

A STUDY OF THE MATHEMATICS EDUCATION PROGRAMMES IN THE TEACHER EDUCATION UNIVERSITIES OF GHANA

Abstract

This study investigates the training of Mathematics teachers at Teacher Education Universities (TEUs) in Ghana. The research addresses the gap in understanding how the Mathematics Education Programmes (MEPs) in the TEUs are executed to train quality Mathematics teachers. From a descriptive survey point of view, the study utilises a quantitative survey with qualitative methods, including interviews and observations, to gather comprehensive data from different sampled participants. The researcher utilised random and purposive sampling to select Teacher Education Universities (TEUs), pre-service teachers, and teacher educators as participants in the study. Data collected for analyses included questionnaires, interview responses, field notes, structured observational data and documents from the selected department. Descriptive statistics (Frequencies, Percentages and Means), inferential statistics (Mann Whitney U test and Kruskal Wallis Test) and thematic analyses were employed to analyse the data collected.

The findings show that though there are various positives in the preparation of Mathematics teachers at the TEUs, such as good programmes towards academic standards, multidisciplinary curriculum implementations, good leadership practices, suitable curriculum structures, and good learning culture, the primary challenge of the MEPs of the TEUs is an infrastructural deficit. Basic infrastructure such as lecture halls, computers, computer labs and materials such as lecture hall desks are lacking in the MEPs of the TEUs of Ghana.

The study's findings highlight the need for stakeholders of the Ghana education system to pay attention to the provision of infrastructure for the MEPs of the TEUs of Ghana, the integration of ICT should be enforced and there should be efforts to encourage graduates of the Mathematics Education Programmes of the TEUs to stay in Ghana to practice after graduation. The study serves as a reference point for the government, Ghana Education Service and individual teacher education Universities concerning the necessary steps needed to improve the quality of Mathematics teachers produced by the MEPs of the TEUs of Ghana.