Pre-Service Teachers' Perspectives on the Role of Multilingualism in Technology Education

Mutsvangwa*

Faculty of Education, School of Mathematics, Science and Technology Education, North-West University, South Africa

Adri du Toit

Faculty of Education, School of Mathematics, Science and Technology Education, North-West University, South Africa

Rosemary Cromarty

Faculty of Education, School of Mathematics, Science and Technology Education, North-West University, South Africa

Abstract

Multilingualism is both an instructional resource and a challenge in the South African higher education landscape, where linguistic heterogeneity intersects with questions of access, equity and student success. In technology education where specialized concepts are usually taught in English, multilingual strategies may serve a crucial function in enhancing learning and promoting inclusivity. This study investigated pre-service technology education teachers' perceptions of multilingualism in their own studies, with particular attention on how they experienced its use, identified benefits and challenges, and understood its beneficence to inclusivity.

The study adopted a qualitative research approach through the use of an online questionnaire that was distributed via the institution's learning management system. The questionnaire comprised open-ended questions that allowed students to reflect on their experiences of multilingualism within their modules. Data was analysed thematically, yielding the following three broad themes: (i) students' experiences from the use of multilingualism in their respective modules; (ii) benefits and challenges of using multilingualism; and (iii) efforts of inclusion of all students at the institution.

The findings show that the students appreciated multilingualism for deepening understanding of technical content, strengthening confidence and affirming cultural and linguistic identities. However, they also reported notable shortcomings of the execution of multilingualism that include, inconsistent implementation, the absence of established technical vocabulary in certain languages, and impressions of unequal provision of linguistic diversity. While participants acknowledged multilingualism as an important resource for learning, they also positioned it as a mechanism for social justice and institutional inclusivity.

The study concludes that persistent, systematic multilingual approaches are necessary in South African universities to transcend irregular practices. The perspectives of multilingualism held by pre-service technology education teachers are likely to influence their future instruction in linguistically diverse classrooms, hence necessitating institutional investment in this area.

Kevwords

Pre-service technology education teachers, multilingualism, technology education, inclusivity, South Africa.