ABSTRACT

Indriyani, Nurul Dwi (2026). A Needs Analysis of English for Computer and Network Engineering Students at a Vocational High School

Vocational English instruction often relies on general English materials that are not fully connected to students' technical fields. This study aimed to identify the English language needs of tenth-grade Computer and Network Engineering (CNE) students at a vocational high school and to examine the extent to which the English teacher's classroom practices fulfilled those needs.

This study employed a qualitative case study design. Participants included 31 tenth-grade CNE students and one English teacher. Data were collected through a questionnaire completed by the students, semi-structured interviews with six selected students and the English teacher, and three classroom observations. The data were analyzed using Miles, Huberman, and Saldaña's (2014) procedures, consisting of data condensation, data display, and conclusion drawing and verification.

The findings showed that students needed English for their future careers in CNE, understanding technical vocabulary and documentation, following tutorial videos, and explaining technical information and problems. Their main lacks was oral technical communication, particularly speaking, which most students identified as the most difficult skill. Limited technical vocabulary, pronunciation difficulties, and low confidence reinforced this difficulty, while listening was the second most difficult skill. Students wanted CNE-related materials and more speaking practice, whereas their interest in authentic resources was more tentative. The teacher's classroom practices partially fulfilled these needs by incorporating technical vocabulary and CNE-related topics into general English lessons, although this contextualization was uneven across the observed meetings. Speaking activities mainly involved reading prepared texts, and listening was not deliberately developed.

The study concludes that English instruction for CNE students needs strengthening rather than replacement. English teachers are recommended to redesign part of the speaking activities toward spontaneous rather than scripted production, add deliberate listening practice, and use more authentic CNE-related materials. Formal collaboration between English and vocational teachers is also recommended to make field-specific English instruction more consistent.

Keywords: Needs analysis, English for Specific Purposes (ESP), Vocational English, Computer and Network Engineering (CNE), Needs-practice alignment