

He reo amiorangi

Tom Roa

Te Pua Wānanga ki te Ao (School of Māori and Pacific Development)

Te Whare Wānanga o Waikato (University of Waikato)

Private Bag 3105, Hamilton, New Zealand

[tomroa@waikato.ac.nz]

Abstract

This paper discusses a project involving the translation of a learning management system (LMS), *Modular Object-Oriented Dynamic Learning Environment* (Moodle), into *te reo Māori* so that users of this LMS, learners, teachers and administrators who have a high level of competence in the language, can work within a fully Māori environment. Aspects of the project referred to here include adaptation of the style guide created by Te Taura Whiri for the Microsoft project, use of the Microsoft translation guidelines, the philosophy guiding the translation and the translation process itself (with examples). The process by which the project was evaluated is also discussed.

Background

Information Technology is essential to high value functions such as communication, trade, and learning in New Zealand and globally. The presence of IT in Māori homes and communities, along with the high level of acceptance amongst children and young people, makes it one of the few high status domains of extraordinary influence on the crucial area of intergenerational transmission. Māori Language IT took a giant step forward with the translation of Microsoft Office/Windows in 2005. The overall translation was about 900,000 strings, with a large portion of that being individual words or phrases. However, the Microsoft corpus is seen as foundational to the task rather than as its completion. The language of IT is constantly changing and each new format and system creates a different context which affects word choice and word use. To achieve a more robust IT, corpus users' perspectives must be taken into account.

The project's primary aim is to evaluate the acceptability and appropriateness of our translation of a Learning Management System, Moodle, into Māori. This paper discusses the ongoing process of translation, our reviewing of the Style Guide, and notes from the usability study in which teachers and students at the University of Waikato were observed using Moodle in our Māori translation. Moodle (*Modular Object-Oriented Dynamic Learning Environment*) is an open source LMS framework that allows development of a fully immersive environment for all user levels, including learners, teachers, and course/system administrators. The overall size of this translation involved about 4,800 strings (approx 29,000 words). The initial translations were completed by Roger Lewis, Damen Pitiroi, and Hariru Roa, with Tom Roa and Te Taka Keegan giving guidance and assistance. We decided that our target audience would be people of high language ability.

Style guide

The style guide created by Te Taura Whiri for the Microsoft project was our starting point, expanded and changed to suit our context and purpose. It covered key decisions in relation to target register (genre, formality, style, and tone), translation technique (conciseness, source flaws, consistency, and equivalence) vocabulary

(ambiguity, loanwords, acronyms, etc.), orthography (macrons, hyphenation, case, punctuation, etc.), grammar (articles, prefixes, pronouns, etc.), commands (infinitive form, passive form, etc.), and sentence formation (instruction chain, sequence, statives, passives). Its aim was to clarify the basis of lexical and style decisions, to ensure that the translations were consistent, and also to leave clear guidelines for future translators. This ‘continuing work-in-progress’ allowed additions or changes as we became more familiar with Moodle. We initially followed the lexical and style precedents set by Microsoft. Terms that had already been translated we retained, believing that this would lead to greater acceptability. Later we moved away from the Microsoft translations as the context and use of the terms in Moodle was often different. An example of this is *Tākupu* for *Comment* which we changed to *Pito Kōrero*. Also, some of the Microsoft terms were inaccurate. Microsoft translation guidelines demand a consistency in the translation of certain words. The preferred terms for *Exit* were used elsewhere – so *Waiho*. We changed *Exit* to *Putu Atu*, leaving *Waiho* free to be used for terms like *Ignore*.

Translation process

Our first terms were transferred straight from the Microsoft Excel sheets, although the source strings in these spreadsheets give little clue as to context and function, an issue in that the buttons, titles, and menus took different forms. *Use this course* in line with the MS source was *Whakamahia tēnei kōhi*. However it was actually associated with a button that confirmed the selection of a course in a dropdown menu. Not only did it need to be capitalized and be put in the infinitive, the required response from the user was to choose a course rather than use it. It therefore became *Tīpako Tēnei Kōhi*.

The last process – finding the context and changing the translations – was the most time-consuming. While aiming as far as humanly possible for perfection, we found that the initial Microsoft translation often blinded us to alternatives. Later, being able to make changes directly in the Moodle system itself gave us more control over the quality of the translations and sped up the editing process.

The major change in our translation philosophy was the re-orientation of the target text toward the target audience. Before translating a phrase, we considered its function in its context, its contribution to the page, and the response required of the user. We could then be creative, sometimes coming up with a different structure or register from that of the source text in order to represent the functionality of the LMS in ways that were more natural to Māori. The term *Attention* can be translated as *Kia mōhio mai*, *Kia mahara mai*, *Kia mataara*, or *Taihoa koa*. Its contribution to a string is to direct the user’s attention to the information sentence that follows. The bouncy, direct communication to the user in the phrase *E kare* was considered more likely to be natural to the user and faithful to the function of *Attention!* Another example is the term, *Use advanced features*: The initial translation based on MS was *Whakamahia ngā āhuatanga arā atu anō*. This is a button the user pushes to open up the advanced features section. After initially considering replacing *Whakamahia* with *Whakatuwhera* or *Hura*, we realised *Use* was actually redundant. Its function is to show the user where pushing the button leads to. So the final translation was *Ngā Āhuatanga Atu Anō* (*arā* was also unnecessary). The usability testing also gave another perspective (see below).

Examples

The term *Edit* affected the biggest challenge in terms of frequency of use and amount of time researching. Sometimes an English term does not initially encompass the full range of functionality or emphasis in its IT context. Over time its semantic range expands through usage. Māori terms, only recently applied to the IT context, have not yet shifted or expanded their meanings. Translating at the mere word level without a full consideration of the functionality or the contribution that the term makes to the interface may produce an inferior outcome. The word 'edit' comes from newspaper and book publishing contexts where an editor 'corrects' manuscripts or stories. This is part of its function in an IT context - the user corrects mistakes with an editing page. Surveying the IT function of *edit* showed that few instances required a correction of something incorrect or inferior. Furthermore, few instances required reformatting. In the huge majority of cases, a mere alteration or change of some small detail was all that was required. At present the MS Māori word for 'edit' is *Whakatika* (to correct). This term had been used for some years prior to the MS corpus. The first consideration was that it had become widely accepted by the target audience (TA). This meant that any change needed to be transparent in terms of meaning and function. We sought a new term. It needed to be a term that was not used for any other ST (source text) term, so *huri* (change) was excluded. Other possibilities included the transliteration for change (*tīni*) or the words for transformation (*panoni*) or change/alter (*whakarerekē*). *Panoni* rejected as comparatively unknown by our first reference group. *Whakarerekē* was chosen. It accurately reflects the function. It is not a transliteration. It has a wide enough semantic range to include correction.

One of the most difficult tasks was to find different target language terms for each separate source language term. Consider the term 'course'. The word *Wānanga* has been used for each of the following: institute of learning; university; forum; academic; to theorise; pre-European school of learning. It would therefore not be appropriate as a translation for course in this context. The preferred term was *Akoranga*. However, this word had been used for 'lesson'. Possibilities were *Pū akoranga* (a group of lessons) and the transliteration *Kōhi*. We decided that *Kōhi* flowed more naturally off the tongue in spite of the fact that it was a transliteration. Furthermore, in the case of *Pū akoranga*, the second word was ambiguous. This choice followed the style process. It was then presented to the reference group (reference group submission being added onto the style guide process as a step) and met with their approval. Another example of the difficulties involved in attempting to find target language versions of terms is that associated with 'uru' which has so many different uses as indicated below:

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| 1. <i>Whakauru</i> = to enrol a student; to include | 2. <i>Whakaurunga</i> = Enrolment |
| 3. <i>Takiuru</i> = to log in | 4. <i>Takiurunga</i> = Log in |
| 5. <i>Nohouru</i> = to be logged on | 6. <i>Ohauru</i> = to subscribe/subscription |
| 7. <i>Tāuru</i> = to enter something | 8. <i>Tāurunga</i> = Entry |
| 9. <i>uru</i> = to access (as a user); included | 10. <i>Urunga</i> = accessing, entrance |
| 11. <i>Manauru</i> = access (authorisation to access) | 12. <i>Āheinga Uru</i> = able to access |
- Plus other words related to this issue, e.g., 13. *Tomo / hou atu* = to enter (as a user)

Evaluation

The Evaluation was most revealing. Its purpose was to test the acceptability and usability of the translation. Our observation team, Hariru Roa and Joeline Seed-Pihama, guided by the Project Manager from the School of Computing and Mathematical Sciences, Kirsten Thomson, and Chris Knowles of the School of Education, observed eight students and four teachers using Moodle in Māori. Factors influencing their observations were the fact that those being observed had different levels of proficiency in the target language and the observers themselves had differing levels of familiarity with IT and with Moodle. The process, not including application for approval by the appropriate University Ethics Committee and general discussion regarding the project, was to take around an hour per participant over a three week period. Teachers were observed logging in; setting up their course(s); setting up a quiz (time allowing); and ‘chatting’ (time allowing). Similarly, students were observed logging in; completing a quiz; browsing (time allowing); and chatting (time allowing). Although the team tried to maintain a distance in observation, the participants continually sought their involvement and advice both with the language, and with the system. The observers repeatedly suggested that the participants should ‘give it a go’ and to attempt to deduce meaning from context. However, to avoid the possibility of the participants becoming ‘*hōhā*’ and simply giving up, observers did end up giving assistance, noting the assistance that had been sought, and then moving on.

In the language area, the observers reported a number of issues:

- The translations were consistently literal, hence unnatural to the Māori ear and eye.
- Users took issue with the difficulty of the language: ‘You have to think really hard, and you don’t want to have to do that when using a programme like this!’ ‘A first-year second-language learner would be completely lost!’
- Questions were posed about newly coined words when there were perfectly good ones already available, and about apparent inconsistencies and ambiguities in the terms. For example ‘login’ (*takiuru*) could easily have been *tomo*, *kuhu*, *uru*, *whakauru*, etc., and *Whakaahuatanga* was used for ‘Introduction’, ‘Description’, and ‘Summary’.
- Users took ‘*Rapu Arā Atu Anō*’ (Advanced Search) to mean ‘Search for others/more’, missing the nuance of greater specificity (see above).

The grammatical ambiguity also raised comment:

- Does the phrase ‘*Rapu Ngā Huinga*’ mean search **in** the forums, or **for** them?
- ‘Edit Course Settings’ as ‘*Whakarerekē Ngā Tautuhinga Kōhi*’ similarly.

The inclusion of an object indicator ‘i’, or a passive suffix would have clarified these.

The layout contributed to ease of use familiar with IT. Context often helped in the understanding of a new word. Some features (e.g., drop-down boxes) sometimes provided certain information and contextual clues, although at other times the complexity of the language led to confusion. The observers also noted differences in the approaches and feedback between the teachers and the students. Students were more open to new words, and less concerned with the language than with the task set

for them. Teachers were more concerned with the standard of the language and the thought processes behind the language selections.

The observers recommended that revision begin with typographical errors and terminological inconsistencies. They suggested that priority be given to the production of an English-Māori/ Māori-Māori glossary. In the longer term, they recommended that all translations be reviewed, the emphasis being placed on literal translation. No recommendations were made regarding the Moodle Language Management Systems, although Reference Group members suggested that introductory sessions in Moodle were needed.¹ The follow-up on the observations will clearly affect acceptability and usability. Given some more time and effort, it is hoped that those who have some familiarity with IT and a reasonably high level of proficiency in *te reo Māori* will wish to, and be able to, adjust. If there is one major lesson to be learned from this exercise, it is that the first attempt needs to be subjected to careful scrutiny by potential users. Success cannot be claimed until users are satisfied with the outcome.

Conclusion

The translation process and its investigation continue, with usability and acceptability tests playing a central role and with debate about the 'reo o te kāinga' and the 'reo o te kura' continuing. Because IT is now so central to the lives of younger people and to almost everyone who operates in professional and educational contexts, it is appropriate that these debates should take place within the context of IT. It is also appropriate that IT should play a role in the revival, maintenance, progress, and evolution of the Māori Language.

Tihei Mauri Ora!!

Endnote

1. The reference group included representatives from Waikato Institute of Technology; Te Whare Wānanga o Awanuiārangi, *Te Taura Whiri* (Māori Language Commission), and Tainui Waka (Hauraki, Raukawa, Maniapoto, and Waikato).