

Scientific Language Learning and ICT for the Real World

Tomasz Rączka

E-mail: T.Raczka@sjo.pw.edu.pl
Warsaw University of Technology (Poland)

Abstract

Scientific language learning has encountered dramatic changes in the knowledge-based economy. Its roles and functions are increasingly 'pragmatized' as a result of emerging new players and competing markets for knowledge production, the availability of higher education to a wider range of social classes, evolving needs of the more demanding language student as customer, as well as the assimilation of ICT into the field. The curriculum and dynamics of scientific language learning in English for Specific Purposes (ESP) settings, in particular, has correspondingly become more sensitive to industry collaboration opportunities, commercial exploitation, and is increasingly transdisciplinary. As new scientific methods, terms, and concepts are continuously added and outdated ones removed as they emerge, the field of scientific language learning pertaining to ESP has been unable to keep pace with the speed of scientific knowledge and progress. This has resulted in a widening gap between scientific language learning courses and applied needs of the real world.

As a result of these developments, this paper argues that it is timely for scholarship in 'ICT and language learning' to move beyond current integrative and pedagogical debates which emphasizes disciplinary duality, and consider the increasing symbiotic relations between the two in meeting the challenges of today's reality in scientific knowledge generation and production. In particular, the paper stresses the urgent need to reexamine the relevance of ICT and language learning vis-à-vis a model of 'performativity' whereby applied needs perform, shape and format ICT and language needs, rather than observing how these fields function. By tracing through a multimedia and interactive course English for Biotechnology that is offered at Warsaw University of Technology, it is argued that an epistemic culture of scientific knowledge production is continuously and contingently fed back and forth in the enactment and structuring of knowledge. Consequently, it highlights the prospects of reconciling the dichotomy between scientific language learning and ICT, the role of the language instructor as both an educator and mediator between curriculum and industry, and the flow of scientific knowledge between classroom and practice. Examples of classroom activities and recommendations for course design will be presented in support of a joint ICT and language learning's relevance for applied needs in scientific ESP settings.