# The Maes T System and its use in the Welsh-Medium Higher Education Terminology Project

### **Tegau Andrews**

Language Technologies Unit Bangor University t.andrews@bangor.ac .uk

## **Gruffudd Prys**

Language Technologies Unit Bangor University

 $\verb|g.prys@bangor.ac.uk| \\$ 

### **Dewi Bryn Jones**

Language Technologies Unit Bangor University

d.b.jones@bangor.ac
.uk

### **Abstract**

This paper describes the Maes T terminology development system, its use in the Welsh-Medium Higher Education Terminology Project, and the manner in which it facilitates collaboration between geographically dispersed terminologists and subject specialists.

### 1 Introduction

Maes T is a language neutral ISO standards-based online system for the development of terminology resources. It facilitates the creation and publication of dictionaries, whether online, on CD, on mobile phones or in hardcopy. It enables terminologists and subject specialists to collaborate online to standardize terms. The Maes T infrastructure currently supports the Welsh National Terminology Portal and the Terms for Welsh-Medium Higher Education website, which together encompass 18 terminology dictionaries. This paper discusses its use in the standardization of English-Welsh Higher Education terminology.

# 2 The Welsh-Medium Higher Education Terminology Project

The Welsh-Medium Higher Education Terminology (WMHET) Project is an ongoing scheme which began in September 2009, funded by the Centre for Welsh Medium Higher Education. The project aim is to standardize Welsh terminology in academic fields that lack the terminology required at university level. Using the Maes T system, online dictionaries are developed to

aid students, researchers and lecturers across all Welsh universities. The use of a common system with an inbuilt step-by-step standardization process ensures a consistency in terminology development in the sector and helps coordinate the work of geographically dispersed teams of subject specialists and terminologists.

As ISO standard 15188 states (2001: 4.3.4), involving subject specialists in the standardization of terms improves terminological quality, whilst also ensuring the implantation and dissemination of those terms. As the opportunities for providing terminology training for subject specialists are limited, the interface has been carefully designed to be user-friendly and accessible to non-terminologists, with terminology standardization presented as a clear, interface-driven process. The user interface is currently bilingual (English-Welsh) to allow users to access the system in the language of their choice. Crucially this enables non-Welsh speaking subject specialists to contribute in standardization activities such as writing an English definition for a concept.

### 3 The Maes T Interface

For practical purposes, the design of the Maes T interface incorporates certain assumptions. It assumes that subject specialists will submit an English term for which they wish to standardize a Welsh language equivalent term. Therefore, English is considered a source language throughout. Maes T then divides the terminology standardization process into 4 stages, each identified by a separate tab in the user interface. These are:

- 1. Collecting Terms,
- 2. Defining the Concept,
- 3. Standardizing Terms and
- 4. Linguistic Information.

In the first stage, *Collecting Terms*, the following initial information is collected, as prescribed in Prys and Jones (2007):

- The source language (SL) standard term
- Source of the SL term
- Any SL synonyms which may occur, along with their sources
- Welsh language candidate terms
- Source of the Welsh candidate terms.

In the second stage, the concept may be defined in either or both the source and target languages, and a disambiguator may be added.

While term collection and concept definition are seen as two steps in standardization within Maes T, they are not considered in isolation from each other. The link between each is manifest in a shared comments box. The comment box is used by all team members as a way to register agreement or disagreement on the candidate terms or underlying concept, and this feature facilitates the development of a consensus between all parties before a term is declared standard.

In third step, *Standardizing Terms*, the terminologist records the consensus achieved regarding the normative status of each candidate term, while in the fourth step, *Linguistic Information*, the terminologist records data such as the part of speech, gender and plural form of the term. Leaving this as a last step removes the tendency, seen in previous Maes T iterations, of recording superfluous grammatical information for candidate terms that are later discarded. It also ensures that subject specialists are free to concentrate on the conceptual aspect of terminology work, leaving grammar to the terminologist.

Once each of these four steps is completed, the terminologist publishes the term online by clicking the 'Publish' button. This feature ensures that only standardized terms are released on the web. Currently, across all terminology projects, some 83,000 concepts are live online through the 'Publish' feature of the Maes T system.

#### 4 Technical Information

Maes T utilizes current web technologies to provide the user interface and to store and disseminate terminology dictionaries. Google Web Toolkit is used to allow for a more interactive responsive web-based interface. The server side software utilizes Welsh linguistic components, such as lemmatizers, spelling and grammar checkers that are then available to Maes T.

#### 5 Conclusion

Maes T was developed to provide a rapid, inexpensive and user-friendly way of standardizing terminology, based on principles of international standards and inclusive, consensus-based working methods. It facilitates the multi-format publication of terminology dictionaries, and has streamlined the process of inputting terms, storing definitions, discussing candidate terms and reaching conclusions, whilst archiving the decisions taken for future reference.

In the context of the WMHET Project, Maes T has given geographically dispersed academics a common platform to facilitate collaborating on mutually beneficial projects, where they can develop a common sense of 'ownership' over newly developed or standardized terms. It is hoped that this will ensure the implantation and dissemination of those terms in the Higher Education sector and beyond.

The application itself is language neutral, and its interface could be translated into other languages as necessary. Generous licensing models for developing countries and lesser-used languages are being discussed.

#### Reference

Bangor University. 2009. *Maes T.* <www.maes-t.com/gwt> (accessed 17/02/11).

Bangor University. 2010. Porth Termau Cenedlaethol Cymru/ Welsh National Terminology Portal. <a href="https://www.termau.org/porth">www.termau.org/porth</a>> (accessed 17/02/11).

Centre for Welsh Medium Higher Education. 2009. Termau Addysg Uwch/ Terms for Higher Education. <www.porth.ac.uk/termau> (accessed 17/02/11).

ISO 15188:2001. Project management guidelines for terminology standardization.

Prys, Delyth and Dewi Bryn Jones. 2007. Guidelines for the Standardization of Terminology for the Welsh Assembly Government Translation Service and Welsh Language Board. <a href="http://www.byig-wlb.org.uk/English/publications/Publications/5338">http://www.byig-wlb.org.uk/English/publications/Publications/5338</a>. pdf> (accessed 17/02/11).