



USING NEW TECHNOLOGIES TO PRODUCE LANGUAGE MATERIAL FOR MINORITY AND ENDANGERED LANGUAGES

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Abstract:

While the impact of new technologies and the globalisation process pose many challenges to Minority Languages (MLs) and Endangered Languages (ELs), technology can be also used to the benefit of these languages. This paper discusses how technology can bring benefits for MLs/ELs. It outlines what Computer Assisted Language Learning (CALL) can and cannot do for MLs and ELs. It describes a software template and syllabus that can be used to produce CALL materials for MLs and ELs and outlines courseware that was developed for Nawat, an EL of El Salvador. Finally, the paper highlights the need for linguists, universities and ML/EL communities need to work together to produce worthwhile and usable CALL materials.

Introduction

New technologies and the globalisation process pose many challenges to minority Languages (MLs) and Endangered Languages (ELs). They can often serve to further marginalize these languages and erode their sphere of usage. However, new technologies also offer benefits for MLs and ELs. They provide a mechanism for quick and easy publication of resources (via the Internet), a forum for the use of the language (via discussion boards) and a means to provide language learning resources (via Computer Assisted Language Learning (CALL) materials).

This paper outlines how technology can help MLs and ELs and discusses a working example of how technology has been used to provide linguistic and language learning material for Nawat, an EL of El Salvador (less than 100 remaining speakers). It also describes the benefits that accrue from the production of these materials. CALL is not a miracle solution for MLs/ELs but can act as a starting point for the future.

The Benefits of the Internet for Minority and Endangered Languages

In order for a language to be viable, it must fulfil certain conditions. Lemus (1999) states that a language must have legal status, social use and material available in order to be sustainable.

The Internet by itself cannot change the legal status of a language (at least not until e-voting becomes more common), but it can contribute to the social use of a language and the production of language materials.

If a ML speaker has no one with whom s/he can communicate with in the ML, obviously, s/he will not be able to use the ML. However, the Internet can provide a forum where ML speakers can communicate even if they are geographically disparate. The availability of discussion groups, notice boards and chat-rooms on the Internet enhances the usage opportunities of MLs and ELs. This is especially potent in the case of ELs, where the remaining speakers cannot physically meet other speakers. For example, Buszard-Welscher (2000) reports that speakers of P (an EL of North America) use the Internet to communicate with each other and has given them an environment to use the language.



A common difficulty encountered by MLs and ELs is the lack of material available in the language. Traditional production techniques mean that it is costly to produce a limited amount of materials. However, the Internet provides an alternative forum for the production and publication of materials via web-sites. While not totally without cost, web-sites are relatively easy to set up and maintain. They do not have to be distributed in the traditional way and can control who accesses the material (if this is an issue for the language community). They have the extra advantage in that they can include multi-media resources (e.g. sound, video and graphics), which can make the material more accessible to text-shy or illiterate users.

Computer Assisted Language Learning and Minority/Endangered Languages

One recurring need for ML and EL speakers who wish to pass on their language to the next generation, is the need for language learning resources. CALL has much to offer the language learner, including increased motivation, privacy, multi-media presentation of materials and the ability for the learner to work at his/her own pace and learning style. CALL is difficult to do for the Most Commonly Taught Languages (MCLTs) and is even harder for MLs and ELs.

CALL is a multidisciplinary field that calls on the skills of linguists, teachers and people with technical skills.

CALL for MLs and ELs faces extra challenges. These include money, availability of speakers, limited speaker knowledge of the formal aspects of the language and, in some cases, literacy. In the case of ELs, time is an issue, as the language must be documented before the remaining speakers die. Therefore, the solution must be low-cost (or free), easy to use, accessible, use "standard" technology and be quickly available. It also must have the support of the community in the development and use of the material. While this may seem like an unobtainable wish-list, section 4 outlines a working example of CALL material for Nawat, that meets most of these requirements.

CALL provides benefits over the traditional text-based approach for language learning.

Putting the ML/EL online (possibly for the first time) can increase the social prestige of the language both within and outside the community. It can demonstrate that language can be part of the digital-age and help counteract the stigma often associated with MLs/ELs (not just a "language for the old people". It can provide access to previously unavailable resources.

In the case of ELs, often there may be only a few remaining copies of resources in a fragile.

By placing information on the Internet (providing that it is culturally acceptable), more people can have access to this material.

If CALL resources are available for a ML/EL, it may be possible to incorporate them into the school curriculum nationally. Good CALL materials include aspects of culture as well as language items and if the majority culture has access to the CALL materials, it can become aware of its own cultural and linguistic borrowings from the ML/EL. This can potentially foster a more positive attitude toward the ML/EL community in question.

While these potential benefits do exist for CALL in the ML/EL context, it is not to imply that simply production CALL material will bring about these benefits automatically.

It should be understood that the planning, development and implementation of CALL materials must be handled correctly in order to achieve these benefits and, as of yet, no clear and comprehensive blue-print exists for CALL in the ML/EL context.

What CALL cannot do for MLs/ELs

CALL cannot produce fluent speakers without the investment of time and effort. It will not change a ML into a majority language simply by its existence. It cannot erode the negative image that often surrounds MLs and ELs. The ML/EL community members are the principal players in the status of their language. While many ML/EL communities yearn for legal status and equal recognition with the majority language, the provision of this status and recognition alone will not sustain a language. In Ireland, there is more



government support for the language (equal legal status with English, a core subject in primary and secondary schools, national television and radio stations etc.) than there is among the general population.

This means that the language has been prevented from disappearing completely but reaction against the perceived "force-feeding" of the language has, until recently, resulted in a backlash against language promotion campaigns. An ML/EL community must want its language to be used and passed on to the younger generation if an ML/EL is to have any chance of survival.

A Software Template and Syllabus for CALL Materials for MLs/ELs

A software template and syllabus has been developed to enable the production of CALL materials for MLs and ELs. The template uses XML technologies to produce multi-media, multi-modal (Internet, CD and a printed version), consistent and straightforward language learning materials. It provides a low-cost solution that is quick to produce, flexible and easy to modify. The template is not language specific and can be adapted to most languages. The syllabus is just a suggested syllabus can it can be adapted to local needs.

The benefits of use XML technologies is that they enable data to be presented in different formats and can handle many different languages (via the use of Unicode). XML technologies are emerging as the standard technology for the representation of linguistic data in the future, so whatever material is produced now using this technology should be migratable to future data structures.

This paper does not pretend that the template described here is the best available and perfect - indeed, that would be a very inaccurate description. However, the aim is to show that even a simple template such as this one can produce a worthwhile CALL program for an EL and reap some of the benefits stated earlier and it can provide a starting point for future efforts.

The template was used to produce CALL materials for Nawat (Pipil (Campbell, 1985)), an EL of El Salvador. There are less than 100 remaining, mainly elderly speakers and they live near Sonsonate, in western El Salvador (Grimes (2000) reports about 20 speakers). The initial version of the courseware contains material for complete beginners. It consists of 12 lessons and each lesson has three sections which, in turn, have text and audio conversations, an interactive activity, explanation and vocabulary links. There is a dictionary (text and audio data), and sections on culture, grammar, the alphabet and language learning tips. Native speakers (Genaro Ramírez and Paula López) were enthusiastic about the project and willing recorded all the spoken parts of the course. There are two versions of the course - one in English and the other in Spanish.

The aims of the project were to produce CALL courseware for Nawat and to provide linguistic information on the language which will be useful in the future. The final product (which is available at Ward, 2001) was warmly received in El Salvador. People several generations removed from the Pipil culture were interested in the courseware and the Ministry of Education and Culture in El Salvador were also pleased with the courseware. Developing CALL materials is one part of the battle, deploying or using them is another. Deployment is the hard part and is not to be underestimated, but it is only possible by the availability of resources.

Linguists and ML/EL community conflict

Linguists working with MLs/ELs usually want to document the language. ML and EL communities can sometimes resent the activities of linguists thinking that they reap huge financial gain from their activities (a belief that is usually unfounded). If the community is interested in promoting their language, they would prefer the linguists to help them produce language teaching materials, rather than worry about some "academic" aspect of the language.

A CALL system can be an acceptable half-way house between these two often conflicting activities. The linguists can document the most important parts of the language, record spoken conversations and

produce dictionaries. These materials can be used to produce a CALL system that uses the resources in a way that linguists would not normally envisage.

Universities and Minority and Endangered Languages

The production of CALL materials is challenging. Realistically, universities must work together with local ML and EL speakers in the production of these CALL materials. ML/EL communities often do not have the internal expertise to develop these materials and it is pointless for them to start at the beginning and re-invent the wheel (in terms of CALL materials). Moreover, commercial publishers may not be interested in ML/EL material production, at least initially.

Conclusion

While new technologies present challenges to minority and endangered languages, they also offer them potential benefits. This paper discussed the benefits of the Internet for MLs and ELs which include the provision of environment for language use and the production of language resources. CALL in the context of MLs/ELs was reviewed and the benefits over the traditional paper-based approach were highlighted. CALL is not the miracle answer for MLs/ELs and this was also pointed out. A software template and syllabus for the production of CALL materials for MLs/ELs was developed and the key elements of this template were reported. CALL can act as a compromise solution between the sometimes conflicting goals of linguists and ML/EL communities. Finally, the need for universities and ML/EL communities to work together on ML/EL CALL is highlighted. There are still many technological challenges ahead for MLs and ELs but technology is not all bad news and can bring its benefits as well.

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