

## Language Intelligent Pronunciation System through MWP

**Aletia Trakakis, Carmen Kruger, Foteini Psarra, Ericos Georgiades**

IQ2 (Nicosia, Cyprus, Thessaloniki, Greece, Johannesburg, South-Africa)

[info@iq2.org](mailto:info@iq2.org)

### Abstract

According to the relevant literature, current computer aided language learning includes only speech recognition, without considering the significant differences of sound among different languages, such as voicing, place and manner of articulation, accents, nasalisation and labialisation.

Felix (2008) claims, there is "...enough data in current computer aided language learning to propose constructive effects on spelling, reading and writing". Consequently, any new and innovative system developed should "...ideally be able to understand a user's spoken input and evaluate it, not just for correctness but also for appropriateness. It should be able to diagnose a student's problems with pronunciation, syntax, or usage and then intelligently decide among a range of options", as stated by Warschauer.

The research presented in this article investigates solutions to these problems. The Language Intelligent Pronunciation System (LIPS) is suggested to include and add the production, perception and physical nature of speech sounds in any online/offline language training course for supporting the learning of the spoken part of the language and not just the writing, spelling and reading. An innovative and new streamed audio technology protocol, based on phonetics and phonemes – Music of Word Protocol (MWP) – needs to be integrated to assist learners with the proper pronunciation of words and phrases.

LIPS aims at uniting eLearning with Computer-supported Collaborative Learning, assisting the creation of an open learning environment, consolidating training initiatives on a scalable web-based platform, supporting portability and standards, personalised content and enabling knowledge reuse. LIPS in addition is suggested to allow a cross-language database, that through comparison check on words of the different language in the database, indicates to the learner other languages he/she have knowledge of. This innovative approach will lay a concrete base for the development of even more foreign languages, supporting the Lisbon 2010 goals set for language learning.