Establish EMI (English-Medium Instruction) Ability Indicators for the Mechanical Engineering and Environmental Engineering Disciplines

Abstract

Globalization of higher education has led to increasing demand for English-Medium Instruction (EMI) courses in many non-native English speaking countries of the world. In Taiwan, universities that aim to attain competitive advantages and to attract international enrollments have also followed suit and taken action to promote EMI. Despite the increasing importance of EMI in university curriculum, systematic studies of academic English skills required in an EMI classroom are lacking. Without such skill ability indicators, it is difficult to assess student skill profile, determine desired levels of academic English proficiency, or create training programs for students of EMI. This study investigates EMI courses of mechanical engineering and environmental engineering in order to understand classroom tasks and identify academic English skill requirements from both teachers' and students' perspectives. Using data from classroom observation, student surveys, and teacher interviews, the researchers hope to gain a better understanding on information such as student perceptions on and students' needs of the EMI courses. The information will help identify training needs and develop ability indicators.

Keywords: English-medium instruction, higher education, teachers' view, academic English training

建立全英語專業課程能力指標:以機械工程及環境工程領域為例

摘要

因應高等教育全球化趨勢,非英語系國家為提升競爭力無不積極推出大學專業 領域英語授課課程。為吸引國際學生,同時提升本地生的英語能力,台灣教育 部及大專院校亦不落人後,提出獎勵辦法,邀請專業教師以英語教授專業領域 內容。雖然各校紛紛投入大量資源,相關成效以及配套措施如學生學術英語訓 練之探討有限。本文認為能力指標的訂定有助於學生能力評量、學術能力需求 設定、培訓活動設計。本研究聚焦於國立成功大學工學院機械工程系及環境工 程系之全英語專業課程,藉由課堂觀察、學生問卷調查、教師訪談嘗試了解學 生對於全英語專業課程的看法以及學生的學習需求。本研究發現將有助於了解 訓練需求以及能力指標的設定。

關鍵字: 全英語專業課程、高等教育、教師觀點、學術英文訓練