



Editorial

Welcome to this ninth volume of the Interdisciplinary Journal of Education whose themes include mathematics teaching and learning; teachers' retention, psychological safety and supervision; job creation; teenage pregnancy; and ICT in teaching-learning.

The teaching of mathematics necessitates teachers to take learners through the relevant steps that eventually lead to desirable solutions. Likewise, its assessment requires students to demonstrate mastery of the steps involved in problem-solving. Indeed, arriving at the right solution without proper demonstration of the 'how' raises questions. It is through failures in these steps that instructors are able to judge the challenges students face – such as understanding of concepts, interpreting and executing tasks, or even attending to the basics; each of which offering insight for the instruction and guidance. In the first article, Lukumon and colleagues investigated error patterns by undergraduate mathematics education students at a Nigerian university when solving problems on complex number topics.

With advances in science and technology, coupled with the changing nature of learners, the content and pedagogical approaches that used to be appropriate several decades ago may not be applicable to the Gen Z learners. Likewise, skills, such as mathematics ones have to be developed among learners by competent teachers, which teachers need regular retooling to cope with the changing nature of knowledge; hence the necessity of professional development. In one district in South Africa, despite unsatisfactory learner performance in intermediary-phase mathematics, teachers demonstrated reluctance in participating in professional development workshops, raising concerns; which formed a topic of investigation by Kasumba and colleagues.

Challenges facing the teaching and learning of mathematics are multifaceted, including institutional-, instructional-, materials-, teacher-, language-, family-, and student-related, among others. Whatever the dimension, these are worthy exploring and in the third article, Prado and Seguisabal examined the challenges that hindered the development of student learning in General Mathematics at one senior high school in the Philippines.

Away from mathematics; the demand for higher education has increased in Uganda which is reflected in the number of tertiary institutions and that of graduates churned out every year, which is quite healthy. The problem is that there seems to be shortage of academic staff in these institutions and even the few that are available prove hard to be retained. Ironically, this has been witnessed in public universities whose salary scales are relatively high. In the fourth article, Patrick and colleagues examine how compensation strategies influence retention of academic staff in public universities in Uganda.

After satisfying the basic physiological needs, workers – including teachers – need to feel secure at their workplaces so that they can freely express themselves and interact with one another, a phenomenon that seems to be under explored in Ugandan secondary schools. So, what is the role of head teachers? In the fifth article, Mugizi and colleagues investigated how head teachers' supportive leadership influenced psychological safety of teachers in secondary schools in a district in Uganda.

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Imagine one visiting a strange place and after a while he/she cannot figure out how he/she arrived there and how to go back or proceed. That's how important map skills are to us, and have to be imparted to school children though it has remained a challenge for some teachers. Could the problem be in the way the subject is being taught? In the sixth article, Seshea and colleagues examined instructional supervision strategies used by heads of department in facilitating map work teaching in one district in South Africa.

Acquiring university education is a dream for many parents and children with the assumption that graduates turn out into productive citizens, beneficial to society. However, the current situation is characterised by unemployed graduates where universities are being accused of producing graduates who lack relevant skills; hence, the increased focus on technical vocational education skills. The question is, to what extent does management of these skills correlate with job creation among university students? In the seventh article, Peter and Gasa investigated just that.

Education is a right for everyone irrespective of gender, religion, race, age, etc., and facilitation of access to it is a preoccupation of governments. In many countries in Africa, primary and secondary education is to a large extent tuition-free. Consequently, school children are expected to be chaste and concentrate on their studies with limited interruptions. In Tanzania, one in every five teenage girls has ever been pregnant and the causes are well documented. What is missing though, is a synthesis focusing on the social and cultural factors contributing to this. In the eighth article, Kazenga and Mhule conducted a systematic review to address this gap.

As it were, not all children get an opportunity to access, let alone complete school. This however should not mean that they are doomed, since there are ways of making up at later stages, i.e., lifelong learning. What is even more interesting is that with the help of technology, there are opportunities for adults to participate in learning under flexible and personalised modes. What is disturbing though is that application of digital technologies within adult educational programmes is quite limited. In the ninth article, Charles and colleagues examined adult learners' perception regarding the use of digital technology in accessing education in Tanzania.

In this era of the Fourth Industrial Revolution, no individual, community, or institution should be left behind when it comes to facilitating of learning. ICT has been proven to be useful in simplifying means of teaching-learning to the extent that traditional methods, modes, and means of teaching-learning are being replaced with digitalised ones. However, it seems that institutions are not moving at the same pace in terms of adopting ICT. In the last article, Oniyide evaluated the application of ICT in private Qur'anic / Arabic school settings in one state in Nigeria.

Thank you very much for supporting IJE through writing and reading.

Maimuna Aminah Nimulola

Editor-in-Chief