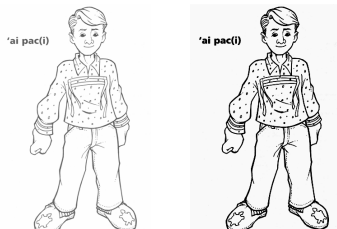
Adjustments

It is very useful to understand some basic adjustments. These will help you control brightness and contrast and more.

Steps:

1. Click on 'Image' on the main tool bar
2. Select 'Adjustments'
3. Choose 'Auto Level' for quick clarity of your image
4. Experiment with brightness and contrast

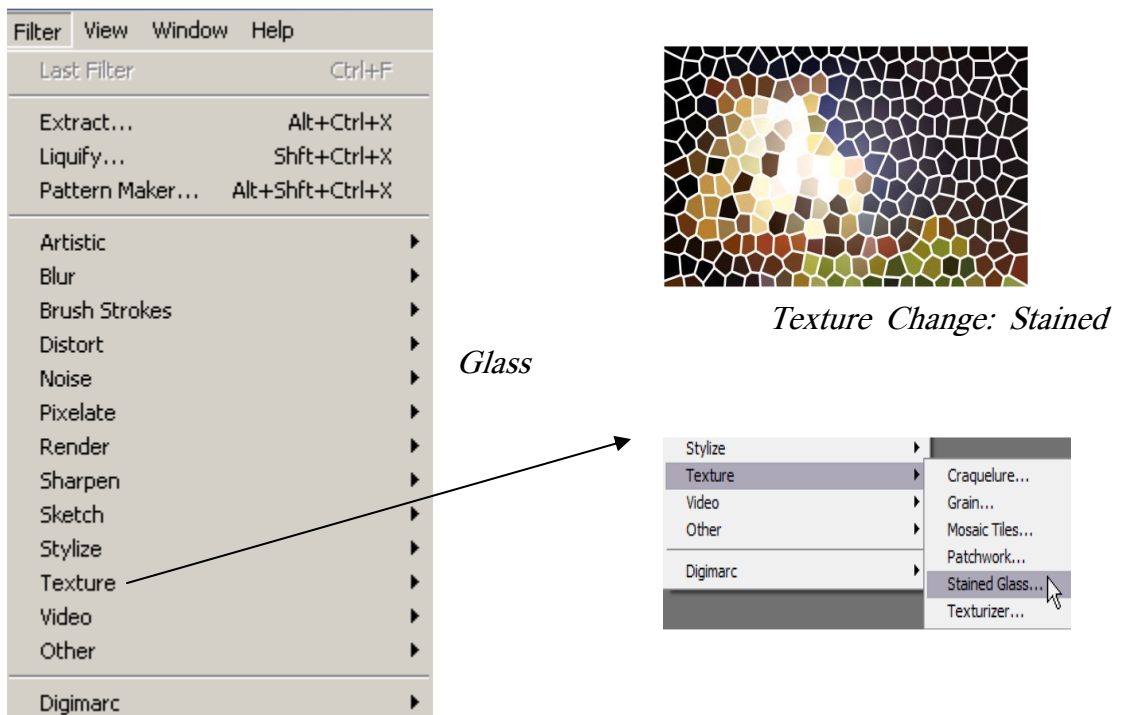
*Illustrations from
the Chemehuevi
Coloring Book,
CRIT Library*



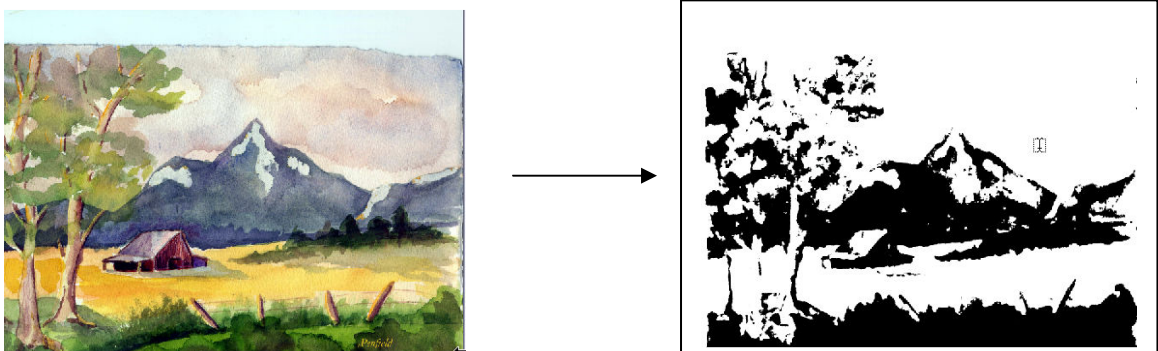
Filters

Working with just one of many possible layers in Photoshop, you can affect many artistic changes in your image. The changes below are just a small sample of what is possible when you use the ‘Filter’ option on the tool bar.

Remember, as you experiment with these, to ‘Undo’ after each filter change. Otherwise, you will be placing a filter upon a filter—but then, that can be fun too! The ‘Filter’ option gives you the following menu of choices. Note the arrows on the right. Each of these options can be expanded.

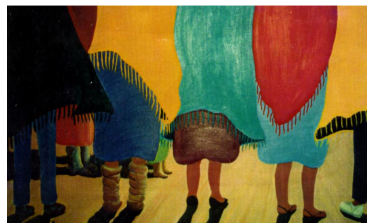


You can use this same sequence to create other changes in your picture. For instance, if you choose **Filter** and then **Sketch** and then **Torn Edges**, you can create a ‘torn-edge’ effect.





Embossing

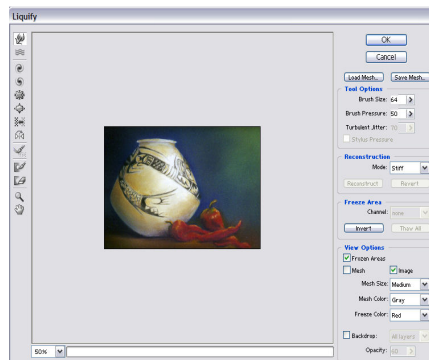
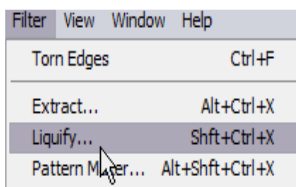


Outlining



Liquify

One very interesting effect is called 'Liquify'. Begin with 'Filter' on the main tool bar. This window will open.



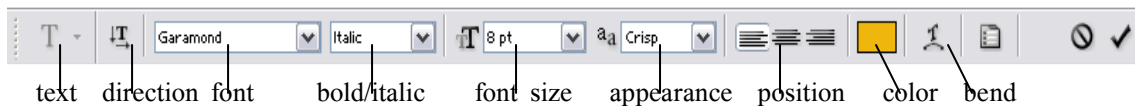
You can choose the size of the brush stroke. Once you do, drag your cursor over the image to create the liquify effect. The result looks like this:

Small brush stroke



Large brush stroke





Text and Fonts

Be aware that text in Photoshop 7 behaves differently than it does in earlier versions. It is now postscript and is equivalent to Adobe Illustrator or Quark in printed appearance. It now behaves more like a word processor.

Adding Text:

1. Close any existing pictures
2. Open a new one that is 72 resolution, 250 x 600 pixels and has a transparent background
3. Select the 'TEXT' tool on the tool bar
4. Click on the picture
5. Type something
6. Select the layer your text is on
7. Select the text to be edited
8. Change the color of the text
9. Change the 'font type'
10. Apply a bend
11. Move the text
12. Click on 'OK' - the check mark



Saving Documents in Different Formats

Formats:

- **.psd** – PhotoShop format which preserves layers
- **.jpg** – For the Web and PowerPoint
- **.gif** – For the Web, but best for text
- **.tif** – A cross platform format that preserves all quality for printing
- **.pct** – Another good format for print and cross platform

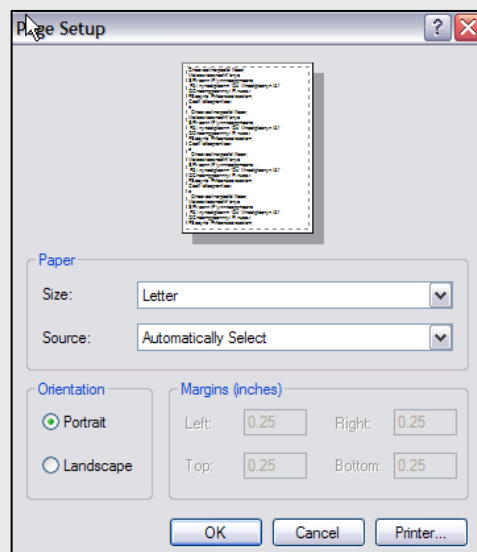
Steps:

1. **Open** your picture using Menu > File > Open to navigate to the document, click once on ‘OK’
2. **Save it** as Work.psd in a folder on the desktop
3. **Save it** again as Work.jpg
4. Try **Menu > File > Save as** – Now change the name and save to a different desired location (For instance, save as ‘My documents’.
5. **Click ‘OK’**

Printing Your File

Steps:

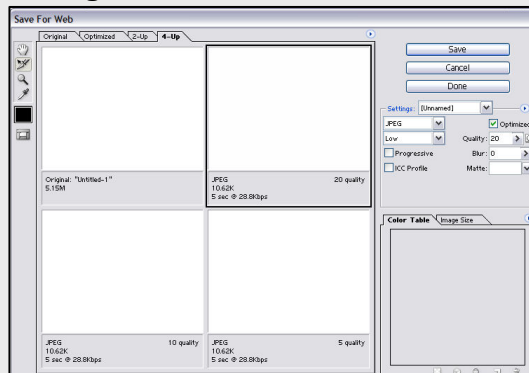
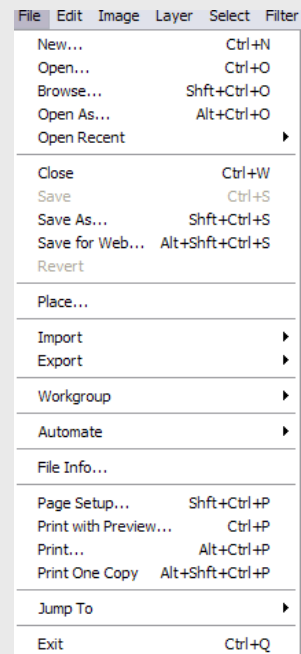
1. Open your Work.jpg file
2. Go to the Menu > File > Page Setup. When the window opens, make sure that the document will print to the printer of your choice
3. Choose ‘portrait’ or ‘landscape’ depending on how you want to orient your picture
4. Click ‘OK’
5. On the same menu, choose ‘Print’ and Click ‘OK’



Saving for the Web

Steps:

1. Open your Work file
2. Go to Menu > File > Save for Web. This opens a new window
3. Click on the 4-up tab. This option creates 4 images. The upper left image is your original and the others are examples of options.
4. What is most important is the format setting! Choose .jpg for image or .gif for text, then set quality and 'OK'. The options should be practiced as the effects are many. Basically you must balance the file size with quality and format type. Quality is a combination of the numbers of colors and the quality setting.



Exercise 1: Let's practice saving for the Web

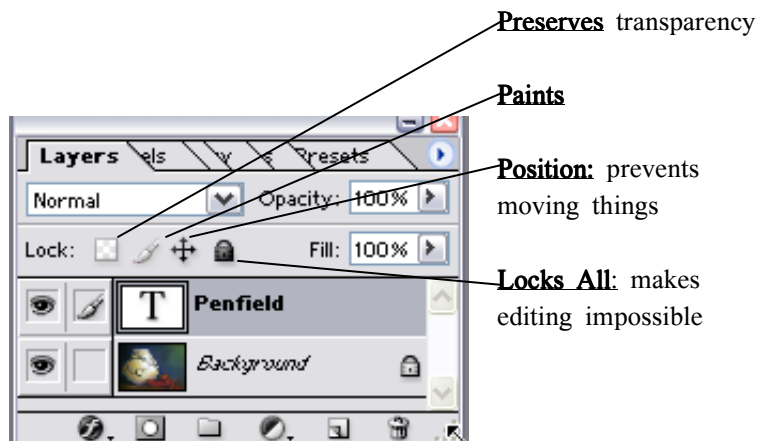
- Open Work.psd
- Go to Menu > File > Save for Web
- Save a .gif that is 100k with the name of Work01.gif in your workshop folder
- Save the .gif in the 'Work' folder on your desktop
- Save a .jpg or 75k or smaller to the same folder. Name it Work01.jpg.
- Now go to your desktop folder and make sure the files are there.

Even if you don't plan to have your own web page or to publish your work on the web, it doesn't hurt to learn to save picture files in a variety of formats to insure quality reproduction.

When you feel you have mastered working on one layer, you might want to try bringing in more. Here are just a few pointers. See Part IV for recommended online tutorials for more advanced work with Adobe Photoshop.

On the layer palette, there are several useful features. One is the locking feature. At the top of the layer palette, notice several boxes with icons. Checking the boxes will lock features of layers on the active picture.

The features on the right make editing easier and help prevent common mistakes.



Making Videos with Your Camcorder

Language revitalization and preservation are greatly enhanced by the use of video. For those languages with few speakers it is so very important to video all levels of language use especially just everyday conversation. These tips for using a video were contributed by Julie Rackow who worked on the CRIT project. However, you don't have to be a professional videographer like Julie to capture great video moments that can help preserve and inspire language use. Please see the segment on our website, <http://projects.ltc.arizona.edu/gates/TELR.html>, showing Johnny Hill's amazing homemade video of Chemehuevi.

Video Shots: Tips to make shooting with your camcorder easier

- **Remember to take the lens cap off.** (Eh?) No, really, we're serious. In the rush of setting everything up for a shot you would be surprised at the number of people who set the camera recording with the lens cap still on. Even the pros can do it –
- **Always record 5 seconds before and after the shot you want.** Editing decks need a bit of space to get the signal properly (called pre-roll) and they can muck their edits up if you don't have enough pre-roll.
- **Use manual focus if at all possible.** Autofocus hunts for stuff to focus on, so if someone walks through the shot it will try and focus on them, getting your subject out of focus. Autofocus also uses up a lot of battery power, so using manual focus and push focus (a button you can press for autofocusing) makes your batteries last longer. Whatever, make sure your subject is in focus. To be absolutely sure, zoom in on the subject, focus, and zoom out.
- **Leave that zoom rocker switch alone!** See that button that rests just underneath your fingers when you hold the camera? That's your ticket to bad film-making. Its sitting there, nuzzling you saying 'Hey press me! Zoom in, go on. Now zoom out! Smart'. Unfortunately when you come to watch your film most of your audience will be sick because the zoom is constantly tromboning in and out. There are only two occasions when it is OK to use the zoom during a shot.
 1. You are interviewing a man who has just seen his daughter run down by a steamroller. Understandably its a heart-wrenching moment. So Mr. News Cameraman zooms in really slow (you barely notice it) so we capture that first tear perfectly (how they can do this I do not know).

2. Cheesy 70's cop movie. We have just ended the last car chase scene and we want to establish that they are now back in the cop shop.

EXT. POLICE HQ - DAY

FAST ZOOM IN on window of building.

CUT TO - INT. POLICE HQ OFFICE - DAY

SUPERINTENDENT ROBERTS is chewing the two rookie cops asses off who have just flunked the car chase. He's angry, he's mean and he's got huge sweat rings under his armpits.

OK, so you get the picture. Zoom for effect - not because the button is forcing you to. By all means use it to set up a shot when the camera's not rolling, but leave it at that.

- **Use a tripod** - If you want a steady shot then stick your camera on a stand (or a wall or something).
- **Don't use a tripod** - (umm...bit of a contradiction here - oops!) - If you want to give your film some energy dump the tripod, setting your camera up on sticks takes too long anyway. To keep it steady-ish, get as close to your subject as possible and shoot as wide-angle as possible to minimize shake. If you can, keep both eyes open (instead of just squinting down the viewfinder) so you can adjust the camera to follow your subject.
- **Check your white balance**, especially if you are in mixed lighted rooms. (White Balance? Mixed lighting? Eh?) White balance is essentially what color your camera thinks is white. Some cameras have buttons for this i.e. indoors, outdoors etc. Other cameras sort this out automatically (although they can make a botch job of it) and some allow you to set it manually (by sticking a piece of white card in front of it and saying 'Hey, this is white you dumb camera'. This all matters because not all light is the same color. Lights have different color temperatures. Sunlight is kind of bluey, artificial light (like light-bulbs and stuff) is orangey and fluorescent strip lights are greeny. Your eyes can sort this information out, but the camera tends to make everything look all one color if its on the wrong setting. Checking your white balance is okay if you've got a color viewfinder but you'll need to wire the camera into a TV if you haven't. Failing that sure the preset is right and hope its OK.
So remember:

Sunlight	Bluey
Artificial Light	Orangey
Fluorescents	Greeny

- **Avoid Backlighting** - This is where your subject is standing with the sky or a window or white wall behind them. The camera goes 'Hey, loads of white I better set my exposure to that', so when you come to look at your footage all you can see is a silhouette of your subject and you can hardly see their face. Solution - turn around, and use the light from the wall/window to light your subject (Some cameras might have a BLC - Backlight Compensation button, but these tend to on the whole suck).
- **Try not to appear in your own film** - Unless of course you are Hitchcock or your actor has called in sick and you're having to play the role yourself you want to try and avoid appearing in your film as...the camera operator! Avoid fingers near the lens or long hair draping into shot. Equally be careful when shooting through glass, mirrors or shiny objects not to catch a view of yourself. Use a polarizing filter to cut down on any reflection.
- **Switch the camera on before you take the lens cap off** - I don't know where I heard this, but apparently you can damage the camera's CCD chip if you take the cap off then switch it on - you know, cap off, light streams in, chip gets frazzled. Equally don't point your camera at really bright lights i.e. the sun, nuclear explosions etc
- **Check your sound** - Most cameras have headphone sockets so you can monitor what the camera is picking up. Recording without checking your sound is like shooting and not looking down your viewfinder. Remember: your ears are great (they can filter out all that extra noise and focus in on just one voice) - your camera isn't, it'll pick up on every squeak and rumble.
- **Use an external mic if possible** - To get better sound get your hands on a good external microphone that plugs into your camera. This should cut down on operating noise from the camera (inside whirring etc.) and you can pick a mic for the job at hand. Doing street interviews? Get an unidirectional mic (y'know, the ones that look like ice creams) to cut down on all that traffic noise (if your camera has any kind of handle tie your flex around this, so if your interviewer yanks on the cord the mike isn't pulled out). Drama? Try a super-cardoid mic and mount it on a old broom and get a mate to stand there and dangle it in front of your actors.
- **Gag your microphone** - If you know you're going to be shooting in a windy place get a wind gag for your mic. Wind gags are basically furry things that fit over your mic (in the wild they can live up to 70 years), that cut down on the roar you will hear if filming in wind. The other day I stuck my camera out of a car window and the sound I got was like ground zero at a nuclear blast!

- **Protect your equipment** - You've got to keep it safe from two things - the environment and from it getting nicked. Keep your gear clear from dust and dirt (use a cover to protect it from the rain) and screw on a skylight filter to protect the lens. Clean the lens/filter and viewfinder using blower brushes, air jets etc. Security! Keep your camera close to you, make sure its insured and know its serial number if it does get pinched.
- **Tape Care** - Always use the best quality tape you can afford (usually metal evaporated). You can only capture an event on tape once. The great thing about tape is that you can record over stuff but be careful you may need footage again in the future. Remember, keep all your rushes!
- **Batteries** - Always carry fully-charged extra batteries, otherwise you can bet that you will lose power halfway through the most important shot of your film. Bear in mind that batteries have a shorter lifespan in the cold. Hug them to keep 'em warm (and show them that you love them).
- **Shoot loads!** - Tape is cheap. Use it. When you get around to editing you might just need a certain shot, so shoot everything. Shoot plenty of cutaways (shots to cut in at any point – close-ups, buildings, reactions of other people). Don't tell your actors, but shoot practice takes (you might need to put a bit of gaffer tape over the recording light) sometimes they are the best, most natural take.
- **Shoot with both eyes open** -- like the news cameramen do. It takes some practice but it allows you to see what's going on in the viewfinder as well as around you. (Jonathan Lewis)
- **Avoid the horns of Satan!** - Try to keep an eye on what is in the background of your shot. You want to try and avoid potted plants sprouting from people's heads etc., not to mention trees & telephone poles. Especially steer clear of backdrops where there's visually exciting stuff going on - a videogame running in the background as you can guarantee that your audience will end of paying more attention to this than what the person is saying or doing. There's a classic clip I've seen where two policemen are talking about what a quiet night it had been with no arrests. Behind the officer, in the background, are two lads beating each other to a pulp.
- **Other things you may need for the shoot?** Boom mike's, windsock for the mikes, lights, several heavy duty extension cords, more batteries for the camera, batteries for the mike's, any props, back drops; this can be as simple as a black or colored bed sheet, and think of other things may you need? Better to be over prepared that to have to scratch a shoot due to lack of preparation.

- **Watch films of all sorts.** Films from the 50s to the mid 70s play to a more intelligent audience. Older films rely more on plot and character development than on special effects to get the point across to the viewer. Watch for creative pacing and character development, things that are lacking in most of the contemporary film. Avoid Hollywood block buster films, for the most part they are not artistic and without special effects do not have much else to offer. Watch PBS, NOVA, the Discovery Channel, A & E, the History Channel, and documentaries, critically analyze how the pro's use the camera to help tell the story? How do they frame the subject matter to draw the viewer in? How do they highlight things by using audio or supplemental footage; use music or silence to accent the tone, pace and tension in the scene.
- And finally, **have fun!**

The Videomaker Handbook is a selection of excellent articles that explain all aspects of video production in depth. Although very technical at times this is a really useful book for anyone looking to get the most out of their video camera, covering everything from scheduling your shoot, through all aspects of production to distributing your finished video. From the writers of the USA's Videomaker magazine so you know it comes from the experts.

Julie R. Rackow

Edited by - dale@exposure.co.uk

Swinomish youth pick up cameras, tell their own stories
Sun, 23 May 2004 - Tina Potterf - Seattle Times staff reporter

Native American youth are aware of the stereotypes that taint their heritage. Ask a group of Native kids from the Swinomish tribe near La Conner, Skagit County, about what it means to be an American Indian, and you may be surprised by their candor and insight:

"You probably think I'm another stoned Indian. Well, you're wrong. I'm going to become a lawyer."...

[About] Native Lens. Later this month, the short digital films created by Swinomish youth will be available for viewing online at www.911media.org. ... Through Native Lens, Cladoosby said, "People can learn more about our culture."

Robert Williams was one of only a few participants with prior experience in shooting and editing videos. "I've tried sports, basketball and baseball, and it didn't work out," Williams said, "So I picked up a camera."

Williams, 21, has a penchant for short documentaries, mostly of his buddies playing basketball or hanging out, set to an underground hip-hop soundtrack. He hopes to build on and pass along the experiences gained through Native Lens, a program he said "gives us a chance to go back to the tribe and tell them what we have learned and what we've done."

Getting the youth to think critically and creatively, and to empower them to share their stories with others, is ultimately what Native Lens is about.

"These kids are really good storytellers...," said Tracy Edwards, Swinomish education director. "I hope that they continue with what they learned here and bring it back to the tribe."

"And if they have a story to tell, they can get it out to the community."

POWERPOINT 2003

For beginners working with indigenous languages, PowerPoint allows for the creation of effective multimedia language lessons incorporating audio, graphics and text. Beginning students, sometimes affectionately called 'newbies', need very little training in computers before creating visually exciting slides which can support either oral language learning, literacy or both. Individually created slides are then organized into a full presentation or language lesson.

We see two important applications for PowerPoint for those who work with indigenous languages:

1. for language advocates to use as a support for public presentations
2. as a format for multimedia language lessons.

Best of all, PowerPoint is really easy to learn. Here is a brief overview of what PowerPoint has to offer:

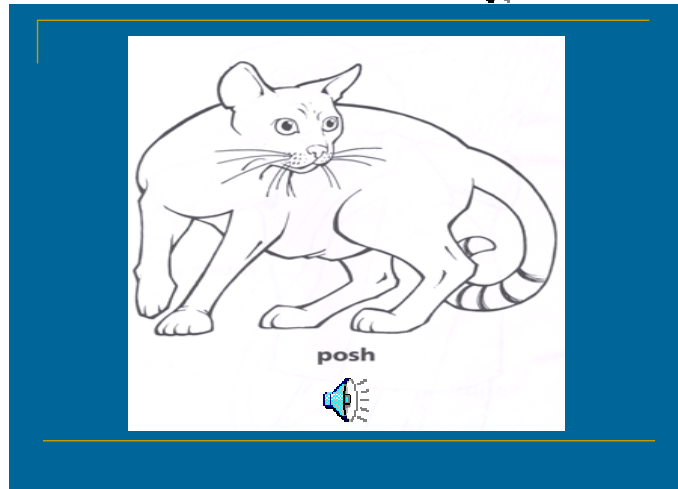
- Presentations consisting of a series of slides you create which can be projected or used to create overhead transparencies.
- Handouts, outlines and notes can also be generated from these slides giving you dynamic language learning materials in hard copy.
- You can import audio files you have created in your language into a PowerPoint slide.
- You can import text files from MSWord – using Unicode or other fonts appropriate for indigenous languages.
- You can add graphics – from your own scanned-in drawing, or from clip art or from web-based sources.
- You can upload your presentation to the web, save it to a CD or send it to a friend.

We will start by showing you an example of a single multimedia slide. This single slide is part of a larger language lesson on animal names in Mohave. This slide was created by importing a sound file of a Mohave speaker (Robert Martin, 1969 tape recording), a picture from the Mohave coloring book and text from the Mohave

**To use language,
the speaker has to know
its real bones, guts, blood,
spirit, mind, heart.
He has to know its pain
and its joy.
He has to know its
creation.
And the only way he can
is to know
he is being created
as he speaks it.
He is a creator then
of that language.**

*Simon Ortiz, After and
Before the Lightning, 1994*

dictionary: (If you were to click on the sound icon , you would hear the Mohave word.)



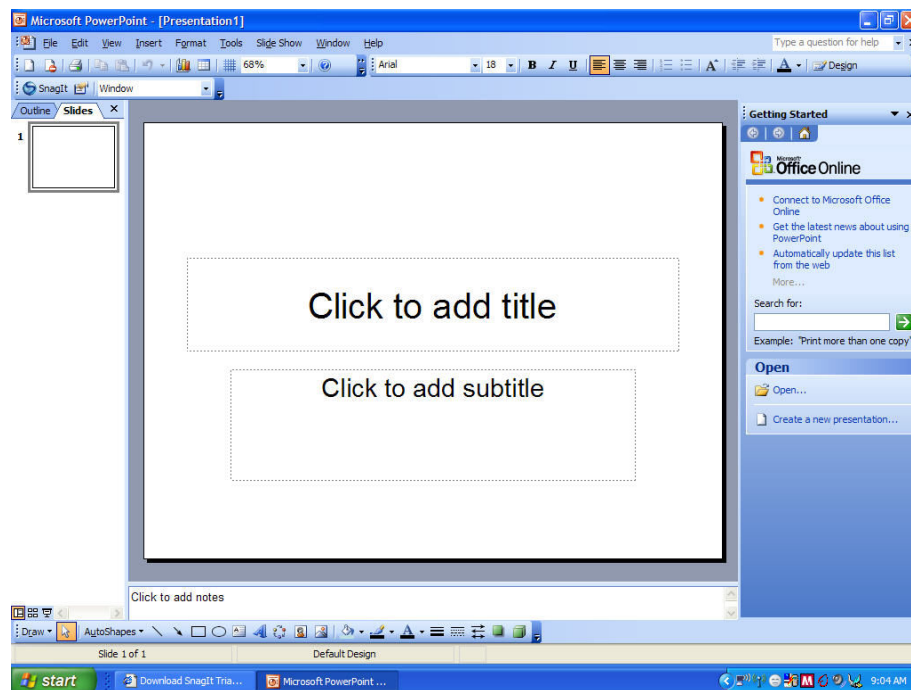
Let's Begin!

Step 1: Opening the program.

There are two ways to open the PowerPoint program on your computer:

1. Double click on the Microsoft PowerPoint icon on the desktop **OR**
2. Click on Start --> Programs --> Microsoft Power Point

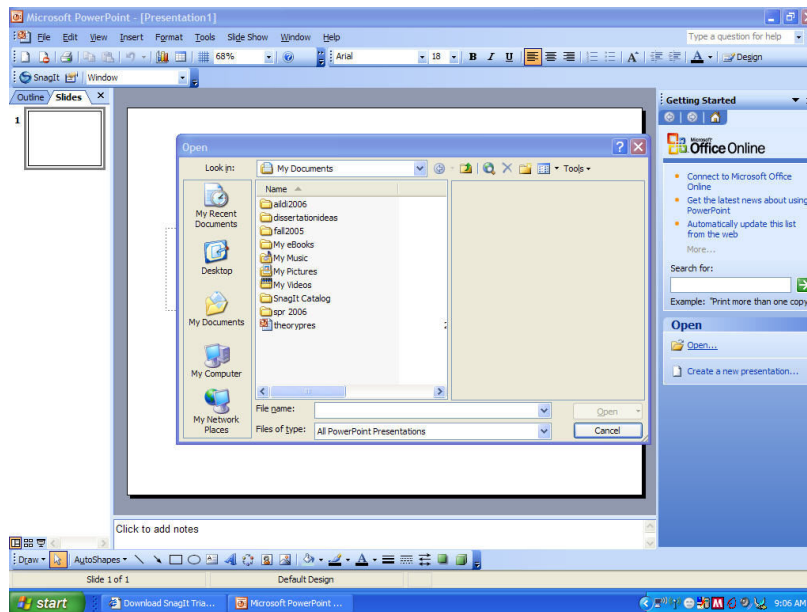
When the program opens, you will see this window:



Choose one of the following, each for a different purpose:

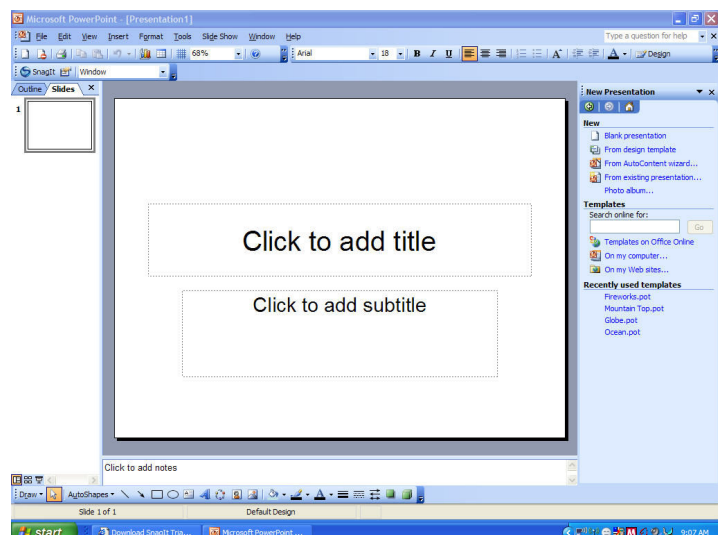
1. **‘Open...’** if you are looking for an existing Power Point **OR**
2. **‘Create a new presentation’** if you want to make a language lesson or a public presentation.

Note: If you have already been working on a presentation select the ‘Open...’ button – Then select your presentation – and then click on OK – your named and saved presentation should be there!



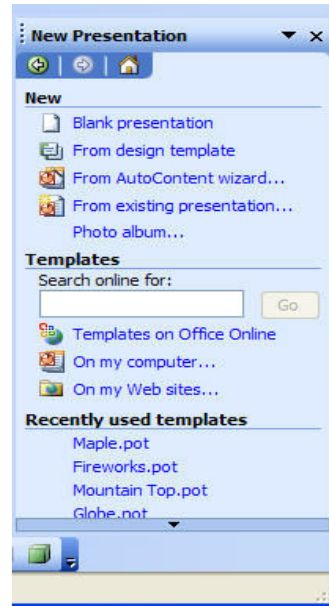
Step 2: Choose **‘Create a new presentation’** to begin constructing your multimedia language lesson.

This window opens automatically when you choose **‘Create a new presentation’** button.

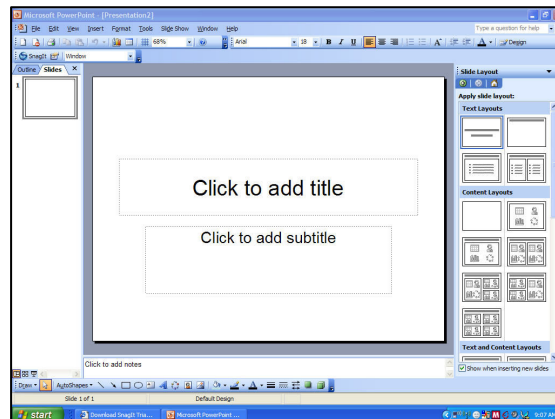


Step 3: Choose a Slide Layout

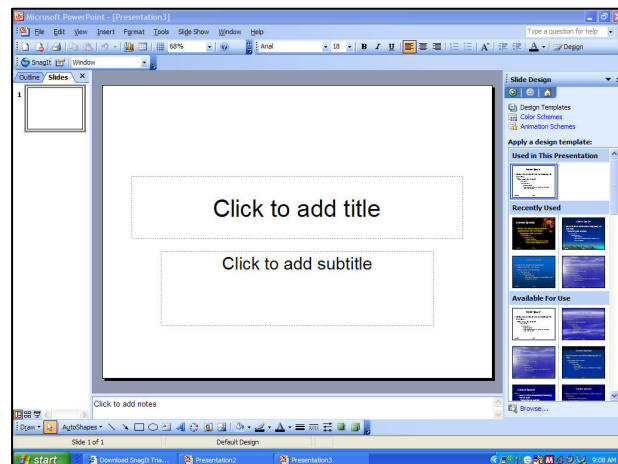
This menu is located on the far right of your screen. It provides information and previews of your presentation. This window gives you some formats to choose from. Just click one of the layout images and the menu will change to show different layouts that you can choose.



For Example, if you choose **'Blank presentation'**, the following screen will appear:

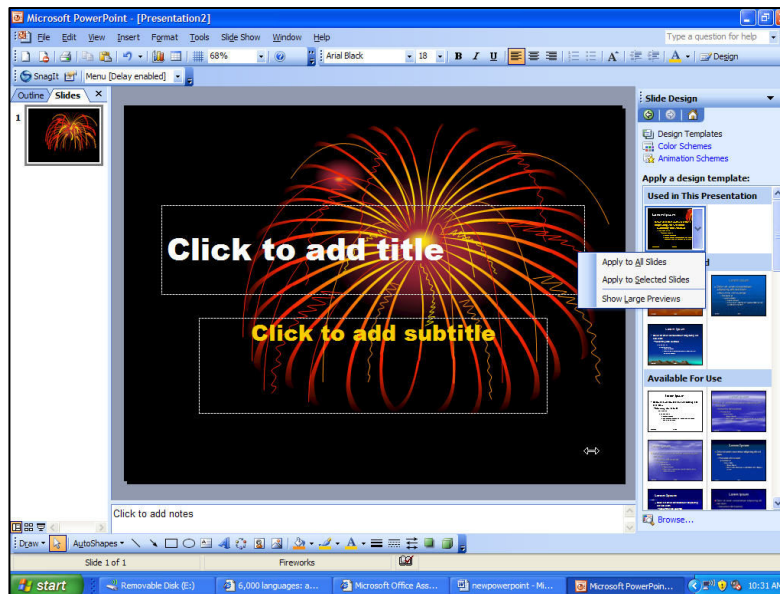


You can then scroll up and down with the menu on the far right of the screen to choose a layout. If you choose **'From design template'** different choices will appear in the menu on the far right of the screen:



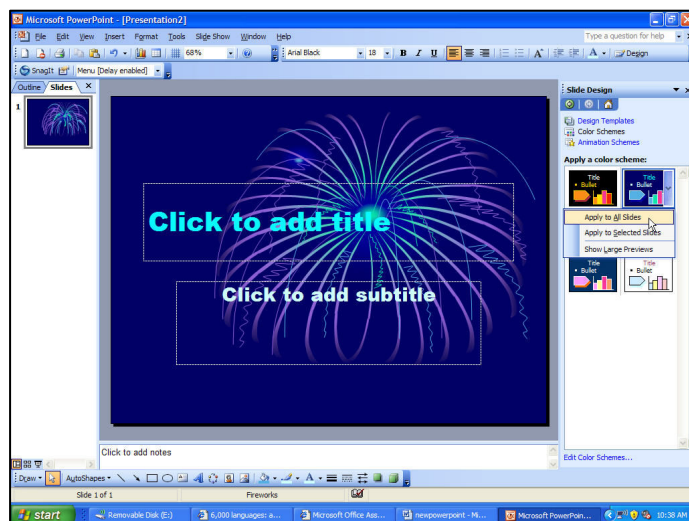
Step 4: Apply a design template or background color

Applying a design template is an easy way to make your lesson(s) colorful. To apply a template, click on one of your choice. It will then be posted on the screen. If you want to change the template simply click on the next one of your choice. If you want to use the template for all of your slides, move your pointer to the right of the template design and click on the down arrow. A small drop down menu will appear where you can select **'Apply to All Slides'**.



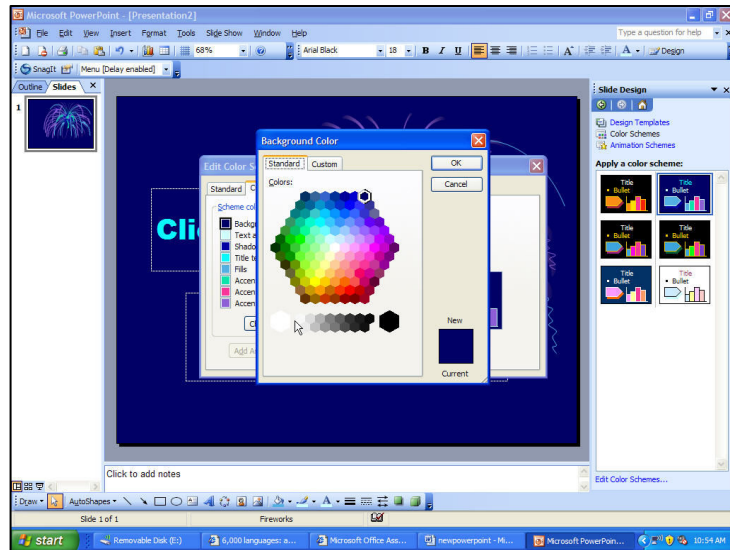
Apply a background color:

If you want a different color scheme, click on the **'Color schemes'** button and choose your colors by clicking on your choice:

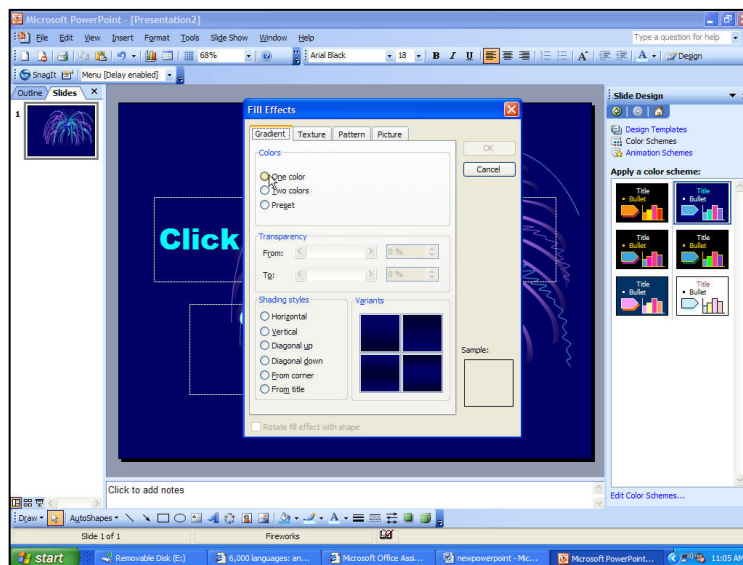


To create different color schemes, click on **'Edit color schemes'** which is located at the bottom of the Slide Design menu.

First, the Edit Color Schemes box will appear, then, click on the **'Change color'** button. The Background color box will appear as shown above. Then, you can choose between a Standard color or a custom color.

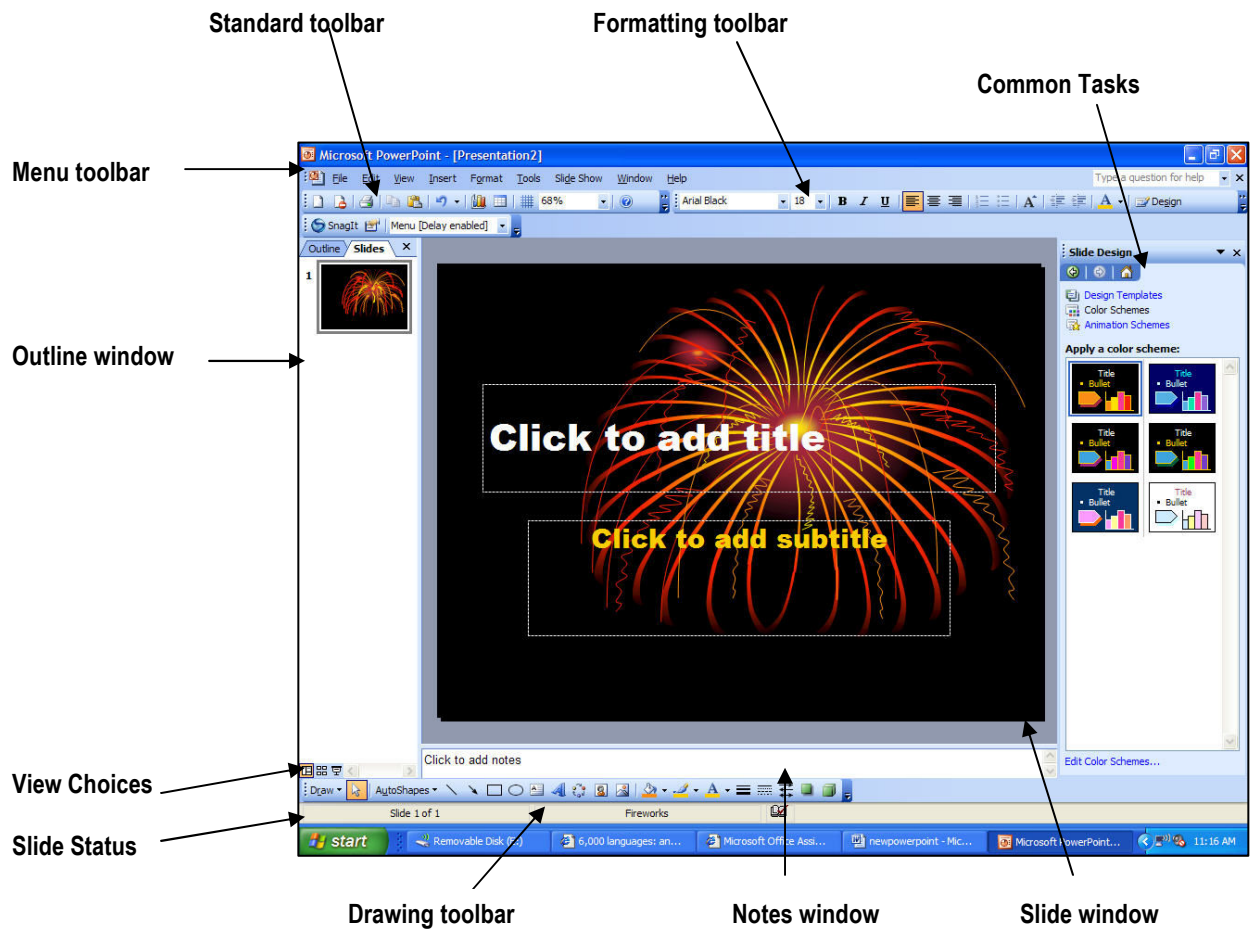


The background of your presentation can also be changed with **'Fill Effects'**. Choose **Format** from the menu bar, then click on **'Background...'**. The screen below will appear and you can adjust Gradient, Texture, Pattern and Picture.



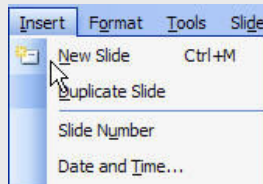
You now have many, many ways to make your slide bright and engaging – GO FOR IT!

Step 5: Understanding the PowerPoint Screen from the *Normal View*



Exercise 1: Time to Practice!

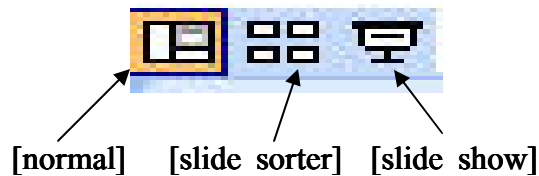
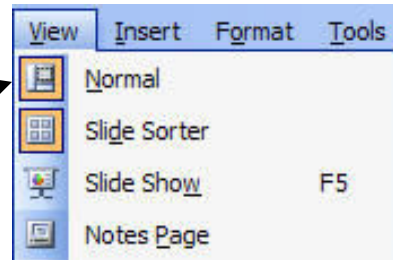
- Open Power Point
- Choose 'Create new presentation'
- Apply either a 'design template' or a background color
- When you want to add another slide, click on 'Insert' and this menu will appear



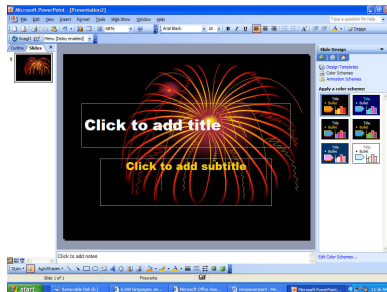
- And you are ready to build your presentation or language lesson!

There are two ways to access views of your slides:

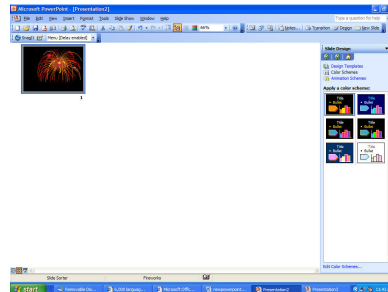
- Click on 'View' on the main tool bar which gives you this menu
- Choose a symbol from the bottom left corner of the PowerPoint screen



Normal View: This view shows the presentation outline on the left, the slide in the main window and allows for notes at the bottom.



Slide Sorter View: Slides can be ordered and sorted from this screen. Just click on a slide to select it and drag it to where you want it placed.

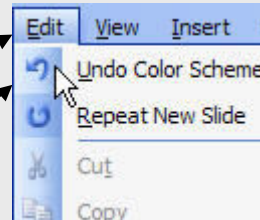


Click the Slide Show button on main tool bar to view the complete show on the full screen!

Remember: BE FEARLESS!

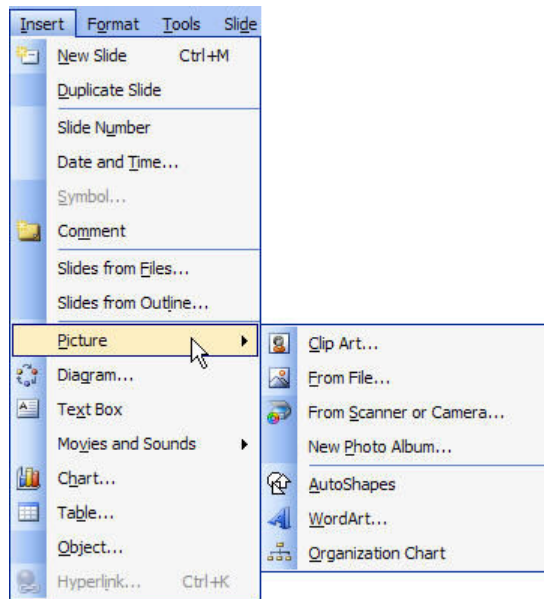
As in Microsoft Word, there is always the command, " Edit....Undo" . This process will reverse your mistakes, so don't be afraid to try anything...

Click 'Edit'
Select 'Undo...'



Step 6: Inserting a Graphic Element

There are many sources which can be used to bring graphics (pictures, drawings, even videos) into a PowerPoint slide. Using Adobe Photo shop, you can enter your own pictures or drawings and scan them to your computer. You can then import them into PowerPoint. You can also use ‘clip art’ already handy on your computer or available from a number of online sources. You will need to become familiar with the ‘insert’ menu:



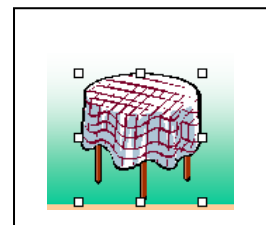
Let's begin by inserting a picture from ‘Clip Art’ located on the drawing tool bar



Notice that there is also ‘Word Art’ available

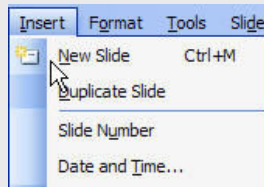
Resizing Pictures:

Pictures and other graphic elements are marked by small boxes on each side. You can resize pictures by clicking on these boxes and dragging them – a double arrow will appear. A Plus sign, + , means you can move the whole image.

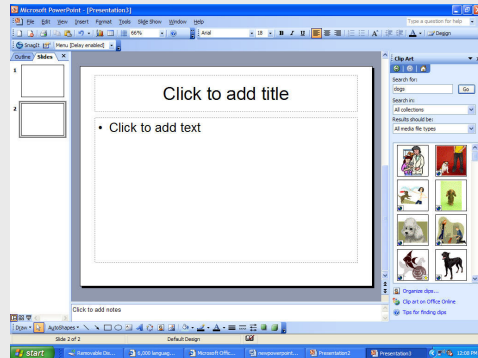


Exercise 2: Working with Clip Art

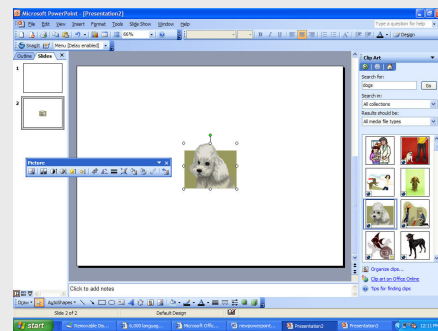
- Open a new slide under 'Insert' on the menu tool bar



- Locate the cursor on your open slide where you would like to insert a picture
- Click on 'Insert' on the menu tool bar
- Choose 'Picture' (You may have to extend the menu)
- Choose 'Clip Art'
- Select a picture (NOTE: you can choose a picture available on your computer or select to go online to find more clip art.)



- Click on a picture and it will be inserted into your slide.
 - You can resize the picture if you select it once it is inserted
 - You can also move it if you are working with a blank slide.

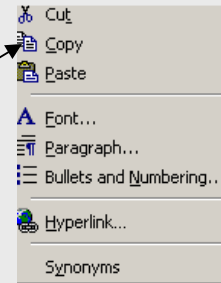


Step 7: Inserting Text

PowerPoint allows you to type directly into a slide by inserting a 'Text Box'. Go to 'Insert' on the main menu and select 'Text Box'. Using the mouse, put your cursor where you want the text to appear and click within the box to begin typing. You may also import text material from other software programs like Microsoft Word, see exercises below.

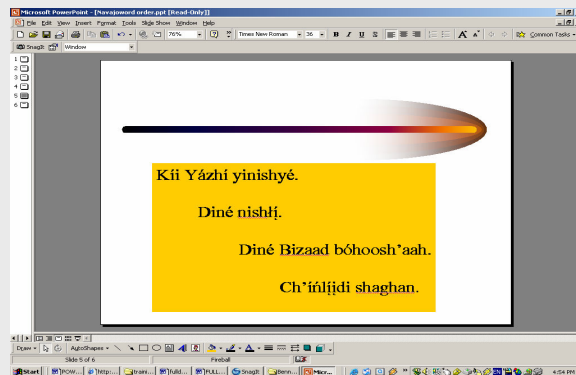
Exercise 3: Type directly or insert Word Art

- Type a word or sentence on your slide related to the picture you chose.
- Exercise 3a: Import from Microsoft Word
- Minimize your PowerPoint presentation
- Open Microsoft Word
- Highlight whatever you typed
- Right click and choose 'Copy'
- Minimize your Word document
- Maximize your PowerPoint presentation



- Place the cursor where you want the text to appear then **Right click and choose 'paste'**

This seems like a lot of extra work, but if you have created a Word document using Unicode or other fonts, you will want to import the document!



Navajo PowerPoint contributed by Benny Hale

Step 8: Inserting Sound Elements

There are several ways to bring sound into a PowerPoint slide:

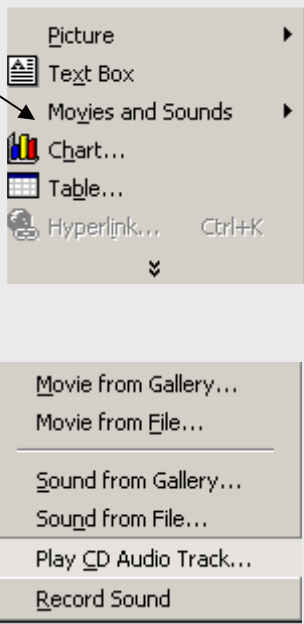
- You can create a sound file using PowerPoint itself
- You can create sound files on other software, like Audacity, then import the sound files to your PowerPoint lesson.

- You can import sound files from outside sources, like old tape recordings. In this case, you need to bring them into Audacity, for instance, and create wave files to save for use in language lessons. To use files from outside sources like audio tapes, see the section of these materials using Audacity software.

Using PowerPoint as a recording source for sound files

Exercise 4: PowerPoint for sound files

- Place your cursor anywhere on the slide you are working on
- Click on the **'Insert'** menu
- Click on **'Movies and Sound'**




The image shows two screenshots of the PowerPoint 'Insert' menu. The first screenshot shows the 'Movies and Sound' option highlighted with a black arrow pointing to it from the text 'Click on 'Movies and Sound'' in the list above. The second screenshot shows the 'Record Sound' option highlighted with a black arrow pointing to it from the text 'Click on 'Record Sound'' in the list above.

- Click on **'Record Sound'**

Exercise 4 (cont.):

- You will now have a small window which looks and acts like a tape recorder.



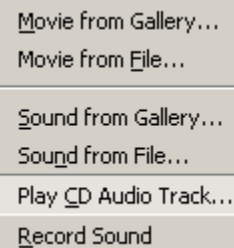
- Point and click on the red button and **'Record'** a word to match the picture you have chosen
- Click on the center button to **'Stop'**
- Click on the left arrow to **'Play'**
- A sound icon  will automatically appear on your slide

Inserting Sound from files

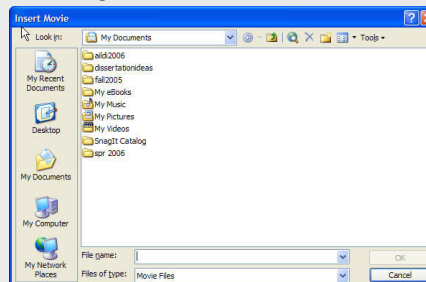
If you have been working with Audacity or any other sound software, you can add your saved sound files to your PowerPoint.

Exercise 5: Sound from PowerPoint files

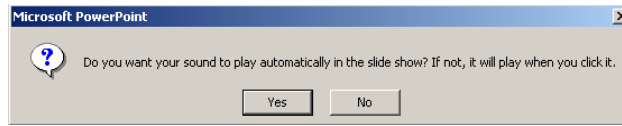
- Click on the **'Insert'** menu
- Select **'Movies and Sound'**
- Click on **'Sound from File'**



- And you will see a list of the sound files you have **saved as wave files**
- Select the file you want and click **'OK'**

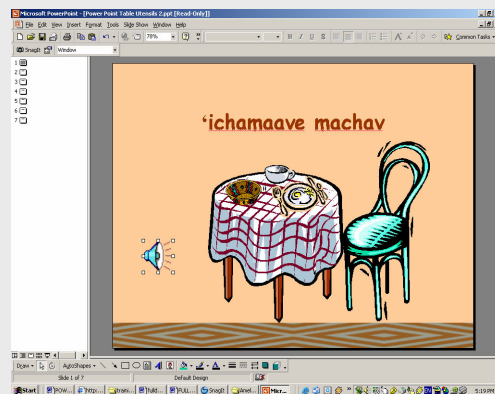


As PowerPoint pulls sound into your slide, you will see this window.



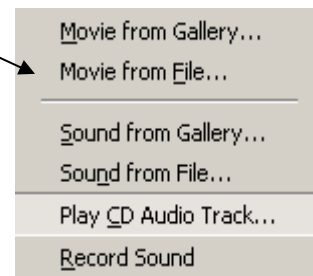
You are given the choice of hearing the sound automatically or of having to 'click' on the icon to hear it. For language lessons, either mode can be interesting and engaging. Although, making the user 'click' makes it more interactive.

The resulting slide will show a **sound icon** which you can then place near the text or picture if you want by clicking and dragging.



Mohave PowerPoint slide contributed by Amelia Flores

NOTE: *Video clips* can be inserted into PowerPoint slides in much the same way: Just choose **'Movie from File'** to import your own movie, once it has been captured.

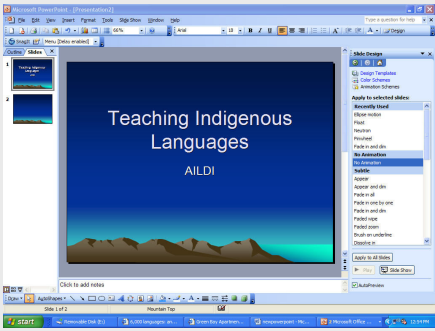


Once you select 'Movies from File', you will get a window like this. Choose the file you need then click on 'Open'. Once you are into your file of videos, select the specific one you need and click on 'OK'.

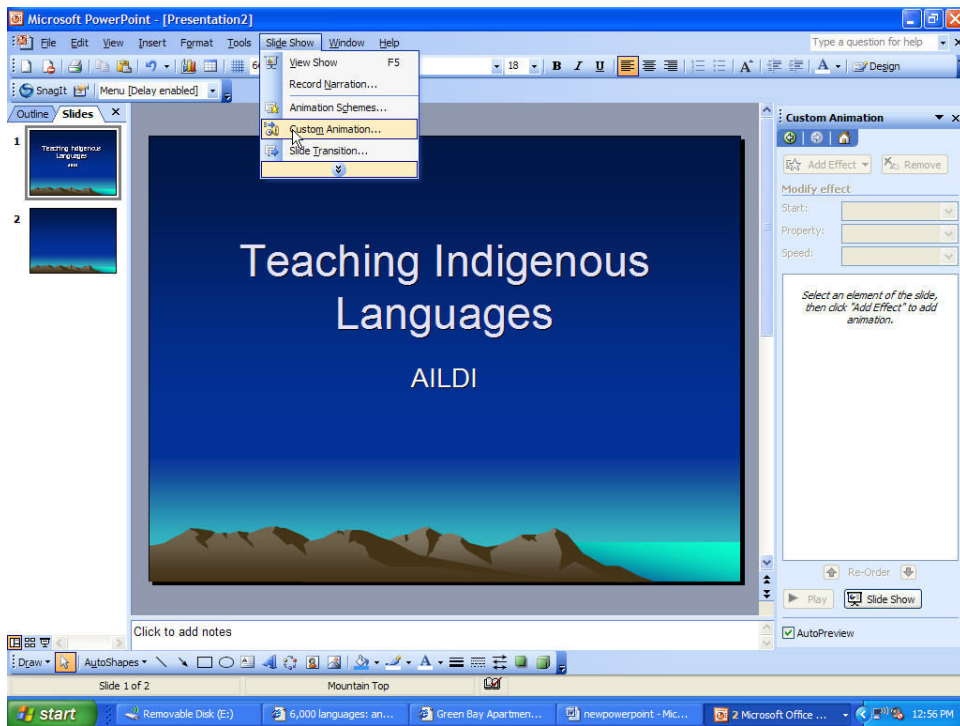
Step 9: Adding Animation!

Exercise 6: Animation!

- **Create** a new slide
- **Add** a graphic element of your choice
- **Click** on the 'Animation Schemes' link



To use Custom Animation, choose 'Slide Show' from the menu tool bar and the screen below will allow you to create a number of exciting effects to animate and add unique sounds your slide!



Congratulations! You have just made a multimedia slide for use in a language lesson!

Here are some reminders from Part I about creating language lessons:

- Think of a single lesson only in the context of a larger unit of study
- Be sure the data is accurate
- Plan carefully before beginning
- Think 'Immersion' – use the native language as much as possible
- Make it bright, active and fun!

Once-dying Chinook language finds future
in voices of children

Tue, 8 Jun 2004 - Nancy Bartley - Seattle Times staff reporter

GRANDE RONDE RESERVATION, Ore.

To Tony Johnson, the Chinook jargon widely spoken by his ancestors was not just a second-class language used for trade but a language of tribal rituals, family gatherings and courtship. Until recently, it was almost extinct.

Now, due largely to the 33-year-old Johnson, who regards each word of his ancestral tongue as an heirloom, the jargon also known as "Chinuk-wawa" has become a language of the future. In the seven years he has worked for the Confederated Tribes of the Grand Ronde to revitalize the language, Johnson, who grew up in Raymond on Willapa Bay, has developed a teaching program that has become a model for tribes around the region.

What makes the program successful is the traditional master-and-apprentice approach, in which students learn from elders, then become teachers themselves. That's coupled with the more modern-day concept of language immersion, in which students speak Chinuk-wawa in and outside the classroom. ...Now the Grand Ronde program is so successful..., children here use Chinuk-wawa to keep secrets from adults.

PowerPoint examples:

These first few examples show how PowerPoint can be used to support public presentations about language.

Using Technology for Language Revitalization:
Current Status in Tribal Communities



Phil Cash Cash
University of Arizona
cashcash@u.arizona.edu

today's talk

Background
The "Information Age"
The Digital Divide and Native Communities
Information and Communication Technologies

Community-centered Language Advocacy
What is Language Revitalization?
What does technology have to do with it?
Planning for a technology future

Phil Cash Cash

CREATING A LANGUAGE
LESSON PART ONE
Lessons, Audience and
Purpose

Prepared for Colorado River Indian Tribes by
Maureen Salzer, Technical Advisor to the
University of Arizona's Gates Grant for
Indigenous Language Revitalization
March 2005


Overview: Creating a Language
Lesson for Your Community

✳ This presentation will try to help you
answer these questions:

- ◆ What is a lesson?
- ◆ Who is your audience?
- ◆ What is your purpose?
- ◆ What are some ways of designing effective lessons?

Maureen Salzer

Mohave Sentence



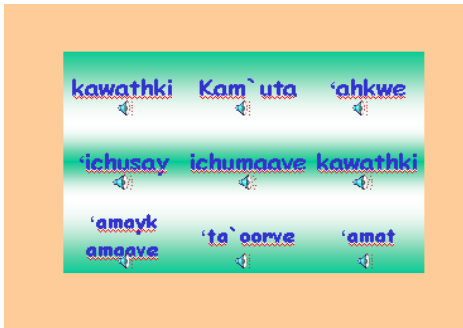
inyech matapoik
I am hungry

Susan Penfield

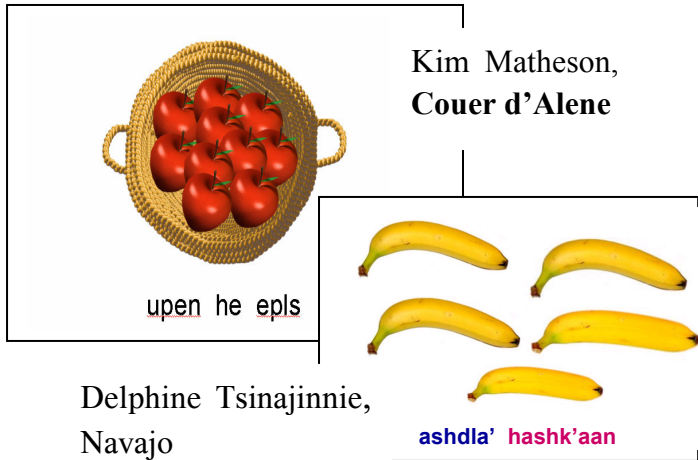
Subject Marker on phrase

- Morphemes: small units of meaning
 - ny = the
 - kw ..ny = [one] that (like adding -er)
 - ch = subject marker
 - k /-m = verb marker
- Humar poshny kw'a'aavnych Joe iyuum
child cat that heard Joe sees
The child that heard the cat sees Joe

Below are sample slides done by CRIT participants and students from the American Indian Language Development Institute. Most have audio files attached. Active samples can be seen on our website at www.



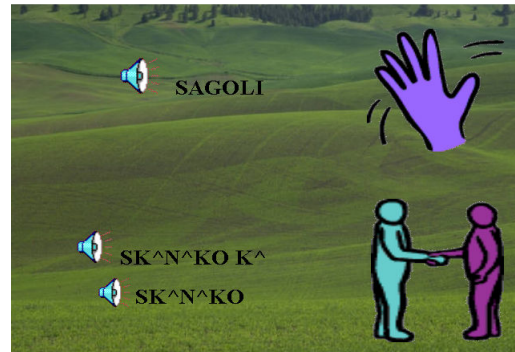
Amelia Flores, Mohave



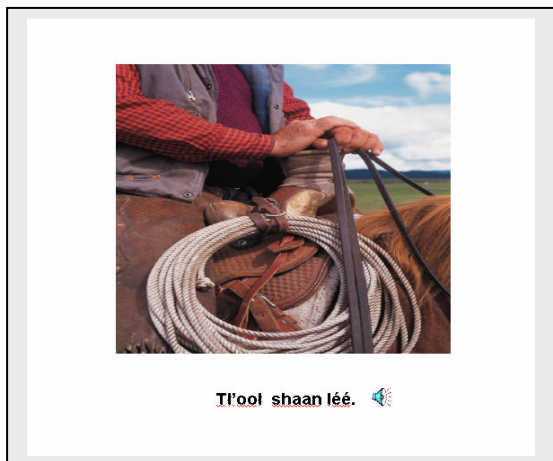
Delphine Tsinajinnie, Navajo



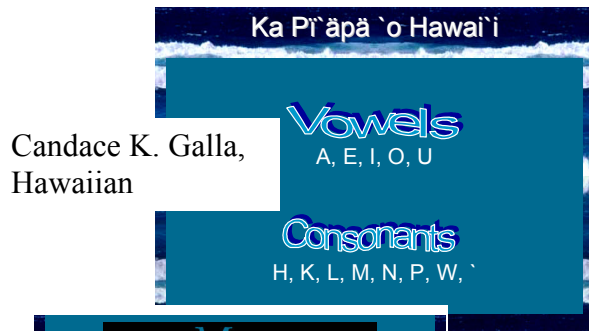
Lonnie Wilder, Hualapai



Tracy Williams, Oneida

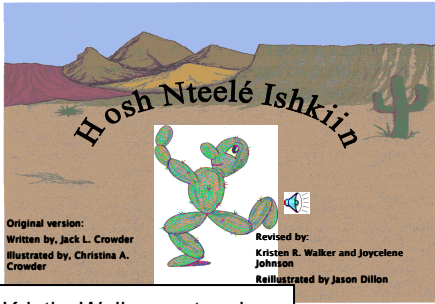


Vangie Warwick, White Mountain Apache

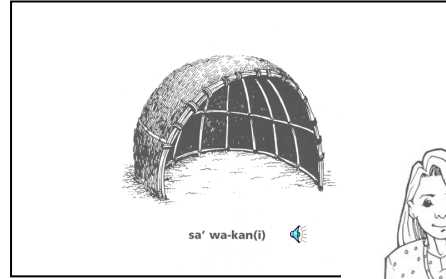
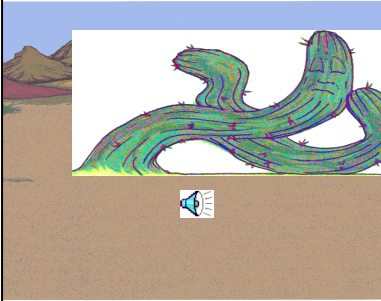


Candace K. Galla, Hawaiian





Kristin Walker, a teacher from San Carlos Apache schools worked with a tribal elder, Joycelene Johnson and illustrator Jason Dillon to revise this earlier book by Jack L. Crowder. It presents seven Apache verbs acted out by 'Cactus Boy' and supported by oral language only.



Nora Vasquez,
Chemehuevi
Art by Ryan Smith
scanned in from the
Chemehuevi Coloring
Book.



na' ?inci-c(i)



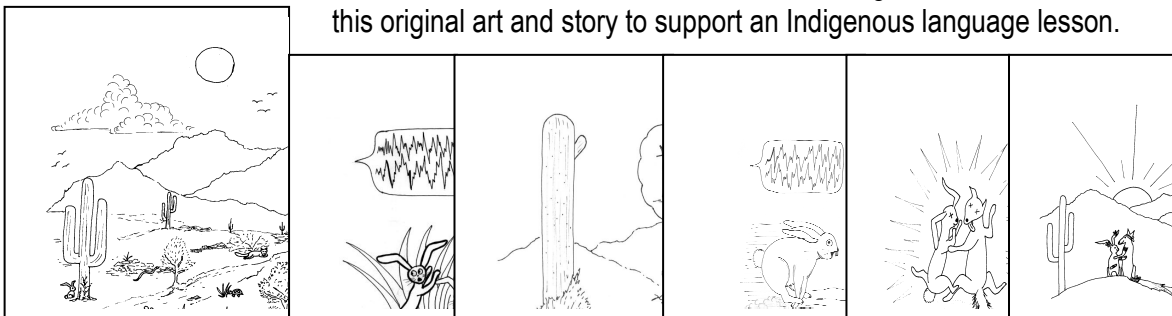
Rhonda Antone, Cathy Ross and Yolanda Two Two worked together to create a presentation for teachers new to their community and to the Tohono O'odham culture and language.

Tohono O'odham Alphabet Sounds

- This was produced by three O'odham teachers during the AILDI 2004 session at the University of Arizona. It is a visual and audio introduction of the Tohono O'odham language and alphabet sound system. This is for the new teachers coming into Indian Oasis-Baboquivari Unified School District 40.

Teaching on the Tohono O'odham Nation

Arlene Joyce Hughes,
Akimel O'odham and a teacher at Gila Crossing School in Arizona created this original art and story to support an Indigenous language lesson.



MICROSOFT PUBLISHER 2003

Microsoft Publisher is a desktop publishing application from Microsoft. This entry level desktop publishing application provides the user to create a variety of materials, such as books, brochures, business cards, calendars, certificates, newsletters, invitations, and much more. Publisher 2003 is bundled with Microsoft Office 2003 Small Business and Professional Editions.

For this exercise, Creating a Storybook, you will learn how to create a book that can be printed at your home, office, or school setting to be reproduced at your leisure, without the hassle of trying to find a publisher who will not compromise your story.

Exercise: Creating a Storybook

Setup

Step 1: Open Microsoft Publisher

- Click on the Start menu
- Click on Programs
- Scroll to Microsoft Publisher and click

Step 2: Open a New File

- Under the File menu, choose New.

Step 3: Page Setup for a Booklet Layout

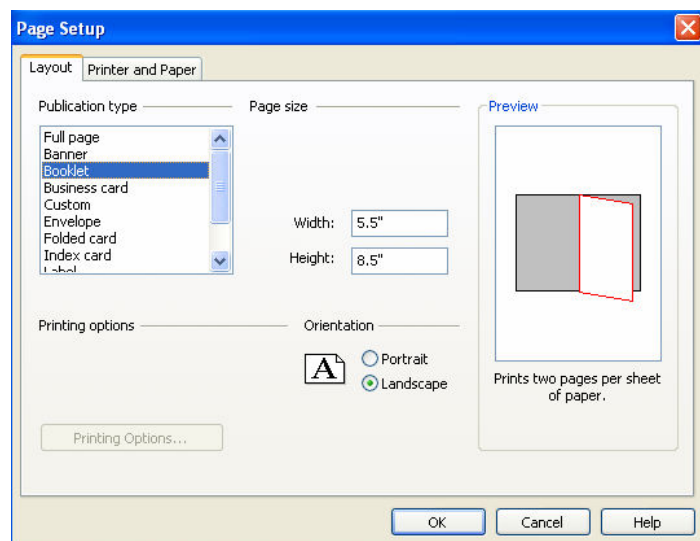
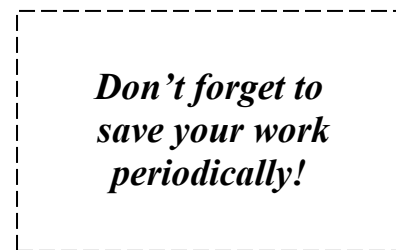
- Under the File menu, choose Page Setup (A Page Setup screen will appear)
- Click on the Layout tab and under the publication type, click Booklet.

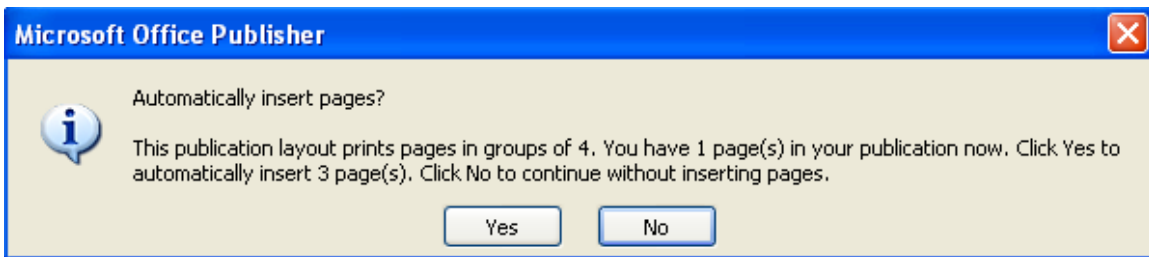
Step 4: Click OK

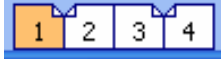
- Under Printing Options – Orientation, click on Landscape. Set the width to 5.5” and Height to 8.5”.

Step 5: Layout Pages

- Once you have completed your page setup, this dialogue box will appear. Click Yes to automatically insert 3 pages.



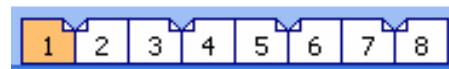
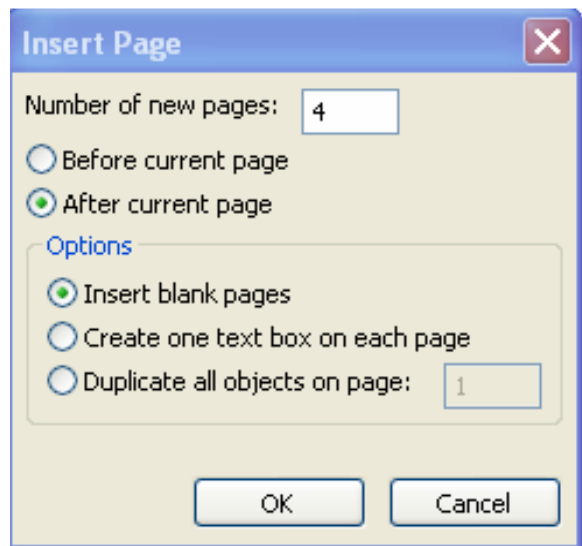


- At the bottom of your screen, you will see this page layout. 
- It is recommended that when you add pages to your book, that you add pages in multiples of four.
 - Try this exercise – Take a piece of paper and fold it in half. Starting with the front page, number it page one and continue until page four. You will notice that from each folded sheet of paper, you are essentially creating four pages total.




Step 6: Adding Pages

- We want our book to have 8 pages total (remember we need to add pages in multiples of four), so we need to add 4 additional pages.
- Go to the Insert Menu and click on Insert Page (An Insert Page screen will appear).
- Type in the number 4 into Number of New Pages. For this example, we will indicate that we want to insert blank pages after the current page.
- You will now see this page layout at the bottom of your screen.

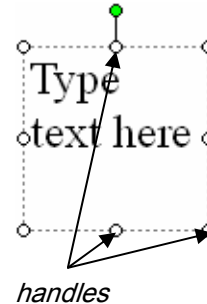


Inserting Text and Graphics

Step 7: Inserting Text

- To insert text, click on the textbox icon  (found on the vertical Objects toolbar to the left of your screen)

- Now, click anywhere on the page where you would like your text.
- A text box will appear on your page. In the text box, you will see a blinking cursor. Begin typing your text.
- To resize your text box, position the mouse pointer over one of the handles (small shapes displayed around an object when the object is selected) and then drag the mouse.
- TIP: If part of your text does not appear in the text box,
 - Enlarge the text box larger
 - Change the text size
 - Delete some of the text



Step 8: Inserting Graphic Objects

- To insert a graphic object, click on the Insert menu, find Picture, and then click on Clip Art... or From File... (see section on Microsoft Word and/or PowerPoint)

Printing & Finishing Touches

Step 9: Printing

- Once you are done editing, it is time for you to print your storybook. Depending on the capabilities of your printer, you may be able to do duplex printing (printing on both sides of a sheet of paper). You will need to review your printer manual. If your printer is not capable of duplex printing, you can print out each page one by one and manually feed your printer. This may take some trial and error, but it will be worth it.
- Go to the File menu and click on Print (a Print screen will appear). Click on Properties. Again depending on the capabilities of your printer, you may or may not find an option that allows you to do duplex printing. If you do, click on it and click OK until you are back to the Print screen.
- If your printer allows for duplex printing, a screen may appear that will guide you through your printing process and may require additional steps.

Step 10: Finishing Touches

- Once your storybook has been printed, fold in half and bind using a long reach stapler.

Enjoy reading your storybooks to friends and family!

MAXAUTHOR



Under the direction of Scott Brill and in conjunction with the Critical Languages Program, the University of Arizona Computer Aided Language Instruction Group (UACALI) has made freely available for non-commercial use its MS-Windows and Internet based multimedia CALL authoring system. MaxAuthor has been under development for 14 years and was used by authors nationwide to create the recently published [Critical Languages Series](#) CD-ROMs. Without any programming, MaxAuthor lets you create language instruction courseware for Chinese, Japanese, Korean, and 44 other languages, including several Native American languages. MaxAuthor requires Windows 95/98/NT/2000/Me/XP, 486 (or better), 16MB RAM minimum, SVGA (or better), sound card, speaker, 9MB disk space, microphone recommended. In this section, you will be introduced to the basic MaxAuthor capability. For more information, see the full description of MaxAuthor at www.cali.arizona.edu.

Capabilities:

MaxAuthor works just like a text editor with tools that add audio and exercise material; there is no programming or scripting necessary. The author records separate audio for both sentences and words and has the option of recording audio in the training language only, but can also record translations or paraphrases. The author selects one of the 5 authoring views: Word, Sentence, Multiple Choice, Footnote, or Cloze (Vocabulary Completion). The tools within MaxAuthor let you play, record, or edit recordings. When the Record All menu choice is selected, MaxAuthor sequentially records each word or sentence. Once you record audio for your lesson, the student can immediately use [MaxBrowser](#), [Listening Dictation](#), [Pronunciation](#), [Vocabulary Completion](#), and [Audio Flashcards](#) without further customization. By adding more information to the lesson such as multiple choice questions, multimedia footnotes, and custom Vocabulary Completion blanks, you can enhance the richness of the student's interaction with the lesson. It's up to you, the instructor, to decide how much time you want to invest in your new lesson.

MaxAuthor treats lesson text as a collection of sentences, words, footnotes, multiple choices, and cloze blanks. The instructor records separate audio for both sentences and words to allow the student to hear the contextual differences between words spoken in isolation, and words spoken in sentential context. MaxAuthor differs from other multimedia authoring packages in that it is specifically built for teaching languages: there is no scripting language; you graphically attach exercise elements to specific parts of the text and there are no programming languages to learn.

The Indigenous languages currently supported by MaxAuthor include Navajo, Chemehuevi, Southern Paiute, Yaqui, O’odham, Luiseño, Nahuatl, Ojibwe (Chippewa), Hupa, Lummi and Mohave.

“All over the world, all peoples have their language. And anyone who has no language is lost....There are some people who have their own language, but they do not love it. And those people become nothing. We do not want to end up like that. We want to carry forth our language and make it grow. There are some people who rejoice at speaking their language. And from this, these people do great things.”

Leonzo Knight Julián, *International Journal of the Sociology of Language* 132, 1998, pp. 183-184.

Let’s begin!

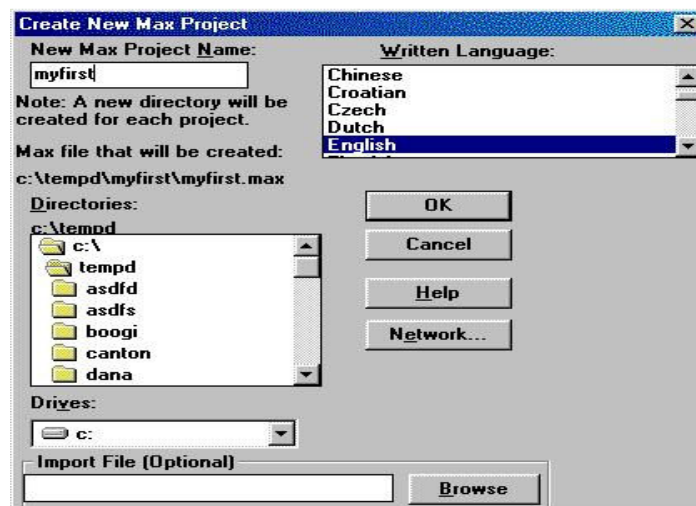
To access Max Author and to begin construction of language lessons, open ‘Internet Explorer’ and type www.cali.arizona.edu in the dialog box.



Tutorial 1: Creating your first lesson with MaxAuthor

Step 1:

- Select File > New from the MaxAuthor main menu to bring up the Create New Max Project dialog.
- Type in a project name (less than 8 characters with no spaces or file extensions), pick English as the written language for your first lesson, and select a directory for the new project (MaxAuthor creates a new directory for each project).
- Then click OK to bring up the Enter New Lesson Information dialog.



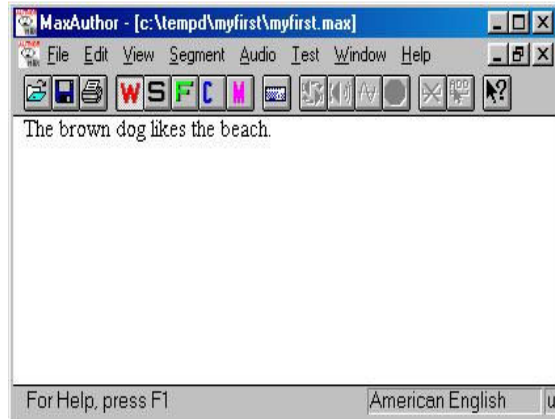
Step 2:

- Type in your name, a short lesson description, and add an audio language (American English) that you will record later.
- Then click OK to start editing your new lesson.



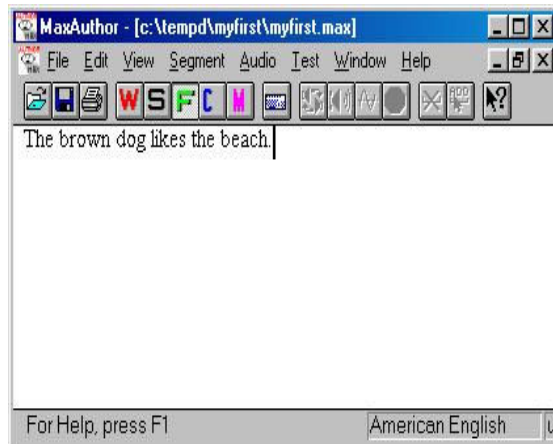
Step 3:

- Type in one sentence for your lesson: "The brown dog likes the beach." MaxAuthor acts like a text editor that has several layers (or views) of information. Initially, you will be in Word View. For non-English text, you can click Help > Keyboard Mapping to see how to type characters in the written language of the current document.




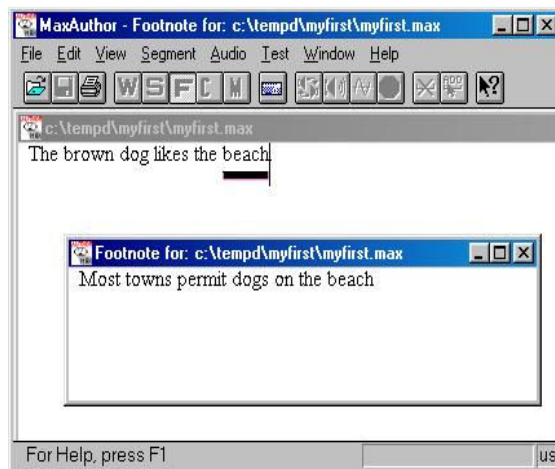
Step 4:

- Add a text footnote to your lesson by clicking on View > Footnote Segments on the main menu. This switches you to Footnote View, and you will notice that the green F button is now depressed on the toolbar. (Tip: you could also have just clicked on the F button directly to switch to footnote view).



Step 5:

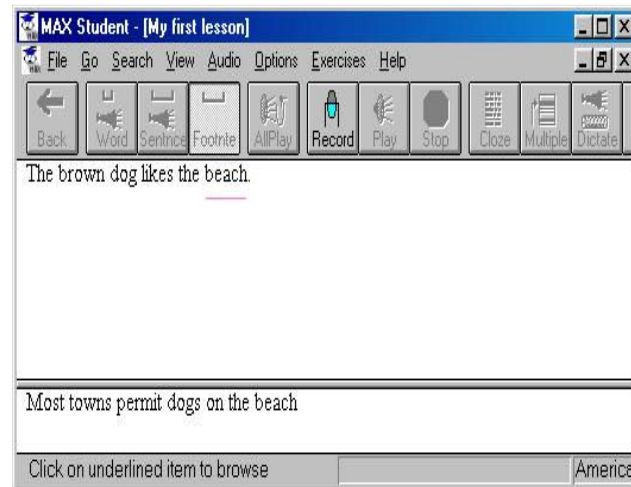
- Then, highlight the word "beach", and choose Segment > New from the main menu, and for the type of footnote, choose A text footnote. A window will appear where you can type your text footnote: "Most towns permit dogs on the beach".
- When you are finished, click the "Close Window" box  on the upper right hand corner of the footnote window.



- Test your lesson to see what the student will see. Make sure your new lesson is the active window. Click on Test > Student Max on the main menu. You will be prompted to first save your lesson, click OK.

Step 6:

- The MAX Student application then starts up using your new file.
- You will see your text footnote underlined in green, and when you click on it, your footnote text appears at the bottom of the screen.
- Click on File > Exit to leave the student view and return to MaxAuthor. Don't forget that each MAX application (MAX Student, Dictation, etc.) has extensive help available from the main menu.



Preserving Languages

Sunday, May 16, 2004 - By W. JAMES HONABERGER - For The New Mexican
Santa Fe, New Mexico

Despite the seemingly vibrant demonstration of Indigenous languages, the idioms are in danger of being lost. According to linguists, if tribal members -- most especially the youngest generation -- do not learn to speak their languages, the next 60 years might see the silence of more than 150 of the remaining 175 Indigenous languages in the United States.

"Many people are using the computer to create tutorial programs, and we're finding that those are very powerful tools," said Inee Yang Slaughter, institute director. As Native Americans fluent in their language grow older and take Tewa, Hawaiian or Choctaw to their graves, efforts to cultivate younger speakers are helping.

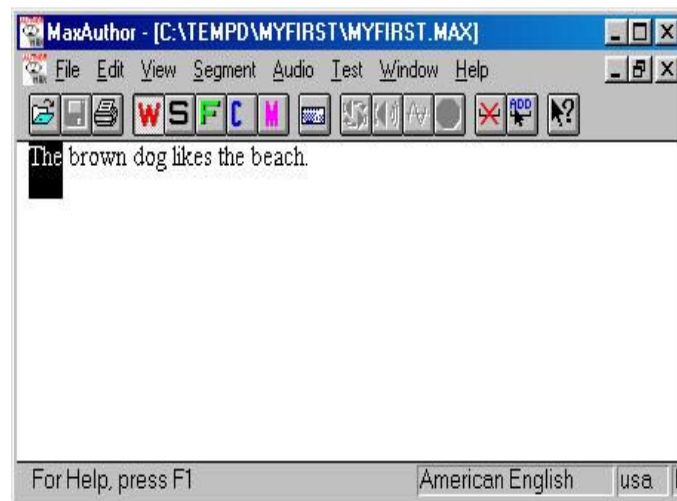
[Tessie] Naranjo said language and culture have a symbiotic relationship. "Behavior is embedded in the language; language reflects what the values of your community are," she said. "If you don't know your language, you won't learn how to be a good Tewa person ... or a good anything person."

<http://www.santafenewmexican.com/main.asp?Search=1&ArticleID=44796&SectionID=2&SubSectionID=&S=1>

Tutorial 2: Add audio to your MAX lesson

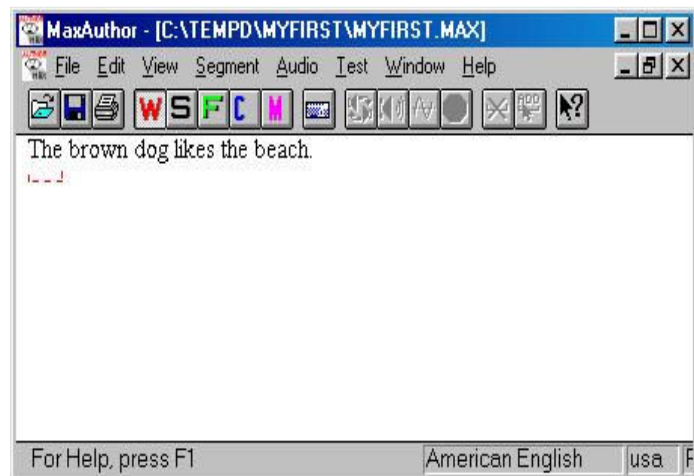
Step 1:

- MaxAuthor provides an easy way to record audio for each word and each sentence of your lesson. Although audio recording is optional, it is highly recommended. First, you need to delineate the boundaries of words and sentence segments.
- Switch to View > Word from the main menu or click on the W toolbar button.
- Highlight the first word of the lesson using the mouse or the cursor keys while holding down the shift key.



Step 2:

- Click on Segment > New (or click on the Add toolbar button). The word now becomes underlined red with dots to show you that it is an unrecorded word segment.



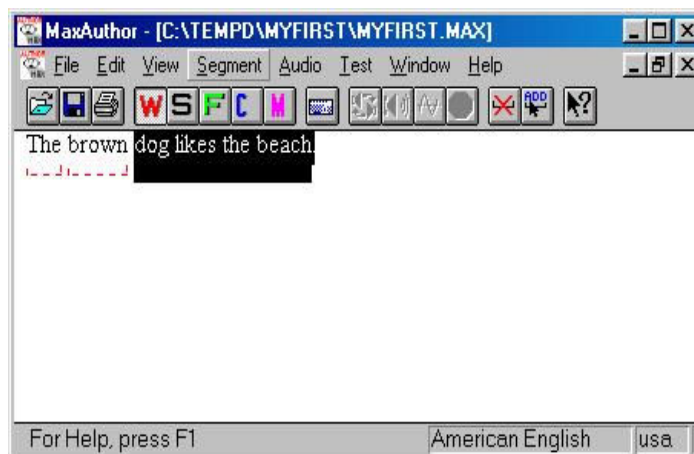
Step 3:

- Do the same for the next word. Note that you can double click on a word to highlight it. There are two cursors in MaxAuthor, the text cursor (a blinking vertical line) and the segment cursor (a heavy black horizontal line). The segment cursor may not be visible if the text cursor is not on top of a segment.
- If you misplace a segment's boundaries, you can remove it by clicking once on it and selecting **Segment > Delete** and trying again. You can also tweak a boundary by using **Segment > Boundaries**. Note that segments of the same type must not be overlapping.



Step 4:

- A quick way to segment is to highlight an entire section of text and choose Automatic Segmentation. MaxAuthor provides its best guess for the segment boundaries that you can later fine tune.
- Highlight the rest of the sentence that is not segmented so far and click on Segment > Automatic Segmentation.



Step 5:

- To record the word segments in your lesson, make sure your microphone is working, click on the first segment and choose **Audio > Record All Segments**.
- The MAX Audio Recorder dialog box will pop up.
- Click on **Record** to start recording the underlined word segment. Recording continues until you click **Stop**. Then, **Play** your recording, re-record it, or **Save** it. After you have saved it, you will automatically be prompted to record the next word, and so on.

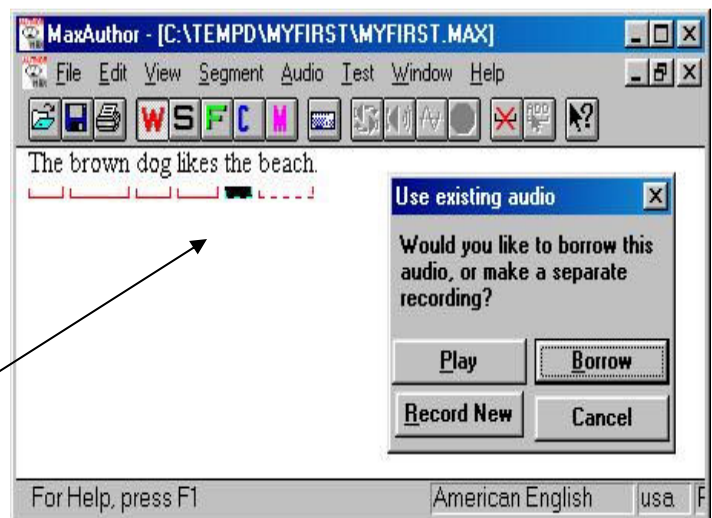


Note: on some versions of Windows, the Windows Taskbar can obscure the MAX Audio Recorder and other input windows. We recommend that you set your taskbar option to Auto Hide.

Step 6:

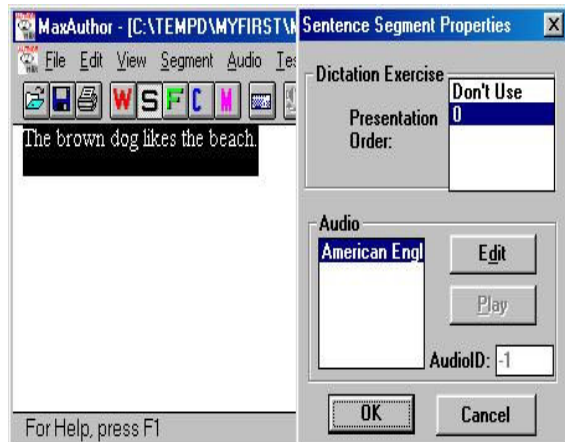
- When you are about to record a word that has already been recorded, MaxAuthor plays the already recorded word and you can elect to Borrow the previous recording or record a new one.

Note that the segment changes from a dotted line to a solid one once you have recorded it.



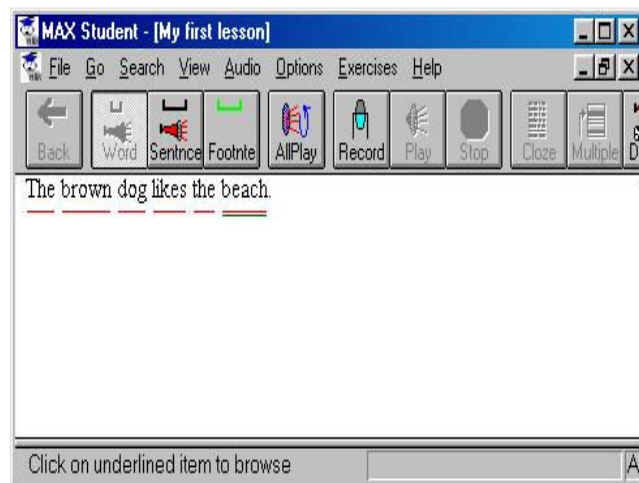
Step 7:

- Switch to View > Sentence Segments and create the sentence segment. You should include trailing punctuation as a part of the sentence. When you create a sentence segment, you are prompted for Dictation Presentation Order (starting from 0). In this way, you can control the order of presentation for each sentence in the Listening Dictation Exercise, or choose ‘Don’t Use’ if a sentence is too long, too short, or otherwise not appropriate for a listening dictation exercise.
- Click OK.
- Record the sentence segment by clicking once on it and choosing Audio > Record All Segments.



Step 8:

- Click on Test > Student Max to test your lesson. The student has 3 views of the lesson text: Word, Sentence, and Footnote. When in Word View, the student can click on your words to hear them. Note that the Dictation, Flash card, and Pronunciation exercise buttons are now enabled because word and sentence recordings have been created. Try out these exercises to see how they utilize your recordings.
- Select File > Exit from Student Max, returning you to MaxAuthor.



NOTES: _____

Tutorial 3: Add a multiple choice exercise to your MAX lesson

Step 1:

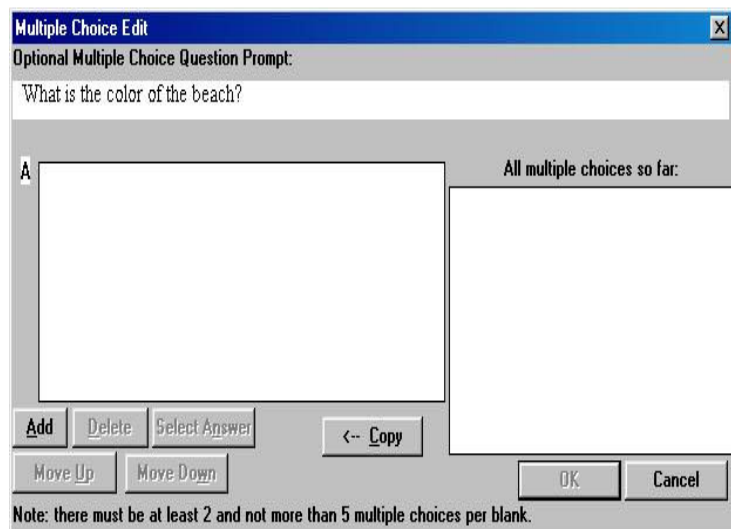
- MaxAuthor provides an easy way to add an optional multiple choice exercise to your lesson.
- Click on View > Multiple Choice or click on the M toolbar button, and highlight the word “beach”.



We are attaching the multiple choice to this word because we want to draw the student's attention to the word when we ask the multiple choice question

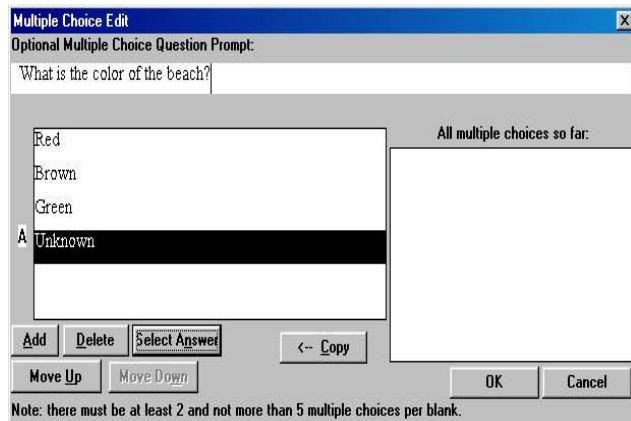
Step 2:

- Click on Segment > New and the Multiple Choice Edit dialog box appears.
- In the Optional Multiple Choice Question Prompt box type “what is the color of the beach?”
- This is the question that will be asked of the student. This question can be written in the target language or in English.



Step 3:

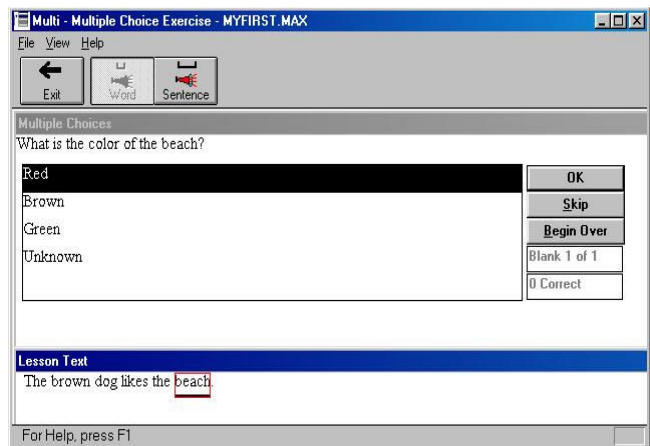
- Click on the 'Add' button and type "Red" and click on OK, then add "Brown", "Green", and "Unknown".
- Now click on "Unknown" and then 'Select Answer', and you will see the A designator move to it. This is the correct answer that the student will hopefully select.
- Click on OK to dismiss the dialog box.



Step 4:

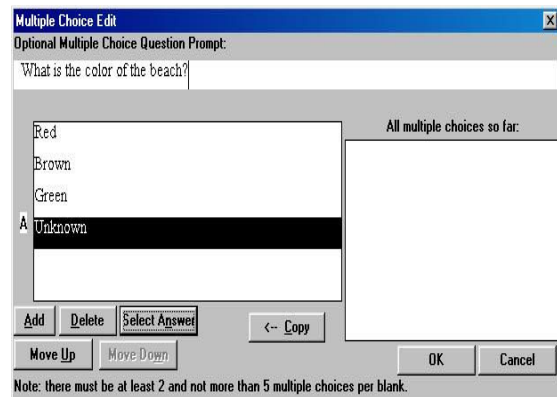
- Now, test your lesson by choosing Test > Multiple Choice.
- Select OK to save your lesson.
- Click on File > Exit to return to MaxAuthor.

Note that the student can keep trying the ones incorrectly answered until they are all correct.



Step 5:

- To further edit your multiple choice question, either click once on the segment and select Segment > Properties, or simply right click on the multiple choice segment to bring up the Multiple Choice Edit dialog box again. You can right click on almost any type of segment (footnotes, word, sentence, etc.) in MaxAuthor to view or change the segment's properties.



Tutorial 4: Add a fill-in-the-blank (Cloze) exercise to your MAX lesson

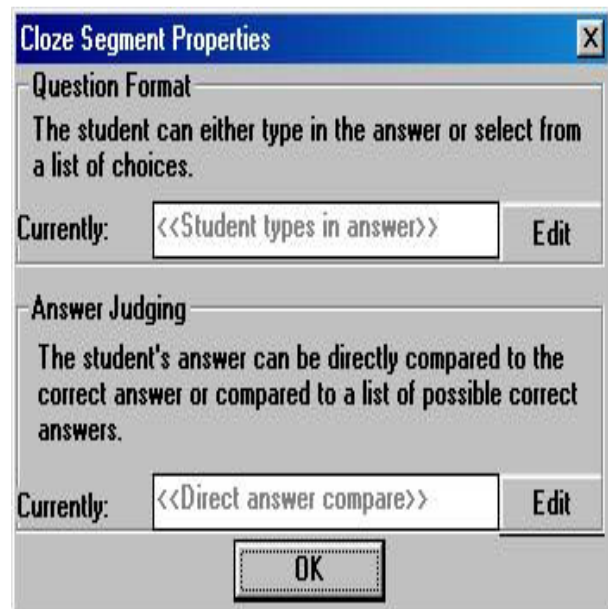
Step 1:

- MaxAuthor lets you add an optional Fill-in-the-blank exercise to your lesson. This is also called a 'Cloze' or 'Vocabulary Completion' exercise. The student's job is to type in the correct character(s) for each blank or, alternately, select the proper answer from a choice list.
- Click on View > Cloze Segments or click on the C toolbar button.
- We could use automatic segmentation to place Cloze blanks every Nth word, but in this case, we will place the segments manually. To create your first Cloze Segment, highlight the word "dog". This is going to be the word we 'blank out'.



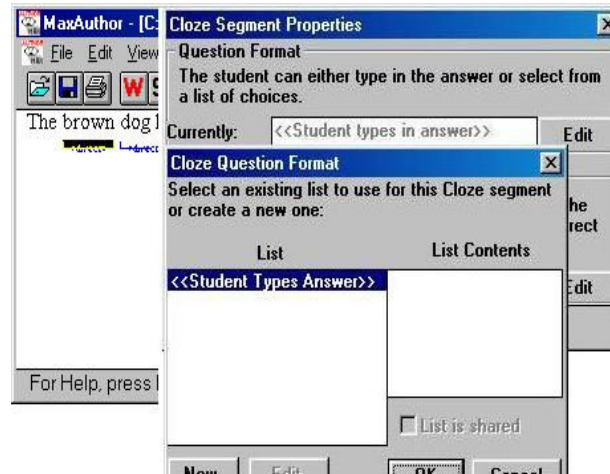
Step 2:

- Click on Segment > New which brings up the Cloze Segment Properties dialog box.
- There are two properties of a Cloze segment that can be changed, the Question Format and the Answer Judging. The Question Format is either <<student types in answer>> (the default) or the name of a choice list that the student will pick from. Choice lists can be shared between Cloze segments, which can save a lot of typing
- For this segment, we will just accept the defaults, so just click on OK.



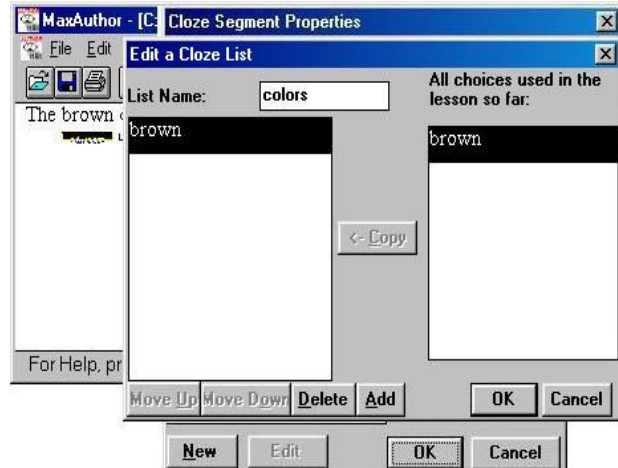
Step 3:

- For the next cloze segment, we are going to present the student with a few choices that they can select from, so they don't have to type in the answer directly.
- Highlight the word “brown”, and click on Segment > New, and in the Question Format box, click on the ‘Edit’ button.
- In the Cloze Question Format dialog box, click on the ‘New’ button.



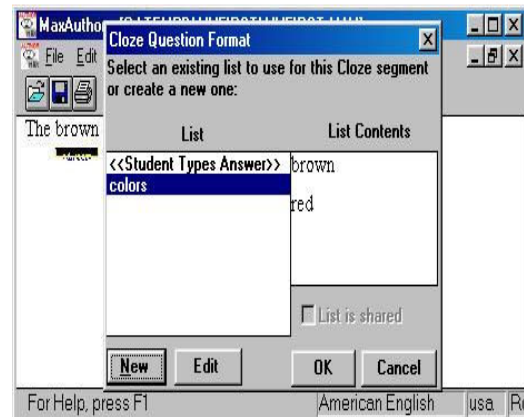
Step 4:

- In the List Name box, type “colors”. This name is only used for the author's benefit, it is never shown to the student. Other list names could be: "nouns", "adjectives", etc. *Notice that “brown” is already in the list because it is the correct answer and must be a choice that the student will have.*
- Click on ‘Add’ to add a new color (distractor) to the list, and type “red”.



Step 5:

- Now click OK, and you will see that the “colors” choice list is now associated with the blank you've been working on.
- Click on OK to dismiss the Cloze Question Format dialog box, and then OK to dismiss the Cloze Segment Properties dialog box. Test your lesson by choosing Test > Cloze and select OK to save your lesson.



Step 6:

- The student is shown two blanks and if they click on the first blank they have to pick from two choices: red or brown. If they click on the second blank, they have to type in the answer.
- When they click on 'Check', the student's answers are compared to the correct answers and displayed.
- Click on 'Back' to return to MaxAuthor.

Student's View



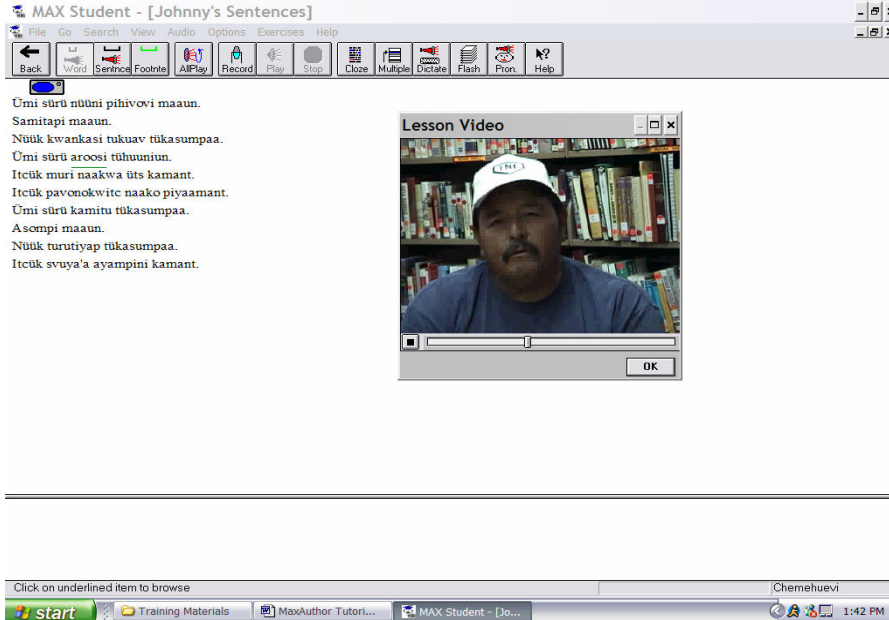
Food for thought:

Does the language we speak shape the way we view the world?

“...Navajo classifies objects into a variety of categories, depending on such characteristics as shape and rigidity ...for example, round object, long rigid object, long flexible object, flat flexible object...and so on. Therefore, the category to which an object belongs determines which verb stem is used in talking about it. [Therefore] the verb for ‘*pick up*’ will be different in sentences such as “I *pick up* a cigarette”, I *pick up* a blanket” and I *pick up* a rope.”

(Silver and Miller, 1997:72)

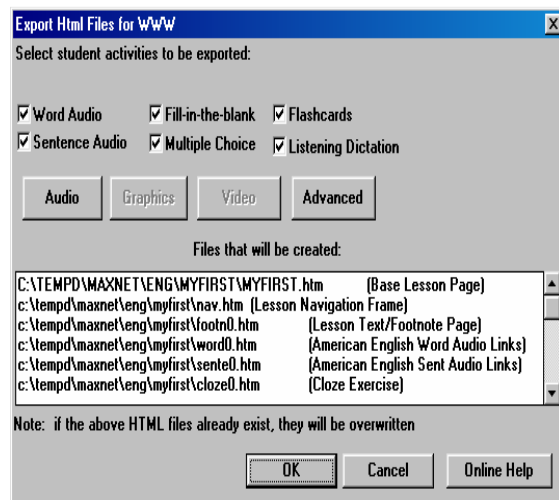
Tutorial 5: Export your MAX lesson to the Web



Chemehuevi Lesson, featuring Johnny Hill, Jr., on the web at www.cali.arizona.edu

Step1:

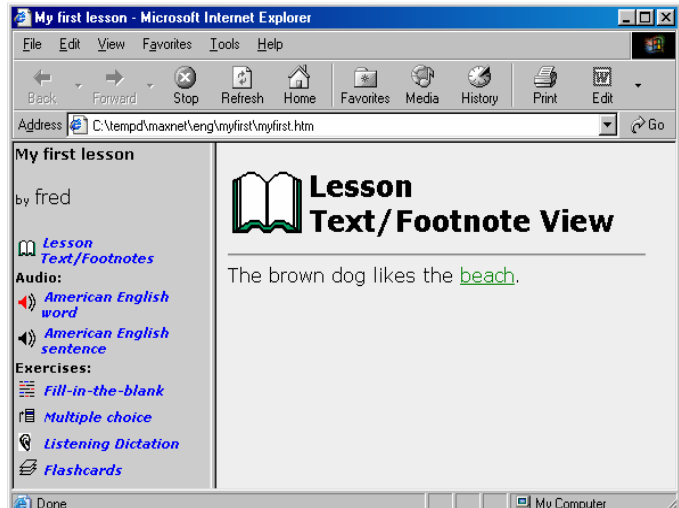
- MaxAuthor lets you export many aspects of your lessons for web delivery so they can be used on PCs using Microsoft's Internet Explorer 4.0 or greater. (See cali.arizona.edu for examples and options are detailed in the [MaxAuthor Manual](#) available through the same website.)
- Click on **File > Export HTML** and you will see this dialog box. Now, click on the 'OK' button to convert your MAX lesson to HTML format. Note that several HTML files are created in the same directory that your MAX lesson is in. These files control the web delivery and should not be modified.
- After MaxAuthor creates the HTML files for your lesson, you have the option of viewing the files in your default browser. If you say 'Yes', MaxAuthor instructs your browser to load the top level HTML file created for the lesson which in this case is the local file: c:\tempd\maxnet\eng\myfirst\myfirst.max.



Step 2:

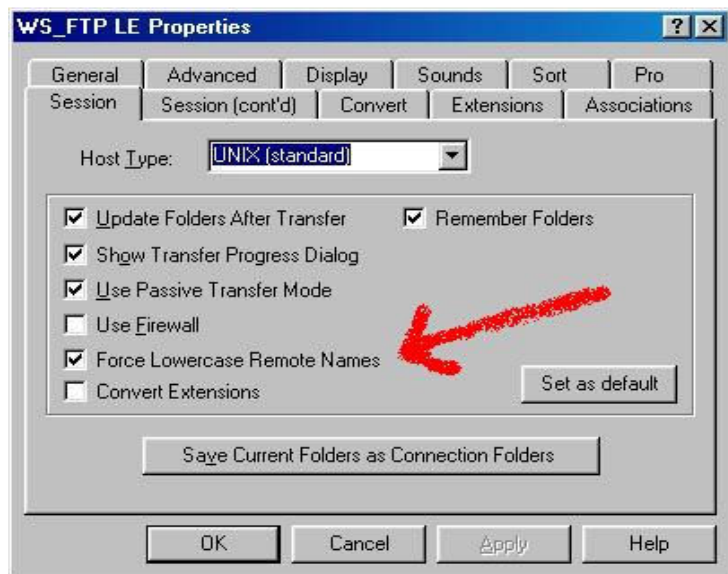
You can try out all the lesson activities the student will see (except for Flashcards which must be accessed using an http: URL).The left hand frame is used for navigation and the right hand frame for the various views and activities of the lesson. Since the lesson's name was myfirst.max, the file to point your students to is myfirst.htm. If you want to put the lesson files on your web server, copy (or FTP) the entire lesson directory to your server. In this case you would copy the directory C:\tempd\maxnet\eng\myfirst to your web server.

Let's say your web server's name is <http://myschool.edu/> and your subdirectory is me, and you copied your myfirst lesson directory and all files to me, then the URL of your lesson would be: <http://myschool.edu/me/myfirst/myfirst.htm>



Note: Each lesson must remain in a separate directory (you can't copy more than one lesson's HTML files into one directory because of file name conflicts).

If your web server has case-sensitive filenames, you may need to set your FTP program so the filenames are forced to be lower case when transferred. Shown at right is the Options screen from [WS_FTP](#) as an example. We hope you've enjoyed this tutorial! Mail comments to: brill@arizona.edu



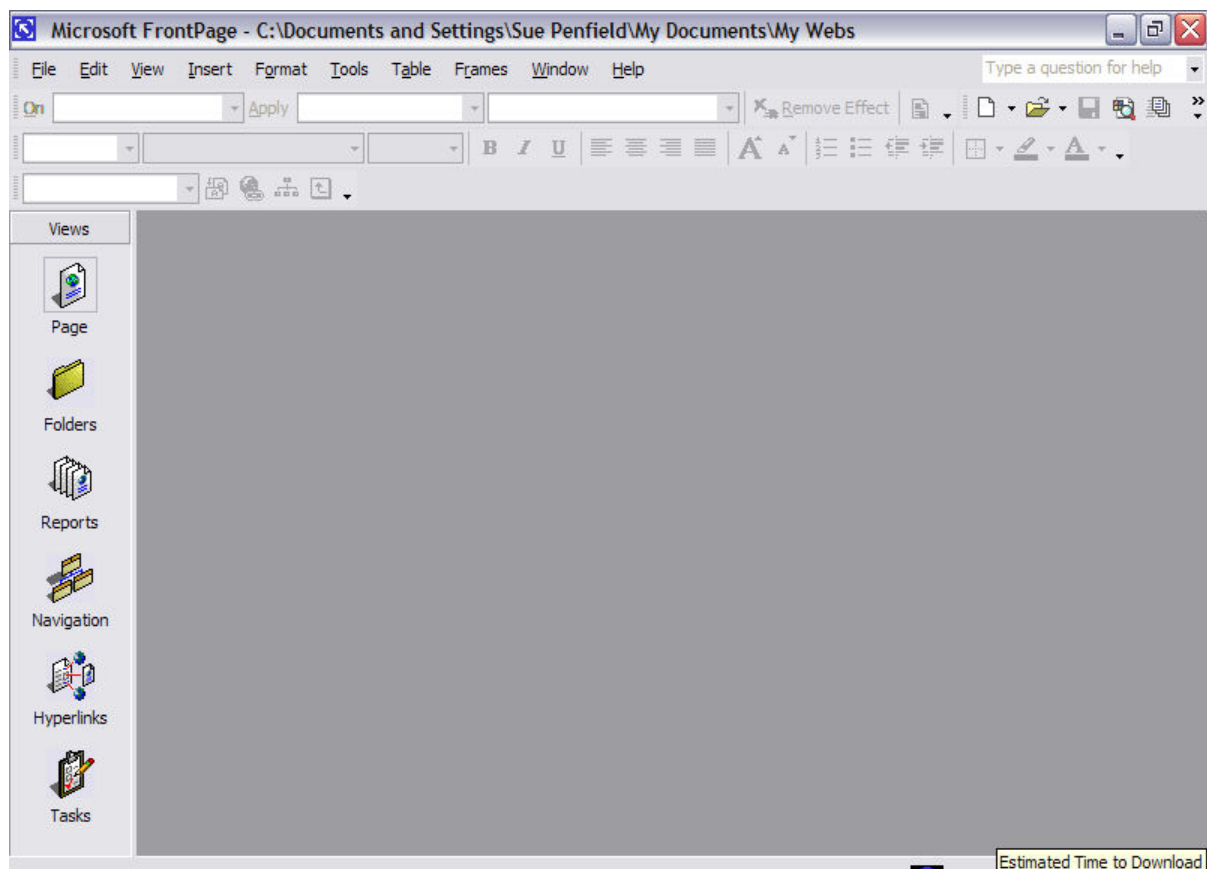
FRONTPAGE 2000

If you are anxious to publish your materials on the Web, using FrontPage is a very easy way to do it. To begin, you need to contact your Internet provider. They will create an account and give you information about how to log in. You can also create your web page and files without publishing them. That is, you have a choice, within FrontPage, of working locally (the “C” drive) or working while connected to the Web (either Internet Explorer or Netscape). We recommend working while on the Web if possible.

Ten steps to get you started with FrontPage:

Step 1: Open FrontPage

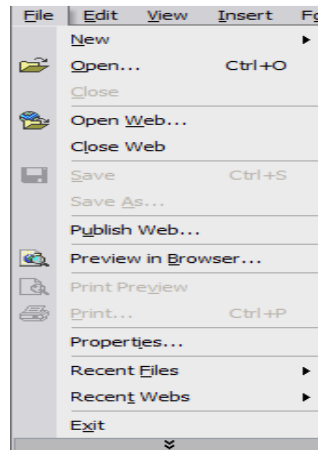
- Go to ‘Start’
- Go to ‘Programs’
- Click on **Microsoft FrontPage** 



Note: Not all Internet Service Providers (ISPs) provide Web space and only select ones provide FrontPage extensions that allow you to work directly on the server. If the server does not have FrontPage extensions, you can not drag and drop files on to the server. You would have to use FTPs (File Transfer Protocols) to transfer files.

Step 2: Work on the Web

- Choose File > Open Web

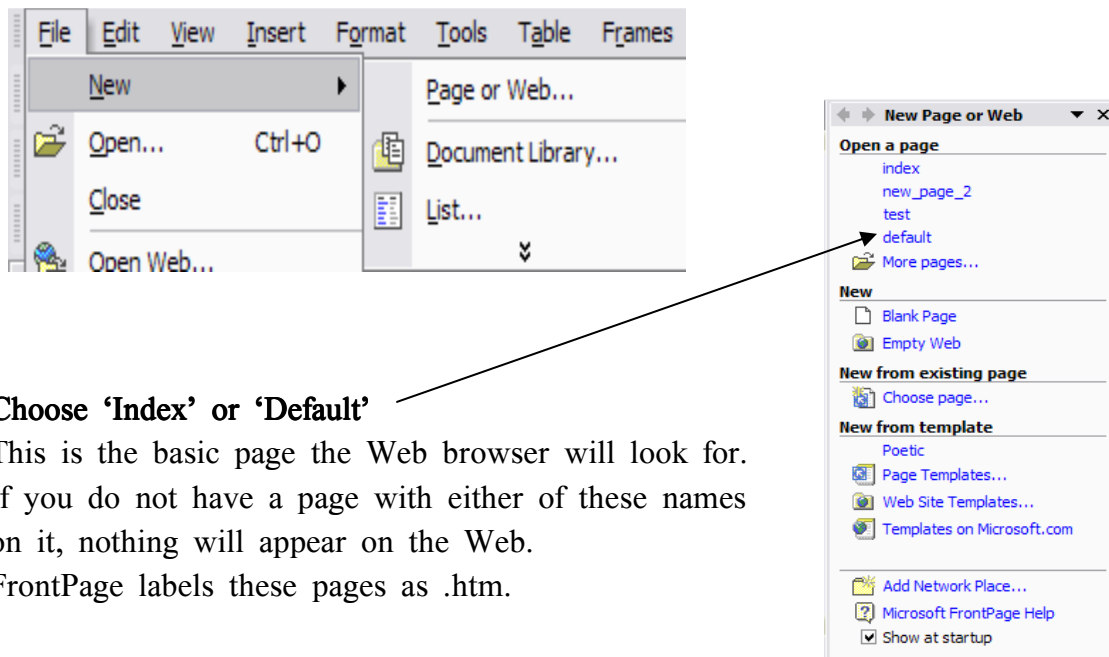


Note: If you do not choose 'Open Web', you will be working locally and no one will see your page except you, unless you upload it.

When the window opens, type in the URL of your Web Folder. Then you will be asked for your username and password

Step 3: Create 'Index' or 'Default' page

- Go to File > New > Page or Web



Choose 'Index' or 'Default'

This is the basic page the Web browser will look for. If you do not have a page with either of these names on it, nothing will appear on the Web. FrontPage labels these pages as .htm.

Step 4: Views of your page

There are several ways to view your page. It is important to understand the active editing views versus the online views.

a) Views Tool Bar



Page – actual editing page view

Folders – what you have already saved

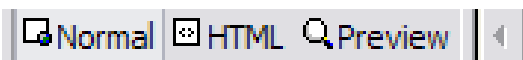
Reports – how many pages with broken links, folders that take too long to load

Navigation – charts for creating links and ways to organize your page information in a hierarchical fashion

Hyperlinks – shows graphically which files are linked to other files (NOTE expanded + and - signs)

Tasks – allows you to assign jobs to others working on the site

b) Editing View Tool Bar



Normal View – view in active editing

HTML – to see the html code

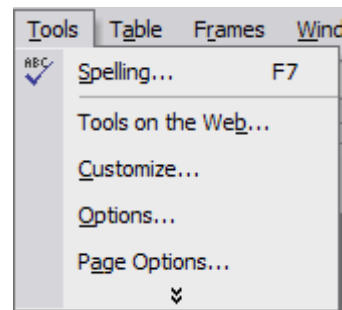
Preview – shows how it will display on the web

“It’s scary how important language is...If I only had someone from my school to help me, this is what I would do: Make a curriculum to benefit the students from kindergarten to eighth grade, speak just in my native language to the kindergartners, and repeat this system every year until the kindergarten children are in the eighth grade.”

Bilingual teacher /AILDI participant.

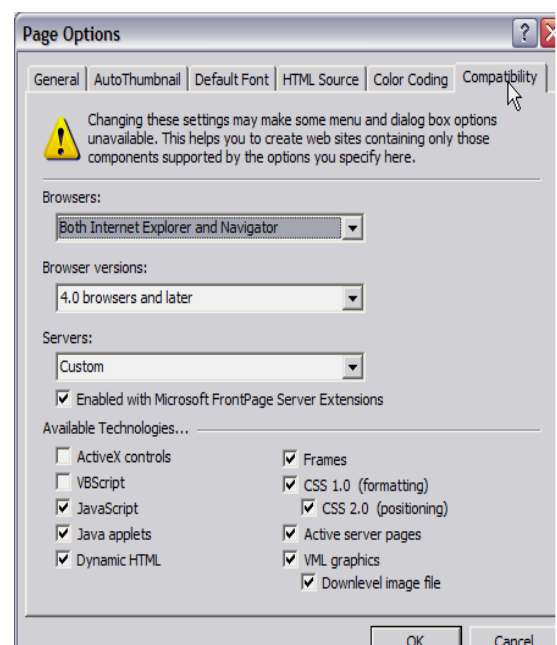
*Teaching Indigenous Languages,
Jon Reyhner, ed.*

Step 5: Internet Explorer and Netscape



To be sure that your page can be viewed through either of these browsers,

- Go to **Tools > Page Options > Compatibility**
- Choose **'Internet Explorer and Navigator'** by Clicking on the downward arrow on the right under 'Browsers'
- Choose **Version 4.0 or later** (Do not worry about the bottom-checked boxes.)
- **Click on 'OK'** (This prevents some tools from showing that are not available in Netscape)



Step 6: Create a Page

- Go back to **File > New > Page or Web**
- Choose **'Index'** if new
- Choose **'Blank Page'**

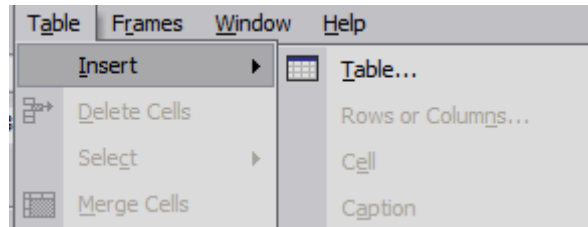
You should be **working in Normal Mode**.

To save the information, simply go to **File > Save**. If you are working on the Web, the information will be instantly available.

Step 7: Designing your page

There are several ways to do this. You can choose any of the following: Frames, Shared Borders or Tables. Here, we will use 'Tables' because it gives you more individual control and is easy to learn.

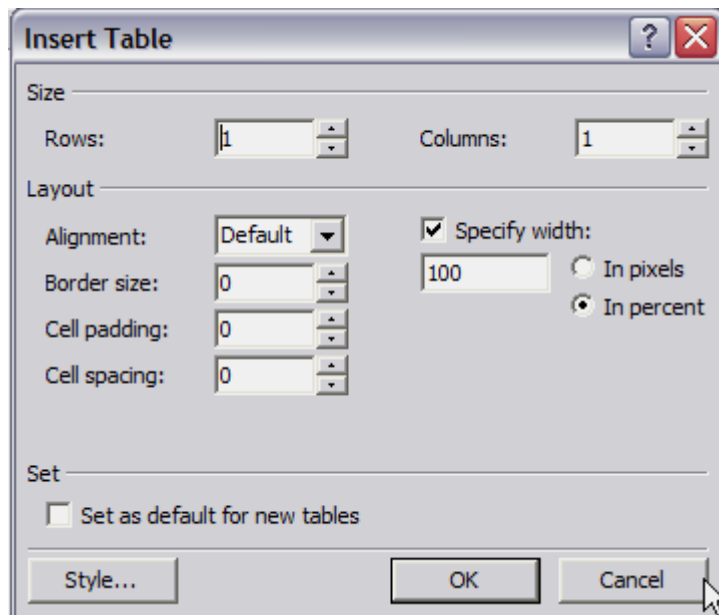
- a) Begin by going to Table on the main menu: Go to **Table > Insert > Table**

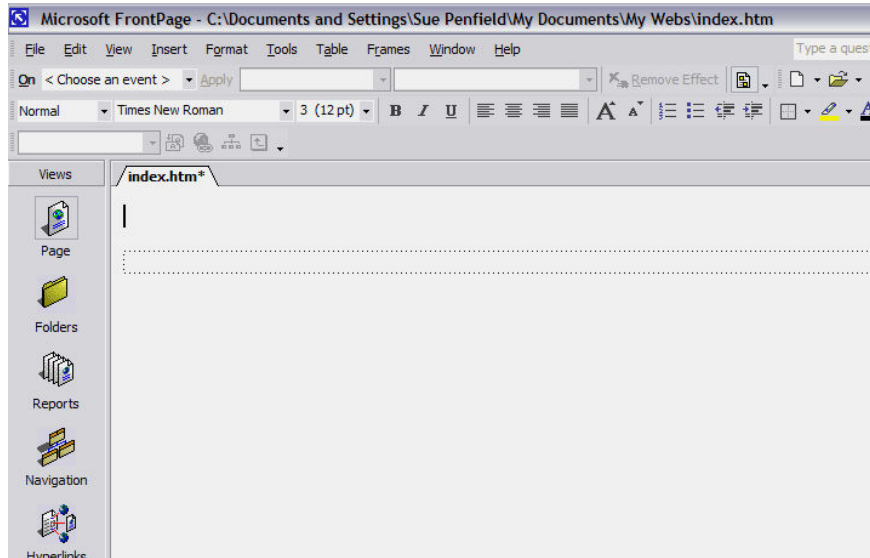


Choose 1 Row and 1 Column for now

Choose 0 for borders

Set at 100% - if the browser screen shrinks, your page will shrink with it.



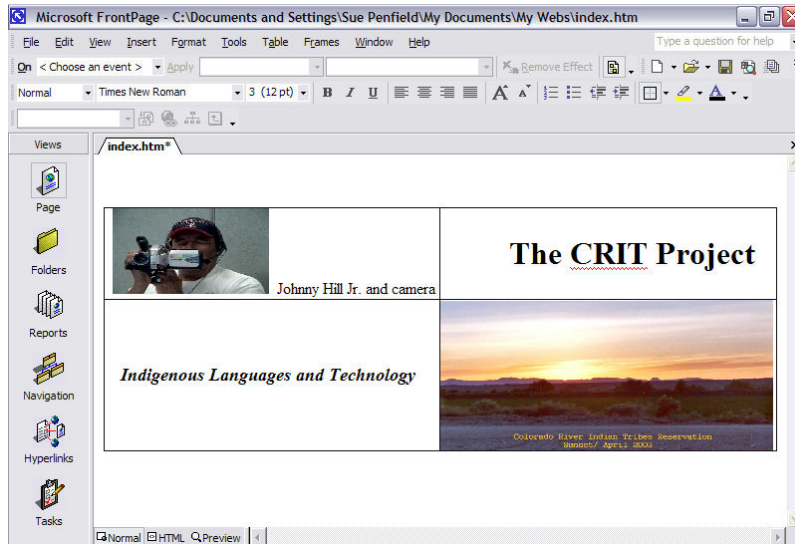


- b) You have now created one row on your page.
- c) Type something, anything, within that row. Notice that if you hit ‘Enter’, it will drop two spaces (this is a FrontPage feature which treats each ‘Enter’ move as creating a new paragraph. This is good to do if you are formatting paragraphs differently. However, within the row you just created, if you want to single space hit ‘Shift – Enter’.
- d) Tables within tables
- To isolate items within your page, insert a table *within* the table you just created.
 - You can center things within a given table field by using the page alignment menu on the Format tool bar.



Your page design will be based on the changes in color, fonts and graphic images you put into your tables and on the way you choose to arrange your tables.

The page below has two rows and two columns:



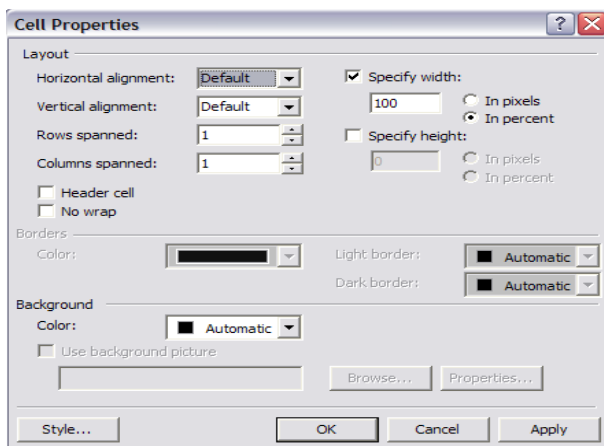
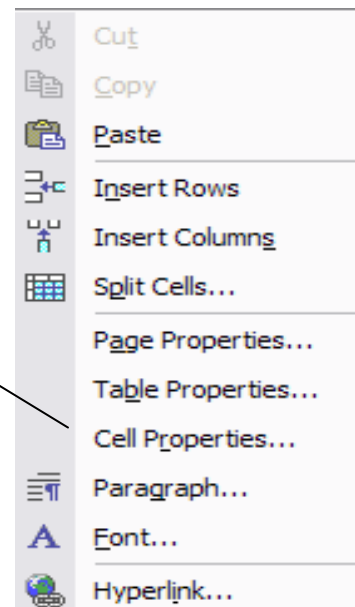
Step 8:

If you 'right click' you will bring up this menu:

- Click on 'Page Properties'
- You can also choose Table or Cell properties

You can now make color background changes for your whole page, just the table or just a cell within the table.

You can also choose colors for hyperlinks and fonts.



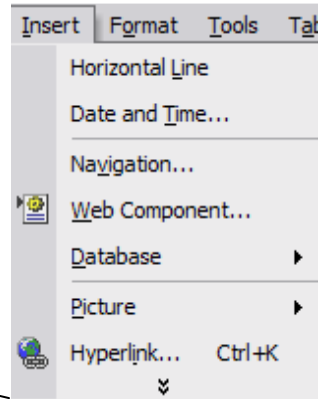
Step 9: Some things you might want to do:

1. Create email contact:

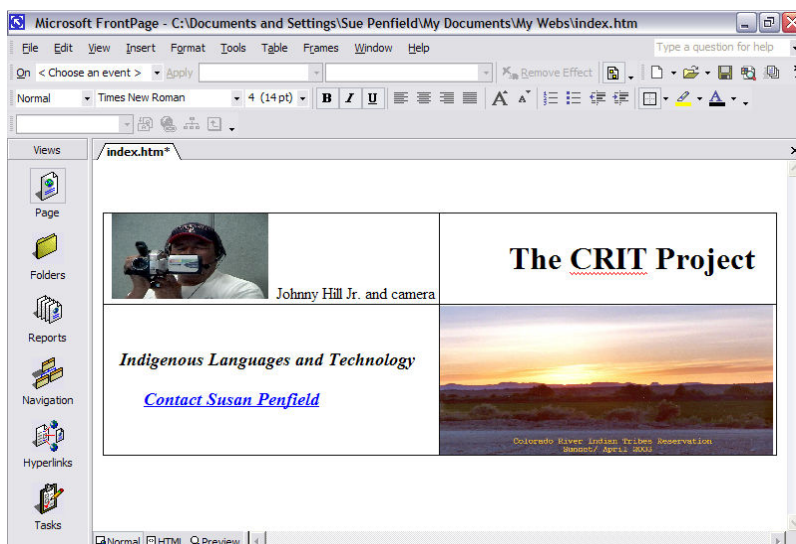
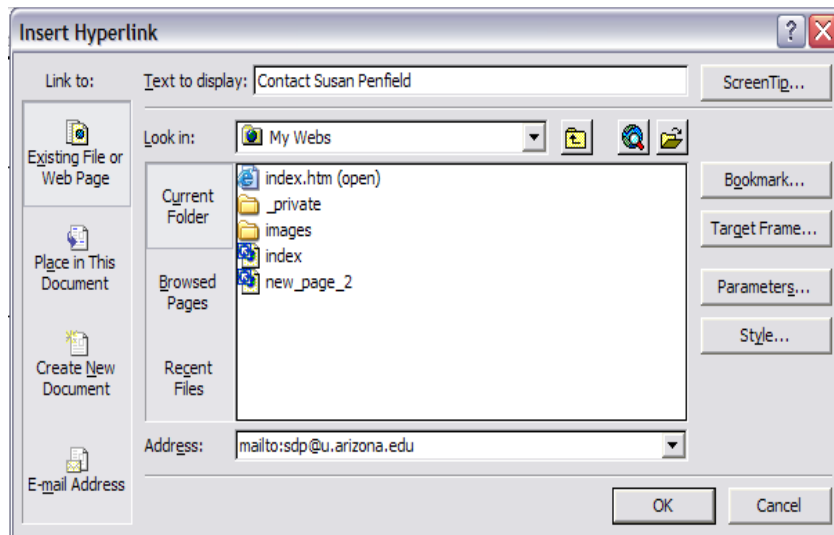
On your page, type in 'contact (web page owner)'

Highlight what you just typed

Go to 'Insert' > Hyperlink



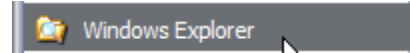
On the window, type the email address you wish to be contacted at in the bottom box.



At left:
Web page under construction showing hyperlink to owner as seen in 'Normal View' for active editing.

2. Upload documents from Microsoft Word or elsewhere.

- You must first send the information to the server.
- **Minimize** your FrontPage window
 - **Open Windows Explorer** from the Start menu
 - Go to **Programs then > Accessories**
 - **Select your file**
 - **Right click and choose 'Copy'**
 - **Go back to FrontPage and click 'Paste'**



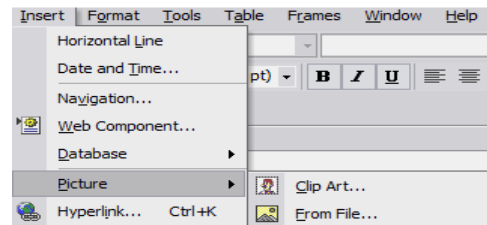
3. Create a hyperlink to another site.

- **Just as you did to create an email contact:**
- **Type in the URL** information for the link you want
- **Highlight the link**
- **Click on 'Insert' go to 'Hyperlink'**

4. Insert an image

As in other Windows Programs, inserting a picture is done by

- Go to **'Insert'** on the main tool bar
- Select **'Picture'** > Choose **'Clip Art'** or **'From File'**
- Select your image
- Click **'Insert'**



NOTE: Graphic files for Web pages are best if saved as a JPEG (.jpg) for quick downloading. Otherwise, it might take forever just to open your page!

Step 10: Save your work!

- Go to **File > Save**

Recommendations:

- If you are a beginner, avoid working with 'navigation' view.
- Work on the Web if possible. If not, things saved in the local folder (working off line) can be uploaded to the Web in the same way as any other file by using Windows Explorer and dragging to the location
- Although it is easy to write documents in MSWord and upload them, it is better in terms of html code levels to type right in FrontPage if you can.
- Be aware that very savvy internet users can access your folders unless you put every thing that is sensitive to you into the folder marked **-private**.

Native Americans Strive to Retain Vanishing Heritage

12 Jul 2004 - By Deborah Block - Browning, Montana

For the Indigenous peoples of America, the Lewis and Clark expedition brought publicity that led to a massive influx of people into their native lands. The Blackfeet Indian nation of Montana is one of those native American tribes trying to teach its children about their language and culture, before the old ways completely disappear.

Ernie Heavyrunner, says since so many Blackfeet no longer speak the language, efforts are being made to reach the children, even at a young age. "It's important for their identity," says the teacher. "It's important for them to know who they are, where they came from, and their language helps them to know this."

The children sing in the Blackfeet language at a private elementary school on the Blackfeet reservation in Browning, Montana. The school, which is part of a non-profit organization known as the Piegan Institute, hopes to revitalize the language.

Darrell Kipp "The fact is that our students come here and speak our language exclusively each day - English isn't allowed in the classrooms during the day. So all instruction is in our language," says Mr. Kipp. "Yet, our students are more articulate and better English speakers than their public school peers."

<http://www.voanews.com/article.cfm?objectID=C03EAA9D-8CB0-49BB-88095305F37D3F85#>

CD CREATION

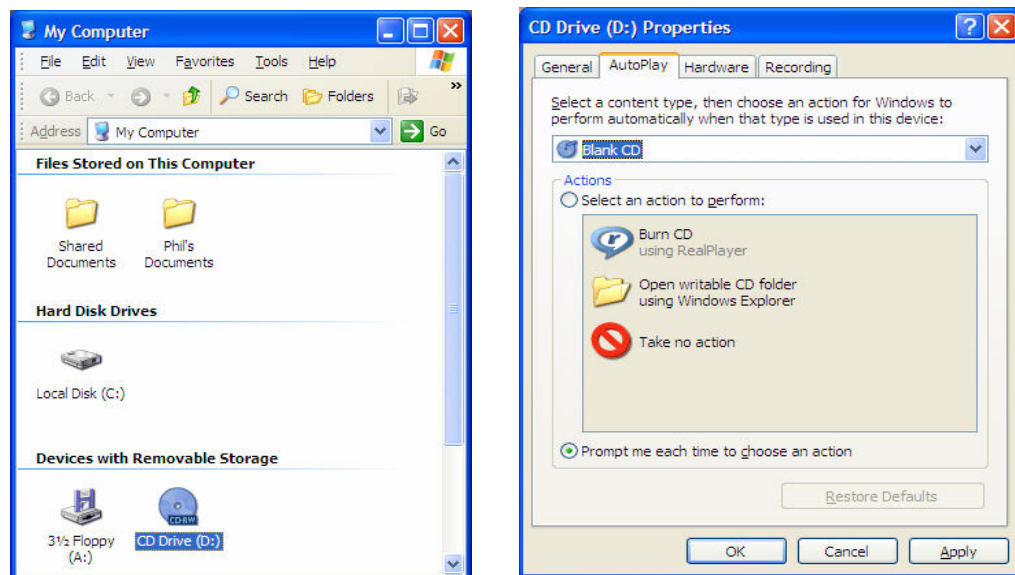
If your work contains sound and images, you will want to save it on a CD. Here are two common ways to easily do that: 1) Windows Explorer and 2) Roxio Easy CD Creator.

Burning CD's in Windows Explorer

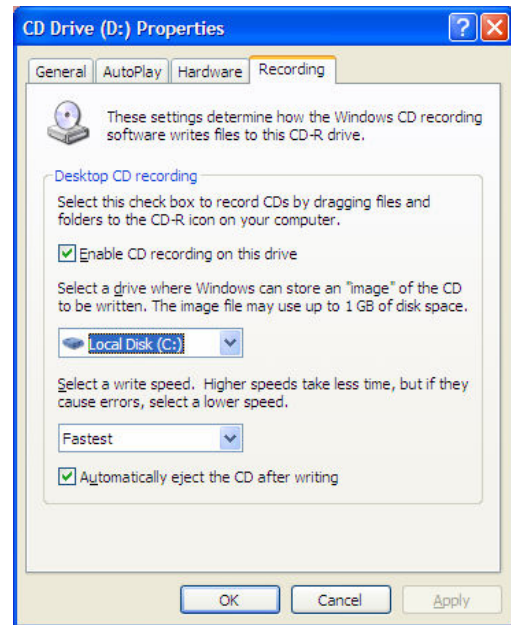
Among the currently available Windows operating systems, Windows XP is the first operating system to have a built-in CD writer that allows you to create or “burn” a data or audio CD (Compact Disc). Writing or “burning” a CD is the process of optically recording data to a CD via a laser beam using a computer’s CD-ROM Drive. Once the data is recorded, the now portable CD is optically “read” and digitally transferred to your computer as stored files and folders.

Steps:

1. To begin, open My Computer (or Windows Explorer) and right click on the CD Drive.
2. Once the menu appears, select **Properties**. Choose the **AutoPlay** tab, and make sure that **Blank CD** is selected. Also make sure that the button is selected in **Prompt me each time to choose an action**. This setup ensures that every time you insert a blank CD, you will be asked to choose an option such as “Burn CD” or “Open writable CD folder using Windows Explorer”.



- Next, with your CD Drive (D:) Properties screen still open, choose the **Recording** tab, and make sure the **Enable CD Recording on this drive** option is turned on. Now, click OK.
- Next click on your CD Drive (D:) to open and drag your folders or files that you wish to “burn” onto the open work space.



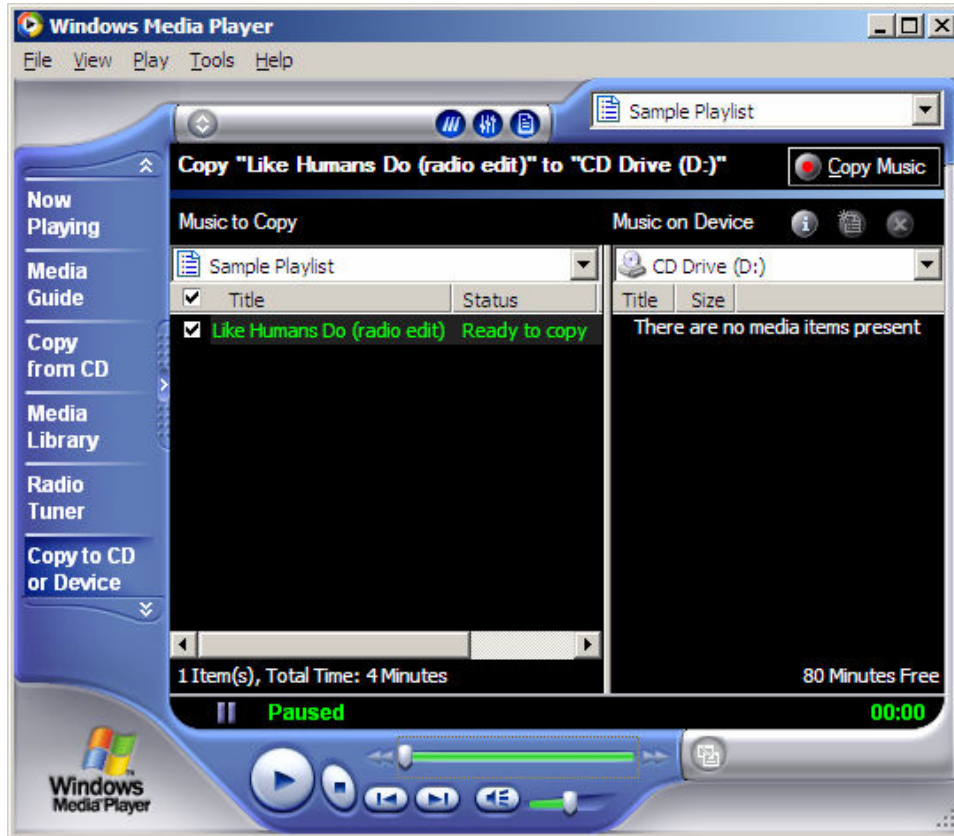
- Under the File menu choose **Write these files to CD**.



- The CD Writing Wizard screen now opens. Notice that you have the option of naming your CD. Go ahead and do so and follow remaining instructions to complete this process. Creating or burning audio CDs follow a similar process as above. This short tutorial assumes that you have created language-based sound files using Audacity and have created a sound in your ‘files’ folder.
- After inserting a blank CD, open **Windows Media Player**.



- Under the File menu, select **Add to Media Library** and navigate to **Add file**. Locate your language sound files folder and click on a sound file to add. Once you have added as many sound files as needed click on **Copy to CD or Device** to view your sound files listing.



- The sound files or songs listed under **Music to Copy** are ready to be written to your CD. Your playlist can be modified by checking or unchecking the box next to the title of your recording.
- Once you have a complete listing, you will notice that each recording has a **Status** report note such as **Ready to Copy**. Next click on **Copy Music** button in the upper right. All the tracks in your playlist will be written to CD. Congratulations, now you have an audio CD of your audio recordings!

Roxio Easy CD Creator

A commonly used software is Roxio Easy CD Creator. To 'burn' a CD using this program, just follow these steps. Easy CD Creator can also be used for music CD's, but to copy material with language text, sound and graphics, make a 'data CD'.



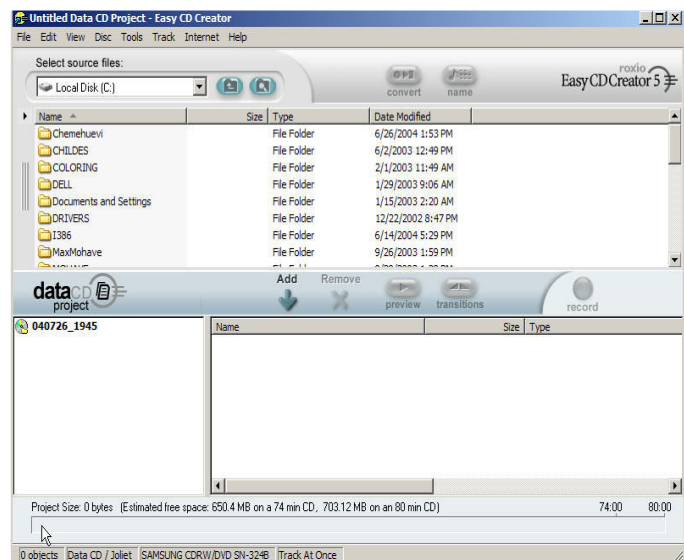
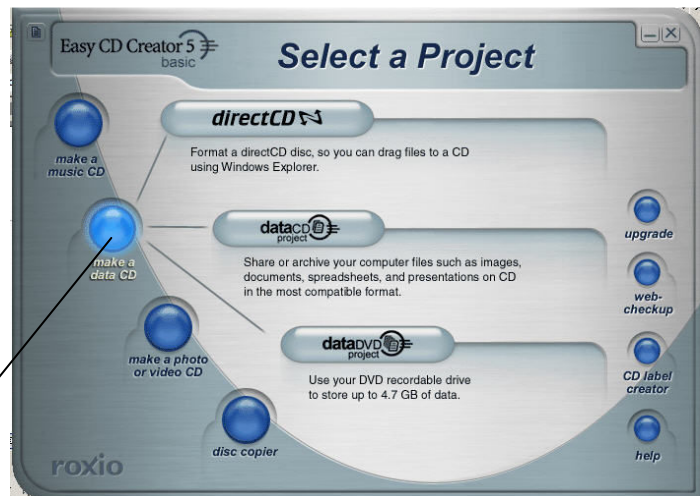
Steps:

- Go to **start** button on bottom right of screen
- Go to **program** button
- Go to **CD writing software**
- Go to **Easy CD Creator**- This will open a window called 'Select a Project'
- **Choose to make a DATA CD Project**

When the window appears, choose the folder that you want to copy

- Click on **Add** button
- Click on **Record** button
- Click on **Options** button
- Click button next to **finalize session, not CD.**
- If you do not want to add more to the same CD, go to options and click dot next to **finalize CD**
- Click on **Record**

NOTE: Use a CD-R or CD-RW with at least 24x or above for speed.



UNIVERSITY OF ARIZONA TECHNOLOGY SUPPORT FOR INDIGENOUS LANGUAGES

There are two technologies which lend themselves to work with Indigenous languages now being used at the University of Arizona: 1) The MOO and 2) the MBS or OLE board.

1. The MOO: The MOO is largely text-based and can incorporate digitized tapes. It is an asynchronous system designed to support class work online. However, the MOO is unique in that it has a split screen. One side is for typing text and the other is for the organization of objects (class room spaces and discussion topics). This space, however, also allows you to use anything that is on the internet. For working with Mohave, we used the MOO by putting a digitized tape in the Web-friendly side and then carrying on text-based discussions about this tape online between the U of A and the CRIT library. Tribal elders at the CRIT library could listen to the tape in segments at the same time as the linguist working in Tucson. They could then chat about the content of the tape. As well, the entire typed conversation can be recorded and archived. For those working on translating tapes, using a digitized segmented version is a big improvement over working with cassettes and constantly having to rewind even when not working online.

You are welcome to log on as a guest in the MOO and experiment with the environment. You can't create objects this way, but you can get a feel for it. For more information about the MOO, contact Jean Kreis at the Learning Technologies Center (jeank@u.arizona.edu.) There is no cost associated with this and you may be able to use the MOO for your language work. Brief directions for MOO use are on the following page.

2. The University of Arizona has also developed an online language lab. Please see our site at www.ole.arizona.edu. The MBS (Multimedia Board System) or OLE Board, is listed under 'tools'. This is an asynchronous system which allows for voice, video and text to be used online. There are several possible choices for working with this system. While it is still under construction, several people are working with it to support Indigenous languages. It will allow speakers from many different community locations to access oral language examples or language lessons online at their convenience. Information is posted much the same as one might do with email and can be opened at anytime. Tracy Williams, Oneida doctoral student in Language, Reading and Culture and Paul Lyddon, doctoral student in the Second Language Acquisition and Teaching Program have been

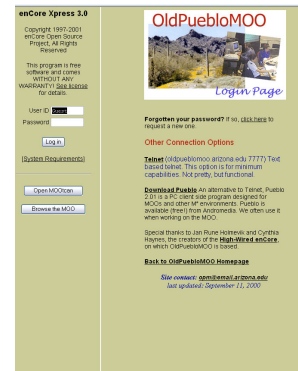
working together to design a number of online lessons in Oneida. Tracy has contributed the results of her work in the section below. We welcome others who would like to try this technology. For more information, contact Garry Forger, Assistant Director of the Learning Technologies Center at the University of Arizona at gforger@u.arizona.edu.

The Moo

Steps:

1. Logging on:

- Click your Start menu
- Click on ‘run’
- Type in the URL: <http://oldpueblomoo.arizona.edu>
- Click on ‘connect’
- Log in as a guest (Click on ‘log in’)



The first page that comes up asks you for additional information (you don’t need to give it...)

2. What you will see:

- The MOO has a split screen unlike all other programs. These define the *virtual* ‘spaces’ in the MOO. The right side is web-based (anything from the Web can be put in this space; users can also create ways to organize this space.).
- The left side of the page has two parts: The top part just explains what is going on within the MOO and tells you who else is on-line. The bottom part is the ‘chat’ window.

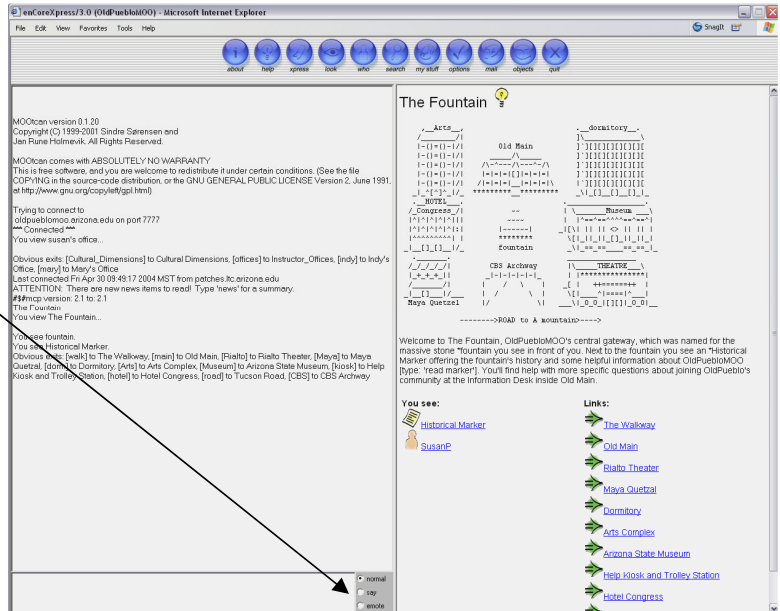
3. To get around in the MOO:

- On the right side, click on objects which have an arrow beside them. You will move to wherever the arrow leads you...
- On the left side, two commands are important:
 - **@go** and the name of the place (no space between @ and ‘go’). For example: @go the fountain. This also works for URLs @url <http://oldpueblomoo.arizona.edu>
 - **@join** and the name of the person (no space again). For example: @go jeank or @go susanp

4. To 'Chat' in the MOO:

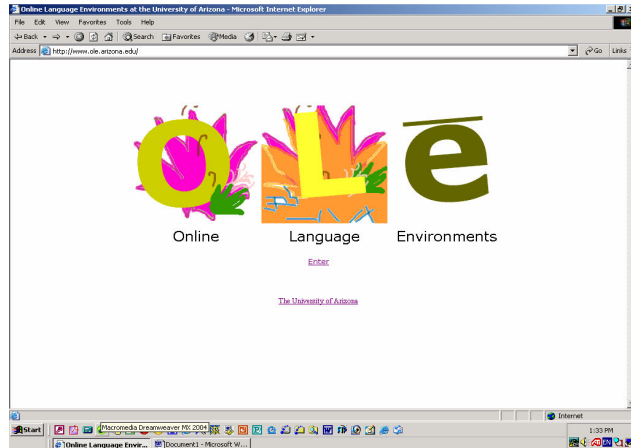
- On the lower right side, near the center of the screen, click on the 'say' button.
- Type what you would like to say and press 'enter'
- You can read peoples responses in the box on the upper right side.

5. The 'LOOK' Button: use to go back or to see where you are in the MOO.



The MBS Board System:

URL: <http://ole.arizona.edu>

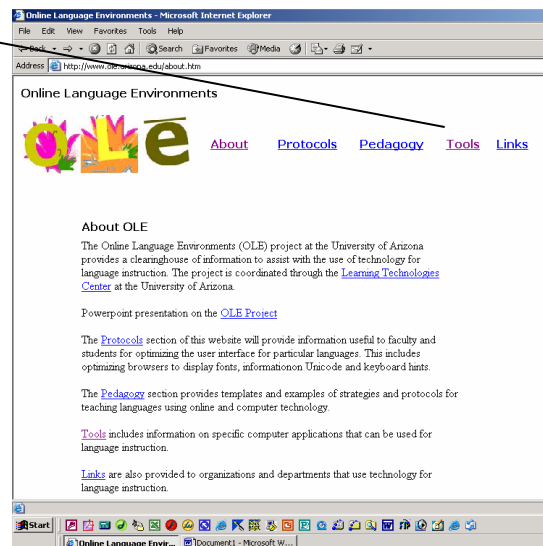


Tracy Williams, Oneida:

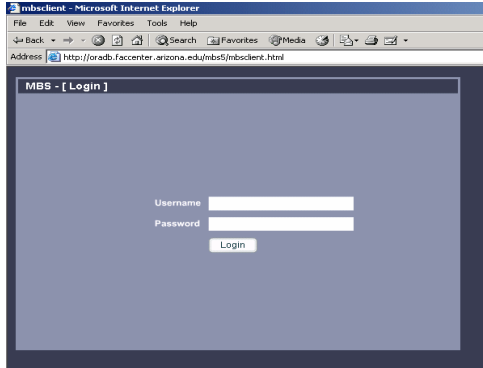
I am interested in online language lessons and teaching because it works across great distances. I am a student in Arizona and my language is spoken primarily in Ontario, Canada, Wisconsin and New York. I think this device is an important tool and is part of growing technological force that can be used to teach languages.

The above screen is the starting point for the Multimedia Board System (MBS). MBS is an asynchronous, interactive language teaching program with video, audio and text. Choose MSN or Google search engines and type in <http://ole.arizona.edu>. And click **ENTER**. The next page has information about Online Language Environments (OLE). Then, click on **TOOLS**.

TOOLS will take you to several choices for language teaching. One is called the *Ole Board*; it is also referred to as the MBS. Both names are used on the website.

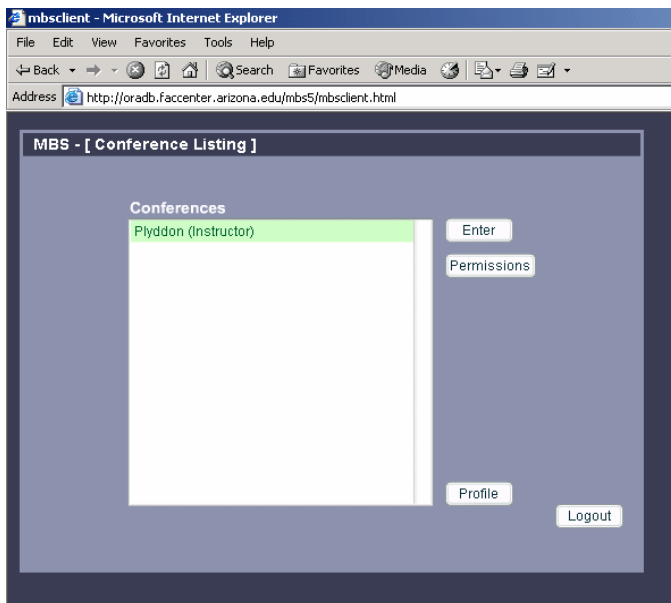
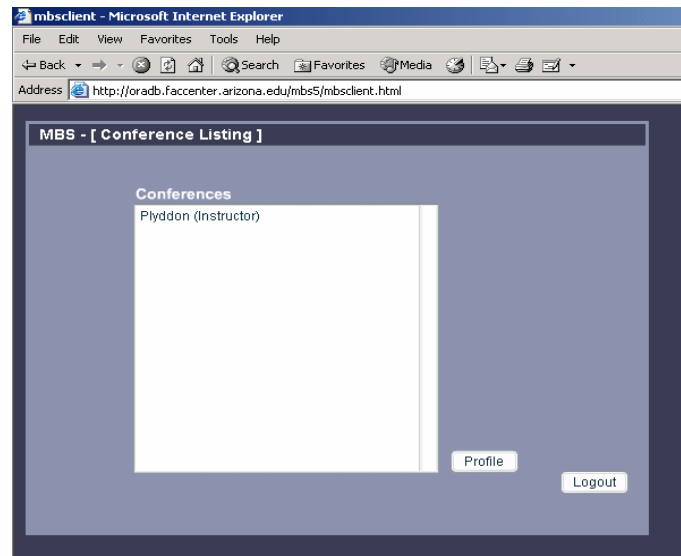


Click on OLE Board. This will take you to a new page with the Username/password dialog box. You will have to obtain a Username and password from Gary Forger, Learning Technology Center, University of Arizona (gforger@u.arizona.edu) to enter the board.



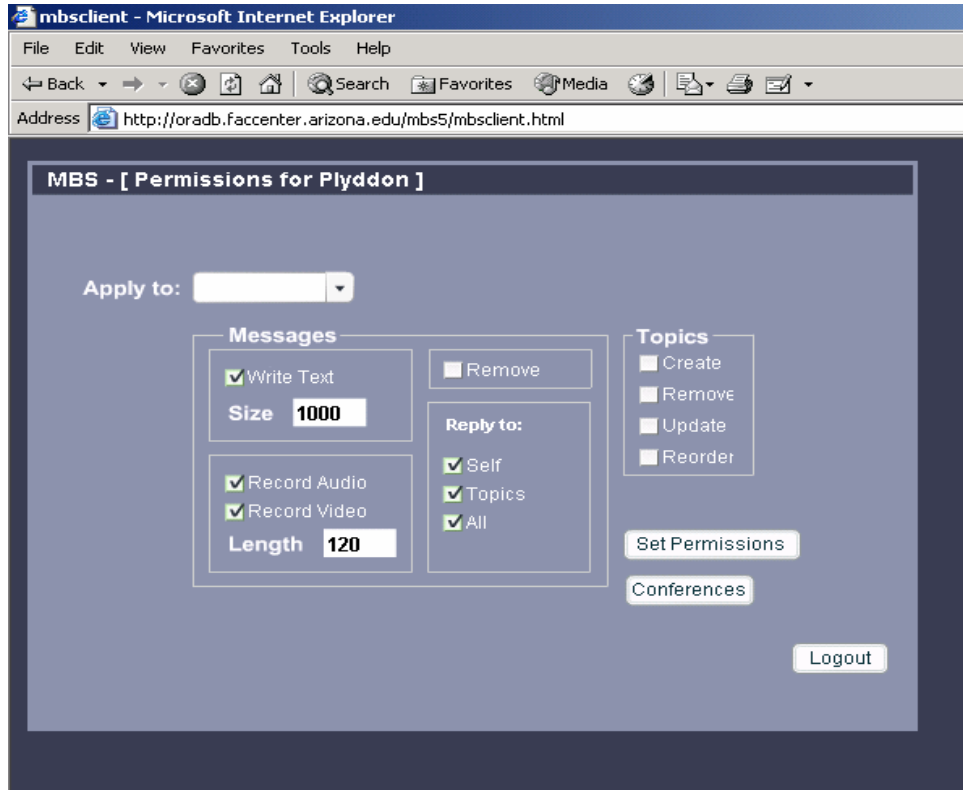
This is the login screen. This login screen can be accessed using the Web URL: <http://oradb.faccenter.arizona.edu/mbs5/mbsclient.html>.

There are two types of Usernames/passwords: 1) for use by instructor or 2) for use by student. To the right is the instructor page Conference Listing. A conference is the same as a class. The instructor would then click on the correct Username.

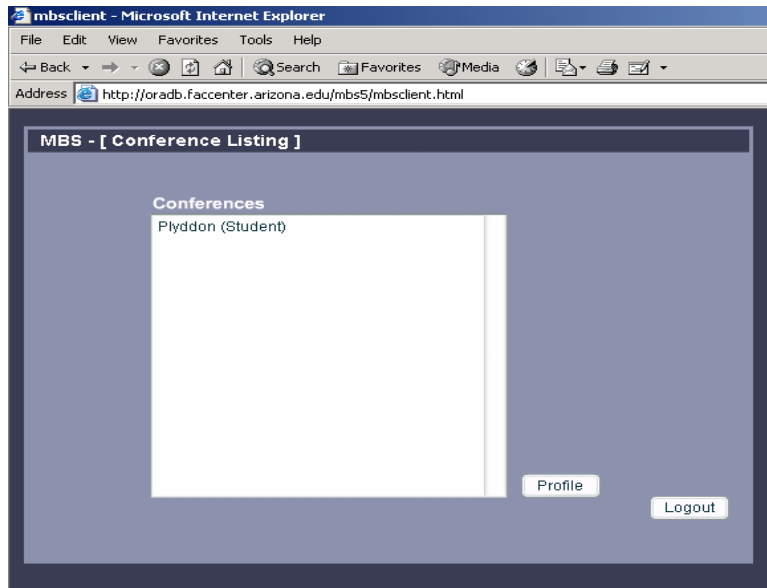


After clicking on your username, the next page allows you to **ENTER** the class or check **PERMISSIONS**. Permissions are set by the instructor for the student. The permissions allow students to perform selected operations specified by the instructor. The permission page is only accessible to the instructor.

The instructor can select what kind of characteristics the student *Messages* will have. For example, the instructor can specify a limit to the number of characters that a student can type in the text box. The instructor can also signify how long the audio and video response can last.



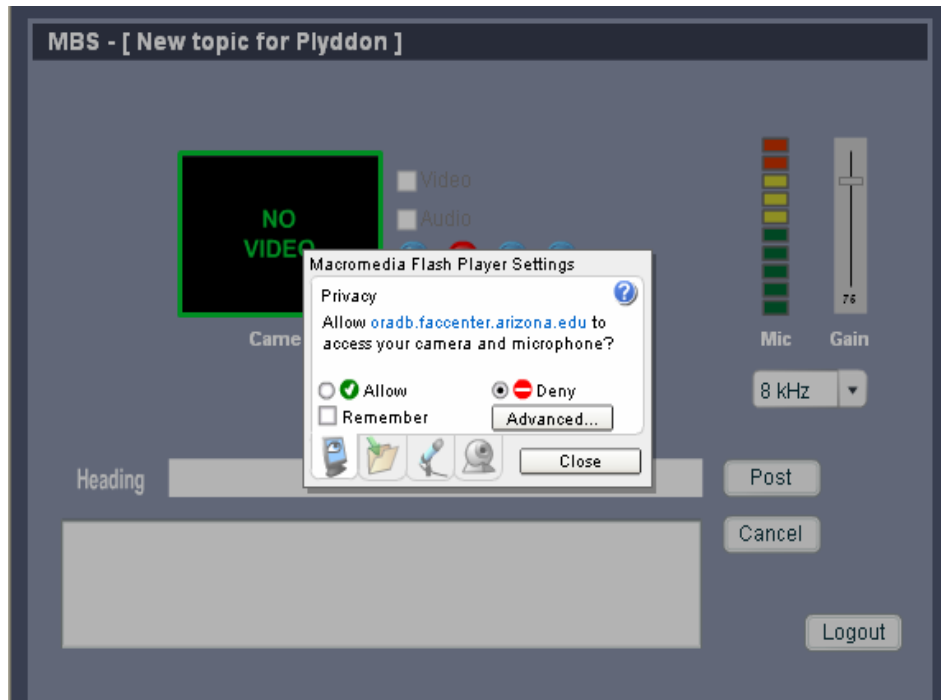
Once, the permissions are selected, **click on SET PERMISSIONS** and return to **CONFERENCES**. Below is what the student Conference Listing looks like. The only difference is that the Username is identified in parentheses as *student*. Then, **click on the USERNAME** for student access and then, **ENTER**.



After clicking **ENTER** on either the instructor or the student conference listing, the above page will be displayed. The topics or lessons to be used are listed and the instructor or the student can choose which ever one has been assigned. The blue circles with the plus sign (+) next to it means that there are other choices located within that particular lesson. When you click on the blue circle, the original lesson is displayed with video, audio and text (you can also use just audio and text). When you click on the plus sign (+), you can add responses to the lesson(s).

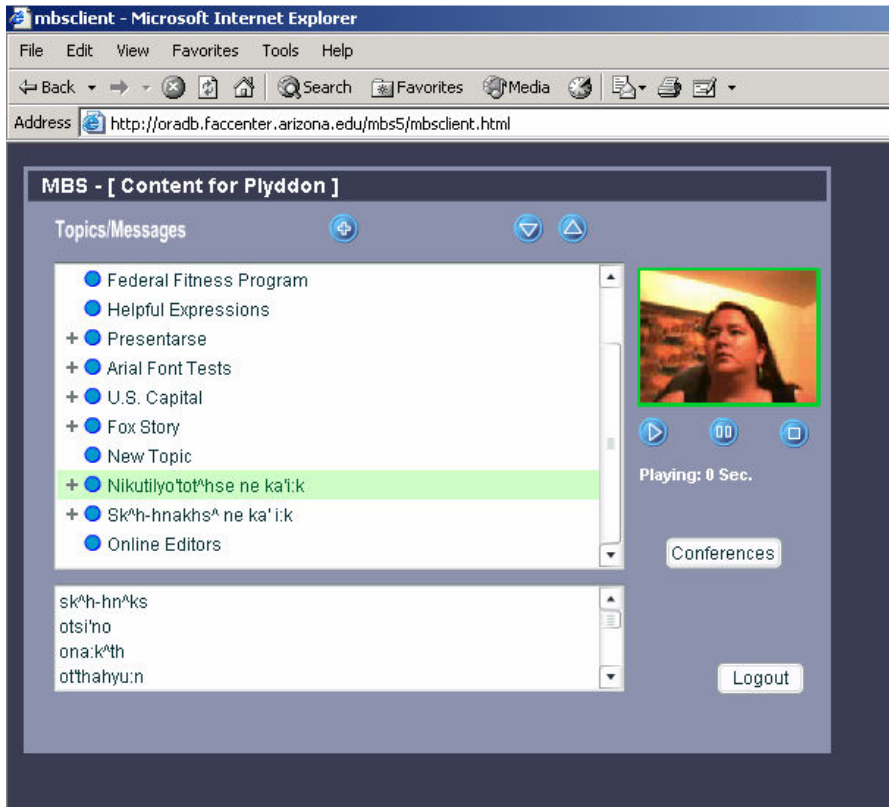
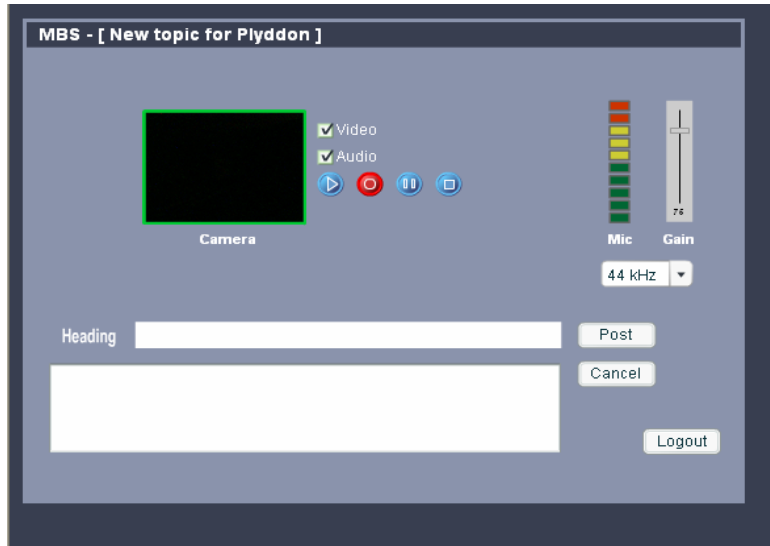
In order to create a new lesson, click on the capital letter 'T' that is located within a circle at the top of the screen. This allows you to record new audio or video and type what you need in a text box.

A Flash Macromedia dialog box will automatically pop up. **Select the ALLOW** check mark. This will enable the audio and video. Once the new screen is ready, click on video or audio or both and then make sure to **click on the 8KHZ drop down arrow and select 44KHZ.** This will ensure the best sound



recording. When you are ready to record, click on the record button (the red button). It is possible to re-record as many times as needed. At this point, the text box can also be utilized to represent what was recorded or to write messages to students. When the lesson is complete, click *POST* and the new lesson will be added to the choices in the conference listing. Below is an example of a screen that is ready for recording.

I enjoyed working with this technology and I think it is very promising. I will use it as a supplement or support for language immersion lessons. One of the main reasons I like it so much is that the student can hear and see language lessons as many times as they want or need and, as the instructor, I can develop lessons that pertain to my student's needs.



This is the first lesson in Oneida language taught by Tracy Williams, Ph.D. student in Language, Reading and Culture at the University of Arizona from Oneida, Wisconsin. The video, audio and text are displayed. The student can replay this lesson as many times as they want.

PART IV: RESOURCES

In the introduction to her book, Bead on an Anthill, Delphine Red Shirt writes:

These stories are told through the eyes of my childhood but from an adult perspective. They are what I remember, “Weksuye” meaning “I remember”, “Ciksuye” meaning, “I remember you”, “Miksuye” meaning “remember me.”

In the process of writing these stories, I felt great satisfaction in reconnecting to my native language, Lakota... It came alive for me and brought back all the feelings I felt as a child when I first heard those words spoken. I was not sure what would come across to the reader. How effective it would be to use my native language to capture the essence of what my culture means to me and of what I wanted to convey about it to the reader. I know now that my writing was richer for its use...I am grateful to [my parents] and to my Lakota ancestors for the right to say in Lakota, “Le miye,” meaning “this is who I am.”

This section offers:

1. Software Resources
2. Selected online tutorials
3. Selected Website
4. Funding Sources
5. Suggested Current Readings on Language Revitalization

There are many avenues of inspiration and support. We hope that you will continue your efforts to use technology in support of language and that these resources help you in that journey.

SOFTWARE RESOURCES

Adobe Elements

If you have a knack for photography and want to take your skills to a new level, Adobe Elements is for you. Adobe Elements provides tools to both edit photos and creatively experiment with different photo options, including special effects or creating Web animations. For more information, visit <http://www.adobe.com/products/photoshopel/main.html>

Adobe Illustrator

Adobe Illustrator is a software program that provides tools for designing images for print, online, or other mediums. It has many special applications, such as 3D effects and scribble effects, meant to enhance images. For more information, visit <http://www.adobe.com/products/illustrator/main.html>

Adobe After Effects

This software program is designed to aid in the production of motion graphics and visual effects, for film, video and the Web. According to Adobe, it is easy to learn and use, and has extensive visual effects. For more information, visit <http://www.adobe.com/products/aftereffects/main.html>

Adobe Premier

Adobe Premiere Pro software is a nonlinear video-editing application. Powerful real-time video and audio editing tools give you precise control over virtually every aspect of your production. Built for the exceptional performance of Microsoft Windows XP systems, Adobe Premiere Pro takes video production to an entirely new level. For more information, visit <http://www.marcpeters.co.uk/adobe.html>

AuthorWare

Authorware is the leading visual authoring tool for creating rich-media e-learning applications for delivery on corporate networks, CD/DVD, and the Web. Develop accessible applications that comply with learning management system (LMS) standards. For more information, visit http://www.macromedia.com/software/authorware/?promoid=home_prod_aw_082403

Avid Xpress

Avid Xpress is another option for the editing and creation of digital video. It has both Windows and Mac software available and has numerous training and support options. For more information, visit <http://www.avid.com/products/xpressdv/>

Director

Macromedia Director aids in the development of high-performance multimedia content and is currently being used by a number of Indigenous language advocates. If you're interested in working more with multimedia in DVDs, websites, or CDs, Director can be a powerful tool. For more information, visit <http://www.macromediacom/software/director/>

Final Cut Pro

A Macintosh product used to capture DVCPRO HD over FireWire, edit using camera-native footage and output over FireWire with no quality loss. RT Extreme, now for HD, can deliver multiple HD streams, effects, filters and transitions in real-time to an attached Apple Cinema Display. For more information, visit <http://www.apple.com/finalcutpro/>

GoldWave

GoldWave is a professional digital audio editor. GoldWave allows you to play, edit, mix, and analyze audio and apply special effects, such as fade, equalizer, doppler, mechanize, echo, reverse and more. You can also digitally remaster and restore old recordings with noise reduction and pop/click filters. For more information, visit <http://www.goldwave.com>.

HP CD Writer Plus

The Hewlett-Packard 9510i is an internal IDE CD-re-writable drive for writing and rewriting CDs fast. This drive lets you save your files to CD quickly and cost effectively. Compatible with large-capacity, 80-minute CDs, this drive comes with CD creation and backup software so you can create reliable custom CDs for music, photos, and data; back up and protect individual files or folders; or restore your whole hard drive. For more information, visit <http://welcome.hp.com/country/us/en/prodserv.html>

Macromedia Flash

Flash provides the tools to create rich content and applications across desktops and the Web. Flash is installed on 97% of Web-enabled desktops, and would enhance any Indigenous language based website. For more information, visit <http://www.macromedia.com/software/flash/>

Microsoft Front Page

This software program is designed to make website development an easy and enjoyable process. Like other Microsoft products, it has helpful templates and step-by-step instructions to help you master HTML. For more information, visit <http://office.microsoft.com/home/office.aspx?assetid=FX01085802>

Microsoft Picture It

A powerful photo-editing tool making it easy to improve photos. This software uses advanced editing and creative tools to make your good pictures great pictures. For more information, visit <http://www.microsoft.com/products/imaging/products/pipinfo.asp>

Microsoft Publisher

Microsoft Publisher is a software program that helps you to create and publish various materials, including newsletters, flyers, and brochures. It also has built in templates that aid in the creation of these various types of publications. For more information, visit <http://office.microsoft.com/home/office.aspx?assetid=FX01085794>

Paint Shop Pro

Paint Shop Pro is an image-editing package which combines low price and powerful features. Paint Shop Pro is a fully featured digital darkroom in the same mold as Adobe Photoshop and Corel Photo-Paint. Version 7 adds new features for retouching digital images, creating business graphics, and producing interactive Web graphics. For more information, visit <http://www.jasc.com/products/>

Roxio Easy CD-and DVD Creator 6.0

The digital media suite has been redesigned - it's easy to install and use. For more information, visit <http://www.smallbusinesscomputing.com/biztools/article.php/2106401>

Sound Forge

The Sound Forge[®] digital audio editor includes a powerful set of audio processes, tools, and effects for manipulating audio. Sound Forge software allows you to edit, record, encode, and master nearly any form of digital audio including WAV, AIFF, MP3, and more. For more information, visit <http://mediasoftware.sonypictures.com/products/soundforgefamily.asp>

Studio 8

Studio 8 is a software program that focuses on video editing and DVD authoring. It does not provide a template based learning environment, however, and would be more useful for those with extensive computer experience. For more information, visit <http://www.pcmag.com/article2/0,4149,574600,00.asp>

Toolbook Instructor

This software program aids in the creation of software application simulations and is easy to use. It is intended to help make learning more interactive and assessment comprehensive – tools essential to Indigenous language programs. For more information, visit <http://www.sumtotalsystems.com/toolbook/instructor.html>

Voice-It

Technology supporting personal voice recording.. The latest device records up to 5 minutes of notes with flash memory, which protects against data loss if the battery runs out. This recorder is easy to carry, weighing only 2 ounces and measuring 3.5 by 2.25 by 0.5 inches. Its features include four channels for sorting messages, a keypad lock, two erase options, two play options, and skip-forward and -reverse buttons. It runs on one AAA battery, which is included and lasts up to six months. For more information, visit <http://www.blueswimmer.com/category.act?categoryid=00008>

SELECTED ONLINE SOFTWARE TUTORIALS & ONLINE COURSES

Microsoft Home Page

This is the central site for accessing new information and tutorials about Microsoft Office products. See <http://www.microsoft.com>.

Florida Gulf Coast University

This site offers excellent tutorials for Office 2000 including Word, FrontPage and PowerPoint.: [http:// www.fgc.edu/support/office2000/](http://www.fgc.edu/support/office2000/)

Electric Teacher

This is a very helpful site for simple tutorials on PowerPoint, FrontPage, other software and many lesson plan ideas. <http://www.electricteacher.com>

Learning Electric.com

A number of helpful, easy-to-follow tutorials can be found at <http://www.learningelectric.com/word.htm>

Downloads.com

If you are looking for free software and lots of it check out www.downloads.com.

Multimedia Learning Lab

This is a University of Arizona resource site. Look under 'Workshops' for helpful tutorials at <http://www.mll.arizona.edu>

<http://www.actden.com/>

actden (Digital Education Network) has been your resource for online learning since 1995. Please 'click' around and enjoy our free software tutorials and high-quality online courses.

SOFTWARE TUTORIALS



FrontPage 2000

Making web sites is easier than ever!



Office 2000

Classroom communication collaboration presentation



Internet Explorer 5

Surf at warp speed in your classroom



Internet Explorer 4

Max the Web with IE4



PowerPoint 98

Pick up PowerPoint pointers from Jim and Sue



FrontPage 98

Why weave web sites without FrontPage?



Outlook Express

E-mail is easy with Outlook Express

ONLINE COURSES



TestDEN

Prepare for the TOEFL test on the Internet



WritingDEN

Are wolves really bad? You decide



SkillsDEN

A primer to Information Technology



SkyDEN

The Ever Expanding Universe



GraphicsDEN

Have you visited our student gallery?



MathDEN

A last hurrah for Minus the Math Shark [[REGISTER](#)]



NewsDEN

Yahoos starting avalanches for fun [[REGISTER](#)]

SELECTED WEBSITES

Teaching Indigenous Languages

- <http://jan.ucc.nau.edu/~jar/TIL.html>

The Society for the Study of the Indigenous Languages of the Americas

- <http://www.ssila.org>

The Alaska Native Language Center

- <http://www.uaf.edu/anlc/>

The Piegan Institute

- <http://www.pieganinstitute.org>

The Indigenous Language Institute

- <http://www.Indigenous-language.org>

The Foundation for Endangered Languages

- <http://www.ogmios.org/home.htm>

Terralingua

- <http://www.terralingua.org>

Oneida Nation Cultural Heritage

- <http://language.oneidanation.org>

Technology-Enhanced Language Revitalization

- <http://projects.ltc.arizona.edu/gates/TELR.html>

Technology and Indigenous Languages

- Language Learning & Technology Special Issue
Volume 6, Number 2 May 2002
- <http://llt.msu.edu/vol6num2/default.html>

Native Languages Page

- <http://www.nativeculture.com/lisamitten/natlang.html>

"When a language dies, its universe--a unique way of understanding, interpreting, and inventing the world--dies with it. A cultural gene pool dries up, and all of us are the weaker and the poorer for the dying of diversity."

Brian Swann,
Coming to Light.

FUNDING SOURCES

The information about funding sources was taken from each website listed. These represent just a few of the many possible organizations which offer support for endangered languages.

Government Based

- **ANA**

Website: <http://www.acf.dhhs.gov/programs/ana/programs/index.html>
Administration for Native Americans
Mail to: 8th Fl. West Aerospace Center
370 L'Enfant Promenade
Washington, D.C. 20447-0002
Toll Free 1-877-922-9262

The **Administration for Native Americans** (ANA) promotes the goal of social and economic self-sufficiency of American Indians, Alaska Natives, Native Hawaiians, and other Native American Pacific Islanders, including Native Samoans.

- **NEH**

Website: www.neh.gov
The National Endowment for the Humanities
1100 Pennsylvania, NW, Washington, DC 20506
Call: 1-800-NEH-1121
Email: info@neh.gov

The **National Endowment for the Humanities** supports a wide range of projects, including language preservation. Because democracy demands wisdom, the National Endowment for the Humanities serves and strengthens our Republic by promoting excellence in the humanities and conveying the lessons of history to all Americans. The Endowment accomplishes this mission by providing grants for high-quality humanities projects in four funding areas: preserving and providing access to cultural resources, education, research, and public programs.

NEH grants typically go to cultural institutions, such as museums, archives, libraries, colleges, universities, public television, and radio stations, and to individual scholars. The grants strengthen teaching and learning in the

humanities in schools and colleges across the nation, facilitate research and original scholarship, provide opportunities for lifelong learning preserve and provide access to cultural and educational resources strengthen the institutional base of the humanities.

- **NSF**

Website: www.nsf.gov
The National Science Foundation
4201 Wilson Boulevard,
Arlington, Virginia 22230
USA

The **National Science Foundation** funds research and education in science and engineering. It does this through grants, contracts, and cooperative agreements to more than 2,000 colleges, universities, and other research and/or education institutions in all parts of the United States. The Foundation accounts for about 20 percent of federal support to academic institutions for basic research.

Private Foundations

- **The Benton Foundation**

Website: www.benton.org
Benton Foundation
1625 K Street, NW 20006
11th Floor
Washington, DC 20006
Phone: 202-638-5770
Fax: 202-638-5771

“The mission of the Benton Foundation is to articulate a public interest vision for the digital age and to demonstrate the value of communications for solving social problems. Current priorities include: promoting a vision and policy alternatives for the digital age in which the benefit to the public is paramount; raising awareness among funders and nonprofits on their stake in critical policy issues; enabling communities and nonprofits to produce diverse and locally responsive media content. **The Benton Foundation does not accept unsolicited**

grant applications or offer general grants. We are a private foundation, an institutional hybrid, bridging the worlds of philanthropy, public policy and community action. We assume diverse, crosscutting roles as nonpartisan knowledge broker, convener, public interest advocate and policy analyst. The Foundation has an endowment of approximately \$10 million, the annual income from which is devoted to our own operating projects. Because of Benton's pioneering work, a number of foundations and corporations have provided additional funding.”

- **The Christensen Foundation**

Website: www.christensenfund.org
145 Addison Avenue
Palo Alto, California 94301

Geographic Bio-Cultural Focus: The Christensen Fund (TCF) is developing a new grant-making program that combines our interests in arts, biological conservation science and education into a single approach. Funding will be directed towards strengthening the understanding, appreciation and creative persistence of biological and cultural diversity in four geographic regions:

- The Greater South West (USA and Mexico)
- Turkey, Iran and Central Asia
- The African Rift Valley (Ethiopia)
- Northern Australia and Melanesia

We will also accept proposals from California San Francisco Bay Area-based organizations whose activities support bio-cultural and educational outreach efforts linked to one or more of these geographic regions or the diaspora from those regions living in the Bay. A small number of grants will also be made that support efforts to build knowledge and practice worldwide around integrating concerns for cultural and biological diversity.

- **Endangered Language Fund**

Website: <http://www.ling.yale.edu:16080/~elf/>
Endangered Language Fund, Inc.
Department of Linguistics
Yale University
P. O. Box 208366
New Haven, CT 06520-8366
USA

The Endangered Language Fund is devoted to

- The scientific study of endangered languages
- The support of native efforts in maintaining endangered languages
- The dissemination, to both the native communities and the scholarly world, of the fruits of these efforts

The fund supports efforts originated by the native community or the scholar planning to work with a language. Each year, we solicit proposals for such work as

- Preserving the texts of a native culture
- Preparing videotaped instruction in the language
- Support for "generation skipping" language learning

- **The Indigenous Language Institute**

Website: <http://www.Indigenous-language.org>
560 Montezuma Avenue, 202
Santa Fe, NM 87501
Ph: 505/820-0311
Fax: 505/820-0316

The Indigenous Language Institute (ILI) recognizes the imminent loss of Indigenous peoples' languages and acknowledges the individuality of Indigenous communities. ILI facilitates innovative, successful community-based initiatives for language revitalization through collaboration with other appropriate groups and organizations, and promotes public awareness of this crisis.

- **Foundation for Endangered Languages**

Website: <http://www.ogmios.org/home.htm>

A few of the stated aims of the Foundation are: To raise awareness of endangered languages, both inside and outside the communities where they are spoken, through all channels and media; to support the use of endangered languages in all contexts: at home, in education, in the media, and in social, cultural and economic life; and to monitor linguistic policies and practices, and to seek to influence the appropriate authorities where necessary;

- **Ford Foundation**

Website: office-of-communications@fordfound.org

Ford Foundation

(Headquarters)

320 East 43rd Street

New York, NY 10017 USA

tel: (212) 573-5000

fax: (212) 351-3677

“We work mainly by making grants or loans that build knowledge and strengthen organizations and networks. Since our financial resources are modest in comparison with societal needs, we focus on a limited number of problem areas and program strategies within our broad goals.”

- **Lannan Foundation**

Website: www.lannan.org

Lannan Foundation

313 Read Street

Santa Fe, New Mexico 87501-2628

505-986-8160 phone

505.986.8195 fax

Lannan Foundation is a family foundation dedicated to cultural freedom, diversity and creativity through projects which support exceptional contemporary artists and writers, as well as inspired Native activists in rural Indigenous

communities. The foundation recognizes the profound and often unquantifiable value of the creative process and is willing to take risks and make substantial investments in ambitious and experimental thinking. Understanding that globalization threatens all cultures and ecosystems, the foundation is particularly interested in projects that encourage freedom of inquiry, imagination, and expression. **The Indigenous Communities Program** (ICP) supports the resolve of Native Americans to renew their communities through their own institutions and traditions. Funding priority is given to rural Indigenous projects that are consistent with traditional values in the areas of education, Native cultures, the revival and preservation of languages, legal rights, and environmental protection. The foundation has supported the efforts of several national organizations, though funding priority is currently given to smaller, rural grassroots organizations serving communities that are Indigenous to specific geographic locations. Organizations supported both serve and are controlled by Native people.

SUGGESTED CURRENT READINGS ON LANGUAGE REVITALIZATION

Bradley, David and Maya Bradley (Eds). *Language endangerment and language maintenance* London; New York: Routledge Curzon, 2002.

DeCoteau, Tammy Eastman. "Who Will Teach my Great-Great-Grandchildren Dakotah?" *Tribal College*, Spring 2004, Vol. 15 Issue 3.

Grenoble, Lenore A. and Lindsay J. Whaley, (Eds.) *Endangered languages: language loss and community response*. New York: Cambridge University Press, 1998

Hinton, Leanne. *Flutes of fire: essays on California Indian languages*. Berkeley: Heyday Books, 1994

Hinton, Leanne and Ken Hale. *The Green Book of Language Revitalization in Practice*. San Diego, CA.: Academic Press, 2001

Matsumura, Kazuto (Ed.). *Studies in endangered languages: papers from the International Symposium on Endangered Languages, Tokyo, November 18-20, 1995*. Tokyo: Hituzi Syobo, c1998.

Maffi, L. "Endangered languages, endangered knowledge." *International Social Science Journal*, Sept. 2002, Vol. 54 Issue 173.

Malone, Dennis L. "Developing Curriculum Materials for Endangered Language Education: Lessons from the Field." *International Journal of Bilingual Education & Bilingualism*, 2003, Vol. 6 Issue 5.

Mühlhäusler, Peter. "Language endangerment and language revival." *Journal of Sociolinguistics*. May 2003, Vol. 7. Issue 2.

Stikeman, Alexandra. "Talking My Language." *Canadian Geographic*, Jan/Feb 2001, Vol. 121 Issue 1.

Reyhner, Jon . "A Resource Guide." *Tribal College*, Spring 2000, Vol. 11 Issue 3.

Warschauer, Mark. "Technology and Indigenous Language Revitalization: Analyzing the Experience of Hawai'i ."Canadian Modern Language Review, Oct 1998, Vol. 55 Issue 1.

Williams, Colin H. *Language revitalization: policy and planning*. Cardiff: University of Wales Press, 2000.

GLOSSARY

We have included many basic technology-related terms here. For more, check online at

www.webopedia.com.

Adobe Acrobat

Software that allows the user to read certain files, called pdf files that may be sent via email or found on the Web. This is free software that is easily downloaded.

Analog

A format used for storing data, including sound recordings. Sound is stored in analog format on audio cassette tapes, for instance.

Audacity

An open source sound editing system.

Authorware

Authorware is a software meant to provide tools for creating interactive learning and training environments that use digital movies, sound, animation, text and graphics.

AWE card

A sound card that uses wave table.

Backup

Making a copy of software and files/documents on another storage device so that it can be restored if the computer loses that information.

Bandwidth

Technically, bandwidth is the difference, in Hertz (Hz), between the highest and lowest frequencies of a transmission channel. However, as typically used, it is also the amount of data, usually measured in bits per second, that can be sent through a given communications circuit.

Battery

Your laptop can run on a battery, which will need to be recharged if it runs down. The computer usually has an automatic recharge function that will recharge the battery when your computer is plugged in.

Binary

Computers store information in the form of on-off electrical impulses, which correspond to the binary (2 base) digits, 0 and 1. Files can be transferred over the Web in either binary or ASCII (text) format. A binary file is one that contains any non-printable characters, such as compiled programs, graphics files, word processing and spreadsheet files, audio files, and so on.

Bit

A binary digit. A bit is the primary unit of digital data and is written in binary language as a 1 or a 0. There are eight bits in a byte and in one ASCII character.

Beta

A beta version of something is not yet ready for prime time but still possibly useful to related developers and other interested parties.

Bookmark

A list of frequently accessed websites which you can create using a 'bookmark' function such as clicking on 'Favorites' in Internet Explorer.

Boot

Starting up an operating system (OS) is called 'booting' it. If the computer is already running, it is more often called 'rebooting'.

Browse

When you browse on the Web, you look around at various websites, following links or doing searches.

Browser

An application that displays HTML and other information found on the Web. Netscape and Internet Explorer are examples of browsers. This software accesses the Web and let you drift from link to link without having to have a purposeful search.

Byte

Unit of measurement for computer memory roughly equal to one character (For example, the letter "A"). A byte is a grouping of bits. Memory is typically measured in kilobytes or megabytes, and disk space is typically measured in megabytes or gigabytes.

1000 Bytes=1 Kilobyte (K, KB)
1000 Kilobytes=1 Megabyte (MB)
1000 Megabytes=1 Gigabyte (GB)

CD read/write drive

(see Drive)

CD-ROM (CD-R and CD-RW)

A portable Compact Disk ROM, which means that you cannot interact with the data on this disk.

Click

When the cursor is pointing to something you want to access on your screen, click with the mouse by pressing down with your right forefinger on the left mouse button.

Double click – by pushing the left mouse button twice in a rapid manner.

Left click - Used for navigating within your documents and on the screen and it operates the cursor.

Right click - Enables you to bring materials into your file, to cut and paste, and change document formats.

Clipboard

A temporary storing area for cut or copied information.

Computer

An electronic machine that accepts, processes, outputs and stores data. More technically, a computer is a programmable machine. Some of the major parts of a PC include the motherboard, CPU, memory (or RAM), hard drive, and video card.

CPU

Central Processing Unit (the circuitry or ‘engine’) controls storage and processing of data. CPU's have a clock speed measured in Megahertz (Mhz). Higher numbers usually mean faster computers.

Cookie

A cookie is a small file that a web page on another machine writes to your computer’s disk to store various bits of information.

Crash

This is what you DON’T want to experience! A computer ‘crashes’ when a bug (problem) enters a program severe enough to cause the computer to become inoperable without being restarted.

Cursor

This is the symbol on your display screen which represents your logical position within a document. The cursor can be either an arrow, a hand, a vertical bar, an hourglass, or some other symbol.

Database

A collection of related information (data) that can be sorted, searched and calculated.

Default

The option that is selected automatically by a system unless an alternative is specified.

Delete

To delete a file, click on its name, hold down the mouse button and drag the name to the recycle bin icon. Then let go.

Desktop

The desktop is the main screen of your computer. When you turn the computer on, you will see the desktop. Go from here to other software or functions.

Digital

A format for storing data, including sound recordings. Sound is stored in digital format on computers, CDs, and disks. The digital format is used whenever a computer is involved: digital code is the language of computers. It is called digital because it is made of binary code.

Digital camera

A digital camera looks and behaves like a regular camera. However, instead of using film, it stores the image as a file for later transfer to a computer.

Directory

On a hard drive, a file which acts as a folder and contains other files or directories. On the Web a Listing of websites, email addresses or other data.

Disk

A disk is a physical object used for storing data. It will not forget its data when it loses power. It is always used in conjunction with a disk drive. Some disks can be removed from their drives, some cannot.

Documents

Any files you may create, especially on a word processing program like Microsoft Word.

Domain

A named collection of network hosts. Some important domains are: .com (commercial), .edu (educational), .net (network operations), .gov (U.S. government), and .mil (U.S. military). Most countries also have a domain. For example, .us (United States), .uk (United Kingdom).

Download

To 'download' a file is to copy it from a remote computer to your own. The opposite of this action is upload.

Drive

A device for storing and/or retrieving data. Usually you will be saving files to a hard drive, which is an integral part of the computer's hardware. You may also wish to keep files on floppy disks, which are portable. Some drives (such as disk drives, zip drives, and tape drives) are typically capable of having new data written to them, but some others (like CD-ROMs or DVD-ROMs) are not.

DVD player

This port allows you to play DVDs.

Edit

To make changes to a document, a sound file, a video file, and so on.

Email (electronic mail)

A system whereby a computer user can exchange messages with other computer users (or groups of users) via a communications network. Electronic mail is one of the most popular uses of the Web.

FAQ

Frequently Asked Questions.

File(s)

Where you keep your work. You may want to think of them as file folders like the ones we put in filing cabinets. On the computer, these are usually kept on the hard drive or stored on a CD or Floppy disk. A file is an information packet, either data or code, identified by a filename and accessible by a filing system.

Firewall

A hardware device (or collection of devices) that is placed between two networks. One network is considered inside the company (safe) and one is considered outside the company (not safe). All traffic, both from the inside and outside, must pass through this device.

Floppy disk (aka Floppy)

Small portable devices that are used to save files and transport these files between computers.

Floppy drive

(see *Drive*)

Folders

Folders contain and help you organize your files. You may wish to have a separate folder for different subjects or projects. All of your files related to that subject or project can then be stored together in the same folder.

Font

The font defines what each letter, number, and other symbol looks like.

GIF

Graphic Interchange Format is a highly compressed format for storing and transferring graphic images.

Gigabyte

Approximately one billion bytes or 1,000 MB (actual 1,073,741,824 bytes).

Gopher

A simple, menu-based system for searching and retrieving information from resources across the Web.

Graphic

A binary file that is displayed as an image (picture or drawing) as opposed to text.

Graphical User Interface (GUI)

A GUI is a software which lets the user use pictures and "point-and-click" technology to access the software application. It allows a computer user to interact with the computer by manipulating graphic (image) representations (called icons) with a mouse or other pointing device instead of typing text commands.

Hard copy

A printed copy of any produced document or data.

Hard drive

A piece of computer hardware used to store files or information. They are currently getting cheaper and smaller--some now fit on a key chain.

Hardware

The actual physical parts of a computer system: monitor, keyboard, mouse, the CPU and so forth – anything you can actually touch. These are the pieces of equipment that hold the working parts of the computer as well as the working parts themselves. Also included are drives and boards.

Home page

The starting point for a set of information about a particular topic in the Web; the first screen you see when you access a website.

Host

A computer that provides a physical link to the Web and allows users to communicate with other host computers on a network.

HTML

HTML stands for **H**yper **T**ext **M**arkup **L**anguage, which is a standardized method for defining formatting, links, and other special handling of text, images, and objects. The Web can be thought of as a single VERY large HTML document. Every browser has the built-in ability to understand HTML.

Http

The **H**yper **T**ext **T**ransfer **P**rotocol is the native protocol of browsers and is most typically used to transfer HTML formatted files.

Icon

A graphic image that appears on your computer monitor which represents a computer task or file. You can click on it to access its function. Double clicking on an icon for Microsoft Word will load that software program so that you can use it. Icons have a variety of functions. They usually have a hidden attached description that can help you see what they are and what they do which appears when you place the cursor over the icon.

Import

To bring new information into an existing file from an outside source.

Input

Any data or instructions entered into a computer through any of a variety of processes for storing and configuring application software on a hard drive. Also, adding hardware to a system.

Interface

Hardware that connects one thing to another, enabling you to move or change the format of data; also, a means by which the two systems interact.

Internet (aka Web)

(see Web)

Internet Explorer

A popular browser. Double click on this icon to get access to email, and the Web.

Java

An independent programming language, developed by Sun Microsystems. Java Applications are compiled and stored on a server and downloaded to be run on local "Java Virtual Machines" embedded into the client software.

Javascript

A special purpose Java-like language especially adept at interacting with user input and used extensively to make web pages interactive.

JPEG

JPEG stands for **J**oint **P**hotographic **E**xperts **G**roup, which defines a standard compression format for high-resolution color images.(.jpg)

Kilobit

One thousand bits. The kilobit is a convenient unit of data for talking about transmission speeds over computer networks.

Kilobyte

Approximately one thousand bytes (1,024).

LAN

Local **A**rea **N**etwork is a linking of many computers so that they may exchange files and share hardware (like printers and disk drives).

LAN port

This is the location (port in back of the computer) where you connect to LANs.

Language lesson modules

Sets of short, related lessons written on MaxAuthor.

Laptop

A small, portable computer that can be held on your lap (if you want!). This name distinguishes it from a desktop computer. Desktops have separate monitors, keyboards, and CPUs. Laptops have everything in one package.

Local printer

This usually refers to a printer that is directly connected to a computer, as opposed to one connected via a network.

Login (verb)

A procedure used to establish communication, by the user, to a computer.

Login (noun)

The same as User ID – ‘User **I**dentification’ name or number.

Link

A word, phrase, graphic, or address that, when clicked on, loads other information about the linked phrase or loads a related web page.

Listserv

An automated mailing list distribution. Listserv’s are used to send single messages to a wide audience (usually with a common interest like, ILAT - Indigenous Languages and Technology listserv) usually to promote a discussion among members of the list.

Lurking

Listening without responding publicly on a listserv or mailing list. As the name implies, this activity is considered somewhat antisocial, but lurking allows beginners to get a feel for the flavor and response patterns of the participants of the group, and also lets them get up to speed on the history of the group.

Macintosh (aka Mac)

The type of microcomputer made by the Apple computer company.

Mail folder

A file organized in a standard format where one or more email messages are stored.

Mail server

A program that distributes files or information in response to requests sent via email.

Main menu

The ‘main menu’ usually refers to the first menu you encounter in a software program.

MaxAuthor

Software created by the Critical Languages program at the University of Arizona for language learning. It contains self-directed lessons and learning modules in which students can see, hear, practice, and repeat language lessons. Designed primarily for languages that are less commonly

taught. MaxAuthor contains video, audio, and text so that learners may simulate a classroom experience by listening to, reading, and repeating words, phrases and sentences. Many of the lessons include video of the language being spoken by native speakers. Users of MaxAuthor can also create their own lessons.

Megabit

One million bits.

Megabyte (MB)

Approximately one million bytes (1,048,576).

Megahertz (MHz)

A unit of measurement, equal to one million cycles per second, used to compare the speed of computers. The higher the number, the faster the computer.

Memory

Computer hardware (usually chips) used to store information, not to be confused with the hard drive.

Menu

A list of items that you may select that may have a variety of functions such as provide information, start an application, or show another set of choices.

Microcomputer

A personal desktop or portable computer; usually refers to either a compatible PC or Macintosh.

Microsoft Windows

A graphical interface that runs on the MS/DOS operating system modem.

Modem

A modem converts digital signals to analog and back again to digital.

Monitor

Output device that produces on-screen display of processed data and computer instructions.

Mouse

A hand-operated pointing device that enables you to operate your software programs to create and manipulate files. On the screen you will see the blinking cursor that indicates where the mouse is pointing. The mouse itself rests on the table or desk and can be moved easily by hand. It usually has rolling ball underneath it that helps it move. It's easier to use a mouse with a mouse pad, a special pad with a surface that makes mouse movement go more smoothly.

Mouse operation

The mouse has two buttons near the "tail" or cord which you may 'click' left or right on. These buttons enable you to interact with your software, give commands to the computer and move around the screen.

MPEG

Motion Pictures Experts Group, which defines a standard compression format for video and sound. It is used to display and hear online movies.

MS/DOS

(see Operating System)

Multimedia

Multimedia refers to the combination of sound and video on a computer or software package. This indicates a capability to work with and integrate various types of things including audio, still graphics, and especially video as part of specific software programs.

Netiquette

A pun on "etiquette" referring to proper behavior on a network. There currently is no "Miss Manners" of the Web—but 'netiquette' is expected of users.

Network

The term refers to any group of computers that are connected to each other and can share information.

Network printer

A printer that is attached to a network and is accessible by other machines on that network.

Notebook

Portable, battery powered computer, a small laptop, with monitor, system unit and keyboard combined as one unit.

Online

Connected to or part of a network especially the Web.

Open URL

The dialog box you use to type the complete URL address for a web page or other Internet server.

Open

When you open a file, you are telling your software program to find a particular file or piece of software and bring it up on your monitor screen. In the Microsoft environment, the Open command can be found in the main menu under the command 'File'.

Open source

Open source software goes one step beyond freeware. Not only does it provide the software for free, it provides the original source code used to create the software. Thus, curious users can poke around with it to see how it works, and advanced users can modify it to make it work better for them.

Operating system

This is the software that enables your computer to run other software. The two main operating systems are the DOS system (which is usually used on IBM-type PCs) and the Mac system (Macintosh or Apple computers).

Output

Data that is displayed on the computer monitor or printed in hard copy.

PC

The term **Personal Computer (PC)** properly refers to any desktop, laptop, or notebook computer system.

PDF files

These files have a format that requires you to use the software Adobe Acrobat when you want to read them. In many cases, this software will load automatically when you attempt to open the files.

Pixel

The smallest distinct point on a computer display is called a 'pixel'.

Plug-in

A plug-in is a piece of software designed not to run on its own but rather work in cooperation with a separate application to increase that application's abilities.

Port

A small plug-in or connection station in the back of your computer.. There is usually more than one port. The mouse port, for instance, is where you plug in your detachable mouse.

Power Point (Microsoft)

Software that you use to create presentations. It makes colorful and visually interesting slides that can be shown to an audience on a projector. You can also add audio and video files to Power Point slides making it a good medium for creating language lessons.

Power supply

The plugs and cords connect you to a wall plug. The battery is also a power supply.

Presentation

Using Power Point, a presentation usually covers a small subject that can be discussed in detail in ten to twenty minutes. It is meant to be an oral talk that is based on information recorded on the slides. The presentation itself is a performance, in front of an audience, that uses the Power Point slides to underscore, emphasize, or illustrate the points you wish to make. Learning to be a language advocate, means that you might make many such presentations!

Printer

The hardware component that produces hard copy output.

Program

A set of instructions or steps that tells the computer how to perform a task. Also, another word for 'software'. A program is designed to accomplish certain tasks on the computer. For instance, the Power Point program (software) is used to create presentations, the Microsoft Word program is used to create documents.

Protocol

A protocol is a means of communication used between computers. As long as both computers recognize the same protocol, they can communicate without too much difficulty over the same network or even via a simple direct modem connection regardless whether or not they are themselves of the same type.

Queue

A backup of packets or print selections, lined-up and awaiting processing.

Quick Time

A video format for making movies available on the World Wide Web.

RAM

Random **A**ccess **M**emory temporarily stores current application software.

RealPlayer

Software that enables you to play movies and listen to sound files on your computer.

Real-time

Something that happens in real-time will keep up with the events around it and never give any sort of "please wait" message.

Recycle Bin

If you delete files, they will go to the Recycle Bin. You can empty this bin by clicking on the icon and following instructions on the window that comes up.

ROM

Read **O**nly **M**emory stores permanently essential system programs and start-up instructions for the PC.

Robot

A robot (or 'bot' for short) in the computer sense is a program designed to automate some task, often just sending messages or collecting information. A 'spider' is a type of robot designed to traverse the Web performing some task (usually collecting data).

Save

A command like Open, Save is commonly used in the Microsoft environment. To keep the changes or edits you make to your files, you must use this command. It records the changes you have made on the older version of the file that is stored on the computer's hard drive, changing

the original version of the file. If you want to keep the old version, you should use the Save As function and name the revised file a new name.

Scanner

A scanner is a piece of hardware that will examine a picture and produces a computer file that represents what it sees. Scanners digitize (converts into a series of dots) hard copy and stores it as a graphics scanner file.

Search engine

A search engine is a computer program or group of programs which can take a search string (usually a word or words) and rapidly compare that string with the information in its database, keyword index, or the text of many documents.

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