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**READING AND WRITING IN THE ENGINEERING**

**CLASSROOM:**

**AN ETHNOGRAPHIC EXPLORATION**

**BY**

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*Patricia John-Goh*

## ABSTRACT

This study was conceived to discover the reading and writing experience of first-year Engineering students. It was born out of the need to ascertain the actual experience of students after they leave the ESL classroom and enter the content-area classroom.

Specifically, it sought to discover how students read and write in preparation for their academic tasks. Among the areas explored were how students read, their motivation for reading and the strategies they employed while reading; what students wrote; and, the problems they encountered while performing these tasks.

A research design based on the tenets of ethnographic inquiry was deemed appropriate for this exploration. Language was studied in the context in which it occurred, and was viewed holistically. This ‘thick description’ enabled the discovery of what members in the community under study understand, both explicitly and tacitly, in order to operate in it.

In the area of reading, the study revealed that students confined their reading to the single text prescribed. And, while reading was deemed important by all the participants, more emphasis was placed on the understanding of the mathematical aspects of the topics studied – formulas, equations, and the solving of mathematical problems via calculations.

The study also noted the relative absence of writing as it is understood in the ESL classroom, in the content-area classroom. There were few opportunities afforded to students to provide written explanations or descriptions of aspects of a topic.

A significant finding was that solutions to problems could be presented either in words or be represented by an equation or formula. These mathematical solutions carried underlying meaning that was understood by all participants.

The findings revealed that there is a need to prepare students for the very specialized reading and writing they will encounter in their content-area classrooms. The study suggests that an ESP programme, that endeavour to address student needs, must focus on a specialized course design and the development of materials that are specifically formulated for Engineering students – to be handled by an ‘enlightened’ ESP practitioner.

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