

# INNOVATIVE TEACHERS' PEDAGOGICAL EFFICACY IN THEIR USE OF EMERGING TECHNOLOGIES

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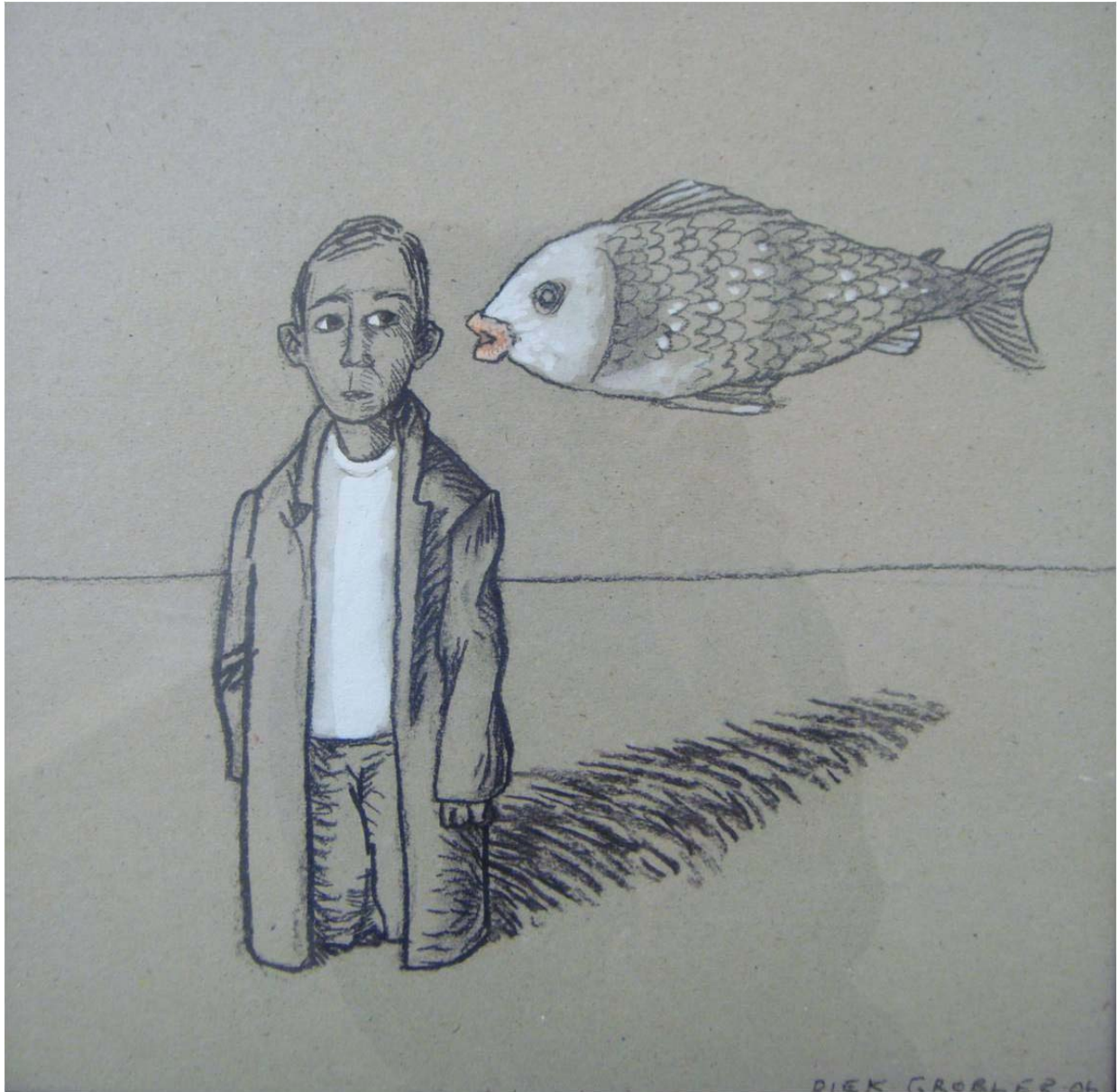
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Charcoal drawing on cardboard: Diek Grobler 2006

## Dedication

*To Soar, Stride, Stroll and Inspire*

The Batchelor and Kotzenberg family values are encapsulated in the pages of this document.

*Humanity*

*Integrity*

*Perseverance*

*Humour*

*Resilience*

*Balance*

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## Declaration

1. I understand what plagiarism is and am aware of the University's policy in this regard.
2. I declare that this thesis is my own work. Where other people's work has been used (either from a printed source, Internet or any other source), this has been properly acknowledged and referenced with departmental requirements.
3. I have not used work previously produced by another student or any other person to hand in as my own.
4. I have not allowed and will not allow anyone to copy this dissertation with the intention of passing it off as his or her own work.

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## Publications

Botha, A., & Batchelor, J. (2011). Mobile Learning. In K. Van Wyk (Ed.), *Teaching and elearning in South African Schools* Macmillan (in press).

Batchelor, J. (2010). *Liberating Learning: Innovative Pedagogical Practices in Africa*. Paper presented at the eLearning Africa: 5th International Conference on ICT for Development, Education and Training, Lusaka, Zambia.

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## Summary

*Innovative teaching is, in essence, the art of breaking down barriers which prevent educators from preparing learners for the gruelling demands of the 21<sup>st</sup> century by exploiting the affordances of emerging Information and communications technologies (ICT) to enhance their teaching and learning strategies. The resulting new educational practice can affect roles, learning situations, patterns of interaction, learning spaces, strategies and theories as well as modes of assessment (Mioduser, Nachmias, Tubin, & Forkosh-Baruch, 2002a). The problem addressed in this study is that of innovative teacher knowledge construction and its context. The role of educational technologies in teaching and learning has evolved and changed dramatically over time but little is understood of how this knowledge manifests itself in their practice and how it is replicated and shared in practice. Pioneering, innovative teachers have developed personal theories that may potentially inform future practice once articulated and disseminated. This study sets out to deepen our understanding of how new knowledge is created in practice by innovative teachers and how this knowledge manifests itself in teaching and learning with emerging ICT. The consequent collaboration between researcher and participant teachers can act as a reconciliatory measure between practice and theory.*

*The literature reviewed draws on tenets from socio-cultural theory, critical philosophy, emerging technology and teaching and learning theory and aims to construct rational foundations to assist in the articulation of new theories which, in turn, will better our understanding of this new emerging pedagogical practice. A post-modernistic interpretive prism views the research investigation through the work of teachers qualified as finalists in the Microsoft Innovative Teachers Forum Awards (ITFA) competition. This annual competition recognises and connects innovative teachers who share a common interest in the enhancement of teaching and learning through the use of technology. Data collecting instruments include meta-data consisting of educational multimedia artefacts, virtual classroom tours (VCT's), document analysis, innovative teacher workshops and interviews. The data were qualitatively analysed using Straussian Grounded Theory Method to articulate a substantive theory which aims to better our understanding of knowledge creation when innovative teachers use emerging technology to enhance their teaching and learning. The resultant substantive theory's three core components comprise moral cohesion; innovation negotiations in context; and responsive*



*governance as essential to innovative teachers' pedagogical efficacy when they engage with emerging technologies.*

*Innovative teachers' perception of the professional burden they carry along with their bricoleur attitude allude to them using whatever means and whatever is at hand to equip learners with the skills required to make them contributing members of their community and the information society. Strategies for the constant renewal of pedagogical practices and the need for reflexivity included the appropriation of learners' personal devices for learning where their disposition had to be carefully managed in accordance with ethical considerations and their various capabilities. Innovative teachers are powerful change agents within their school environments and in this regard a certain amount of freedom could be offered to innovative teachers to further explore their own practice whilst at the same time tasking them with additional responsibilities in growing organisational capabilities. Innovative teachers use their increased status and power within their schools to actively lobby for policy changes through participating in advisory committees and assisting in the drafting of documents that hold strategic, ethical and practical implications for the exploitation of emerging technologies within their schools.*

## **Keywords**

Emerging technologies

Information Communication Technology

Innovative teachers

Pedagogy

Grounded Theory

Technology integration

Pedagogical efficacy

Information society

Organizational learning

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*What something is, as it is, we call its essence or nature. The origin of something is the source of its nature. The question concerning the origin of the work of art asks about the source of its nature. On the usual view, the work arises out of and by means of the activity of the artist. But by what and whence is the artist what he is? By the work: for to say that the work does credit to the master means that it is the work that first lets the artist emerge as a master of his art. The artist is the origin of the work. The work is the origin of the artist. Neither is without the other.*

*– Martin Heidegger (1971)*

Taken from “*The Freirean Legacy*”(Slater, Fain, & Rossatto, 2002)