

DEVELOPMENT OF A WEB-BASED GLOSSARY FOR DEVELOPMENT COMMUNICATION AND ORGANIZATIONAL MANAGEMENT

**H.V.A. Wickramasuriya^{1*}, C. Sivayoganathan¹, W.A.D.P. Wanigasundara¹,
S. De Silva¹ and B.M.K. Perera²**

¹*Department of Agricultural Extension, Faculty of Agriculture,
University of Peradeniya, Sri Lanka*

²*Career Guidance Unit, University of Peradeniya, Sri Lanka*
**heshan54@gmail.com*

Concepts, which are mental representations and the basis that enables meaning and communication, are the basic building blocks in the social sciences. To an agricultural undergraduate, who enters the University after having done natural science subjects in his/her pre-University entrance examinations, the concepts in the social sciences are relatively new. They are also faced with a multiplicity of definitions that are multidimensional and multilevel, and have a difficulty of gaining quick access to the technical definitions of these concepts. Thus, the primary objective was to develop a web-based learning material to enable easy access to the contextually relevant concepts and definitions.

The methodology does not follow a traditional research design, but rather it is one for the development of a software product. It consisted of a requirement analysis after which the database was designed, and the initial output was generated through prototyping. Definitions were obtained from specialized dictionaries such as the Dictionary of Psychology, glossaries, general dictionaries, and books. Data input, verification and obtaining of additional data were done. Initially, data were stored in a MS Access database and then transferred to a MySQL database. Initial testing was done on a server on the local host. Within the HTML code, JavaScript was used to add functionality to the web pages and to communicate with the web server. Hypertext preprocessor (PHP) was used as the server scripting language to develop dynamic and interactive web pages. Structured query language (SQL) was used as the query language. Finally, unit testing and integration testing were done.

The result of this product development was the database, called 'Concepts', which includes around 2600 concepts and definitions including some multiple definitions, which can be accessed through the 'Concepts' link on the Department of Agricultural Extension webpage. The different outputs include a listing of all the concepts together with their definitions, the selection of concepts and definitions for a particular course, and the ability to connect directly to the selected term in the Oxford Dictionary, the Free Dictionary, WordNet, Wiktionary, the Madura dictionary (for Sinhala terms) and Wikipedia. Thus, this product allows the user to easily obtain additional definitions from other sources, the pronunciation of the term, or the context of its use. This product provides an aid for the students that can assist their current learning and continued learning even after graduating. It can assist the teachers too. As this initial work has not studied the actual use of this product, it should be done in the future. Possible further enhancements are a direct link to a Tamil dictionary, enabling access to the product through mobile devices, incorporating conceptual models, and linking to a visual thesaurus.

Financial assistance given by the University of Peradeniya (RG/2012/10/Ag) is acknowledged.