

**PROFESSIONAL DEVELOPMENT OF MATHEMATICS TEACHERS:
PERSPECTIVES AND EXPERIENCE FROM EAST AFRICA**

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Professional development of mathematics teachers should be a continuing process in order to provide support in changing educational contexts. Changes can be due to curriculum re-design as well as modifications in the context such as sudden increase of learners due to change in education policies. Professional development should address the three major areas of teacher knowledge; content knowledge, pedagogical knowledge and pedagogical content knowledge (Shulman, 1986). In specific professional development sessions one area could have greater emphasis but an integrated approach can strengthen teachers' overall competences. In designing professional development, mathematics teachers' experience should be integrated to enable contextually relevant adaptation of new practices. Reflection is crucial for teachers to effectively build upon their professional experience for improving practice especially in cases of curriculum changes. Moreover, professional development based on experiential learning allows teachers to appreciate mathematics from the viewpoint of learners. In reflecting on experience of what is involved in learning mathematics, teachers are able to improve on techniques used in facilitation of learning or adapt new strategies for mathematics teaching. This paper will showcase a research project that had an emphasis on mathematics teacher professional development. The priority of the research project was to increase numeracy performance among pupils in selected Tanzanian primary schools by focusing on teachers' classroom assessment practices. The guiding ideas for professional development component will be discussed and also the experience of teachers and teacher educators from the project. Final discussion will focus on possible actions for future mathematics professional development in the context.

References

Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational researcher*, 15(2), 4-14.