



Dear Readers,

The five articles report on research conducted on teaching and learning related to various fields of specialisation. These range from instructional approaches associated with teacher education, to strategies applied to science and language education at tertiary and secondary education levels. The authors applied various research methodologies, ranging from phenomenological and grounded theory approaches, to pretest – posttest interventions, correlation research, confirmatory investigations, case studies and meta-theoretical reflections.

The two articles by John Duxbury and Lockias Chitanana on cooperative learning and tele-collaborative learning respectively, address the global importance of collaboration and cooperation as two classical postmodern approaches. A lot of research has been done on the importance, practice and impact of cooperative learning on teaching and learning recently. The ‘ability to work with others’ is not only rooted in kindergarten pedagogies and methodologies, but is also manifested in adult education landscapes where problem solving in a cooperative environment is determined by the abilities of individuals to engage with reality multidimensionally.

Kerekes and King emphasise the importance of drama play in teacher education, and in doing so voice the spirit of postmodernity as underpinning premise as it reflects itself in a teacher education programme. This contemporary alternative to our traditional and transmissional teaching training methods, succeeds in bringing together different eclectic aspects, approaches and practices that are demonstrating the authentic character of current teacher education very specifically. Drama play has become a valuable addition to our suite of teacher training practices and contributes in providing students teachers with a route to display their growth and development. We regard reflective (and reflexive) competence as an important component of educator development and the article adds value to the existing epistemology on professional identity development. The outcome of their study is a further extension of the extended (or alternative) opportunities that need to be created when it comes to the teaching of diverse learners in real-life situations. The authors remind us of the complexity of adult education and of the eclectic requirements, driven by the postmodern paradigm of thinking, accompanying the development of educators. The technique adds further value to Korthagen’s ‘Practice-Theory’ where student teachers and beginner educators need to come forward with their own theory for effective teaching and to find a suitable way in demonstrating their understanding of such theory.

The emerge of science process skills teaching as approach towards scientific enquiry and consecutive critical thinking in the early eighties, paved the way in engaging

learners with the substance and syntaxes of the different sciences in the classroom. As a more concrete way to engage with the physical and natural science in the classroom, science processes with a variety of functions ranging from measuring, calculation, problem setting, analysis and synthesis, allowed learners to capture the essence of critical thinking in a more definite and purposeful manner. Scholars such as Bruner, Carin, Finlay, Gilbert, Millar, Osborne, Popper, Solomon, Sund, Trowbridge, Wellington and many others, have entertained and enlightened us on the outcomes of their research on scientific enquiry for many seasons. Critical thinking in science education – as well as in the other learning areas and school subjects – has become a critical outcome or key objective to many science curricula, syllabi, lesson plans and learning task designs. It has often been argued that the true value of education – and not only science education - does not lie in the quality of the outcomes, results or findings, but rather in the inquiry and searching that brought the outcomes to light. Hashemi and his co-workers have therefore succeeded in posing the importance of critical thinking as opposed to traditional modes of exposition, and have successfully linked their argument of critical thinking as important phenomenon of change in education, to the establishment of critical thinking as broader educational policy requirement in a specific educational system.

We have seen various attempts the past twenty years to engage, disengage, critique and reassess the importance of micro teaching to teaching practice in general and to student teacher development more specifically. Abdurrahman's article not only revives our interest in microteaching as component of teacher education, but also shifts the emphasis to the value of a learner-centered approach that has been dominating teacher training practices recently. On the contrary, this debate is currently experiencing a shift in emphasis towards learning and learning-centered learning as opposed to learner-centered learning. The rationale behind the importance of microteaching lies vested within a number of classical teacher roles, competences or standards (American Association for the Advancement of Science and the National Academy of Sciences) such as curriculum development, instructional practices, subject knowledge, administration and management, and assessment. The empirical evidence following a post-positivist intervention, allows a reasonable critique of a teaching strategy that has become inseparable with teacher education the past three decades or more.

Sincerely,  
Prof. William J. FRASER  
**Associate Editor**

University of Pretoria  
Department of Science, Mathematics and Technology Education  
CBIOL FSB M. Acad, South Africa

Email: [William.Fraser@up.ac.za](mailto:William.Fraser@up.ac.za)