

Back to Basics: Rethinking Foundation Phase Teaching and Learning Practices

By Phiwokuhle Mandisa Dhlamini



The need to promote a culture of active and participant learning at the Foundation Phase of Education is a crucial one. This was the common rhetoric in research projects presented by some of the Masters and PhD candidates present at the Southern African Association for Research in Mathematics, Science and Technology Education (SAARMSTE) Eastern Cape Chapter colloquium. This took place on May 20 2017 at the Rhodes University Education Department.

The idea of self-regulated learning took centre stage. The studies conducted by some of the researchers established that this style of independent learning celebrates the strengths and talents that learners bring into the classroom. The researchers also found that it also challenges the conventional educational makeup which glorifies the teacher as the main source of knowledge whilst reducing learners to mere recipients of information.

One of the papers presented during the seminar provoked discussions around language use in the South African schooling system. The question of engaging learners in their mother tongue to advance and enhance understanding of their designed curriculum is one that was highlighted in a presentation entitled, *Investigating the Role of Metacognitive Instruction in Learning Science in Bi/Multilingual Contexts*.



This was presented by Nelson Mandela Metropolitan University (NMMU) PhD candidate, Kholisa Papu. Papu's research is centred on promoting the logic and conceptual understanding of scientific ideals through the use of English and *IsiXhosa* as mediums of instruction. Her project investigates the role of metacognitive instruction in learning science in bi/multilingual contexts. It seeks to normalise

independent thinking among learners as opposed to training them to be mere consumers of a prescribed curriculum. She believes that the use of indigenous African languages consciously cultivates long-term reasoning, critical thinking and conceptualisation in a manner that they can relate.

“The benefits of metacognitive thinking also contribute towards life-long learning. In the workplace, it contributes towards producing employees who are proactive and independent thinkers. So, the benefits of metacognitive behaviour are needed beyond the academic setting,” explained Papu.

Papu’s research further complements the current discourse on decolonising education in South Africa. This national discussion encourages teaching and learning that reflects the lived experiences of learners and their familiar environment. It further magnifies the benefits of mother-tongue learning alongside English as a viable resource of learning through the strategic embedding of metacognitive instruction.



“I hope that the deliberate use of metacognitive instruction in learning science in bi/multilingual science contexts will support the move towards developing *isiXhosa* as an academic language and as a language of learning science, maths and technology,” she reiterated.

In another presentation, the significance of encouraging long-term understanding amongst learners was addressed by Rhodes University MEd in Mathematics Education candidate Gottfried Muhembo.

His research analyses the effectiveness of visual literacy skills in teaching, with the purpose of promoting conceptual understanding in geometry in particular. Although his study focuses on the senior secondary phase in his home country of Namibia, it is also equally applicable and relevant to Foundation Phase teaching and learning.

Muhembo’s research explores the idea of transcending conventional teaching methods to accommodate conceptual teaching by applying visual tools and artefacts. He explained that the use of visual aids such as pictures, drawings and charts in geometry makes the learning process a more practical one for learners. He also mentioned that learners acquire and retain information better when their background knowledge is incorporated into the learning environment.

“This approach to learning eliminates the culture of memorising concepts and information for the mere sake of obtaining good marks; instead it invites learners to seek deeper understanding by making reference to real-life situations,” emphasized Muhembo.



In the spirit of creating a learning environment that draws from learners' active participation, Carolyn Stevenson-Millin's research focuses on learning in a fun and inviting way.



Her project entitled *Merging Music and Mathematics in the Foundation Phase*, perceives grade R learners as central agents to their learning experience. She explained that music possesses certain mathematical principles in beats, melodies and rhythm. Stevenson-Milln turned the colloquium into a classroom as she demonstrated how music would be incorporated into a mathematics lesson using African drums and shakers. This activity helped to display the spirit of group work and improved leadership that results from the fusion of mathematics and music.

“This is an excellent way of getting learners to think for themselves instead of constantly acting upon the teacher's directions, it also improves their concentration skills,” enthusiastically explained Carolyn.

The Chairperson of the SAARMSTE Eastern Cape Chapter, Dr Tulsi Morar, encouraged further research on the Foundation Phase of Education and the language debate in South Africa. Dr Morar emphasised on the importance of spaces such as the SAARMSTE colloquium in disseminating research topics and presenting findings that are relevant to the current teaching and learning practices.

“We need to dedicate more research and attention to the issues that exist in the early stages of education because once we get this stage right, we can expect impressive outcomes in Matric pass rates,” elaborated Dr Morar.