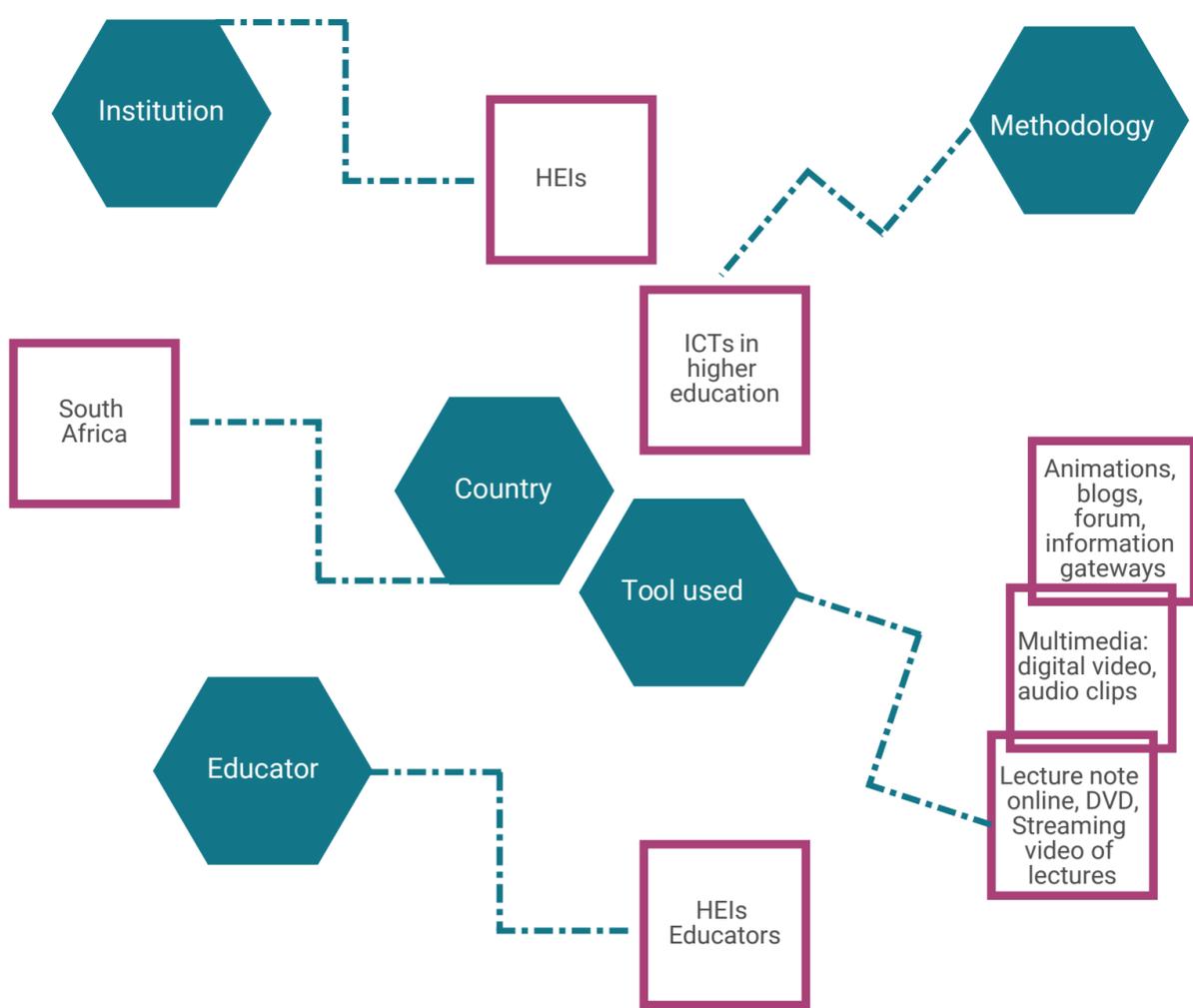


# THE ROLE OF ICTs IN HIGHER EDUCATION IN SOUTH AFRICA: ONE STRATEGY FOR ADDRESSING TEACHING AND LEARNING CHALLENGES



In developing countries where higher education is fraught with serious challenges at multiple levels, there is increasing pressure to ensure that technological possibilities are viewed in the context of educational needs. This case study (conducted at the University of Cape Town) argues that a central role of educational technology is to provide additional strategies that can be used to address the serious environmental and educational challenges faced by educators and students in higher education. It shows how specific and carefully considered interventions using ICTs can be used to address teaching and learning concerns regarding South Africa Higher Education Institutions context. In particular, the use of interactive spreadsheets to develop mathematical literacy skills and the use of educational technology to manage tutorials in large classes.



## Main challenge, Key Success and Enabling Factors

- The major teaching and learning challenges facing higher education revolve around student diversity, which includes, amongst others, diversity in students' academic preparedness, language and schooling background.
- Teaching and learning in South African higher education has also to contend with deep-rooted complex issues and problems stemming primarily from a previously racially divided and unequal education system.
- In addition, large classes are an endemic feature of most university courses posing an additional challenge in the teaching of a diverse student population.

## Lessons Learnt and Recommendations

- The model has been substantiated with examples of the application of educational technologies to teaching mathematical literacy, academic literacy, management of large classes, and ways of influencing curriculum design.
- Our argument is that technology alone is not a solution to the educational challenges faced in South Africa. The challenges lie in identifying and conceptualising ways that educational technology can usefully contribute to student learning experiences, curriculum, and pedagogical designs.
- Educational technology has a key role to play in South African higher education as one of the strategies for addressing teaching and learning concerns.



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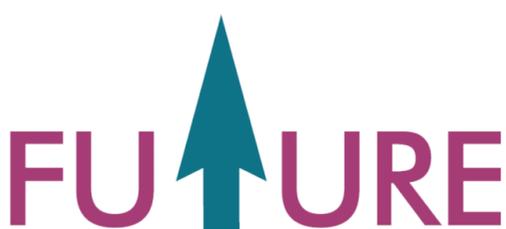
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