NEEDS ANALYSIS OF ENGLISH FOR BIOMEDICAL ENGINEERING STUDENTS: A CASE STUDY OF THAI UNDERGRADUATE STUDENTS

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ABSTRACT

This study employed the Needs Analysis theory to investigate the actual English language needs of Thai undergraduate Biomedical Engineering students. The study aimed to identify the English needs of the students and expectations from all relevant parties in order to develop English courses for Biomedical Engineering. This study was a case study for which a survey was conducted at the Biomedical Engineering Department, Faculty of Engineering, of a particular university in Thailand. The participants consisted of (1) 54 Thai undergraduate Biomedical Engineering students, (2) the program chair, (3) five subject teachers, (4) an English teacher, and (5) six stakeholders from different organizations. Three research instruments were used in data collection: a questionnaire, focus group interviews, and semi-structured interviews. The questionnaire was used for collecting quantitative data from students. Focus group interviews were used to follow up data from the students. Semi-structured interviews were used for gathering in-depth data from academic staff and stakeholders. Statistical methods and content analysis were used for interpreting the results. The findings were (1) students and academic staff stated that all English skills were necessary; however, English speaking skills, especially oral presentation, were the most important while the most problematic skill was writing essays and academic papers for journals; (2) academic staff expected students to be highly competent in speaking and writing English; and (3) stakeholders required graduates to be proficient in all English communication skills and reading English manuals. The study suggests that English courses should focus on academic English with course content mainly based on science and engineering. Class activities should be designed to match the students' desires and to meet the language needs in target situations.

KEY WORDS: NEEDS ANALYSIS (NA)/ ENGLISH FOR SPECIFIC PURPOSES (ESP)/ ENGLISH FOR ACADEMIC PURPOSES (EAP)/ BIOMEDICAL ENGINEERING (BME)

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