TEACHER EDUCATION AND DEVELOPMENT IN AFRICA: THE NEED FOR ACCESS, EQUITY, SUSTAINABILITY, QUALITY AND RELEVANCE WITHIN THE CONTEXT OF GLOBALISATION
Speakers’ presentations

Note: All the papers and presentations have been posted as received from the authors. The DETA secretariat takes no responsibility for their format, language and content.

The list has been arranged per stream and alphabetically based on the surname of the first author.

### Stream: Teaching children in diverse African contexts

<table>
<thead>
<tr>
<th>Presenters</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget literacy as a priority in Business Education</td>
<td>America C</td>
</tr>
<tr>
<td>“Rethinking teacher professional development: Ethnodramatic research representation as a means to trigger reflective thinking”</td>
<td>Ankiah-Gangadeen A et al.</td>
</tr>
<tr>
<td>The future we want in Nigeria: Boko Haram and another program of education for life</td>
<td>Ayodele-Bamisaiye O</td>
</tr>
<tr>
<td>Evolution of sexuality education and need for a concerted national adolescence programme</td>
<td>Bholah R &amp; Varma ON</td>
</tr>
<tr>
<td>“What are you?” Experiences of youth with biracial and multicultural identities in the school context</td>
<td>Carvalho-Malekane W</td>
</tr>
<tr>
<td>Interrogating quality in early childhood education: A South African perspective</td>
<td>Excell LA &amp; Linington V</td>
</tr>
<tr>
<td>Enhancing school science in developing countries using inquiry based science education</td>
<td>Gaigher E</td>
</tr>
<tr>
<td>Addressing girls’ violence and gender inequalities in Mozambican primary schools: a longitudinal study</td>
<td>Januário FM &amp; César NA</td>
</tr>
<tr>
<td>Children who commit family member murder: Why should we notice</td>
<td>Moen M</td>
</tr>
<tr>
<td>Preparedness for inclusive education in early childhood education (ECE): A survey of Gweru District ECD centres</td>
<td>Mutovosi O &amp; Musarurwa JF</td>
</tr>
<tr>
<td>Linking large-scale assessment and teachers’ classroom assessment practices: challenges and opportunities for language teaching and learning</td>
<td>Omidire MF &amp; Makgamatha MM</td>
</tr>
<tr>
<td>Inclusion and Exclusion of children with Special Education Needs with regards to mainstream stream schools in Mauritius</td>
<td>Somrajsing D</td>
</tr>
</tbody>
</table>

### Stream: Pedagogies that will achieve “The Future We Want” for education in Africa

<table>
<thead>
<tr>
<th>Presenters</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inside TESSA, the active pedagogy for all teachers</td>
<td>Agbogan KR</td>
</tr>
<tr>
<td>A tray of learning opportunities: a case for low-cost learning supports</td>
<td>Auckloo P &amp; Bizlall VK</td>
</tr>
<tr>
<td>Investigating factors that influence pre-service primary teachers’ self-efficacy in arts education</td>
<td>Beeharry-Konglar M</td>
</tr>
<tr>
<td>Climate change education - successful initiative of a tertiary education institution</td>
<td>Bholah R, Varma ON. &amp; Cyparsade M</td>
</tr>
<tr>
<td>“I am your tutor. What I say is sacrosanct”: an exploration of authority, agency and learning in a college of education in Ghana</td>
<td>Buckler A</td>
</tr>
<tr>
<td>The experiences of educators in the management of inclusive classrooms</td>
<td>Chauke M</td>
</tr>
<tr>
<td>Title</td>
<td>Author(s)</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Towards a theoretical model to investigate the impact of laboratory work in the teaching of cell Biology</td>
<td>Cossa E</td>
</tr>
<tr>
<td>Meeting teacher training needs for inclusive education in sub-Saharan Africa: Audit and possible solutions</td>
<td>Deane M &amp; Komlan A</td>
</tr>
<tr>
<td>Advancing gender equity in an online Geography course: A strategy for teacher education</td>
<td>DeVivo M</td>
</tr>
<tr>
<td>Activating innovation as part of scholarship of teaching: An action research-driven epistemology</td>
<td>Du Toit P</td>
</tr>
<tr>
<td>Re-thinking the value of learning theories to develop self-directedness in open distance students</td>
<td>Geduld B</td>
</tr>
<tr>
<td>The leadership challenge in South Africa: Perspectives of child citizens to strengthen democratic citizen education</td>
<td>Joubert I &amp; Ferreira-Prevost J</td>
</tr>
<tr>
<td>Promoting Learner-Centred Pedagogy in Teacher Education in Rwanda: Factors for success</td>
<td>Kabanda et al.</td>
</tr>
<tr>
<td>Prospects and challenges in the implementation of localized curriculum in selected primary schools in Zambia</td>
<td>Kalimaposo K &amp; Mulubale S</td>
</tr>
<tr>
<td>Transforming science education in Africa through primary science tutors implementation of science enquiry skills</td>
<td>Kamanga N</td>
</tr>
<tr>
<td>Pedagogies for development to address challenges and opportunities of the 21st Century Kenya</td>
<td>Kisirkoi FK</td>
</tr>
<tr>
<td>Indigenisation of the ECD curriculum for a better education future: The Zimbabwean experience</td>
<td>Konyana S</td>
</tr>
<tr>
<td>Reflecting on the role of distance education platforms in the professional development of adult learners</td>
<td>Mahlangu V</td>
</tr>
<tr>
<td>Coping with large classes in democratic South Africa: Are female teachers crying foul?</td>
<td>Makura A</td>
</tr>
<tr>
<td>Learner gender roles and stereotyping notions and the educator mindset regarding equity and equality in schools and academic institutions</td>
<td>Matseleane N</td>
</tr>
<tr>
<td>Teaching the teachers of teachers of teachers</td>
<td>Mays TJ</td>
</tr>
<tr>
<td>To what extent are teacher training programmes meeting the needs of the 21st Century? The case for mathematically gifted children</td>
<td>Mhloolo MK</td>
</tr>
<tr>
<td>Learners’ mistakes and misconceptions on the subject General Ledger, and proposed strategies</td>
<td>Modise AM</td>
</tr>
<tr>
<td>Teaching Accounting in multilingual classrooms in South Africa</td>
<td>Modise MA &amp; Mogashoa LO</td>
</tr>
<tr>
<td>Beyond blame and victimhood: confronting the binaries of Apartheid in the classroom</td>
<td>Moreeng B</td>
</tr>
<tr>
<td>English language learning in teacher professional development through Open and Distance for quality education</td>
<td>Mwalongo JL</td>
</tr>
<tr>
<td>Transdisciplinarity: An innovative practice in teacher education</td>
<td>Mzindle D</td>
</tr>
<tr>
<td>The need for a (critical) pedagogy of place in schools: A South-African perspective</td>
<td>Ontong K</td>
</tr>
<tr>
<td>Teachers’ perceptions of the potentials of OERS for improving the quality of English second language (ESL) teaching in Kenya</td>
<td>Orwenjo DK &amp; Kanana FE</td>
</tr>
<tr>
<td>Effective teaching of electric circuits in grade 12 physical science learners around Motheo District in Free State</td>
<td>Rankhumise M</td>
</tr>
<tr>
<td>Perceptions of culturally diverse grade 12 learners regarding problem-solving in Physical Science during winter school sessions</td>
<td>Sentlalentoa WN, Alexander G &amp; Komati F</td>
</tr>
<tr>
<td>Responding to lack of capacity for community schools in Zambia through group meetings at school and zone</td>
<td>Sinyangwe P</td>
</tr>
<tr>
<td>TESSA OERS- 10 years on: providing a model for transforming teacher development in diverse African contexts</td>
<td>Solly M &amp; Anamuah-Mensah J</td>
</tr>
<tr>
<td>Indigenous knowledge systems (IKS) and the teaching of climate change in Zimbabwean secondary schools</td>
<td>Tanyanyiwa VI</td>
</tr>
</tbody>
</table>
Social Responsibility in reducing gap between high school and 1st-year university Maths: SMU Case, South Africa
Thabane JL & Seeletse S 57

The complexity of trainee teachers’ voice through representations: Exploring avenues of a participatory approach in educational research
Thondee M 58

### Stream: The role and impact of technology on teacher development

<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenters</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive approach of introducing TESSA secondary science OERs for extensive use: A focus on student teachers of UEW</td>
<td>Acquah S &amp; Ngman-Wara E</td>
<td>60</td>
</tr>
<tr>
<td>Accessing TESSA OERs to enhance teaching and learning: The changing phases at OLA College of education Ghana</td>
<td>Anyanful VK</td>
<td>61</td>
</tr>
<tr>
<td>An auto-ethnographic account of tablet PCs usage by SEN educators with cognitively impaired learners</td>
<td>Avinash VO et al.</td>
<td>62</td>
</tr>
<tr>
<td>Attitudes and coping practices of using mobile phones among secondary schools stakeholders - Uganda</td>
<td>Busulwa H</td>
<td>63</td>
</tr>
<tr>
<td>Training teachers in using technology to achieve the future we want: A case of Botswana</td>
<td>Butale C</td>
<td>64</td>
</tr>
<tr>
<td>Evaluating Mobile Apps for teaching</td>
<td>Callaghan R</td>
<td>66</td>
</tr>
<tr>
<td>Use of OERs for school science and Mathematics education: an Indian experience</td>
<td>Deshmukh N</td>
<td>66</td>
</tr>
<tr>
<td>Using TESSA OERs to enrich the teaching and learning practices of basic school teachers in Winneba Municipality</td>
<td>Essuman S</td>
<td>67</td>
</tr>
<tr>
<td>ICT Integration in the classroom teaching process: Investigating perception of secondary school teachers in Mauritius</td>
<td>Gowreesunkar V &amp; Hugues S</td>
<td>68</td>
</tr>
<tr>
<td>New relationships and dialogues: How the technological objects we use to teach, impact on teacher development</td>
<td>Haupt G</td>
<td>69</td>
</tr>
<tr>
<td>Opportunities and challenges of online professional development for teachers in a small island state</td>
<td>Jianey F &amp; Oogarah-Pratap B</td>
<td>70</td>
</tr>
<tr>
<td>Primary teacher professional development on ICT and motivation in teaching</td>
<td>Kabate M</td>
<td>71</td>
</tr>
<tr>
<td>Achieving “THE FUTURE WE WANT” for education in Africa being a myth and a reality</td>
<td>Kajie D</td>
<td>72</td>
</tr>
<tr>
<td>Uses by and challenges from teachers using TESSA print materials in secondary schools selected Tanzanian schools</td>
<td>Katabaro J</td>
<td>73</td>
</tr>
<tr>
<td>TESSA OERs and participatory teaching approaches</td>
<td>Kaulu G &amp; Cibesakunda A</td>
<td>74</td>
</tr>
<tr>
<td>An investigation into the implementation of teaching and learning technologies at the University of Mthwakazi rural campuses</td>
<td>Madlela B</td>
<td>75</td>
</tr>
<tr>
<td>A contribution to evaluating mathematical online learning tools such as Khan Academy and tablet technology</td>
<td>Mahomed S</td>
<td>76</td>
</tr>
<tr>
<td>The role of MOOCs in international higher education</td>
<td>May EL</td>
<td>78</td>
</tr>
<tr>
<td>The influence of educational technology on curriculum innovation</td>
<td>Mihai MA</td>
<td>79</td>
</tr>
<tr>
<td>How to sync in a blink: Teaching online in countries with restricted internet access</td>
<td>Mischke G &amp; Bajnath N</td>
<td>81</td>
</tr>
<tr>
<td>E-tutors’ perspectives on e-tutoring as an online resource</td>
<td>Mohangi K &amp; Naidu N</td>
<td>81</td>
</tr>
<tr>
<td>Bolstering OERs for innovative teacher professional development outreach programmes: the case of TESSA in Tanzania</td>
<td>Muganda CK</td>
<td>82</td>
</tr>
<tr>
<td>Tablet pcs transforming relationships in teacher education to support pedagogic change</td>
<td>Murphy P et al.</td>
<td>84</td>
</tr>
<tr>
<td>Title</td>
<td>Authors</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Embracing new technologies to enhance teaching and learning for school learners</td>
<td>Naidoo V</td>
<td>85</td>
</tr>
<tr>
<td>Teaching and learning at a distance</td>
<td>Ntloedibe-Kuswani GS</td>
<td>86</td>
</tr>
<tr>
<td>Developing autonomous online learning material concerning oral competencies in French at lower secondary level: Insights from language didactics and (socio)linguistics</td>
<td>Oozeerally S &amp; Peedoly K</td>
<td>89</td>
</tr>
<tr>
<td>The use of cell phones to access TESSA OERS: Experiences of students in Winneba, Ghana</td>
<td>Otami S</td>
<td>90</td>
</tr>
<tr>
<td>Evaluation of collaborative model of peer teaching in Ghana using TESSA materials: Experiences of teachers</td>
<td>Otami S, Adzifome NS &amp; Amihere AK</td>
<td>90</td>
</tr>
<tr>
<td>Improved access and quality through integration of ICT in teacher professional development</td>
<td>Seeletso MK</td>
<td>91</td>
</tr>
<tr>
<td>Science teaching and learning using TESSA material in Kenya</td>
<td>Shayo S</td>
<td>92</td>
</tr>
<tr>
<td>What are the characteristics of materials designed to support teacher learning?</td>
<td>Stutchbury K</td>
<td>93</td>
</tr>
<tr>
<td>The effect of computer technology on learning in a multilingual language class</td>
<td>Sujee EJ</td>
<td>93</td>
</tr>
<tr>
<td>ICT-assisted Mathematics and science teachers professional development: Insights from Rwanda</td>
<td>Uworwabayeho A</td>
<td>94</td>
</tr>
<tr>
<td>Mediocrity to excellence: Transforming interactive whiteboard teaching</td>
<td>Van Niekerk MP</td>
<td>95</td>
</tr>
<tr>
<td>The quintessence of teaching large classes: the role of education innovation</td>
<td>Verschoor J &amp; Wilson D</td>
<td>97</td>
</tr>
<tr>
<td>Challenges of embedding and extending TESSA science OERs for effective pedagogy in secondary schools in Kenya</td>
<td>Wambugu PW &amp; Keraro FN</td>
<td>97</td>
</tr>
<tr>
<td>Increasing teacher agency through use of openly licensed digital stories for early literacy development</td>
<td>Welch T</td>
<td>98</td>
</tr>
<tr>
<td>Computer tablets in the National Teachers’ Institute’s post-graduate diploma: Expectations and challenges</td>
<td>Yaya D</td>
<td>99</td>
</tr>
<tr>
<td>Stream: Quality in education as a prerequisite to establish “The Future We Want” for education in Africa</td>
<td>Presenters</td>
<td>Page</td>
</tr>
<tr>
<td>Quality Outcome Indicators for School Performance Improvement: The Case of Ghana’s SPIP</td>
<td>Abreh MK</td>
<td>101</td>
</tr>
<tr>
<td>Towards the construction of compulsory education of boys and girls in Maasai pastoral community</td>
<td>Akinyi Otieno CM</td>
<td>102</td>
</tr>
<tr>
<td>Ensuring quality delivery of open distance learning (ODL) teacher education programmes</td>
<td>Aluko FR</td>
<td>103</td>
</tr>
<tr>
<td>Career and psychosocial challenges and coping strategies of newly qualified secondary school teachers in Zambia</td>
<td>Banja MK</td>
<td>104</td>
</tr>
<tr>
<td>Supporting Mathematical Literacy and Accounting teachers in South Africa</td>
<td>Bruynse I</td>
<td>105</td>
</tr>
<tr>
<td>Intra and intercontinental migration of South African teachers: the sharing of knowledge</td>
<td>De Villiers</td>
<td>106</td>
</tr>
<tr>
<td>Quality materials in support of quality teacher education</td>
<td>Drew S &amp; Baxen J</td>
<td>107</td>
</tr>
<tr>
<td>Developing the linguistic proficiency of pre-service teachers who use English as a medium of instruction</td>
<td>Evans R</td>
<td>108</td>
</tr>
<tr>
<td>The expansion of early childhood education: Differences between rural and urban schools in Zimbabwe</td>
<td>Fobelets S et al.</td>
<td>109</td>
</tr>
<tr>
<td>Change of school structure in Zambia: Is it new wine in old wineskins?</td>
<td>Kalimaposo K</td>
<td>110</td>
</tr>
<tr>
<td>Creating the future we want through provision of quality teacher education for learners with exceptionalities</td>
<td>Karugu KG &amp; Otube WN</td>
<td>111</td>
</tr>
<tr>
<td>The role of the module coordinator in a distance education program during contact sessions</td>
<td>Mampane S</td>
<td>112</td>
</tr>
<tr>
<td>Title</td>
<td>Authors</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Perceived barriers to learning and academic self-efficacy of pre-service students and their effect on academic performance</td>
<td>Matoti ST &amp; Lekhu A</td>
<td>113</td>
</tr>
<tr>
<td>Large classes and microteaching experience of student-teachers and teacher educators (Work in progress)</td>
<td>Matoti S &amp; Lekhu A</td>
<td>114</td>
</tr>
<tr>
<td>Creating platforms for teachers to participate in sculpturing the future through learner support</td>
<td>Mbuyuza-DeHeer NMM</td>
<td>116</td>
</tr>
<tr>
<td>Researching student satisfaction in ODL learning environment to enhance the quality of education in Africa</td>
<td>Mdakane M &amp; Els CJ</td>
<td>116</td>
</tr>
<tr>
<td>Putting out fires in urban schools: a study of how schools manage crime</td>
<td>Mohlakwana A</td>
<td>117</td>
</tr>
<tr>
<td>Continuing Teacher training as key for Sustainable educational quality: A focus on tertiary education in Botswana</td>
<td>Morolong BL &amp; Magang VG</td>
<td>119</td>
</tr>
<tr>
<td>Preparing quality teachers – A challenge of contemporary teacher education curriculum design</td>
<td>Mulenga IM</td>
<td>120</td>
</tr>
<tr>
<td>Unlocking the potential of public libraries in supporting teaching and learning in open and distance learning in Makerere University</td>
<td>Nabushawo H</td>
<td>122</td>
</tr>
<tr>
<td>Exploring ethical decision-making in universities</td>
<td>Nieuwenhuis J</td>
<td>123</td>
</tr>
<tr>
<td>Education access and quality education in Rwanda: Achievements and challenges</td>
<td>Nzabaliwa W &amp; Ntahomvuksye C</td>
<td>124</td>
</tr>
<tr>
<td>Part-time distance education lecturers’ experiences of students’ level of readiness during the first learning support session for BEd(Hons) students</td>
<td>Ogina T</td>
<td>125</td>
</tr>
<tr>
<td>Why do English speakers (other than native) lack flair and fluency?</td>
<td>Patil R</td>
<td>126</td>
</tr>
<tr>
<td>Perceptions of secondary school teachers regarding Human Rights Education Pedagogy in the Free State Province</td>
<td>Segalo LJ</td>
<td>129</td>
</tr>
<tr>
<td>Improving service to students through enhancement of academics as teachers at a university of technology</td>
<td>Sentalentoa WN &amp; Alexander G</td>
<td>130</td>
</tr>
<tr>
<td>What are the demands for quality educational transformation in diverse African context regarding “the future we want?”</td>
<td>Slabbert JA</td>
<td>131</td>
</tr>
</tbody>
</table>
BUDGET LITERACY AS A PRIORITY IN BUSINESS EDUCATION

Carina America
Economic and Management Sciences
Department of Curriculum Studies
Education Faculty
Stellenbosch University
Cape Town, South Africa

Abstract

South Africa’s socio-economic context of inequality, poverty, and high unemployment presents enormous challenges to many households and individuals. Numerous young learners witness their families having to find ways to stretch limited resources and to manage their debt in order to survive. A rising concern is that South Africans have a poor savings culture which could affect their financial security in the long-term. Prior studies indicate poor levels of financial literacy of high school learners (Varcoe, Martin, Devitto & Go, 2005) and in developing countries (cf. Pauw, Oosthuizen & van der Westhuizen, 2008; Oseifuah, 2010; Tustin, 2010; The World Bank, DFID, OECD & CGAP 2009). Teaching financial literacy in high schools has shown to increase financial knowledge, self-efficacy and savings rates in the short term (Bartholomae & Fox, 2002). Budget literacy refers to the competencies required to specify financial objectives and to decide about the allocation of the financial resources. This paper offers preliminary exploration of Budget literacy using Business Education school curriculum policies, which are dispersed over a spectrum of economic, financial and business subject matter content knowledge. Content analysis is applied describing the trends and principles as it relates to the progression, continuity and sequencing of content. Strengthening budget literacy in the school curriculum can reinforce
social messages to young consumers about the desirability of engaging in particular financial behaviours and the ability to manage life situations from a financial point of view (234 words).

References:


RETHINKING TEACHER PROFESSIONAL DEVELOPMENT: ETHNODRAMATIC RESEARCH REPRESENTATION AS A MEANS TO TRIGGER REFLECTIVE THINKING.

Aruna Ankiah-Gangadeen
Pascal Nadal
Ashish Beesoondyal
Rajendra Korlapu-Bungaree
Shalini Sooben-Ramasawmy

Mauritius Institute of Education
Corresponding author: Aruna Ankiah-Gangadeen
a.ankiah@mieonline.org
+230 52566456
+230-454-1037 (fax)

Abstract

This paper examines the use of an ethnodramatic research representation to prompt trainee teachers to critically reflect on the implications of adopting particular approaches for the teaching of English in the Mauritian context. It had been noted over the years that the lecture method, despite being watered down by a more constructivist approach, was failing to bring about the desired level of reflective thinking about pedagogical issues. Moving away from a former construction of teaching as a monolithic concept, critical reflexivity treasures the revelation of stances of doubt and ambiguity (Hardy & Palmer, 1999), particularly when classroom practices run counter to official policies and institutional regulations (Schnellert et al., 2014). Against such a backdrop, experiential learning as a form of reflexive practice (Osterman & Kottkamp, 1993) is what led the researchers to use ethnodrama as a pedagogical tool. Well documented in the field of qualitative research, ethnodrama
is relatively less popular in teacher education. Nevertheless, the researchers deemed that by the very nature of its impact on participants and audience, ethnodrama could be an effective tool to trigger divergent thinking and foster rich reflections and discussions on pedagogical choices.

The transformation of data and analysis into a performance script was, for its part, based on the principle of reproducing reality. It was also important to decide whose voice was being brought out, as this notion is central to ethnodrama. The script created space for the participants’ construction of situation and characters. Frequent modifications were made depending on how actor-participants perceived and responded to their roles, based on their own experience of the school context. The convergence of both person and personae during the rehearsal process contributed to authenticity of situations and of language, which in turn enhanced action, dialogue and staging. Time and space being important considerations for the script and the staging, various dramatic devices were used, but there was less focus on technicalities of performance and more on depicting characters in their respective contexts, so that the audience could clearly identify with each character.

For the purposes of this paper, data was collected through focus group discussions with actor-participants and audience members. Findings revealed that this ethnodramatic experience enabled trainees to become more sensitive to the implications of adopting certain approaches and the factors influencing their implementation. The schism between theory and practice struck them vividly as they could identify with the situations depicted. Ethnodrama had created a third learning space where they were able to analyse what they had observed during their school placement. This triggered a level of critical and reflective thinking that enabled them to develop insights into the teaching and learning of English in multilingual Mauritius.

They were consequently able to identify some of the most relevant issues in the field of ELT and engage with the current debates in a most critical manner.

**Keywords:** Ethnodramatic research representation, English language teaching (ELT), teacher education, critical and reflective thinking.

**References**


THE FUTURE WE WANT IN NIGERIA: BOKO HARAM AND ANOTHER PROGRAM OF EDUCATION FOR LIFE

Oluremi Ayodele-Bamisaiye
Department of Teacher Education
University of Ibadan, Nigeria
anikeadeolympus@gmail.com
+2348037949870

Abstract:
This paper is in the discipline of Philosophy of Education. The author will critically examine the problem of Boko Haram insurgency/terrorism in Nigeria from philosophical, socio-cultural, and educational perspectives. This discussion will be in three parts. The first part will examine the socio-political and religious antecedents to Boko Haram especially in the North-East geo-political zone of Nigeria and the socio-economic gaps caused by having two parallel educational systems in this social context. In the second part of the paper, the author will discuss religious, political and educational fallouts of Boko Haram on the Nigerian nation with the accompanying national casualties. The author will show how education that should pave the way for national development has come to be seen as abomination, judging by the behavior of the beneficiaries of the educational system who also occupy important political positions in the same socio-cultural context. The third part of the paper essentially borrows from Plato’s idea of the Ideal state as professed in his Republic. This part will focus on the future of national peace and stability which we want in Nigeria and how the two parallel educational systems can be positively engaged for the benefit of the people and the peace and stability of the nation.

EVOLUTION OF SEXUALITY EDUCATION AND NEED FOR A CONCERTED NATIONAL ADOLESCENCE PROGRAMME

Ravhee Bholah
Oomandra Nath Varma
Mauritius Institute of Education
Corresponding author: Ravhee Bholah
r.bholah@mieonline.org
+230 4016555
+230 4675159 (fax)

Abstract:
Adolescence is a period of both physical and behavioural growth that is notable for an increase in risk taking behavior and a growing interest in sex. Due to lack of reliable information, young people experience sex in unplanned, unprotected and sometimes coercive ways, putting them at risk of unwanted pregnancies and sexually transmitted infections, including HIV and AIDS. Current situations repeatedly signals the need to address comprehensive and effective sexuality education. However, this subject in the Republic of Mauritius has long been a sensitive and controversial issue. The government and relevant stakeholders have taken appropriate steps to address this issue but it needs further attention. This paper will explore the changing patterns with adolescence and highlights the evolution of sexuality education in a multi-ethnic societal context. It will critically analyze the subject with respect to various aspects including content coverage and pedagogy employed in different teaching and learning contexts. There is also an urgent need for concerted multi-stakeholders action plan for youth, parental education, community mobilization, evaluation of sexuality education programmes and appropriate research studies.
WHAT ARE YOU? EXPERIENCES OF YOUTH WITH BIRACIAL AND MULTICULTURAL IDENTITIES IN THE SCHOOL CONTEXT

Wendy Carvalho-Malekane
University of Pretoria
Pretoria, South Africa
wendy.malekane@up.ac.za
0824121311
012 4205757

Abstract

Monoracial relationships still dominate in post-apartheid South Africa. However, over the years, the demographics across South Africa have changed considerably resulting in an increased trend of interracial relationships. Consequently, it can be assumed that a population of biracial people exists within the country. Biracial is a term used to refer to individuals who have parents from two socially defined racial groups (Francis, 2006). The amount of individuals with a biracial heritage has created an increased need for comprehending the unique perspectives and experiences related to an individual with a diverse racial background (Shih & Sanchez, 2009). Specifically, queries about how biracial individuals experience unique aspects of their identity formation have increased, as a result of their biracial heritage (Khanna & Harris, 2009). Existing studies indicate that one of the unique issues confronting multiracial individuals is the process of identity development (Gillem, Cohn & Thorne, 2001; Miville, Baysden & So-Lloyd, 1999; Miville, Constantine, Baysden, & So-Lloyd, 2005; Pedrotti, Edwards & Lopez, 2008; Root, 1996). This may be a result of the fact that “monoracial models of identity do not recognise the social complexity of adopting a biracial identity in a monoracially defined social world” (Miville et al., 2005:303).

Furthermore, individuals with a biracial heritage challenge society’s obsolete norms and assumptions regarding race because it is not possible to assign them, with ease, to any of the pre-existing racial categories within society (Spickard, 1992; Shih, Bonam, Sanchez & Peck, 2007).

The aim of this study is to explore how youth with different racial and cultural heritages construct an identity and how they experience the world as a biracial person. South African youth were purposefully selected (n=10, 5 males, 5 females) who are first-generation offspring from interracial relationships. Written narratives and narrative interviews (audio recorded and transcribed verbatim) served as data sources and were supplemented by researcher field notes. The core topics identified which relate to the education context are (i) education settings, peers and the biracial individual, (ii) ascribing a racial identity to the biracial individual, (iii) official documents and census not creating a space to construct a biracial identity and (iii) experiences of discrimination and racism in the school context. As children spend most of their day at school, it is imperative for teachers and school counsellors to be equipped with information so as to support and understand biracial children and their interracial families. The purpose of this paper is to develop an awareness and concern for multicultural and biracial children in the school context.

References


**INTERROGATING QUALITY IN EARLY CHILDHOOD EDUCATION: A SOUTH AFRICAN PERSPECTIVE**

Lorayne Anne **Excell**
Wits University
lorayne.excell@wits.ac.za
+27117173195
+ 27117173009 (fax)

Vivien **Linington**
Wits University
vivien.lington@wits.ac.za
+27117173057
+ 27117173009 (fax)

**Abstract**

Within the South African context early childhood education (ECE) is receiving increasing attention at both government and civil society levels. This has resulted in children accessing ECE in increasing numbers. But although access may open the doors to learning, it does not ensure a quality early learning experience nor a child’s acquisition of the knowledge, skills, values and dispositions to counter the educational challenges of today. The pivotal factor is quality. Quality ECE has the potential to drive redress and realise the promise inherent in the South African Constitution.

But as Moss and Pence (2009) argue, quality is not a neutral or an uncontested concept. Current understandings of quality are drawn in the main from a Western perspective and may not be achievable or appropriate in all the disparate educational contexts of South Africa today. ECE teachers and other stakeholders need imagination, creativity, collaboration and innovation if they are to facilitate quality...
teaching and learning experiences in these disparate contexts. They need, in short, to embrace a professional practice that takes cognisance of contextual, historical and cultural factors.

The paper draws on the three dimensions of a community of practice, mutual engagement, joint enterprise and shared repertoire (Wenger, 1998), to explain how new dialogic spaces are emerging; spaces that have the potential to generate innovation, reflection and new understandings of what could constitute quality ECE throughout South Africa. This paper will report how conversations in these spaces have already interrogated different stakeholders’ understandings of quality. In addition, it will set out how these conversations dealt with the constraints and possibilities that could arise in relation to different understandings of quality. Finally the paper investigates how these emerging understandings of quality are being realised in actual practice.

ENHANCING SCHOOL SCIENCE IN DEVELOPING COUNTRIES USING INQUIRY BASED SCIENCE EDUCATION

Estelle Gaigher
University of Pretoria
Pretoria, South Africa
estelle.gaigher@up.ac.za
+27 (12) 420 5663
+27 (12) 420 5621 (fax)

Abstract

This paper presents literature based arguments to promote the use of inquiry based science education as a teaching approach to enhance science teaching in developing countries. Science education contributes to economic development in two ways. Firstly, and obviously, it prepares learners to enter into science subjects in tertiary education, essential to provide the future generation of scientific professionals. Secondly, and much more complex, is the ‘democratic argument’ concerning the needs of the majority of learners who will not follow scientific careers (Millar & Osborne, 1998). These learners are future citizens in societies that increasingly rely on the products of science. Their decisions impact not only their own futures, but also the economic development of their countries.

The conflicts between the scientific worldview and non-western cultures (Chiu & Duit, 2011) present obstacles to science education in developing contexts. These obstacles were described as socio-cultural borders that learners have to cross upon entering the science classroom (Aikenhead, 1996). Science therefore not only often contradicts traditional knowledge, but also challenges traditional cultural behaviour, by encouraging critical, investigative scientific attitudes. From a non-scientific, non-western perspective, such a
questioning attitude may be an undesirable, disrespectful approach which threatens cultural values. On the other hand, culturally based skills such as collaboration, accurate observation, connectedness to nature and a desire to learn from experts may make a valuable contribution to learning science in inquiry based classrooms (Lee, Buxton, Lewis & LeRoy, 2006). Inquiry based practical activities require physical as well as intellectual engagement (Hofstein & Lunetta, 2004), presenting ideal situations to learn science and to learn about science. Groups of learners are engaged in scientific questions, planning and carrying out procedures, collecting data and formulating answers based on evidence, learning to participate in the physical, intellectual and social aspects of scientific practice. Doing so, learners are actually engaging in collateral learning, accepting the rules of the scientific enterprise while embracing home culture and holding conflicting ideas simultaneously in long term memory and resolved to various degrees.

In conclusion, it is recommend that cultural contributions be embraced in inquiry based science education. In this way, scientific inquiry may contribute to bridge the divide between home culture and the culture of science, thereby bringing scientific careers and scientific literacy within reach of all learners in developing countries.

References


ADDRESSING GIRLS’ VIOLENCE AND GENDER INEQUALITIES IN MOZAMBICAN PRIMARY SCHOOLS: A LONGITUDINAL STUDY

Francisco Maria Januário
Department of Science and Mathematics Education
Eduardo Mondlane University, Faculty of Education
Mozambique
januariofm90@gmail.com
+258826981112

Nilza Aurora Tarcísio César
Department of Teacher Training and Curriculum Studies
Eduardo Mondlane University, Faculty of Education
Mozambique
nilza.cesar@uem.mz
+258824895650

Abstract

This paper reports a longitudinal study carried out in Manhica District, Maputo Province, Mozambique. The study is part of a more comprehensive research undertaken under the auspices of the Stop Violence Against Girls in Schools’ project carried out between 2008 and 2013, which was jointly conducted by ActionAid Mozambique and the Faculty of Education, and funded by Big-Lottery Fund from United Kingdom. The study aimed at tracking changes in girls’ capabilities to challenge violence and gender inequalities in school environment and examine how social relations and institutions influence girls to do so. The conceptual framework of the study included acts of physical, sexual and psychological violence, as well as everyday interactions, institutions and structures which produce and perpetuate acts of violence, discrimination and inequalities among female school children. An ethnographic method was employed to perform waves of fieldwork visits (July 2009, October 2011, March 2012, October 2012, and March 2013) to Manhica communities in order to build a deep understanding of how girls face and tackle violence and how communities’ perceptions influence this.

A prior baseline study of fifteen schools was undertaken to inform the state-of-art-knowledge of the situation. Then four schools and their respective communities were sampled for the longitudinal study taking into account criteria such as girls’ ages, closeness of the schools to the main road, and availability of employment opportunities. In each school, participants included three study girls from each of three age groups (8-10, 11-13, 14-17 years), and their friends (boys and girls), classmates (boys and girls), parents, head teachers, and teachers. At community level the sample included also traditional and religious leaders, social professionals (e.g. women’s group leaders, human rights, and child protection units), out of school girls, district education, health and police officers. Study girls were selected according to their level of confidence and achievement (high/medium/low), and their participation in girls’ clubs. A range of data collection methods were used, including individual interviews, classroom observations, focus group discussions and field diaries mainly for the journey school-home-school and transect walks within communities. The study results showed that there were still very weak mechanisms to help girls’ challenge violence and gender inequalities. The community at large deals with gender-based violence in the same way every other offence is dealt with. However, the girls’ level of consciousness in relation to their rights and the importance of getting support (irrespective of who the perpetrator is) showed to rise from wave to wave. Tasks like sweeping the school yard or watering the plants and household chores were also seen as playing a role in the way girls were challenging violence and inequalities. Schools have made a collective effort to tackle violence against children by condemning...
physical abuse and encouraging students to report incidents but education officers were conscious of their weaknesses when it comes to monitor such situations. Verbal abuse was very widespread amongst teachers while communities continued to display very weak, scattered and uncoordinated mechanisms to address violence and inequality issues.

Keywords: Gender inequalities, protection systems, violence.

CHILDREN WHO COMMIT FAMILY MEMBER MURDER: WHY SHOULD WE TAKE NOTICE?

Melanie Moen
University of Pretoria
Faculty of Education
Department of Early Childhood Education
Melanie.moen@up.ac.za
+27 12 420 5632
+27 12 420 5595 (fax)

Abstract

The aim of the paper is to share some insights into family member murder committed by children. A systematic literature review will be presented to highlight the possible individual and systemic causes of these violent acts. From this study the manifestations of violence have emerged which directly affects all societal systems. Phenomenology, which attempts to clarify what appears to us and the manner in which we encounter the world and fellow human beings (Kruger, 1988), serves as theoretical framework. It is believed that if we understand violence better, we will be better equipped to prevent it.

In the past, far too little attention has been paid to violence related crimes, in particular relating to children and young people. The existing body of knowledge is limited, especially on the African continent. The fact, however, is that violent crimes committed by children is a major problem. A report compiled by Muntingh and Ballard (2012), shed some light on the issue of children in South African prisons. According to the report there were four hundred and fifty one children detained for aggressive crimes in 2011. Twenty six of these children committed murder and seven were in prison for attempted murder. This report concluded that aggressive and sexual offenses committed by children in South Africa, have increased by
approximately twelve percent over the period from 1995 to 2011 (Muntingh & Ballard, 2012). A report compiled by Statistics South Africa (2014), indicates that 39,3% of people are murdered by a known member of the community. Even more disturbing is the fact that 24, 9% of all murders are committed by a relative or household member. These facts are noteworthy as it highlights an ever increasing spiral of violence.

Murder is seen as the most serious of all crimes, especially when committed by children. Family member murder is taboo in all known societies, and yet in certain circumstances it does occur. The family in society is seen as the primary caregiver of the child, the one place where family members should feel safe and protected. If one system is upset by something like murder it creates a snowball effect to all other systems. Murder has serious human and social costs to society and places pressure on family, education and criminal justice systems. Therefore, knowledge that can assist in understanding, predicting and preventing violent behaviour is worth reporting. As society and educators we have not paid attention to this phenomenon. As concerned educators and citizens we should proverbially look at this phenomenon through the eyes of a child. It is therefore imperative to listen, observe and pay attention. The data employed for this presentation will focus on insights and preventative measures that can inform curriculum, classroom and community based programmes. It is our hope that insight into the social challenge namely, youth violence will have a positive impact on the “future we want” for all our children.

References


PREPAREDNESS FOR INCLUSIVE EDUCATION IN EARLY CHILDHOOD EDUCATION (ECE): A SURVEY OF GWERU DISTRICT ECD CENTRES.

Onias Mutoyosi
Mkoba Teachers College, Gweru, Zimbabwe
Zimbabwe Open University
Great Zimbabwe University
onnymutovosi@gmail.com
+263 775 073 650

Joseph Fenikias Musarurwa
Head of Department of Theory of Education, Early Childhood Development, Teaching Practice and Distance Education at Mkoba Teachers College, Gweru, Zimbabwe
jfmusarurwa@gmail.com
+263 775 882 678

Abstract

The philosophy of inclusivism is based upon the principles and practice of Inclusive Education and inclusivity within the scope of human rights and social justice. Education was declared as a basic human right in Zimbabwe in line with the international Millennium Development Goals (MDGs). It is a widely acknowledged fact that no meaningful development can be realised without considering education as a fundamental right for every child. The promotion of Education for All (EFA) as a basic human right is central to the international community’s concerted efforts to uplift the well-being of the child. Education is thus universalised for children to get maximum benefits from the system. The Convention on the Rights of the Child had impetus for the international community to meet on the Dakar Conference that affirmed the need for nations to commit themselves to achieve Education for All by 2015. It is on this international convention that educational goals were promulgated among which the first was to ‘Expand Early Childhood Care and Education’. Thus, educational attainment and access are critical for the socio-economic development of societies. Zimbabwe then adopted compulsory Early Childhood Development (ECD) as a national policy but had challenges of exclusion of children with diverse needs. The recent paradigm shift towards Inclusive Education and inclusivity has become a central concern within Zimbabwe’s education at all levels from primary to tertiary education. Insurmountable efforts in response to the policy to adopt the philosophy of inclusivism was realised at primary, secondary and tertiary levels of education. However, the adoption of Inclusive Education and inclusivity at ECD level is still a challenge. Yet, the horizon of accessing and delivering quality and sustainable early childhood education that can transform schools and communities into ‘The Future We Want’ seems elusive. ECD centres in diverse geographic and socio-cultural contexts are sidelined from the benefits associated with Inclusive Education and inclusivity. This study seeks to qualitatively examine through descriptive survey, the state of preparedness for adoption of the philosophy of inclusivism and inclusivity among thirty Gweru urban and rural ECD centres. The study focuses on how adoption of Inclusive Education can have a positive impact on ‘The Future We Want’ for the children of Zimbabwe by addressing the socio-cultural challenges in diverse African contexts that they find themselves in. It also focuses on how these challenges impact on their education and how education systems and institutions need to respond so as to be fully ‘inclusive’. Observation checklists, interviews and questionnaires would be administered in data gathering from ECD personnel to establish the state of preparedness and challenges faced to facilitate attainment of ‘The Future We Want’ as an education transitional dream for the nation. The findings enlighten the educational fraternity on the nature of
‘inclusion’ that children with diverse needs experience within the different contexts of Zimbabwe’s communities. The research findings help inform educational practitioners, the government and charitable organisations on necessary interventions that should be adopted for attainment of ‘The Future We Want’ as a dream for Zimbabwe’s educational achievement.

Keywords: Philosophy of Inclusivism; Early Childhood Development (ECD); preparedness; human rights based education, early childhood education (ECE); inclusive education; inclusivity; education transitional dream; The Future We Want; children with diverse needs.

LINKING LARGE-SCALE ASSESSMENT AND TEACHERS’ CLASSROOM ASSESSMENT PRACTICES: CHALLENGES AND OPPORTUNITIES FOR LANGUAGE TEACHING AND LEARNING

Margaret Funke Omidire
Department of Educational Psychology
University of Pretoria
funke.omidire@up.ac.za
+27 72 949 3771

Matthews Matome Makgamatha
Education and Skills Development
HSRC
mmmakgamatha@hsrc.ac.za
+27 82 673 9603

Abstract
The introduction of annual assessments in South African schools from 2011 represents yet another attempt at remediying low learner performance in literacy and numeracy. The education authorities have embarked on the yearly practice of testing learners in Grades 1 to 6 and 9 for the twin purpose of measuring the performance of the education system and of providing diagnostic information to teachers to guide and inform their teaching. The results have shown that there are no significant improvements in Literacy in English language.

In our paper, we present a review of literature on assessment practices prior to and after the introduction of Annual National Assessment (ANA) and the Curriculum Assessment Policy Statement (CAPS). We also present an analysis of the CAPS guidelines for supporting
teaching and learning of English language and the ANA reports on steps for improvement of literacy figures.

This analysis is to determine the synergy or lack of synergy between the intent and implementation of the CAPS/ANA reports and teachers’ classroom assessment practices. We further discuss both the challenges and opportunities of utilising annual assessments as a vehicle for improving English language teaching and learning in the classroom. We conclude by providing hints on how English language learning and teaching can be enhanced through this national testing regime.

INCLUSION AND EXCLUSION OF CHILDREN WITH SPECIAL EDUCATION NEEDS WITH REGARDS TO MAINSTREAM STREAM SCHOOLS IN MAURITIUS

Dhunno Somrajsingh

Abstract

This paper analyses the imperative that Inclusive Education places on Policy makers, stakeholders and parents and allows to gain an insight in how the local school system in Mauritius works and how children with special needs fit within this. The study aims to gain information on whether children with SEN are freely included into main stream schools and, if so, what support they are provided with, or whether they are excluded from local schools and instead have to attend local special schools.

To obtain data and information from within the local system, the reliable source has been an educational psychologist from the Ministry of education and who is knowledgeable in both local mainstream system and also in the field of SEN. Information has been gathered using an interview in order to gain face to face contact, have flexibility in the discussion and obtain in depth information rather than short prescribed answers. Additionally to gather a range of personal views and experiences from parents of children with SEN ad from children themselves, about the local school system, a questionnaire has been used. The method, I judge was the least time consuming method in order to reduce the additional pressures and commitments for both parties.

This research elucidates many preconceived ideas about the local school system, many of which were incorrect. This research has enabled the researcher to gain in depth details on how the local mainstream school system works as well as answers to what support
is provided, how parents and children feel about their child’s own school placements and in what areas they experience difficulties or lack support. The research provides information on the public’s attitude towards people with SEN and how this affects parent’s views on schooling choices as well as opportunities within society for people with SEN. Furthermore the study has enabled the researcher to obtain details on the future aims and objectives of the government and the Ministry of Education have planned for the local school system.
INSIDE TESSA, THE ACTIVE PEDAGOGY FOR ALL TEACHERS

Kossi Richard Agbogan
TESSA-Togo, Direction des Formations, Lomé, Togo
adolfis2rich@yahoo.fr
+228 90354252
+228 22253894 (fax)

Abstract

TESSA resources are chiefly devised to educate teachers to use teaching strategies that will foster active learning. While primarily created to educate primary school teachers, these resources embody creativity that helps all teachers at all levels to change their attitude towards students and develop a relaxed atmosphere that is conducive to learning. It equally enables students to manipulate teaching materials and accustom themselves to doing research. In few words, they facilitate the task of teaching for the teacher and that of learning at students’ levels. Teaching strategies used in the TESSA materials make the climate ripe for constructing ideal citizens because they teach how to live. These strategies can connect all levels of teaching. This connection has been proven at GSTS BAAL, Dakar, where teachers from primary, lower secondary and upper secondary schools experienced and discovered active pedagogy through the TESSA approach and resources. As teaching skills are transversal, the workshop at the GSTS BAAL shows that TESSA can change teacher-student relation; relation among teachers themselves; and that among students, which prompts them to become more confident. Teachers’ attitudes change positively through the implementation of TESSA strategies, which accentuate interdisciplinary or transdisciplinary skills. Through these strategies, upper secondary school teachers may learn from teachers from preschool and vice versa, to improve
their respective subject teaching. These interrelations between teachers from different levels break free of the bridges amid school curricula. Then in order to share changes in classrooms and to reuse the developed new practices, teachers with ICT skills have been encouraged to post their experiments and successes on a wiki site. This article uses one of the most successful workshop in November 2014 at Dakar as a case study of the impact of active teaching on changing attitudes and approaches, using TESSA material. It explores that factors of this success and explores its implications in teachers training. It illuminates how teachers from nursery school to university should work hand in hand to secure the kind of education we want in Africa.

Keywords: Active pedagogy, interdisciplinary, interrelation, curricula.

A TRAY OF LEARNING OPPORTUNITIES: A CASE FOR LOW-COST LEARNING SUPPORTS

Pritee Auckloo
Mauritius Institute of Education
p.auckloo@mieonline.org
(230) 401 6555 Extension 403
(230) 5 495 47 87

Vitan Kuma Bizlall
Mauritius Institute of Education
v.bizlall@mieonline.org
(230) 401 6555 Extension 422
(230) 5 764 50 46

Abstract

In this paper we make a case for developing low cost teaching materials and by extension a case for integrating a module on the development of low cost teaching materials in teacher education programmes. We contend that improvised teaching aids are as good as state of the art products in initiating the thinking processes relevant to a theme in so far as they suit different learning styles and offer a possibility of learning to evolve from the concrete towards the abstract mode.

In the literature review we begin with a consideration of Plato’s preference of mentally entertaining forms over sensorial learning and scan over the concepts of learning styles and argue that the use of low-cost teaching aids too have their place in socio-constructivist models of learning; we also glimpse into the importance of imitation in teaching-learning situations both in its pedagogical isomorphic form and in its role in advancing the thinking processes of the learners.
We support what we say by demonstrating how a tray can be flexibly used to offer opportunities of learning different themes and serve the purpose of shifting thinking from real world objects to the manipulation of mental objects or concepts or can even become a space for aesthetic expressions, thus, showcasing that low-cost materials can be used in multiple ways rather than having one teaching aid for a specific lesson or concept as is the case for most commercially developed ones.

INVESTIGATING FACTORS THAT INFLUENCE PRE-SERVICE PRIMARY TEACHERS’ SELF-EFFICACY IN ARTS EDUCATION.

Mridula Beeharry-Konglar
Mauritius Institute of Education
m.beeharry@mieonline.org

Abstract

After becoming independent in 1968, education became one of the main preoccupations of the Mauritian Government to meet the new challenges awaiting the country. Shaped by the type of schooling development in the French and British colonial times, the Arts has been an important area of the curriculum in Mauritius as primary education was made compulsory in 1991. Today, it is a core non-examinable subject taught at primary level. However, recent research demonstrates that Mauritian school teachers may not necessarily share the same views of its importance as teaching at primary level tends to be highly exam-oriented. (Beeharry-Konglar & Engutsawmy-Borthosow, 2014).

Often, views and perceptions about Arts education are formed during the beginning phase of teaching which starts with the pre-service teacher education. Informal data collected from trainees at the Mauritius Institute of Education, an institution involved in teacher education, reveal that both modules in the Arts during teacher training as well as school placements contribute largely to shape these opinions. These beliefs also often provide an insight into how these pre-service teachers will use the Arts once they are teaching in schools.

Qualitative data was gathered through a survey administered to 40 pre service teachers. A focus group discussion was also carried out.
CLIMATE CHANGE EDUCATION - SUCCESSFUL INITIATIVE OF A TERTIARY EDUCATION INSTITUTION

Ravhee Bholah
Oomandra Nath Varma
Mohun Cyparsade

Mauritius Institute of Education
Corresponding author: Ravhee Bholah
r.bholah@mieonline.org
+230 4016555
+230 4675159 (fax)

Abstract

Climate change is one of the most pressing environmental problems especially in small island developing states. This paper highlights the various national, institutional and individual initiatives to deal with the problem and also gives an overview of the Africa Adaptation Project (AAP) in Mauritius. It explores climate change education (CCE) initiatives of AAP for one tertiary education institution. Since climate change is a difficult, complex and challenging issue UNESCO and other international agencies recommend a more systematic and integrated approach to address it. The paper therefore explains how the AAP was systematically designed to address climate change education for sustainable development for various target groups (primary and secondary school students, teachers, inspectors and managers, non-teaching staff, local community) in different learning contexts using a whole school-approach. The project involved several important steps including data gathering, learning resource (curriculum) development, capacity building, mobile graphic exhibition (MGE) and other extracurricular activities and was carried over a period of almost two years in three main islands: Mauritius, Rodrigues with 10 pre service teachers. The objective was to investigate factors that influence teachers’ beliefs about their own perceived capabilities in teaching Arts education. Participants were also asked to share information on their past levels of Arts engagement.

The main findings suggest that most participants believe that their capabilities in teaching Arts education is limited. Factors that contribute to such an opinion are: participants’ limited past and current engagement and exposure to Arts offering limited experiences to draw upon, limited cognitive learning and limited development of artistic skills during Arts modules due to their duration and somewhat negative experiences during observation and interaction in the course of school placement. The school environment and school culture during placement also affect participants’ self-efficacy in teaching Arts education.

The conclusions of this study highlight the concern about the place of Arts education in the primary curriculum and are worrying for the future of Arts education in the primary schooling in Mauritius.

Keywords: Arts education, pre-service teacher self-efficacy, beliefs.
“I AM YOUR TUTOR. WHAT I SAY IS SACROSANCT”: AN EXPLORATION OF AUTHORITY, AGENCY AND LEARNING IN A COLLEGE OF EDUCATION IN GHANA

Alison Buckler
The Open University, UK
alison.buckler@open.ac.uk
+44 (0) 1908 858820

Abstract

Across the life-span of the Education for All (EFA) goals, the practice of learner centred approaches has been promoted to ensure quality teaching in Sub-Saharan African schools. But in the years leading up to the 2015 target date, the concept of learner centredness and its relationship with quality has been critically examined. In particular, while learner centred practices have been presented as synonymous with pedagogy, there has been an absence of specificity in terms of this pedagogy and not enough attention has been paid to the role of teacher agency in terms of conceptualising and creating quality learning environments. In addition, at the analytical level, much of the literature is focused on the school, where learner centredness tends to become conflated with child centeredness. It is increasingly reported that this conflation is replicated at the college level and learner centredness becomes something that many prospective teachers learn about, rather than experience themselves.

This paper brings these issues of pedagogy, learner centredness and quality together by exploring authority and agency in the context of a pre-service teacher education college in Ghana. It draws on data from an ethnographic study of how student teachers’ perceptions of professional agency are embedded or disrupted by institutional and pedagogical processes within the three years of the pre-service
Diploma in Education (Dip.Ed). This study is funded by the Spencer Foundation (USA).

Combining a socio-cultural view of learning with the analytical framework of Amartya Sen’s capability approach, this paper explores how tutors and student teachers understand and experience pedagogy and how student teachers’ perception of themselves as agents of quality education is constructed and developed across the learning environments and social contexts of the Dip.Ed. It suggests that pedagogy at the college may look learner centred but the valued knowledge associated with becoming a teacher is mainly seen to belong to the tutors who are positioned as unchallengeable experts. Nevertheless, the paper also illustrates how some student teachers (and tutors) attempt to subvert the hierarchy to participate in an alternative, relational pedagogy that is more congruent with ideas about quality teaching presented in the post-2015 education agenda.

THE EXPERIENCES OF EDUCATORS IN THE MANAGEMENT OF INCLUSIVE CLASSROOMS

Margaret Chauke

Abstract

Full-Service Schools are new institutions in South Africa which have been established in terms of the Education White Paper 6, (Department of Education, 2001: 22-23) as pilot schools for the rolling out of the Inclusion Policy in South Africa. Full-Service Schools foster social inclusion thereby valuing and embracing differences and nurturing attitudes of acceptance and respect. This forms the basis for a just and non-discriminatory society (Landsberg, Kruger and Swart, 2011:8). Thus, Full-Service Schools are schools that encourage learners who experience barriers to learning and learners without barriers to learning and live together (Department of Education, 2001, 2009). All learners must have opportunities to learn and play together and participate in educational activities in a Full-Service School. These inclusion practices which promote acceptance, equity and collaboration are responsive to individual needs and embrace diversity (Constitution of the Republic of South Africa, 1996).

The purpose of this study is to explore the experiences of educators in management of inclusive classrooms. The focus is on how the educators perform three of the seven educator roles as expected in the Minimum Requirements for Teacher Education Qualifications (Department of Education, 2011) namely, the educator as mediator of learning, assessor and community pastoral role.

The problem statement resonates from the Minimum Requirements for Teacher Education Qualification (Department of Education, 2011) which expects educators to perform the seven educator roles in the classroom as stipulated in the qualifications policy. The educators
over and above these roles are expected also to participate in extra-
school programmes such as sports, cultural and artistic activities and 
thus taking more of their time and most probably to the detriment
of not fulfilling their Minimum Requirements for Teacher Education
Qualifications as expected.

Qualitative research method was employed in this study. A qualitative
approach is particularly suited to examine how individuals make
sense of their world in the naturalistic setting of the classroom, without
predetermining the research outcomes (Denzin and Lincoln 1994, 
Patton 2002). Data was collected through in-depth interviews, non-
participatory observation and document analysis. The documents
included the Minimum Requirements for Teacher Education
Qualifications (MRTEQ), Norms and Standard for Educators, (NSE)
Education White Paper 6, and Education Labour Relations Council
Data was analysed through content analysis strategy. Triangulation
method was used to ensure trustworthiness and credibility of the
study (Hofstee, 2011).

Purposeful selection was used as a method of sampling collection.
The population was sampled from three primary schools i.e. one
township school and one inner city school in Tshwane South District
and one rural school in Tshwane North District. Six participants were
interviewed. Three male educators and three female learning support
educators form the core focus of the participants. Ethical considerations
such as voluntary participation, confidentiality, anonymity, privacy and
respect for participants were upheld (Hofstee, 2011:118).

Keywords: Barriers to learning and development; inclusive
classrooms; inclusive education; inclusion; Full-Service Schools;
learning support educators

References

California: SAGE publications. (Eds).


Needs Education: Building Inclusive Education and Training System.
Pretoria: Government Printer.

Department of Education. (2004). Education Labour Relations Council

Department of Education. (2009). Guidelines for Full-Service /

Department of Education. (2011). Teacher Education Policy. The
Minimum Requirements for Teacher Education Qualifications

to finishing a Masters, MBA or PhD on Schedule. Johannesburg,
South Africa: EPE Publishers.

Publishers.

Third edition. Thousand Oaks SAGE.

TOWARDS A THEORETICAL MODEL TO INVESTIGATE THE IMPACT OF LABORATORY WORK IN THE TEACHING OF CELL BIOLOGY

Eugénia Flora Rosa Cossa
Eduardo Mondlane University
Faculty of Education
Maputo, Mozambique
eugenia.cossa@gmail.com; eugenia.cossa@uem.mz
+258-82-4686060
+258-21-493313 (fax)

Abstract

Although there is a conviction that the laboratory work plays a central role in the teaching of natural sciences and development of scientific literacy at all levels of the educational system, several authors agreed in their concern that there is a need to continuously rethink about its implementation and contribution to the performance of students (Cossa & Uamusse, 2015; Ferreira & Morais, 2013; Danmone, 2012; Hofstein & Mamlok-Naaman, 2007; Al-Naqbi & Tairab, 2005). It is around this concern that, in this paper, a reflection on the feasibility of a theoretical model designed with the purpose of evaluating the impact of laboratory work in the teaching of cell biology is raised. In order to accomplish with the aims of the study, the methodology consisted primarily of (i) analyzing the current situation of the laboratory work at the Eduardo Mondlane University (UEM) with particular reference to the Department of Biological Sciences (DCB) and; (ii) reviewing the literature with the aim of gaining a better understanding of the role of laboratory work in the teaching of natural sciences. For a better reflection, two important aspects were considered, namely, the teacher and learner’ factors in terms of their perceptions and opinions regarding the role of the laboratory work in the teaching and learning of cell biology. From the reflection it was possible to conclude that the model under study seems to assist in assessing the impact of laboratory work in the teaching of cell biology. In this regard, teachers and learners stressed a particularly usefulness of the model by stating that there is a need to pay a greater attention to the specific characteristics of the learners in terms of knowledge and skills that they have before being subjected to new materials and equipment, that is, the initial condition (inputs) during the design of laboratory work. Beside this, the study showed that the context in which the laboratory classes are held is a key element since this can influence the way the teacher plans or prepares laboratory activities and articulates with all the interveners (e.g.: students, head of department, course director). In conclusions, the validation the practicality of the designed theoretical model requires a linkage between the various elements or factors influencing the effective implementation of the laboratory work in the teaching and learning of natural sciences.

Keywords: theoretical model, laboratory work, teachers and learners, cell biology.

References


MEETING TEACHER TRAINING NEEDS FOR INCLUSIVE EDUCATION IN SUB SAHARAN AFRICA: AUDIT AND POSSIBLE SOLUTIONS

Michèle Deane
TESSA-UK
michele.deane@open.ac.uk

Amivi-Cra Komlan
Direction des Formations (DF), Lomé, Togo.
TESSA-Togo
kanthamivick@gmail.com
(228) 92 42 77 21
(228) 22 25 38 94 (fax)

Abstract

The Millennium Development Goals have only been partially met. Figures show that since 2000, significant progress has been made in the number of children attending school, yet 30 millions of children of primary age are still out of school in Sub-Saharan Africa (UNESCO, 2013) and according to Rieser (2009), one third of them would be disabled. Sightsavers (2011, p. 2) estimates that fewer than 10% of disabled children attend school. Unless all children attend school, whether able or disabled, Education for All will not be achieved (UNICEF, 2013, p. 28).

But as research carried out in 5 Sub Saharan African countries under the direction of the UNESCO chair for Inclusive Education shows, there is a real need to educate, train and support teachers for Inclusive Education to make tangible progress.

The presentation will report on the findings of the research in Togo, one of the countries where the research was carried out, and consider
ADVANCING GENDER EQUITY IN AN ONLINE GEOGRAPHY COURSE: A STRATEGY FOR TEACHER EDUCATION

Michael DeVivo
Grand Rapids Community College
mdevivo@grcc.edu
616 234 4410
616-234-3484 (fax)

Abstract

Across the globe, online education has boomed, and according to some reports, Africa has become the most dynamic e-learning market on the planet, where self-paced e-learning is growing at a rate of 15.2%, and expected to create much higher revenue than the $250 million it generated in 2011. This year’s revenue forecast for South Africa alone is expected to be more than $110 million.

Unique to Africa is that there is substantial resistance to traditional packaged self-paced e-learning content. This is a marked contrast to the rest of the world, for the global growth in packaged content is higher than any other type of product. Africa is the only part of the world where installed authoring tools produce more revenue than installed learning platforms. In essence, although international “learning companies” have been successful in translation of content, their failure, by and large, to localize content compels educators in Africa to develop e-learning courses independently.

This reluctance to accept “canned packages,” which are often criticized for fostering rote memorization without facilitating critical thinking and analysis, actually places educators at an advantage. An instructional paradigm of “independent invention” has emerged, which is beneficial to facilitating the education of future teachers because localizing content enables African educators to customize content that is highly

References


ACTIVATING INNOVATION AS PART OF SCHOLARSHIP OF TEACHING: AN ACTION RESEARCH-DRIVEN EPISTEMOLOGY

Pieter Hertzog Du Toit
University of Pretoria
Pretoria, South Africa
pieter.dutoit@up.ac.za
+27 12 4202817
+27 12 4205637

Abstract

This paper investigates the interconnectedness of the constructs ‘innovation’, ‘scholarship of teaching’ and ‘action research scholarship’. I depart from the premise that when educator professional development is underpinned by action research, claims of innovation and creativity in teaching practice can be substantiated in a scholarly fashion – and these claims of innovation most often than not are aligned with the notion of ‘the future we want’. As the educator professional development focus of my report aims at showcasing how educators empower themselves by means of action research – as it is a liberating process of professional and personal growth – to embrace the challenges of this unknown future I show how any educator professional development initiative should be authentic. Authentic here implies that the quality of professional learning should be enhanced in order to ensure that educational real-life challenges would be approached in innovative ways. If teacher education is concerned about the expectations of the real world and the future we want there is no other option as to prepare educators in such a way that they develop as innovative individuals who will take responsibility for maximising their full potential. Becoming a self-regulated educational professional and being reflexive are some of the human attributes pertinent to students choosing careers in education, and this also can be passed on to their students.

It is argued here that one subject vital for inclusion in teacher education programs is gender equity. Gender disparities are important to overcome and imperative for sound economic development, and much can be accomplished through female education efforts. Educating girls is a must because throughout most of Sub-Saharan Africa, less than half attend secondary schools, and those that don’t are highly likely to remain only marginally literate, marry young, and give birth to several children, leaving few opportunities for upward social and economic mobility. Moreover, the human health condition of females continues to be threatened by, among other things, a relatively high incidence of fistulas and the tragedy of HIV/AIDS. In essence, educated girls in Africa are three times less likely to get HIV/AIDS, earn 25 percent more income, and have smaller, healthier, families.

The online classroom offers an opportunity to address this issue, and the World Regional Geography course provides an optimal setting for promoting gender equity. Throughout this e-learning experience, students are able to examine case studies from across the African continent and engage in asynchronous dialogue in online forums. They also can show their analytical skills by writing lengthy and thought-provoking essays. This paper offers guidelines concerning content and strategies that have been shown to be successful in educating promising future teachers, particularly in reference to matters of gender equity.
of the 21st century which should be cultivated in every educator. Research on creative and innovative ways of facilitating educator professional learning, shows that these attributes form an integral part of one’s interaction with a specific educational ecosystem. The need for developing soft skills – also referred to as pervasive skills – within every curriculum is inevitable. The epistemological underpinning of my reporting of experience in practice and research of the application of the principals of the constructs in question is meta-reflective in nature. Instead of a typical traditional stance to research I do not report on the numerous sets of qualitative and quantitative data obtained over several years. The reason for choosing a meta-reflective narrative as means of reporting is due to the fact that most of the studies I was involved in and still am are reflective as it is most often than not action research-driven. And action research is a reflexive process. So, I therefore reflect on my reflection. I report on evidence-based practice that includes an array of fields of specialisation. Important aspects of educator professional development, such as curriculum design and development, facilitating of learning and assessment are addressed. Practice-based evidence is offered as claims of innovation. As I am involved in educator professional development for more than 20 years I need to act as role model. This paper therefore includes exemplars of my own quest for innovation and action research.

RE-THINKING THE VALUE OF LEARNING THEORIES TO DEVELOP SELF-DIRECTEDNESS IN OPEN DISTANCE STUDENTS

Bernadette Geduld
North West University
Potchefstroom Campus
bernadette.geduld@nwu.ac.za
0182994583
0764836192

Abstract

Open distance learning has continued to expand and became a rapid changing landscape influenced by technological developments, policy changes on access and redress, diverse student profiles as well as developments in teaching and learning theories. This changing landscape, in particular the diverse South African open distance student population with different levels of preparedness, holds implications for teaching and learning approaches and academic success. Learning is a complex process that has generated numerous interpretations and theories as to how exactly it can be effectively facilitated to ensure that meaningful learning is achieved. This paper will examine the value of different learning theories to develop self-directedness in open distance learning students. The selection and application of learning theories is influenced by the fact that lecturers and students differ in terms of preferred teaching and learning strategies. ODL student profiles range from experienced, adult students who were schooled and trained in behaviouristic teaching and learning principles to younger students who are used to teaching and learning in the digital or online learning era. Similar to students, lecturers have studied in different teaching and learning paradigms and have their own strengths and weaknesses
with regard to teaching and learning. This situation often results in a mismatch between their expected teaching and learning paradigms. The purpose of this paper is not to deconstruct learning theories, but rather to open discussion on the value and shortcomings of traditional learning theories as well as on other adult learning theories that have emerged and could influence academic success and the development of self-directedness ODL students. Reflection on the value of various learning theories can provide insight as to how lecturers can adapt learning tasks and teaching styles with flexibility and creativity. While the basic assumptions and principles of social constructivism are not disputed, it is argued that we must be mindful not to replace one learning theory with yet another and promote a ‘one size fits all’ notion of what good teaching and learning is supposed to be. The concern is raised whether there is a single “best” learning theory and whether one theory is more efficient than the others when it comes to adult learners in ODL. The merit and teaching implications of each theory will be discussed to substantiate the argument for an eclectic use of learning theories in ODL. Many researchers argue against the use of an eclectic approach, though the author argues that an eclectic approach based on a pragmatist epistemology is appropriate for the design and delivery of ODL.

**Keywords:** self-directed learning, behaviourism, constructivism, adult learning theories, teaching implications

---

**THE LEADERSHIP CHALLENGE IN SOUTH AFRICA: PERSPECTIVES OF CHILD CITIZENS TO STRENGTHEN DEMOCRATIC CITIZENSHIP EDUCATION**

Ina Joubert  
University of Pretoria  
Department Early Childhood Education  
Ina.joubert@up.ac.za  
(012) 420 5636  
(012) 420 5595 (fax)

Judite Ferreira-Prevost  
University of Pretoria  
Office of the Dean  
judite.ferreiraprevost@up.ac.za  
(012) 420 5642  
(012) 420 6701 (fax)

**Abstract**

The aim of this paper is to share young children’s voices on leadership in a democratic South Africa. By understanding their perspectives, democratic citizenship education can be considered as an avenue to facilitate leadership skills and the pedagogy thereof reflected upon.

This study follows a systematic literature review on the trends regarding leadership education in the first grades of a primary school and the implications for democratic citizenship education. The data employed emanated from a longitudinal study where learners from a mid-city primary school were asked to complete task-based activities such as mind maps, writings and drawings in order to facilitate self-expression. Analysis of the data revealed that all participants expressed the desire to become leaders. They further posited that
a leader should: care for all people, protect people against violence, obey laws, respect people, including children. The paradigms of leadership which emerged from this study seem to promote a social consciousness, not always present with earlier paradigms.

Leadership as an interconnected process is evident in a school setting when constant critical reflection by leaders helps cultivate effective leadership at schools and in turn empowers learners to construct their own meanings (Densten & Gray, 2011). This builds on Piaget and Vygotsky’s developmental theories which propose that children develop concepts from lived experiences and that their interpretations are social products, on par with that of adults. If leadership is considered to be basic social influence (Murphy, 2011), it is understandable that characteristics of leadership and leadership styles emerge from an already early age.

The South African democracy is regarded as a ‘young democracy’ and as a negotiated democracy it is viewed as a global benchmark. However, challenges for leaders in South Africa are the “still fragile civil society” (Moodley & Adam, 2004) as a result of the high levels of violence, lack of tolerance, racism and xenophobia. In times of conflict and turmoil there are calls for strong, effective, clear, good and visionary leadership. Good leadership includes recognizing human value, sharing information, using influence for the good of others, serving others, expecting nothing in return, remaining accessible, approachable and accountable, and being visionary.

The South African youth are educated through a national curriculum to become the “good citizen” (Department of Basic Education, 2011), identify with democratic values, obtain knowledge about democracy and acquire skills for active participation. However, there is little evidence of teaching leadership skills in the early grades. We argue for the facilitation of leadership skills as a component of democratic citizenship education by integrating literacy in an interactive, participatory way using ‘real life’ stories, role play and analogies.

Kofi Annan (2001) said: “No one is born a good citizen; no nation is born a democracy. Rather both are processes that continue to evolve over a lifetime. Young people must be included from birth. A society cut off from its youth severs its life line.”

References


PROMOTING LEARNER-CENTRED PEDAGOGY IN TEACHER EDUCATION IN RWANDA: FACTORS FOR SUCCESS

Chantal Kabanda
Leon Mugenzi
Gabriel Nizeyimana
Wenceslas Nzabalirwa
Jef Peeraer
Alphonse Uworwabayeho
University of Rwanda – College of Education (URCE)
Flemish Association for Development Cooperation and Technical Assistance (VVOB)

Corresponding Author: Jef Peeraer
jef.peeraer@vvob.be
+250 (0) 783 35 46 27

Abstract

In the global framework on improving quality of education, the promotion of learner-centred pedagogy (LCP) is high on the education reform agenda of many Sub-Saharan Countries. There are however a number of challenges faced by teachers for applying LCP. One of these is teacher educators’ limited use of LCP. Nevertheless, as pre-service teachers have a significant role to play in the sustained application of LCP in schools, it is imperative that they be exposed to effective application of LCP in their training. In the framework of a programme on Learning Outcomes in Primary Education, the University of Rwanda – College of Education, with support of the Flemish Association for Development Cooperation and Technical Assistance, aims to build the capacity of all (13) teacher training colleges (TTC) of Rwanda to provide a meaningful context that allows pre-service primary teachers to critically examine their own pedagogical beliefs, and explore the application of LCP in a more constructivist learning environment. The specific target is to improve the quality of teaching and learning in the TTCs, and this through professional development of all tutors (teacher educators) in the TTCs.

This study provides an analysis of the existing situation with regards to the uptake of LCP in primary teacher education in Rwanda and the interplay between factors influencing or hindering the uptake of LCP. 228 tutors (response rate of 77 %) in 13 TTCs completed a self-report questionnaire consisting of a series of items assessing different factors such as perceived access to LCP resources and Information and Communication Technology (ICT), professional development opportunities, conceptions of learning, and uptake of LCP in instructional and pedagogical practice. Descriptive analysis makes clear that tutors engage their students in Active Teaching and Learning (ATL), especially through well-known approaches such as group work. However, a portion of tutors never engage their students in more transformative approaches such as project-based or independent learning. Most tutors also do not report a regular uptake of ICT for teaching and support of student learning. Multiple regression analysis reveals that factors contributing the most to the explained variance in the uptake of LCP are availability to LCP resources in the TTC (β= .113), pedagogical knowledge (β= .274), cooperation and sharing amongst colleagues (β= .315) and use of ICT supporting student learning (β= .119).

The analysis initiated the design of a professional development programme for the tutors. The crucial ingredients of this programme are a more profound insight in the foundations of LCP, and a hands-on training on specific ATL methods and techniques. It is recommended to engage tutors in follow-up practice, in which they apply what they have learned in their own practice and share insight and experience with
their peers through self-organized additional trainings, dissemination workshops and lesson observations. Finally, apart from providing and compiling a basic set of training and self-study materials, it is recommended to engage tutors in the development of such resources themselves and in sharing these resources in libraries and open resource centres in the TTCs.

PROSPECTS AND CHALLENGES IN THE IMPLEMENTATION OF LOCALIZED CURRICULUM IN SELECTED PRIMARY SCHOOLS IN ZAMBIA

Kalisto Kalimaposo
Sanny Mulubale
University of Zambia, School of Education, Lusaka, Zambia.

Abstract

The study explored prospects and challenges in the implementation of localized curriculum in selected primary schools in Zambia. The current National Policy on Education in Zambia, Educating Our Future (1996) articulates the desire to strengthen the bonds between schools and communities. The focus of the localized curriculum is on traditional skills and participation of the local communities in planning and carrying out learning activities in schools relevant to their socio-economic activities.

A descriptive design was used involving both qualitative and quantitative techniques. The sample comprised nine (09) head teachers, forty-five (45) teachers, one hundred and eighty (180) pupils and twenty-seven (27) parent representatives drawn from the Parent–Teachers’ Association (PTA). Three (03) District Education Standards Officers and three (03) District Resource Centre Coordinators were also included. Purposive sampling procedures were used in selecting Head teachers, Parent representatives from the PTA and Education Officers. Class teachers and pupils were randomly selected using staff lists and class registers through a rotary technique.

Data were collected through questionnaires, semi-structured interviews, focus group discussions, observations, analysis of documents and in-depth interviews with key informants. Qualitative data were analyzed through categorization of themes that emerged...
from the data. Quantitative data involving descriptive statistics such as frequencies, percentages, and tables were generated by SPSS. The across-case approach was used to analyze responses from all the data collection instruments employed in the study.

The study found that community sensitization in the teaching of Community Studies was rather inadequate in some schools. All head teachers and teachers interviewed were aware of the directive by the Ministry of Education to design local curricula. In some schools, community representatives of the PTA were not aware of this directive. Schools lacked technical skills in the design of the localized curriculum as some Head teachers and teachers were not trained. Lack of initiative by schools to train teachers and resource personnel from the community was a major hindrance. There was apathy on the part of some skilled community members, others demanded to be paid allowances for their time spent in schools. Some communities blamed teachers for trying to shift the responsibility of teaching to the community. Some Head teachers argued that there was no need to have Community Studies as most of the topics were covered in Creative Technology Studies. In some schools teachers were not committed to the teaching of the subject as it was not examinable. The study recommended among other things that Zonal Resource Centres should design the Community Studies Syllabi with the help of identified resource persons from the community.
The study sought to find out the scientific inquiry skills primary science tutors impart to the pre-service primary science teachers during their preparation. The study was conducted in one Primary Teacher Training College in Kenya using a qualitative approach and a case study design with particular focus on the scientific inquiry skills used in teaching science. Purposive sampling was used to choose research participants who included one science tutor and six pre-service primary science teachers. Data was collected using semi-structured face-to-face interview with the science tutor, classroom observations, Focus Group Discussion with the pre-service primary science teachers and document analysis. The findings revealed that, while the science tutor was aware of the scientific inquiry skills recommended by the Ministry of Education Science and Technology, there was inadequate utilization of the same in the classroom due to inadequate exposure to scientific inquiry skills during the Initial Teacher Education. In light of these findings I propose that, there is need for integrating and utilizing adequate scientific inquiry skills in Initial Teacher Education curriculum for preparation of primary science tutors. In addition, in-service retraining of the primary science tutors and induction course for the ones joining primary teacher preparation colleges. This would unlock primary science tutors potential and result in increased learner centered engagements, curiosity and interest through hands-on mind-on activities that focus on learners understanding of application of science in real life situations. Subsequently, great opportunity for the pre-service primary science teachers to develop into primary science teachers who are globally competitive for the ‘Future We Want’ and capable of transforming science education in diverse African contexts.

References


“THE FUTURE WE WANT”: TEACHER DEVELOPMENT FOR THE TRANSFORMATION OF EDUCATION IN DIVERSE AFRICAN CONTEXTS.

Florence Kanorio Kisirkoi
Maasai Mara University Kenya
email kisirkifo@gmail.com
0724107155

Abstract

Whereas Kenya’s vision for the future is to accelerate the transformation of the country into a rapidly industrializing middle-income nation by the year 2030, there are reports that the teaching learning approaches are traditional transmission approach and that some learners’ literacy and numeracy levels are below the expected standards. Analysis of developed official school curriculum indicates that the curriculum, though it requires some further improvement to address the recent dynamic developments, is adequate in knowledge, skills and attitudes that should develop a learner who can face the challenges and opportunities of the 21st century if effectively implemented. Many researchers have identified curriculum implementation as the main cause of the low learning outcomes. This study aimed at investigating the pedagogies that could prepare the learner for the 21st century challenges and opportunities. The methodology adapted was document analysis and the document analysed included the Kenya Vision 2030, the sessional papers, school syllabus, research reports on teaching approaches for improved learning and research on the 21st century learner. Research indicates that the 21st century education requires knowledge generation, not just information delivery; it calls for a culture of inquiry. Knowledge will be constructed through research and application, personal experience, interests, talents and passions rather than memorisation. Media literacy skills will be critical. Students will create projects using multimedia and deliver these products to real-world audiences. The study recommended a combination of learner centred teaching learning approaches with influence of constructivism theory that will emphasize innovation and knowledge construction.

Keywords: curriculum implementation, pedagogies, constructivism, challenges, opportunities
INDIGENISATION OF THE ECD CURRICULUM FOR A BETTER EDUCATION FUTURE: THE ZIMBABWEAN EXPERIENCE

Shoorai Konyana
University of Zimbabwe, Mkoba Teachers’ College
shookonyana@gmail.com
+263 772 713 290

Abstract

In this paper I advance the relevance of including African Indigenous Knowledge (Indigenous Child Rearing Practices) in the Early Childhood Development curriculum as a means of preserving African virtues through Unhu/Ubuntu. I further interrogate the rationale of introducing E.C.D. ‘A’ and E.C.D. ‘B’ curriculum as the starting point of formal Primary School learning. My observation is that most Primary schools, though they have local para-professional and professional teachers, do not utilise indigenous knowledge abundant in the community to enrich children’s learning activities. Furthermore, the local environment is not being fully utilised to provide learning materials. Instead, schools lose fortunes in buying toys instead of using locally available materials. Through interviews, observations and document analyses, I gathered sufficient data to indicate that through the development of good relationships between the school and the community, the E.C.D curriculum could be improved through the inclusion of African Indigenous Knowledge (AIK), thereby catching the learners young in instilling the values of Unhu/Ubuntu.

Keywords: African Indigenous knowledge, Child rearing practice, Early Childhood Development, Teachers’ beliefs

REFLECTING ON THE ROLE OF DISTANCE EDUCATION PLATFORMS IN THE PROFESSIONAL DEVELOPMENT OF ADULT LEARNERS

Vimbi P Mahlangu
Department of Education management & Policy Studies
Faculty of Education
University of Pretoria
Pretoria, South Africa
E-Mail: vimbi.mahlangu@up.ac.za

Abstract

According to Trotter (2006) adult development theories offer basis for understanding how adult learners are different from younger learners, also providing an understanding into developing better professional development platforms to meet the needs of teachers at all phases of their careers. This paper will try to answer why some adult learners embrace the Distance Education Platforms positively and use them to develop their professional practice whilst some do not complete the platforms. Again, it will try to answer what could be done to improve the Distance Education Platforms. Thirteen years ago, Drago-Severson, Helsing, Kegan, Broderick, Popp, & Portnow (2001) asked the following question: How is it that the very same curriculum, classroom activities, or teaching behaviours can leave some learners feeling excited and their needs well met, while others feel deserted or lost? This is a qualitative paper and interpretive in nature. Methods used in collecting data will be through desk top-research and document analysis. Age Theory, Cognitive Development Theory, Stage Theory, and Functional Theory will be used as the lenses in trying to reflect on the role of Distance Education Platforms in the professional development of adult learners.
COPING WITH LARGE CLASSES IN DEMOCRATIC SOUTH AFRICA: ARE FEMALE TEACHERS CRYING FOUL SILENTLY?

Alfred H Makura
School of Postgraduate Studies: Education
Faculty of Humanities
Central University of Technology
Free State, South Africa
amakura@cut.ac.za
+27 515074031

Abstract

The paper reports on the tribulations of teaching large classes by five female primary and secondary school teachers in South Africa twenty years into democracy. Despite official posturing that shows a manageable teacher-pupil ratio, some teachers have had to contend with large classes that impact on instructional quality and effectiveness. In-depth interviews with five South African female teachers revealed that political democracy has not been matched by pedagogical democracy. The large classes' syndrome is a challenge thematically rooted in a seemingly thriving apartheid legacy, an unsupportive school environment and a skewed national policy that has not addressed practical instructional issues such as teacher development. The female teachers have adopted ‘the ethic of care’ as a survival strategy but continue to ‘cry foul silently’ over the attendant heavy work loads. This scenario negatively impacts on the quality of education received by our children. The paper implores female subordinate teachers to constantly communicate their instructional tribulations to school administrators with view to transform the education system and plant democratic instructional values in school systems. Likewise, school leadership should not retreat into the bureaucratic cocoon but seriously provide practical educational solutions to the large classes scourge besetting South Africa and countries in similar predicaments. This is the time for twenty first educational leaders to transform education if we are to achieve “The future we want” for our children through professional teacher development.

Keywords: Female, teacher, large classes, management, South Africa.
LEARNER GENDER ROLES AND STEREOTYPING NOTIONS
AND THE EDUCATOR MIND-SET REGARDING EQUITY AND
EQUALITY IN SCHOOLS AND ACADEMIC INSTITUTIONS

Nomshado Matselane
School of Postgraduate Studies: Education
Faculty of Humanities
Central University of Technology
Free State, South Africa
nomshado.matselane@gmail.com
+27 51403 3663

Abstract
The study investigated the gender roles and stereotyping notions of secondary schools’ adolescent learners as perceived by themselves, and pre-service educators from a University of Technology. The focus was to highlight potential challenges presented by gender roles and beliefs in traditional gender stereotypes that adolescent secondary school learners hold as they learn. The study is informed by gender and gender socialisation theories. These theories are influential to the educators’ mind sets on issues of equity and equality particularly of girls in education. The study adopted the quantitative methodology. Two instruments were administered to a sample of 168 comprising 108 secondary school learners and 60 pre-service educators. The instruments were the short form of the Bem Sex Role Inventory [BSRI] (Bem, 1974) (seeking masculine, androgynous, or feminine) was used to solicit data from 108 learner participants between grades 8 and 10 (GET band). The Sixty pre-service teachers completed both The Attitudes Toward Women scale (Spence & Helmreich, 1978) and The Attitudes Toward Men in Society scale (Falkenberg, Hindman & Masey, 1983). Both instruments were used to establish their gender stereotypic notions. The BSRI results showed that the masculinity, femininity and androgynousity of learners were not consistent with their sex. This finding reveals that there appears to be no connection between one’s sex and gender. This suggests a shift from being either feminine or masculine as most of the learners are beginning to be androgynous. The Attitude scales revealed that pre-service did not have preferred attitudes towards themselves and the opposite sex. This revelation can assist the pre-service teachers to fully comprehend learner preferences, gender notions and their impact on learner academic strengths with view to positively impacting on their learning. Likewise, institutions of higher learning and schools are implored to deal with equity and equality issues objectively.

Keywords: Female, teacher, BSRI attitudes, The Attitudes Toward Women scale, The Attitudes Toward Men in Society scale South Africa.
TEACHING THE TEACHERS OF TEACHERS OF TEACHERS

Tony John Mays
Saide
OER Africa
tonym@saide.org.za
082 371 9215

Abstract

Nigeria, like many other countries, is currently in the process of curriculum reform to try to make the school curriculum more responsive to the changing needs of a 21st century knowledge economy. This entails re-thinking not only what we teach but also how we teach it. It is almost axiomatic that teachers teach the way they themselves were taught. Therefore, if we wish to change practices in the classroom, we first need to change practices in the colleges of education by offering appropriate continuing professional development (CPD) to college lecturers.

The design and development of a CPD programme for teacher educators was therefore the focus of one of the recent initiatives of the Teacher Development Programme in consultation with the National Council for Colleges of Education in Nigeria, which Saide facilitated.

In the belief that the programme should practise what it preaches, the design and development of this programme was based upon an activity- and resource-based and collaborative model.

By modelling an activity- and resource-based and learner-centred approach through four interlinked development workshops (programme design, module design, materials development, materials review) over a five-month period, it was hoped that the teacher educators involved would feel sufficiently empowered to model similarly to their peers, who would in turn model these approaches to their teacher-students, who in turn will hopefully adopt such practices in their classrooms.

The paper will outline the process followed, showcase the outputs achieved and report on the reflections of the teacher-educators who were involved in the process.

Keywords: continuing professional development (CPD), hermeneutics, activity-based learning, resource-based learning, collaborative learning, modelling
TO WHAT EXTENT ARE TEACHER TRAINING PROGRAMMES MEETING THE NEEDS OF THE 21ST CENTURY - THE CASE FOR MATHEMATICALLY GIFTED LEARNERS

Michael Kainose Mhlolo
Central University of Technology
mmhlolo@cut.ac.za
(+27) 51 507 4027

Abstract

This theoretical paper is premised on the view that changes in the demand for skills have profound implications for the competencies which teachers themselves need to acquire in order to effectively teach 21st century skills to their students. Many nations around the world have undertaken wide-ranging educational reforms with the intention of better preparing all children for the higher educational demands of life and work in the 21st century. A question arising from this is: ‘What are the skills that young people need to be successful in this rapidly changing world and what competencies do teachers need, in turn, to effectively teach those skills to their students?’ There is a global discourse that positions mathematical competence as the key that unlocks the gates to many opportunities for individual students and to the welfare of a nation in a global economy. Many countries are therefore committing considerable funds to enhancing mathematics education, and in particular advocating special support for the most intellectually gifted pupils may be linked to a failure to engage fully in the developmental process. Through Gagné’s model the paper then launches a strong argument that teachers are central to this developmental process and therefore represent the single greatest obstacle to education for gifted learners. The paper goes on to argue that by implication the quality of gifted education and thus for the efficiency and quality of the gifted students’ learning is dependent upon the quality of training the teachers receive. The ensuing discussion then attempts to address the question of what teacher preparation programs are needed to prepare graduates who are ready to teach well in such a 21st century classroom. The paper concludes by citing some examples of teacher training programmes for the gifted that have been tried in other countries.
LEARNERS’ MISTAKES AND MISCONCEPTIONS ON THE SUBJECT GENERAL LEDGER AND PROPOSED STRATEGIES

Alfred Motalenayne Modise
Faculty of Education
Central University of Technology
Free State, South Africa
mamodise@cut.ac.za, 0827036686

Abstract
In this report we present the commonly identified error patterns and learner’s misconceptions about general ledger, identifying accounts involve, classification of accounts according to (A=E+L) and account debited and credited. Thirty y grade 10 learners' participated in this study. The respondents comprised of 60% female and 40% male, Grade 10 learners in secondary schools, in Free State Province. Four open-ended questions were used in this study. Firstly, the answers given were divided into two: correct and incorrect. Then, incorrect answers were split into sub-categories and tabulated. We used learners’ work samples to identify, classify, and describe learners’ general ledger errors. Seventy four percentages of learners in this study were unable to correctly solve a task involving general ledger. The following types of errors were commonly identified across the sample: a lack of learners’ understanding about general ledger, classification of accounts, and a lack of understanding (or distinction) between account debited and account credited. Final results and conclusions include research suggestions and practitioner-based implications for teaching general ledger in schools and higher education

Keywords: Accounting, ledger, Mistakes, Misconceptions, learners

TEACHING ACCOUNTING IN MULTILINGUAL CLASSROOMS IN SOUTH AFRICA

MA Modise
Faculty of Education
Central university of Technology
Free State, South Africa
mamodise@cut.ac.za
0827036686

LG Mogashoa
Faculty of Education
Central university of Technology
Free State, South Africa
lgmogasho@cut.ac.za
0726055909

Abstract
South Africa is a multicultural country which boasts eleven official languages protected by constitution of Republic of South Africa of 1996. This study investigated the challenges faced by Accounting student teachers in the multilingual classroom in secondary schools in South Africa. Data about the teaching Accounting in the multilingual classroom in South Africa were collected from 20 student teachers (female=60%, Black =98%), using semi-structured individual interview. The data were thematically analysed open-coding. The findings indicated that some learners are not free to talk in the classroom because of language barriers and also because English is not their mother tongue. The learners are faced with English language, Accounting terminology and language at the same time. The finding showed that learners experienced learning barriers despite support from the student teachers because the terminology is
available in English or Afrikaans, and it is not in their mother tongue. The Setswana, Xhosa and Sesotho speaking learners are forced to speak in English or Afrikaans because they do not have terminology and books are written in their mother tongue. These, in turn, raise interesting questions for further analysis and research.

**Keywords:** Teaching, Accounting, Classroom, Challenges, Multilingual

---

**BEYOND BLAME AND VICTIMHOOD: CONFRONTING THE BINARIES OF APARTHEID IN THE CLASSROOM.**

Boitumelo Moreeng  
Faculty of Education  
University of the Free State  
moreengbb@ufs.ac.za

**Abstract**

Teaching history in most of the post-conflict societies is a daunting but necessary task that prepares students for effective citizenship. In this paper the author reports on study conducted amongst 150 third year intermediate history education students which aimed at establishing multiracial student teachers’ experiences of exchanging narratives about the effects of apartheid on the different individuals and groups. Student teachers were requested to conduct interviews with colleagues from a different racial background on how they were affected by apartheid. They had to document their findings and the meanings they attach to the gathered information. Later students presented their experiences during the focus group discussions that were held. The findings revealed that the different groups knew very little about each-others' backgrounds and the effect that apartheid had on them. They realised that most of the information that they upheld was largely based on the misconceptions and unfounded fears. Most importantly the students indicated that the process minimised their competitive victimhood by evoking feelings of empathy with each-others experiences, and the reconstruction of their meanings about their past.

**Keywords:** Controversial issues, Apartheid, History Education, Critical Pedagogy, Victimhood.
ENGLISH LANGUAGE LEARNING IN TEACHER PROFESSIONAL DEVELOPMENT THROUGH OPEN AND DISTANCE LEARNING FOR QUALITY EDUCATION.

Jacob Leopold Mwalongo
The Open University of Tanzania
Email: Jacob.leopold@out.ac.tz

Abstract

Learning English Language as a subject in higher education specifically through Open and Distance Learning system focuses more on reading and writing skills while listening and speaking skills are given no importance. For that reason this paper examined English Language learning as a subject through open and distance learning in Teacher professional development by looking at the missing link. The work particularly identifies students' perception on learning oral communicative skills in English language through Open and Distance Learning system; and it explores challenges of learning Oral communicative skills in English language learning through Open and Distance Learning system. The study involved 100 students who studied English language as a subject and 1 tutor. The study used quantitative and qualitative approach. Purposeful and random samplings were used. Data were collected through questionnaire; interview, and documentary review. The study found that, in learning oral communicative skills through ODL; there is no accuracy in learning and no fluency skills are acquired, learning strategies such as demonstration and discussion are limited practice. In addition, teachers perceived oral communication learning skills through ODL hinders immediate feedback from students to the teacher; and the teacher fails to evaluate and assess students' competence. Students reported; limited time for oral communication skills practice, lack of guidance from a teacher in learning oral communication skills, lack of ability in making their own judgment in what they know and what they learn as challenges. Learning through Open and Distance learning in higher education is crucial. Thus, for English language teacher to be well competent in providing quality education to children for better performance and for education to be sustainable and maintaining its quality, the following are recommended: Reorienting ODL policies and practices so that all necessary skills specifically oral communicative skills to be learnt and acquired; English language study material has to be transformed into audio and visual e-learning platform; Regional centers to be equipped with computer and language laboratories, and the allocation of intensive face to face for the language learning students.

Keywords: Oral communication skills, Open and Distance Learning, English Language, Quality education
TRANSDISCIPLINARITY, AN INNOVATIVE PRACTICE IN TEACHER EDUCATION PEDAGOGIES THAT WILL ACHIEVE “THE FUTURE WE WANT” CREATIVITY AND INNOVATION

Duduzile Mzindle
Durban University of Technology
Pietermaritzburg, South Africa
dudun@dut.ac.za
033-8458934; 082-435-7628
0338458936 (fax)

Abstract

Changes that took place in South Africa call for continuous innovation in curriculum design and implementation as well as effective and efficient ways of making sense of what we teach. The courses that we teach in the institutions of Higher learning should not only be responsive to the socio-economic development needs of our society but it should also develop students as resource. In Teacher education, teacher educators are expected to play a dual role in teaching and learning. Whilst they engage in epistemological issues in their interaction with their students, they also need to display best practice in pedagogical issues because students emulate what they teach. Adopting transdisciplinarity and multidisciplinarity can be one of the creative ways of providing holistic educational experience in addressing the demands of the new curriculum framework. In my discussion I am going to use the experience that I had in understanding that the multidisciplinary nature of the course that I teach called life orientation requires one to engage in epistemological discourse by breaking barriers that existed between knowledge, skills and values as well as head, hand and heart in working with people from other disciplines. Furthermore, vertical and horizontal articulation needs to be one of the elements which we need to be mindful of in the planning process in order to reach the pre stated outcomes. This is a call for educators to be flexible in working with other educators in trying to address complexities that are brought about by the transition from subject to learning areas which integrate disciplines that are foreign to them. This process is not linear in the sense that it requires intellectual debate, incorporation of stakeholders, deep reflection and it is rooted on constructivist paradigm.

The theoretical and conceptual underpinning of this study is informed by socio-cultural theory and critical discourse analysis. The former argues that learning is a social process and has its origin in human intelligence in society or culture. Vygotsky is the main proponent in the social cultural paradigm; he believes that learning takes place at two levels firstly through interaction with others and then integration of what is learned into individuals’ mental structure. This is part of action research that the researcher embarked upon in an attempt to create pedagogies that work in teaching and learning in teacher education.

I believe one should adopt a thematic approach in the design and delivery of curriculum in an attempt to achieving pre-stated outcomes rather than traditional subject or courses which were more rigid and did not leave a space to navigate knowledge across disciplines. This requires a change of mindset. Furthermore, the process requires strong and visionary leadership and management, as well as support, for it to be successful and effective.

Keywords: Integration, meaningful learning, action research, vertical and horizontal articulation, subjects to learning areas, holism vs atomism, feasibility study, monitoring and evaluation vision planning.
THE NEED FOR A (CRITICAL) PEDAGOGY OF PLACE IN SCHOOLS: A SOUTH-AFRICAN PERSPECTIVE

Krystle Ontong
Department of Curriculum Studies
Stellenbosch University
krystle@sun.ac.za

Abstract

For centuries scholars across different disciplines have tried to figure out how education can best respond to not only develop critical citizens who can compete economically at a national and global level but who are also morally equipped to function as an integral part of humanity. In order to achieve these goals, various attempts and adjustments to educational policy have been made ranging from curriculum reform to professional development programmes for in-service teachers. However, macro-level attempts such as these appear remote given the perilous state of education in South-Africa. Aside from poor numeracy and literacy levels we also face the moral dilemma(s) of intolerant behaviour towards our cohabitants. Witnessing the recent xenophobic attacks in South-Africa raises many questions and once again brings education under scrutiny. Occurrences like these, leave us baffled by the same question: what might education’s response be to a deepening moral issue? In this paper I argue that teachers should rethink pedagogy at a micro-level instead of policy at a macro-level. I explore a theoretical rationale for a (critical) pedagogy of place and suggest that it might serve as a potential supportive educational avenue for emotionally (re)connecting learners to the inner self. A deepened connection to the self-forms the basis for connecting to the environment, wider community and ultimately the other in more humane and moral ways. The paper concludes with a discussion on the possibilities for a (critical) pedagogy of place in an era which is defined by challenges relating to institutional accountability.

Keywords: accountability, education, environment, critical pedagogy, place, morals, the other, xenophobia
TEACHERS’ PERCEPTIONS OF THE POTENTIALS OF OPEN EDUCATIONAL RESOURCES FOR IMPROVING THE QUALITY OF ENGLISH SECOND LANGUAGE (ESL) TEACHING IN KENYA

Daniel Ochieng' Orwenjo
Kenyatta University,
Department of English and Linguistics
Nairobi
orwenjo@daad-alumni.de

Kanana Fridah Erastus
Kenyatta University,
Department of English and Linguistics
Nairobi

Abstract

The use of Open Educational Resources (OERs) in the teaching and learning of various subjects is a relatively new phenomenon in Kenya. With the advent and subsequent liberalization of ICT, material developers are subsequently shifting away from the traditional modes of material development in the form of textbooks and other "canonical " formats which require the teacher to use them as they are handed down without any input or modification. The Open Resources for English Language Teaching (ORELT) is one such example. This paper reports the findings of a baseline survey conducted in Kenya with a view to finding out the views and readiness of Kenyan Junior Secondary School Teachers with regard to the adoption of open resources for the teaching of English language in Kenyan secondary schools. It reports that whereas teachers are ready to embrace the use of open resources, they have varying perceptions on the suitability and potential efficacy of open resources in Kenyan classrooms.

It also emerges that such differing perceptions are constrained by institutional, cultural pedagogical and personal factors.

Keywords: ORELT, Perceptions, ESL, Kenya
EFFECTIVE TEACHING OF ELECTRIC CIRCUITS IN GRADE 12 PHYSICAL SCIENCE LEARNERS AROUND MOTHEO DISTRICT IN FREE STATE

M Rankhumise
mprankhumise@cut.ac.za

Abstract

Science learners come to class with pre-instructional ideas that may influence the acquisition of science concepts in electric circuits amongst grade 12 physical science learners. A basic assumption of the constructivist learning theory is that these pre-instructional ideas should be taken into account in constructing students' learning experiences in science classes. A number of conceptual change strategies have been studied in order to alter unscientific (also called alternative) conceptions towards the scientifically accepted conceptions. The challenging task of the science educator is to select appropriate teaching strategies and techniques that will enhance learning.

The study will use quasi-experimental, non-equivalent comparison group research design involving 140 Grade 12 physical science learners drawn from two high schools in the Motheo district. One school will be used as experimental group while the other school will be used as a control group.

The participating schools will be selected using purposive sampling. The selected schools will be geographically convenient to reach by the researcher. Purposive sampling will be preferred because the researcher needs to ensure that the intended intervention could be implemented in the participating schools. A theoretical framework, based on activity-theory as it is applied in a constructivist view of learning, will be developed.

First, a pre-test will be administered to students for diagnostic purposes, i.e. to determine their prior knowledge concerning electric circuits. The identified prior knowledge was then used as a basis for developing the instructional materials in the field of electric circuits. These were based on succession of activities and discussions, and were aimed to enhance progression from contextual to conceptual, through to formal understanding of the concepts. The teaching and learning approaches constituted ‘treatment conditions’, which will then be administered to the experimental group. Secondly the intervention strategies based on activity-based learning were developed. A variety of activities were chosen and sequenced so that students’ conceptions could progressively be changed from their alternative conceptions into scientifically accepted ones. These were based on succession of activities and discussions, and were aimed to enhance progression from contextual to conceptual, to formal understanding of the concepts. A post-test, the same as the pre-test, was administered at the end of the intervention in order to ascertain the effect of the intervention. Engelhardt’s determining and Interpreting Resistive Electric Circuit Concepts (DIRECT) instrument will be used to collect the data, and it will be used as both pre- and post-test. ANCOVA and average normalized gain scores will be used to compare the effectiveness of the intervention amongst the groups.

Keywords: alternative conceptions, activity-based learning, concepts, contextual, formal understanding
PERCEPTIONS OF CULTURALLY DIVERSE GRADE 12 LEARNERS REGARDING PROBLEM-SOLVING IN PHYSICAL SCIENCE DURING WINTER SCHOOL SESSIONS

Wendy N Setlalentoa
Faculty of Humanities
Department of Mathematics, Science and Technology Education
Central University of Technology
Free State, South Africa
wsetlale@cut.ac.za

Gregg Alexander
Faculty of Humanities
Department of Post Graduate Studies
Central University of Technology
Free State, South Africa
galexander@cut.ac.za

F Komati
Faculty of Humanities
Department of Mathematics, Science and Technology Education
Central University of Technology
Free State, South Africa
fkomati@cut.ac.za

Abstract

Although problem-solving is central to any Physical Science course, most students often find it very difficult. First time entering students to the Department of Mathematics Science & Technology Education, Faculty of Humanities at the CUT are mostly characterised by having poor numeracy and problem-solving skills coupled with poor attitudes to learning Physics, which is perceived to be a formula-driven, mathematical discipline. This study, using a non-experimental, exploratory and descriptive method, sought to establish perceptions of the Grade 12 learners who attended the winter school about problem-solving in physical science. A captive sample comprising 168 randomly selected learners enrolled for Physical Science from fifty high schools responded to a researcher-designed questionnaire distributed to them during the final week of the Winter School session. Winter school is part of the university’s community outreach programme to support learning from historically disadvantage schools. Data were statistically analysed using SPSS. Results indicated that, amongst others, factors which had a direct influence on the learners problem-solving skills related to their beliefs, content knowledge, teacher’s teaching strategies, motivation, laboratory use, and non-completion of the school syllabus in a year, were identifiable. Recommendations as well as suggestions for further research aimed at addressing the identified factors are advanced.

Keywords: problem-solving, winter school, science education
RESPONDING TO LACK OF CAPACITY FOR COMMUNITY SCHOOLS IN ZAMBIA THROUGH TEACHER GROUP MEETINGS AT SCHOOL AND ZONE

Peter Sinyangwe
TESSA Open University UK
sandra.rowden@open.ac.uk; kelly-ann.joyce@open.ac.uk
+ 44 (0) 1908 653553

Abstract

One of the challenges facing the education system in Zambia is the lack of sustainability for continuation of school based training programmes, meant to provide teachers with continuous staff capacity building. Often, teachers have applied to further their studies in various higher institutions of learning, and this has been done at great cost, both in terms of money and time meant to benefit learners in the classrooms, as this means that teachers have had to leave school, to attend to their studies many miles away, several times in a year. Quite often, such outings have been made mainly for teachers to be upgraded in terms of rank, or increase in salaries. Upon completion of their studies however, it has been observed in many cases, that teachers’ teaching skills are still mechanical.

One of the recent innovative and most sustainable method of providing teachers with pedagogical skills have been conducted in or nearer to the schools.

Due to widespread poverty levels in Zambia, children born into poor families are unable to attend regular Government schools, sometimes because of great distances to schools, or because parents cannot afford to pay user fees required by regular schools. In this case, such children have been enlisted into community schools, where no user-fees nor uniforms are required, and often children walk only short distances to attend classes. However, more than 85% of teachers teaching in these community schools are untrained, but only volunteers from the same community schools, rendering their services and are often paid by community members in kind; chicken, maize or anything that communities can afford. Most of the community school teachers getting into Government training colleges to train as teachers are deployed into Government schools, further denying community schools with trained teachers.

One way to provide sustainable training for community school teachers has been through the provision of school and zone trainings, where teachers have formed Teacher Group Meetings (TGM), and often meet to share their teaching experiences, and found other innovative ways of teaching various subjects on the school curriculum. Through these meetings, most community schools have improved their methodologies, and produced excellent results, sometimes better than those in conventional Government schools. One of the challenges facing these community schools has often been the lack of materials. In recent years, TESSA materials were introduced to some community schools in the eastern Province of Zambia. Such materials, which can be downloaded on the internet, have assisted teachers meeting TGMs, and are now widely used in many provinces of Zambia. TESSA materials have also assisted to meet various classroom needs for teacher preparations, and are now widely used in school and zonal Teacher Group Meetings in six of the nine provinces of Zambia. The Ministry of Education has currently acknowledged this influence and is now planning to replicate their use.
TESSA OERS- 10 YEARS ON: PROVIDING A MODEL FOR TRANSFORMING TEACHER DEVELOPMENT IN DIVERSE AFRICAN CONTEXT

Mike Solly
Open University, UK
University of Education Winneba on behalf of TESSA Open University UK
sandra.rowden@open.ac.uk; kelly-ann.joyce@open.ac.uk
+ 44 (0) 1908 653553

Abstract

Ten years ago, Teacher Education in Sub-Saharan Africa (OER) was conceived as a response to the critical issues of access to schooling and quality of primary education in sub-Saharan Africa through the use of open education resources. While access to schooling has improved over the years, the quality of teaching and learning continues to be a source of concern. TESSA is a community of around 20 institutions across 13 countries in Sub-Saharan Africa collaboratively producing and using Open Educational Resources (OER) to support teacher development. The OERs promote a learner-centred pedagogy and cover key curriculum topics in five subject areas with each of the 75 units adapted for specific country and linguistic contexts (5 languages). TESSA OER continues to be used in different countries and community contexts from Sudan through Nigeria and Togo to South Africa, and from Mozambique through Tanzania to Mauritius, and is helping to achieve 'the future we want' for primary school children in Africa. The flexible nature of the resources has enabled many countries to adapt them to suit their own specific needs. Evidence across the countries indicate that the pedagogy underlying the resources is transforming the practice of teaching and learning in schools and teacher training institutions. It is also noteworthy that in many contexts, especially where teaching materials are not available or inadequate, the TESSA OERs address this need. Reports however, indicate that the process of embedding TESSA in institutions has been slow in many contexts and new measures need to be adopted to ensure greater access and penetration. We will examine some possible ways of helping to make this happen.
INDIGENOUS KNOWLEDGE SYSTEMS (IKS) AND THE TEACHING OF CLIMATE CHANGE IN ZIMBABWEAN SECONDARY SCHOOLS

Vincent Itai Tanyanyiwa
Department of Geography and Environmental Studies.
Zimbabwe Open University.
Harare, Zimbabwe
tanyanyiwa@yahoo.com; tanyanyiwa@gmail.com
+263772373626

Abstract

Indigenous African education grew out of the immediate environment, real or imaginary where pupils had to have knowledge of the environment. Indigenous education inculcated a religious attitude that imbued courtesy, generosity and honesty. At colonisation Africans were thought of as primitive although they had their own systems, contents and methods of education. Colonialism signified the decline in importance of IKS. Formal education, based on the western world was introduced in Zimbabwe in the 19th century. Until recently, IKS was understood to be irrelevant, unscientific and outdated yet it is scientific. Few attempts were made to integrate IKS into formal education despite its potential in solving contemporary problems. The teacher-centered formal education separated pupils from parents; hence parents were not able to pass on IKS to their children. Failure to integrate IKS was a deliberate attempt to eradicate African education. The western assault on IKS also applied to the use of weather which determines the pattern of life especially in the eve of climate change. By shifting focus in the core curriculum from teaching / learning based on western science to teaching / learning through IKS as a foundation for all education, it is anticipated that all forms of knowledge, ways of knowing and world views be acknowledged as equally valid, adaptable and complementary to one another in equally valuable ways. Climate change presents one of the biggest threats facing human kind today. However, its manifestation has been exacerbated by limited use of IKS which are unique to a society. The uniqueness of indigenous people and their knowledge is inextricably connected to their lands, which are situated primarily at the social-ecological margins of human habitation such as tropical forests and desert margins. It is at these margins that the consequences of climate change manifest themselves in the following sectors: agriculture, pastoralism, fishing, hunting and gathering and other subsistence activities, including access to water. With collective knowledge of the land, sky and sea, indigenous people are excellent observers and interpreters of change in their environment. Resilience in the face of change is entrenched in IKS through diversified resources, livelihoods, social institutions, beliefs, mores, networks, cultural values and attitudes. Collectively held knowledge in a community offers critical insights which can complement scientific data although this is not integrated with western science. Government policies in Zimbabwe often limit options and reduce choices, thereby constraining, restricting and undermining indigenous peoples’ efforts to adapt. This restriction may lead to counterproductive policies which may lead to increased sedentarization, restricted access to traditional territories, substitution of traditional livelihoods, impoverished crop or herd diversity, reduced harvesting opportunities, and erosion of the transmission of IKS, values, attitudes and worldviews. IKS is very important for community based adaptation and mitigation actions in the agricultural sector for maintenance of resilience of social-ecological systems at a local level. This paper, through interviews, document analysis and personal observations proposes that it is best for Zimbabwe to develop her own climate change curricula and modes of delivery that incorporates IKS.

Keywords: Adaptation, Climate Change, Education, Indigenous Knowledge Systems, Resilience
SOCIAL RESPONSIBILITY IN REDUCING GAP BETWEEN HIGH SCHOOL AND 1ST-YEAR UNIVERSITY MATHS: SMU CASE, SOUTH AFRICA

Joel Lehlaba Thabane
Sefako Makgatho Health Sciences University

Solly Seeletse Seeletse
Sefako Makgatho Health Sciences University

Corresponding author: Solly Seeletse Seeletse
solly.seeletse@smu.ac.za
0(+27) 12 521 4291
071 605 5281
086 218 9442 (fax)

Abstract

Students enrolling at the Sefako Makgatho Health Sciences University (SMU) come mostly from the previously disadvantaged communities of South Africa. Their backgrounds are deprived in resources and modern technologies of education. Most of those admitted in the basic sciences were rejected in medicine and health related study programmes in SMU. Mathematics (maths) is the main subject for admission into SMU study programmes. However, maths results are usually low. In an attempt to help to prepare the students in the neighbourhood schools of SMU, some Maths educators partnered with local schools to communicate the needs and investigate the causes of poor maths results. They embarked on an action research to determine the level of educators’ maths education. The general aim of the research was to investigate the causes of deficiencies in maths teaching and results in the local secondary schools, focusing on teachers and learners. Asking the teachers about their education and learners about maths concepts of most difficulty, these were identified. The researchers assisted in teaching the difficult concepts. The study highlighted the most difficult concepts and the teachers’ lack of training in some content. Intervention of the researchers showed to be effective only for the very poor performing schools. Those with descent pass rates of over 50% did not benefit from it. This was the sign of lack of optimality in the methods used. The research recommendations suggested that intervention methods should be improved to be effective in all schools, and extension of the endeavours to more schools.
‘THE COMPLEXITY OF TRAINEE TEACHERS’ VOICE THROUGH REPRESENTATIONS’: EXPLORING AVENUES OF A PARTICIPATORY APPROACH IN EDUCATIONAL RESEARCH

Meda Charisma Thondee
Mauritius Institute of Education
m.thondee@mieonline.org
+230 4016555; +230 782 4007

Abstract

The use of representations (Barmby et al. 2012; Goldman, 2003; Schnotz, 2002) in Teaching and Learning has earned some popularity and an epistemological vantage for justifying participatory dynamics (Pillay, 2009; San Diego, 2008) at practical and conceptual levels (Mitchell, 2011). Considered as endemic to participatory approaches, representations (May, 2002, Stinson and Bullock, 2013) helps the researcher to introspect and understand participants’ constructions and interpretations of their experiences in a particular context. In this paper, I explore and revisit the use of representations including visuals as participatory research instruments. Five trainees, without prior teaching experience, enrolled on the Teacher Diploma Secondary were asked to talk about their imagined teacher selves using representations which includes poems, slams, monologues, creative stories and posters before their immersion to school. In an attempt to unveil the avenues of using representations as a methodological tool in educational research, the paper also optimize the creative and innovative mechanisms that representations contain in fostering dialogues on effective teaching and learning experiences. I chose a critical interpretive standpoint to better understand the complexity of trainees’ voices as they describe and reflect on their own the core values, beliefs and dispositions influencing their choice to join the teaching profession.

Keywords: participatory research methods, visual methodology, teacher self, representations, critical Interpretivism

References


INTERACTIVE APPROACH OF INTRODUCING TESSA SECONDARY SCIENCE OERS FOR EXTENSIVE USE: A FOCUS ON STUDENT TEACHERS OF UEW.

Sakina Acquah
E Ngman-Wara
University of Education, Winneba
on behalf of TESSA Open University UK
sandra.rowden@open.ac.uk; kelly-ann.joyce@open.ac.uk
+ 44 (0) 1908 653553

Abstract

TESSA OERs comprise a large bank of highly structured, activity based units meant to expose teachers to a more excellent way of teaching especially at the basic school level in Ghana, to improve learning and achievement. TESSA OERs are being used in higher education teacher training institution across many countries in Sub-Saharan Africa. Currently the University of Education, Winneba, student teachers at the Department of Basic Education are introduced to the TESSA OERs during the third year of their study. This study was thus conducted to investigate student teachers perception of a more interactive approach of introducing TESSA OERs to them during the training course and its effect on use during and after training. A survey was used to collect qualitative data from 120 out 160 students who were willing to take part in the study and twelve students teachers who showed more interest during lessons were sampled for focus group interview. Results obtained from the study indicated that participants got a better understanding of how to locate and use OERs effectively when an interactive approach is used in introducing TESSA OERs. Among many others, it is recommended that more print versions of
OERS be made available at the Department library for student use as a result of inconsistent power supply and poor internet connectivity.

**Keywords:** TESSA OERs, Interactive approach, Higher education, Teacher education, Student teaches

**ACCESSING TESSA OERS TO ENHANCE TEACHING AND LEARNING: THE CHANGING PHASES AT OLA COLLEGE OF EDUCATION GHANA.**

Victor King Anyanful  
Our Lady of Apostles (OLA) College of Education  
Ghana  
vkanyanful@hotmail.com  
00233-269-624632

**Abstract**

This paper focuses on the changing phases of accessing TESSA OERs to enhance teaching and learning process at the OLA College of education in Ghana. Accessing TESSA OERs at OLA College has passed through markedly three phases. Phase one hinged on Paper copies which had been printed out, next phase was TESSA OERs on CDs, and thirdly accessing TESSA OERs on mobile phones. The Paper copies phase spanned from 2007 to 2011. While the CDs era continued from 2011 to 2014, and then the third phase Mobile phone usage appeared in the opening months of 2015. All these phases represent a continuum to accessing the TESSA OERs. Although each stage had some limitations but its advantages far outweighed its limitations in that teachers and teacher educators could still access the TESSA OERs to help enrich their best practices in terms of teaching and learning. Again each stage has unique merits over the other or more particularly each stage had specific attributes that the other did not have. For example, the Paper copies stage made TESSA OERs available to teachers and teacher educators who were not too good with the use of technology to access the TESSA OERs and that enhanced their teaching and learning, and the Paper copies could be used even when there were power outage. While the CDs were now portable which could be carried along anywhere. The CDs
made easier access to the TESSA OERs as against the Hardcopies. However, the CDs could not be used in the state where there were power outages. The use of the mobile phones have now become the most convenient and portable tool to access TESSA OERs. Since mobile phones are now available everywhere it is envisaged that the mobile phone will now over take all the other ways of accessing TESSA OERs in Sub-Saharan Africa and beyond, as OLA College of education has succeeded in the use of mobile phones to access TESSA OERs.

**Keywords:** Teacher Education in Sub-Saharan Africa, OLA College of Education, Open Educational Resources, Paper copies, CDs, Mobile phones, Holy Child College, Foso College of Education, Komenda College of Education

---

**AN AUTO-ETHNOGRAPHIC ACCOUNT OF TABLET PCS USAGE BY SEN EDUCATORS WITH COGNITIVELY IMPAIRED LEARNERS**

Oojorah Vicky *Avinash*  
Mauritius Institute of Education  
aoojorah@mieonline.org  
+23058236592

Bhollah *Vimal*  
Mauritius Institute of Education  
vimalb_007@yahoo.com  
+23057688437

Toolsee Sangeeta *Devi*  
Ministry of Education and Human Resources  
sdtpriya@yahoo.com  
+23057670436

Shamtally Bibi *Sabina*  
Ministry of Education and Human Resources  
sabina2409@gmail.com  
+23057714034

**Abstract**

Tablet PCs usage in education is a global trend (World Bank, 2012). Mauritius has not been immune to it. Tablets are being implemented at secondary school level these days in Mauritius. Indeed, this technological device is defined as a tool that can enhance pedagogical practices within and beyond the four walls of the classroom. Furnished with appropriate associated tools such as a Classroom Management System (CMS) and a router, tablets can be a catalyst to teacher-
student, student-student and student-learning resource interactions. The implementation of tablet PCs is well under way in secondary schools since 2014. The pedagogical implementation of this initiative has been entrusted to the Mauritius Institute of Education (MIE). The MIE empowers teachers through training sessions, school-based interventions and web-based support such as Facebook and YouTube. The MIE has hence, through the Centre for Open and Distance Learning (CODL), acquired significant know-how with regards to the pedagogical implications of tablet technology.

We have recently considered the implementation of technologies to enhance teaching and learning in Special Education Needs schools. In this context the authors of this paper have visited schools with different types of disabilities. We came across this school, two inspired teachers and six wonderful learners early in 2015. The idea of implementing tablet PCs struck us immediately.

This paper is an account of the meeting of two worlds; educationist and educators with the aim of transforming classroom experiences of cognitively impaired learners at primary school level. In this case, tablet PCs were the transformative technology used. Both sets of authors/participants used dairies to write down their impressions over a wide spectrum of feelings. These accounts give an insight into essential factors that have to be taken into consideration while implementing technologies in special education contexts. It also elaborates on teacher support and types of applications that needs to be developed by interested developers.

ATTITUDES AND COPING PRACTICES OF USING MOBILE PHONES AMONG SECONDARY SCHOOLS STAKEHOLDERS – UGANDA.

Henry Ssebuliba Busulwa
Department of Science Technical and Vocational Education
School of Education
Makerere University
Kampala, Uganda
hsbusulwa@cees.mak.ac.ug
hbusulwa@yahoo.co.uk

Abstract

The debate to use or not to use mobile phones in communication, teaching and learning in Ugandan secondary schools continues at a time when internet coverage is still limited in many parts of the country. Mobile phones have reached many parts of the country, and in their packages, internet can be accessed as well. However, their use for teaching and learning in secondary schools is still unacceptable amongst majority of stakeholders. Discussions held in print and electronic media, are still skeptical about the idea to liberalize use of mobile phones in schools. Access to mobile phones does not only cause excitement to youths in Uganda but can also be destructive to adults. The major fear lies in the destructive and divertive communications that phones cause sometimes causing insecurity to pupils and their property. Youths chat a lot on social media, and use phone accessories such as radio, television, games etc., for entertainment. Students need to cope with choices of using phones for learning, social media communication, and acceptability by parents and teachers that phones are ICT tools which aid teaching and learning.
This ongoing study is carried out at a private secondary school, Namiryango High School in Uganda. It aims at investigating teachers and students attitudes and practices on use of phones in teaching and learning. Interactions through interviews and focus group discussions with stakeholders who include parents to document coping and change behaviour have been recorded since June 2014.

Results indicate that there is reducing fear among teachers (82%) and parents (91%) that phones are distractive. Students are eager to use phones (95%), and can cope so long as they are guided on specific sites where they can access learning materials. Some teachers are hesitant to use phones because of their inadequate capacity and skills to use ICT pedagogies (73%), and tools to promote interactive teaching. This is coupled with excuses of poor internet connectivity (76%). Few teachers were aware of Open Education Resources (27%) and very few (15%) had used TESSA secondary OERs.

Smart phones are an opportunity to increase internet accessibility in schools with no computers. However, teachers need to be retooled into use of ICT pedagogies. Teacher training programmes have to be adequately incorporate use of ICT tools. The Government should endeavour to include ICT and pedagogical development in teacher training programmes so that future teachers use internet for interactive teaching and learning. Therefore, embracing use of phones is opportunity to scale up internet and ICT pedagogies in interactive teaching and use of access open education resources like TESSA. The results from this study suggest some guidelines and good practices for schools to use phones for teaching and learning.

TRAINING TEACHERS IN USING TECHNOLOGY TO ACHIEVE THE FUTURE WE WANT: A CASE OF BOTSWANA

Chandapiwa Butale
University of Botswana
chandabutale@gmail.com
+267 7439 4335
+267 390 9156 (fax)

Abstract

In 2007, the Botswana government developed a National Information and Communication Technology Policy (NICT) aimed at guiding the integration of technology in different sectors of the Botswana society. Of particular interest to this paper are the policy’s recommendations regarding the use of ICTs in teaching and learning. It is argued that for technology to be used effectively in teaching and learning; it is imperative for teachers to be trained in the design and delivery of technology mediated instruction. The policy envisioned the use of technology in Botswana schools beginning at primary school level. Primary schools in Botswana are spread through the breadth and width of the country which makes it difficult to bring all in-service teachers to training institutions to upskill them in the use of ICTs in teaching.

It is argued in this study that training a few teachers from each administrative district of the country and tasking them in turn with training other teachers in their areas would expedite the diffusion of technology skills amongst teachers. The training of teachers in instructional design for teaching with technology is critical because once they are skilled they will in turn impact skills to their learners. For the envisioned use of technology to be actualised it is a given that the necessary infrastructure should be in place but for it to be used effectively by the teachers and students they have to be equipped.
with the necessary skills. Given the number of public schools and teachers who need to be trained to realise the goals of the NICT it is recommended that teachers are clustered into communities of practice (COP, Lave and Wenger, 1991). These COP will be aimed at training some teachers and having them share their newly acquired skills with colleagues in their cluster. The training institution will design distance education materials accompanied by audio recordings in the form of a DVD or any media that will be accessible for the teachers in their different locations. The selected teachers will be apprentices to the experts from the University and in turn will function as experts (under the guidance of the University experts) and develop an apprentice relationship with fellow teachers in their clusters in the process sharing the skills they have acquired. Lave and Wenger (1991) describe this relationship as Legitimate Peripheral Participation (LPP) which is a form of apprenticeship where “old-timers” (those with advanced skills) and “newcomers” participate in a community of practice until the newcomers also become old-timers. LPP is a cyclical kind of relationship in which newcomers ultimately become full participants in the COP and in turn work with newcomers.

The intention of this study is for teacher to be equipped with the necessary skills to effectively design and use technology-mediated instruction as it is viewed that technology savvy teachers will lead to African students who are also equipped with technology know-how and able to function in the digital economy.

References


EVALUATING MOBILE APPS FOR TEACHING

Ronel Callaghan
ICT in Education
Faculty of Education
University of Pretoria
ronel.callaghan@up.ac.za
+27 12 420 5521
+27 12 420 5621 (fax)

Abstract
The development in and availability of mobile technologies, such as tablets and smart phones, as well as other e-resources create many opportunities for use in teaching and learning. This is, however, also generating challenges for teachers that would like to use these resources, and specifically mobile applications (Apps) in teaching. The challenges include aspects such as the daunting quantity of Apps available, varying quality of Apps, application possibilities in teaching, as well as technical issues. This presentation focuses on the results of a research project that investigated evaluation criteria that can be used to assess Mobile Apps for teaching in the different school phases in subjects such as English, Mathematics, Science, Geography and Business Studies. Most of the Apps investigated are subject-specific (i.e. created to teach a topic within the focus-subjects mentioned), but some generic Apps were also evaluated for application possibilities in these subjects. The evaluation criteria include technical as well as educational aspects that can address subject specific challenges. Examples Apps from different school phases and subjects will be used in the presentation to illustrate this evaluation process and criteria. The selected Apps will include subject specific Apps for Mathematics, English and/or Science, as well as generic Apps that support the creative process.

USE OF OERS FOR SCHOOL SCIENCE & MATHEMATICS EDUCATION: AN INDIAN EXPERIENCE

Narendra Deshmukh
Homi Bhabha Centre for Science Education
Tata Institute of Fundamental Research
Mumbai, India
ndd@hbcse.tifr.res.in

Abstract
Nowadays OER development has become a social movement in India. OERs play a vital role in school science and mathematics education if proper deployment and utilization of OER resources takes place. Indian education system is now utilizing OER in order to attain social justice and empowerment. To achieve this sustainable educational development many institutional repositories, open educational resources and digital resources are effectively implemented in classroom. Many educational policies and reforms advocate that the open access to information and knowledge can enhance the quality and standard of school science & mathematics education. The efforts of the different organizations in India which have set up the institutional repositories that are accessible to all are noteworthy. Homi Bhabha Centre for Science Education (HBCSE), Mumbai, Maharashtra Knowledge Corporation Limited (MKCL), Pune and the Indian Consortium for Educational Transformation (I-CONSENT), Pune has developed digital resources for schools, which are to some extent, Open Educational Resources (OER) in nature, aiming at offering quality science & mathematics school education. The mentioned project was funded by the Rajiv Gandhi Science and Technology Commission of the Government of Maharashtra,
India. The content for the course was developed through a series of workshops organized involving practicing teachers, teacher educators, enthusiastic parents and subject experts, so far more than 1000 modules in school science and mathematics were developed. These modules are made available to the stakeholders (teachers, parents and students) through a website (www.mkcl.org/mahadnyan) specially developed for the project by the Maharashtra Knowledge Corporation Limited (MKCL).

Digital material takes into account the constructivist approach of learning and was field tested in Shri Shivaji Education Society, Amravati and Rayat Education Society, Satara with more than 400 science & mathematics teachers. The philosophy of the programme, the strategy of its implementation, mechanism of obtaining feedback from stakeholders for mid-course corrections and feedback obtained during follow-up workshops will be described in the paper.

**Keywords:** School Science, School Mathematics, Open Educational Resources, Digital Resources, Science & Mathematics Education & Teaching- Learning Process.

---

**USING TESSA OERS TO ENRICH THE TEACHING AND LEARNING PRACTICES OF BASIC SCHOOL TEACHERS IN WINNEBA MUNICIPALITY**

Sally Essuman  
University of Education  
Winneba, Ghana  
sallyessuman@gmail.com; sessuman@uew.edu.gh

**Abstract**

In recent times, teachers in Ghanaian schools have been encouraged to master creative ways of engaging pupils in their teaching and learning deliveries and employ new strategies in teaching so as to adapt to the fast growing needs of pupils in the 21st century. In this vein, fifty (50) basic schoolteachers in the Winneba Municipality were engaged in a training workshop, which focused on the use of TESSA OERs. The aim of the workshop was to expose them to the adaptation and integration of the OERs into their classroom-based teaching practices. The focus of this paper is to share some of the experiences gathered at the end of the training. One-on-one interview method was adopted using a semi-structured interview guide. The interview ‘stories’ were analysed manually and are presented as their ‘voices’ in the write up. The findings revealed that most participants had acquired added values to their approaches to teaching and learning and have purposed to improve their classroom practices. They also indicated that the new skills and knowledge will help them in their lesson preparations and planning as well as using the OER in their teaching and learning material (TLM) developments. It was recommended that similar training sessions be organised for all teachers in the municipality and even at their larger forums and conferences. They requested that the University should be engaging them frequently so that they can learn new pedagogies such as these.
Keywords: Open Educational Resources, teacher education in sub-Saharan Africa (TESSA), 21st century classroom

ICT INTEGRATION IN THE CLASSROOM TEACHING PROCESS: INVESTIGATING PERCEPTION OF SECONDARY SCHOOL TEACHERS IN MAURITIUS

Vanessa Gowreesunkar
Mauritius Institute of Education
v.gowreesunkar@mieonline.org
+ 230 401 6555
+ 230 454 1036 (fax)

Séraphin Hugues
University of Winchester, UK
Hugues.seraphin@winchester.ac.uk
+44 (0) 1962 841515
+44 (0) 1962 842280 (fax)

Abstract

The integration of Information and Communication Technology (ICT) in the classroom teaching process is an important area of research in many African countries embarking on educational reform. While some researchers favour this endeavor due to the numerous advantages it generates to the teaching-learning process, critics opine that ICT usage in classrooms is not a panacea that can guarantee educational success on its own. Research reveals that the successful integration of ICT will significantly depend on how teachers' perceive its usage in their classrooms. While previous efforts in research have provided a rich basis regarding ICT integration in classrooms, very few of them were explored from teachers' perspective. With this as foundation, the present study chooses to investigate the perception of secondary school teachers regarding ICT integration in their teaching process. The study takes place in Mauritius and utilizes a mixed methodology. Primary data was collected from a sample of 200 teachers working in
secondary schools located in Zone 1 (Pamplemousses, Port Louis and Riviere du Rempart). The quantitative research design was based on self-administered questionnaires while qualitative data was derived from structured interviews. The findings indicate that perception of teachers on ICT integration was highly subjective and in most cases, willingness to integrate ICT was influenced by both intrinsic and extrinsic factors. Those having positive attitude were favourable for ICT usage into their classrooms, but they were demotivated by factors like lack of competency, slowness in the process, limited logistic support and limited access to resources. Those not willing to integrate ICT into their teaching process refrained from utilizing it in the classrooms due to lack of confidence and unsupportive technical staff. The study concludes that perception of teachers was an important determinant in the effective usage of ICT in classrooms and could be positively influenced by addressing the barriers. The study provides practical information to educators and policy makers and shed light on drivers and barriers to ICT adoption by secondary school teachers in the instructional process. To broaden the scope of the present study, future research might consider other zones of Mauritius, and thus give a more holistic view on ICT integration in secondary schools from teachers' perspective.

NEW RELATIONSHIPS AND DIALOGUES: HOW THE TECHNOLOGICAL OBJECTS WE USE TO TEACH, IMPACT ON TEACHER DEVELOPMENT

Grietjie Haupt
University of Pretoria

Abstract

Governments, academia and industry consider Information and Communication Technology (ICT) as the key to improving education and thus boosting growth across Africa. However, in spite of large financial, political and academic investment in the physical accessibility of a variety of technological devices, continental research indicates there still seems to be widespread reluctance among teachers, trainers and managers to abandon traditional instructional and learning methods in favor of new solutions. In this growing state of multiplying media available to support teaching, it seems that the physical characteristics of particular technological objects affording information about its contextualised usefulness, with its intended potential to connect, process, apply and store information anytime and everywhere, is something to seriously consider when designing curricula for the development of teachers. This implies that teachers as users are embedded in countless socio-technological relationships with external sources of information including technical objects that serve as education media. Therefore, the urgency arises to raise the main research question: what is the nature of these relationships in an age of abundant technical-material objects that are embedded in their everyday socio-educational lives? Such media, including computers, Internet, tablets and smart phones constantly at work in the realm of information, knowledge and learning that serve as agents mediating the connection between the knowledge in the head of the user and knowledge in the external world. Governments, academia and
industry discuss and invest to large extent, in the potential of teachers being able to use these technological objects in as instructional tools. However, very little guidance is provided to introduce teachers on a rational level to make sense of these interrelationships through cognitive connection making processes. Interpreting the physical elements of these objects in terms of their pedagogic, functional and implementation intentions is rarely researched in an educational and instructional context. The purpose of this paper is therefore to provide a theoretical framework for guiding teachers’ interaction and use of a variety of digital devices serving as instructional tools from a psychological perspective. The framework is based on the potential for cognitive connection between teachers’ assumed knowledge in their heads and their perception, recognition and interpretation of new information emerging from technical devices. The argument in this paper is that if teachers are introduced to a rational, but informed approach to understand how the physical components of ‘new’ media connects with its pedagogic, functional, behavioural intentions, adopting the idea of implementing and applying it when learning and teaching, might be experienced as real solutions instead of unwanted challenges in their professional development. The following aspects regarding the design and use of technological media, suggested by design cognition specialists are considered in this paper: What is the psychology of technological media? What is the psychology of activities involved in implementing and using technological devices by teachers? Knowledge in the head and in the world; Knowing what to do; To err is human. These aspects drive conclusive implications for teacher development.

OPPORTUNITIES AND CHALLENGES OF ONLINE PROFESSIONAL DEVELOPMENT (OPD) FOR TEACHERS IN A SMALL ISLAND STATE

Flore Jianey
St Esprit Riviere Noire College
Mauritius

B Oogarah-Pratap
Mauritius Institute of Education
Mauritius

Corresponding author: Jianey Flore
jianeyf@yahoo.com
23057794035

Abstract

One of the major components of educational change is teacher professional development. According to extant literature, teacher training and development through traditional face to face approaches are not always effective in meeting the unique and changing needs of teachers. There is a need for teacher education programs that are more flexible and promote sharing of experiences through a community of practice. Online teacher professional development (OPD) can provide more flexibility and greater opportunities for sharing of experiences for initial teacher training as well as for continuous professional development. Despite the affordances offered by online technologies, little is known about the effectiveness of online professional development of teachers, more so in small island states where in most cases OPD is still at the ‘infancy’ stage and online technologies and pedagogical approaches have to be ‘borrowed’ from more developed countries. It is, thus, important to understand
the opportunities and challenges of OPD in such contexts before it is adopted on a wider scale. It is equally important to consider the implications of borrowing foreign online technologies and pedagogical approaches. This paper draws from extant literature to discuss the opportunities, challenges and implications of online professional development for Mauritius, a small island state in the Indian Ocean, where online professional development of teachers is emerging. The paper presentation should shed some light on factors to consider in the design and implementation of online professional development programmes for teachers in small island states.

PRIMARY TEACHER PROFESSIONAL DEVELOPMENT ON ICT AND MOTIVATION IN TEACHING.

Martha Jacob Kabate
Open University of Tanzania
martha.kabate@out.ac.tz; nyamtandajm@yahoo.com
+255 716 155 533

Abstract

Information Communication and Technology (ICT) is an essential tool for initial and continuous Teacher professional development as it increases teacher motivation and confidence in Teaching. This work intended to examine how Primary Teacher Development on ICT influence teachers’ motivation in teaching, specifically the study explores teachers’ attitude on learning ICT as a subject; it identifies a kind of teachers’ motivation in teaching which has been influenced by professional development on ICT; explores how teachers use the motivation from professional development through ICT in teaching. Lastly, it identifies factors that influence motivation in teaching influenced by the professional development of ICT. The study was based in Dar es Salaam region, Temeke district. The study used quantitative – qualitative approach. The quantitative approach was used for questionnaire data collection method, while the qualitative approach was used for observation of the presence of computers and internet connection in the 5 selected primary schools in Temeke district and interview for information follow up. Purposeful and random samplings were used to have the targeted population and the selected schools while 50 primary teachers from selected schools from Temeke were included in the study. The data for questionnaire were analyzed through Special Package for Social Science (SPSS) version 19, while content analysis was used for the data obtained from the interview. The study found that, primary teacher have positive
attitude on learning ICT in their Diploma course, the ICT knowledge and skills are essential to teachers at personal level, family level as well as at the community level. However, professional development on ICT more intrinsically motivates teachers in teaching than being extrinsically motivated, because the knowledge and skills are interesting, satisfactory and one applies the skills from inner feelings. ICT skills and knowledge motivate teachers in teaching by updating their lessons as well as their lessons plan and creating learners-centric learning environment, mentioning few. Teachers reported present teaching pedagogies; availability, affordability of the computer together with internet connection and access. On the other hand, roles and responsibility of a teacher and lack of teachers’ ICT skills and knowledge and recognition in the school are major challenges. Teacher professional Development on ICT in education is significant in arousing teachers’ motivation in teaching. Therefore, the Tanzanian government through the Ministry of Education and Vocational Training (MEVT) and other educational stakeholders should harmonize the following: the teacher-related factor, environment-related factor as well as situational-related factor in integrating and adopting ICT skills and knowledge in primary schools.

**Keywords:** ICT, Teacher Professional Development, Motivation, Teaching, primary School

**ACHIEVING “THE FUTURE WE WANT” FOR EDUCATION IN AFRICA BEING A MYTH AND A REALITY**

**D Kaije**

**Abstract**

In its report on 29 January 2014 UNESCO put it that after two decades of the involvement of African and international agencies, it is clear that none of the six Education for All goals will be achieved at global level by the 2015 target year.

Education in Africa and Uganda in particular has tried hard to give quality education to their citizens. Some African governments have directed their savings from debt relief towards the education sector. Mali, for example, has annually allocated almost half its debt relief savings towards education, leading to a 14% annual increase in education expenditure between 2001 and 2006. In Nigeria, debt savings were used to hire 40,000 teachers. Debt relief has also enabled many African governments to abolish primary school fees, opening school doors for millions of poor children. The abolition of school fees resulted in an additional 1.3 million children in school in Kenya and 3.1 million more children in school in Tanzania.

However, there are many more challenges that have emanated as a result of the system amongst which is a drop in quality education, increased learner enrolment at all levels of education, an increased need for teachers corresponding to the rise in enrolment.. These challenges have increasingly made education for all a myth.

This study will show a picture of Africa continuously thriving to achieve “Learning for development” and demonstrate the influence of for example OERs particularly TESSA in fulfilling learning for development. The teachers and learners in both Primary and secondary levels of
USES BY AND CHALLENGES FROM TEACHERS USING TESSA PRINT MATERIALS IN SECONDARY SCHOOLS SELECTED TANZANIAN SCHOOLS

Joviter K Katabaro
University of Dar es Salaam (duce) Tanzania
on behalf of TESSA Open University UK
sandra.rowden@open.ac.uk; kelly-ann.joyce@open.ac.uk
+44 (0) 1908 653553

Abstract

The teaching and learning of science in Tanzania has posed a number of challenges. Two major problems often cited include the lack of adequate and qualified numbers of science teachers and poor or lack of enabling environment to teach science subjects, manifested by lack of laboratories and science kits at secondary and primary school levels, respectively. The culmination of these factors has led to a limited number of students studying science in teacher training institutions, a consequence of continued limited number of science teachers in schools.

The current paper explored the uses of TESSA science materials and the challenges facing secondary school teachers in selected schools and their perspectives after interacting with TESSA materials. Six schools were purposively selected given their geographical location and proximity to computer use. A total of eight science teachers are involved in the study. Data collection is handled through in-depth interviews and focus group discussion as well as documentary analysis. It is anticipated that the paper will shed light on the uses of the materials and how teachers can by themselves add other topics along the ways TESSA materials were developed. It is also anticipated that the paper will identify challenges facing teachers who have no
easy access to computers and how such teachers can be supported through ODL.

TESSA OERS AND PARTICIPATORY TEACHING APPROACHES

Goodwell Kaulu
Austen Cibesakunda

University of Zambia
on behalf of TESSA University UK
sandra.rowden@open.ac.uk; Julie.Herbert@open.ac.uk
+ 44 (0) 1908 653553

Abstract

TESSA Secondary Science OER was introduced into the University of Zambia in 2012-2013, with the aim of raising awareness of participatory pedagogy and improving the quality of classroom teaching. A mixed methods study was carried out between April 2013 and June 2013, in order to investigate the impact of these resources in a Secondary School in Lusaka.

The study used an experimental design of the type pre-test post-test control group. A randomly selected sample of 147, comprising 5 teachers, 32 student teachers and 110 secondary school pupils, was involved in the generation of data. The data collection procedures involved the researchers administering questionnaires to the teachers and student teachers, and tests to pupils. Quantitative data were analysed using both descriptive and inferential statistics. Descriptive statistics consisted of the calculation of percentages and post-test mean scores. Inferential statistics (Independent t-test) was used to determine if there was a statistically significant difference between the two post-test means for the two groups. Qualitative data was analysed using the constant comparative method. The results indicated that
TESSA OERs and teaching approaches were exciting, learner centred, practical and enhanced learner performance in science.

Based on the promising results from this small-scale study, funds have been obtained for a study designed to investigate ways of enhancing the participation of girls in mathematics, science and technology. The project will be financed by the National Science and Technology Council (NSTC) of Zambia. It will take two years, beginning June this year. The TESSA OER and teaching approaches will form a significant component of this project. The paper will report on the findings from the initial study and present plans for this new study.

AN INVESTIGATION INTO THE IMPLEMENTATION OF TEACHING AND LEARNING TECHNOLOGIES AT THE UNIVERSITY OF MTHWAKAZI RURAL CAMPUSES.

Benkosi Madlela
University of South Africa (UNISA)
benkosimadlela@yahoo.com
0026876435185

Abstract

The 21st century has seen a massive advent of technologies arguably more than at any other time in the history of mankind. Education systems world over have tapped into emerging technologies for the purposes of moving ahead and staying abreast and relevant to the time, as well as expediting their teaching and learning systems holistically. In 2000 Mthwakazi University (MU) College of Education introduced distance learning programmes for teacher education and training. MU students come from the 5 Mthwakazi provinces, Bulawayo, Matabeleland South, Nkabazwe, Mpumalanga, and Matabeleland North. In order to offer convenient and effective services to all students in different geographic areas in 2010 the university opened campuses and offices to coordinate teaching and learning activities in different provinces and districts of Mthwakazi. In the same year the university also adopted a technologically enhanced teaching and learning approach in the implementation of its education programmes. The paper will investigate how technologically enhanced teaching and learning approach is being implemented in rural MU campuses where there is no electricity, internet connection or both. Qualitative research will be undertaken to collect data using data collection instruments such as observations, interviews, and focus group discussions with lecturers and students at MU rural campuses. Purposive sampling method will be used to select participants to
the study. This method will how-ever be complemented by random sampling. Purposive sampling will be used through targeting MU rural campuses, lecturers and students throughout Mthwakazi. Though targeted these campuses and participants are too many, it won’t be feasible for all of them to participate in the study, as a result random sampling will then be finally used to select those campuses, lecturers and students who will participate in the study. Doing so will give all participants an opportunity to be selected to participate in the study. This study will be conducted in April 2015 during MU’s first semester. Collected data will be qualitatively presented and analysed using a thematic approach. Based on literature review and findings of the study recommendations will be made on how best teaching and enhancing technologies could be utilised by MU rural campuses where there is no electricity, internet connection or both. The finding of the study will be shared with MU main and subsidiary campuses.

Keywords: Teaching, learning technologies in MU rural campuses.

A CONTRIBUTION TO EVALUATING MATHEMATICAL ONLINE LEARNING TOOLS SUCH AS KHAN ACADEMY AND TABLET TECHNOLOGY

Shaheed Mahomed
Cape Peninsula University of Technology, Cape Town, South Africa
mahomeds@cput.ac.za
27 822020617
27 865486048 (fax)

Abstract

Pre-service primary level teachers enter university with a poor background in mathematics. There is a national crisis in the low level of mathematics results at all levels of schooling in South Africa. This is part of an international crisis that also plays itself out across Africa. There are a number of initiatives attempting to improve the level of mathematics both among teachers and students.

One area is the use of online mathematical learning tool, Khan Academy, to attempt to assist pre-service student teachers to strengthen their primary core knowledge in mathematics. Khan Academy has been utilised on 2 groups of students in 2014 and 2015. We will present our interim findings in this area.

Another area is tablet technology with a plethora of math applications (apps). There is as yet little guidance on when and how these apps should be used and what value they have. The maths department in the Education Faculty (GET) of CPUT (Cape Peninsula University of Technology) has started a project to begin a process of evaluating math apps with a view of building up reviews that could assist educators on appropriate selection of apps and timeous use thereof. The idea is to build up a bank of apps with reviews that could be used
nationally, if not internationally, that are evaluated from a learning theory perspective.

A social constructivist perspective posits that students construct knowledge within themselves in the context of their social, physical and psychological contexts. Sfard (1991) with her theory of reification, Goodson Espy(1998), Hubbard (1997) , Smith et al (1996), Delia Marshall (2005) and others, with their respective contributions to learning theory, are united in their views that student learning is a process. Initially a certain level of recall and ‘repetition’ may be necessary, but for concepts to be consolidated needs various strategies that speak to higher order thinking and deep learning.

The math apps have largely not been designed from a learning theory perspective and it is necessary to begin a rigorous process of evaluation so that technology that purports to assist students, are used appropriately.

Students are first given a grounding in learning theory and then assigned tasks of evaluating selected math apps before embarking on a more generalized and detailed study thereof. What has emerged so far is an interim framework for the evaluation of math apps. The initial findings on what may constitute a 5 star rating for math apps, within a South African context, is presented.

References


THE ROLE OF MOOCS IN INTERNATIONAL HIGHER EDUCATION

Eldonna L May
Wayne State University
Music Department
Detroit, Michigan
elmay@wayne.edu
011+ 313 577 9467
011+ 313 577 5420 (fax)

Abstract

The term “MOOCs,” or “Massive Open Online Courses” originated in 2008 during a course called “Connectivism and Connective Knowledge” offered to students at the University of Manitoba, and these courses have been changing the way we think about higher education and distance learning in the United States for the past five years. These course offerings target large-scale participation along with free and open access via the web, often using open educational resources. Typically, MOOCs do not offer academic credit and roughly 10% of the tens of thousands of enrolled students successfully complete the courses. However, the discussion elevated to warp speed in Fall 2011 when Stanford University launched three courses, each of which had an enrollment of approximately 100,000; and several well-financed providers in collaboration with top universities emerged, including Coursera, Udacity, and edX. Not wanting to be left out of the equation, many universities and online service providers, including Blackboard, Inc., quickly followed the trend.

MOOCs attract large numbers of participants, some of whom have been educators, business people, researchers, and others interested in Internet culture. There are both benefits and risks associated with


MOOCs. For example, a MOOC can be organized in any setting that has connectivity and can be conducted in any language, moving beyond time zones and physical boundaries. One of the most attractive features of MOOCS includes the opportunity to add to one’s own personal learning environment and the capability of improving lifelong learning skills. One of the risks to consider: MOOCs threaten the current higher educational business model by potentially selling teaching, assessment and placement separately from the current suite of services. Some MOOC providers have begun charging licensing fees for educational institutions; students are now able to pay to take a proctored exam which could lead to obtaining transfer credit or a certificate at a degree-granting institution. To determine the role and relative merits of MOOCS in transnational higher education – low-cost credit granting educational opportunities or merely online vocational education – the research design for this article comprises an interpretive framework based upon quantitative and qualitative methods incorporating an exhaustive literature review and statistical analysis of MOOC course enrollments versus completion rates and student retention data.

Clearly, in a very short time MOOCS have become interwoven into the fabric of higher education and a presentation centering on the viability, role, and future of such massive open online courses in international online learning environments is both pertinent and critically important to the stakeholders, cohorts, and attendees at DETA 2015.

AN INFORMATION AND COMMUNICATIONS TECHNOLOGY NETWORK IN RURAL SCHOOLS IN SOUTH AFRICA

Maryke Anneke Mihai
University of Pretoria
maryke.mihai@up.ac.za
+27 824302928; +27 124202077
+27 124205621 (fax)

Abstract

Information and Communications Technology (ICT) enhances our abilities to think, learn and communicate creatively. ICT has become so important and valued in our society, that it dictates the way we communicate, organise, plan and behave. It affects all spheres of our lives and has become an indispensable tool to function in modern society (Anderson, 2010). The ongoing infusion of ICTs in schools, driven by the belief that ICTs can play an important part in reforming education and advancing educational goals, has placed pressure on school management teams to address reform and make ICT a priority in schools (Wong, Li, Choi, & Lee, 2008).

Some of the challenges that developing countries like South Africa are facing, with regard to ICT implementation, are the lack of infrastructure, resources and funds, which contribute to the widening of the digital divide between Africa and the developed world (DoE, 2004). Teachers’ reluctance to wholeheartedly embrace technology is often seen as reflecting their professional conservatism or lack of vision, but pockets of innovation in South Africa do exist, for example the use of an IWB network between six Mpumalanga schools, used in teaching Mathematics and Science to grade 11 and 12 learners. A number of rural schools formed a cluster in 2008 using advanced ICT technology to disseminate knowledge centred in one institution
to other, more impoverished, classroom situations. As a concept, it is unique to schools in South Africa.

This study was a descriptive qualitative case study. I selected participants per school that are directly involved with the project and invited them to participate on a voluntary basis. I interviewed 30 participants: six principals, five SGB members, six HOD members, nine teachers, the project manager, a project organiser, an administrative officer and a representative of the Mpumalanga Department of Education (MDoE). Another invaluable source of information was document analysis. Such data for this network included web sites, newspaper accounts, reports on the progress of the project, and learners’ marks.

In this project, teachers are getting together in subject groups in which they exchange knowledge and do peer teaching and coaching. The HODs doing the transmissions are in charge of the subject groups and they discuss the common assessments and any problems arising from the network. This is one of the reasons for professional development. Training is a very important aspect of this ICT project and all teachers receive training to keep them updated with the latest, most innovative developments in terms of lesson content, how to use the computer and IWB, and the usage of the relevant software.

A lot of changes took place in the teacher environment. The teachers doing the transmissions share quality teaching among the geographically dispersed classrooms. This resulted in a marked improvement in the quality of lesson content and teaching methodology of all teachers. An e-learning project office was established to take care of the different reports coming from rural schools concerning marks, technical support and maintenance. In the quarterly meetings, the yearly project plans are discussed and the infrastructure determined.

References


HOW TO SYNC IN A BLINK: TEACHING ONLINE IN COUNTRIES WITH RESTRICTED INTERNET ACCESS

Gerda Mischke
University of South Africa
mischge@unisa.ac.za
+27 82 867 7032
+27 12 429 4960 (fax)

Narend Baijnath
University of South Africa
baijn@unisa.ac.za

Abstract
In response to the reality that a substantial number of African students in the South African context do not yet have regular access to the internet, the University of South Africa (UNISA) is making some of its online courses available on “digi-bands”. The digi-bands allow students to access their courses and participate in online learning activities in an offline environment. Synchronisation software on the digi-bands allows students to synchronise their digi-bands with their course sites on the university’s learning management system (LMS) at regular intervals (e.g., once a week). This process involves a cross transfer of student work from the digi-band onto the LMS and of course updates, announcements, and discussion forum posts from the LMS, onto the digi-band. This paper analyses and interprets statistical data about student responses to the digi-band initiative and reflects upon the significance of offline-online initiatives in countries with an uneven distribution of access to ICTs.

E-TUTORS’ PERSPECTIVES ON E-TUTORING AS AN ONLINE RESOURCE

Kesh Mohangi
Narainsamy Naidu
Department of Psychology of Education
UNISA
Corresponding author: Kesh Mohangi
mohank@unisa.ac.za
012-4292126

Abstract
Although often fraught with challenges, the ODeL context of teaching and learning has opened doors of higher education opportunities for aspiring students worldwide. In many cases, this is driven by students’ desire for flexible and accessible learning opportunities. Hence, the use of technology to support the throughput of increasing student numbers in an ODeL environment appears mandatory. Since 2013, e-tutoring, as another mode of academic support, is being phased in gradually at the University of South Africa (UNISA).

In this paper, we report on the experiences of e-tutors in the module The Learning Child (ETH102L) at UNISA with the intention of improving pedagogy and informing good practice in e-tutoring. We utilized a qualitative, exploratory approach to understand the e-tutors' perceptions of e-tutoring a first year module. Although we purposively selected all the e-tutors who tutored in this module during 2013 and 2014 (n=10), participation was voluntary and anonymous. The appropriate ethics approval was gained prior to the study. Data was gathered by means of questionnaires and analysed qualitatively via thematic content analysis.
Findings indicate that e-tutoring, still in the fledging stage at Unisa and beleaguered with challenges, are nonetheless viewed favourably by the e-tutors engaged in this module. Close academic engagement with the module leader who develops the content, is seen as critical for e-tutoring success. A challenge experienced by e-tutors is the constant need to motivate and support students to engage in academic discussions while also managing the complexities of online communications. Therefore, enhancement of e-tutor capabilities in e-tutoring is an important factor to consider when determining whether e-tutoring and learning is coherent and effective. Administrative challenges aside, e-tutors believe that the e-tutor system can help with the pass rates and with student retention given the personalised contact they are able to achieve with students thereby reducing academic isolation.

BOLSTERING OERS FOR INNOVATIVE TEACHER PROFESSIONAL DEVELOPMENT OUTREACH PROGRAMMES: THE CASE OF TESSA IN TANZANIA

Cornelia Koku Muganda
The Open University of Tanzania
on Behalf of TESSA Open University Uk
corneliamuganda6@gmail.com; sandra.rowden@open.ac.uk; kelly-ann.joyce@open.ac.uk; cornelia.muganda@out.ac.tz
+44 (0) 1908 653553

Abstract

Teacher training and professional development is continually compounded by contextual issues. Profound however, is that quality education requires quality teachers. Thus, quality training and continuous teacher professional development is imperative. In this paper, we are examining the demands of teacher professional development in Tanzania within the current and envisaged future of education in the country; we acknowledge the pivotal role of OERs, in particular Teacher Education in Sub-Saharan Africa (TESSA); and we argue for more innovative approaches that can enhance TESSA OERs outreach to more teachers now. The paper is based on the analysis of the current context of teacher education in Tanzania and a recent survey of the perceptions of TESSA users on how to enhance the effectiveness of TESSA in addressing the current demands of quality teachers in Tanzania. It is observed that the context of Teacher Education in Tanzania is within the ambiance of the ‘Big Results Now’ (BRN) policy and the Education and Training Policy of 2014. The policies acknowledge that the quality of education in Tanzania is below expected standards and promote revamping basic education so that learners are prepared for self reliance and competitiveness in the global market economy. Tanzania has also expanded basic education
to secondary education level. Recognizing the role of teachers in quality education Tanzania is phasing out teachers with less than a diploma qualification. This indicates immediate higher demand for professional development of current primary school teachers. In response to this situation some Teacher Training Colleges (TTCs) have been upgraded to offer Diploma in Primary Teacher Education Programmes.

However, more capacity and flexibility to reach-out and upgrade more teachers is ardently required. In this paper we argue that under such situation the role of appropriate OERs, such as TESSA materials cannot be over emphasized. The argument is based on the results of a recent survey of perceptions of TESSA users on the effectiveness of TESSA materials in Tanzania. The objectives of the study were to enlist reflections on the use and potentials of TESSA materials and to identify innovative ways to bolster their effectiveness in addressing the current demands for quality teachers and teacher education in Tanzania. The methodology was a descriptive analysis of mainly qualitative data obtained through interviews, focused group discussion and document review. Findings were that while the Diploma in Primary Teacher Education (DPTE) programme that integrated TESSA OERs has reached out to 4,805 and graduates are acknowledged as effective teachers, it has reached hardly 4% of the required quality diploma teachers.

There is a need therefore, to be more innovative in the use of OERs to reach-out more teachers. The suggested strategies include: strengthening mechanisms for continually identifying and sharing experiences on potentials, challenges and solutions; capacity building for Tutors and Teachers to enable them access, integrate and use OERs; develop and disseminate TESSA use handbook; incorporate more multimedia to widen access to individuals with special needs; developing and offering TESSA based MOOCs; evaluate and update the DPTE programmes; establish mechanisms of making TESSA users (e.g. DPTE graduates) advocates and promoters of TESSA materials and ensuring awareness and support of stakeholders.
TABLET PCS TRANSFORMING RELATIONSHIPS IN TEACHER EDUCATION TO SUPPORT PEDAGOGIC CHANGE

Patricia Murphy
The Open University
patricia.murphy@open.ac.uk
+44 (0)1908 652376

Freda Wolfenden
The Open University
freda.wolfenden@open.ac.uk
+44 (0)1908 858082

Fiona Henry
The Open University
fiona.henry@open.ac.uk
+ 44(0)1908 652602

Dele Yaya
National Teachers’ Institute
Nigeria
doyaya5761@yahoo.com
+234(0)8060481393

Abstract

Teaching practice is integral to teacher education programmes but trainee teachers are rarely positioned as agents in learning and struggle to enact the ‘learner-centred’ pedagogy promoted in policy and training programmes (Akeampong et al 2013). In previous work we argued that movement of trainee teachers into participatory pedagogy is dependent on relational change in teacher educators (Murphy & Wolfenden, 2013). Dialogue is the foundational process for learning in a participatory pedagogy and this requires transformation in the relationship between teacher educators and trainees. TESSA OER (www.tessafrica.net) functions as a boundary object that bridges between communities of practice in schools and training institutions (Wenger, 1998). Using TESSA OER teacher educators act as brokers enabling the development of shared practices across community boundaries leading to change within schools; but to do so they need cultural tools that allow them to engage with trainees in new ways.

Building on a long-term partnership through TESSA between the Open University (OU) and National Teachers Institute Nigeria (NTI), this project explored teacher educators (supervisors) use of tablet pcs during school visits to trainees on the Nigerian Certificate in Education programme. Thirty supervisors from Kaduna, Niger and Federal Capital Territory were each given a tablet pc preloaded with the TESSA OER, Teaching Practice Supervisors (TPS) toolkit, guidance on tablet use and a template for recording data during school visits in the 2013/14 academic year. The tablet is a tool that can empower by creating possibilities for new actions and we anticipated dual use in providing access to TESSA OER and as a means of embedded data collection. In the data collection we considered the interaction between the potential of the tablet to shape action and the unique appropriation and use of the tablet by the supervisors. Tablet data was complemented by questionnaires and interviews with supervisors collected at project workshops.

An individual using a new mediational means such as a tablet has to change since it calls for new techniques and skills. Data analysis revealed how participation with the tablet as a legitimate tool of their community of practice enhanced supervisors’ connections to, and identification with, their community, affirming and transforming their professional identity. Ready access to TESSA OER facilitated a focus on detail in the OER, valuable in setting targets with trainees. Critically,
tablet functionality was harnessed to capture interactions between trainee teachers and their pupils. This interactional data provided evidence for the negotiation of meaning creating opportunities for learning for the trainee teachers in understanding how knowledge and ways of knowing develop in different classroom situations. Bridging between the known and the new through dialogue presumes intersubjectivity. Photographing or videoing critical moments provided opportunities for different perspectives to be made available shifting the dialogue with trainee teachers, from delivery of a formal judgement of quality of practice towards formative feedback on how to improve practice to achieve quality.

Specifics of the NTI supervisor role are unique but we suggest these findings have wider applicability in support for trainees during teaching practice in multiple contexts.

References


EMBRACING THE NEW TECHNOLOGY TO ENHANCE TEACHING AND LEARNING FOR SCHOOL LEARNERS

Vannie Naidoo
School of Information Technology and Governance
Discipline of Management Studies
University of KwaZulu-Natal
Durban, South Africa
+270722566626; +270312608080

Abstract

Traditional teachers were revered for their chalk and talk. Although this method is so widely used and the chalkboard should never be underestimated, new technological tools have made their way forward into the school arena to enhance classroom teaching. Since teaching is under the microscope for embracing quality to its learners, the new technologies are here to add value to the teaching experience and improve the quality of the teaching service provided. From a basic marketing perspective when a school looks to improve on its quality of teaching it should look at what the learners needs are surrounding teaching and learning. Since we are in the digital age, the learners of today are very techno savvy. Teachers therefore can embrace tools in technology that can help them facilitate the learning process in the classroom. Since learners enjoy interacting with their cell phones, computers and tablets, then teachers need to add this technology where possible into their teaching syllabus. These new technologies can only serve to enhance classroom teaching and learning. At the end of the day a good teacher can use this technology and help the learner. This paper would firstly highlight the new technologies present in classroom teaching; how the new technologies used in teaching can enhance teaching quality would be argued; the benefits and shortfalls of using these new technologies in the African context
TEACHING AND LEARNING AT A DISTANCE

Gomang Seratwa Ntloedibe-Kuswani
Department of Educational Technology
University of Botswana
ntloegs@mopipi.ub.bw
+267 71716626; +267 3552051
+267 3909156 (fax)

Abstract

Distance learning is considered an important vehicle in extending access and participation in higher education to those in rural communities. However, as a technology-driven enterprise, distance learning in Botswana is faced with many challenges of a weak technology infrastructure; hence great difficulty in effectively supporting distance learners in rural communities (Dodds et al., 2008). Thus, many distance learners in rural communities learn with limited resources hence limited participation in higher education for rural communities. Though communication technology infrastructure is weak in rural communities and non-existent in some, almost all distance learners in these communities own personal electronic devices, especially mobile cellular phones. The kind of devices owned provides insights into the kinds of accessible communication technologies (Romiszowski, 2003; Viljoen et al., 2005; Ntloedibe-Kuswani, 2013). Given the ubiquity and mobility of communication technologies –especially mobile technologies - and their potential to reach out most sectors of society, the study explored contextual uses of these technologies and how the realities grounded on contextual activities may enhance distance learning to better meet the needs of learners especially in communities were distance leading is most needed - rural communities.
The study conducted an exploratory context analysis of learning environment for elementary school teachers learning at a distance. The study focuses on how the current uses and impressions of electronic technologies among distance learning teachers can inform strategies for creating better learning environment for teachers teaching and learning at a distance. Teaching and learning at a distance implies a distance (visible or invisible) away from resources that are required for quality teacher education. The initial assumption of the study was that most elementary schools are neglected because of their location (rural) only to discover that all elementary schools are neglected because of their focus on basic education, which is supposed to be primary and foundation.

The study uses an embedded case study design, with 2 cases to explore how distance learning teachers use electronic technologies that they already have in teaching and learning. The research took place in two school districts in rural communities in the South and North of Botswana. The research participants were 30 distance learning teachers (16 from Case 1 in the South and 14 from Case 2 in the North). The study used both semi-structured interviews and survey questionnaire. However, only data from survey questionnaire is reported.

Key words: electronic technologies, distance learning teachers, instructional design, learning environment.

References


(www.researchictafrica.com).


DEVELOPING AUTONOMOUS ONLINE LEARNING MATERIAL CONCERNING ORAL COMPETENCIES IN FRENCH AT LOWER SECONDARY LEVEL: INSIGHTS FROM LANGUAGE DIDACTICS AND (SOCIOLINGUISTICS)

Shameem Oozeerally
French Department
Mauritius Institute of Education

Kaviraj Peedoly
French Department
Mauritius Institute of Education

Abstract
The recent socio-situational dynamics pertaining to secondary education in Mauritius emphasise the development of oral competencies among learners in the lower secondary levels. The National Curriculum Framework for Secondary (2009) highlights the teaching of oral and underlines the competencies which must be reached during the initial phases of secondary schooling. A study during a workshop organised by OIF and MIE in November 2014 revealed a form of scission between the conception of prescribed French textbooks and the NCFS, even though minor efforts can be noted (Horizons 1, 2014). The teaching and learning of oral French is being piloted in 44 secondary schools and related material is scarce.

This study represents a snapshot of a broader project aiming to fill this gap by providing teachers with a complementary instrument to address questions relating to the teaching of oral French and to provide learners with content enabling them to autonomously improve their own oral competencies through online platforms, in addition to what is already being done at school level. This present paper will focus on the epistemological and theoretical dimensions emerging from the (trans)disciplines of language didactics and (socio)linguistics. This type of reflection forms part of the foundational architecture which provides the backdrop concerning the reasoning behind the genesis of the project. Also this will at least partly determine the orientation as well as the philosophy of the material. Hence, elements like pragmatics, discourse analysis and didactics will be an integral part of the online material we intend to design and host on a Moodle platform. We position ourselves on an epistemologically didactic and sociolinguistic axis of instructional designing in view of the conception and setting up of this complementary material in the learning (and teaching also) of oral French.

Keywords: online learning, didactics, (socio)linguistics, oral competencies, autonomous learning

References

THE USE OF CELL PHONES TO ACCESS TESSA OERS:
EXPERIENCES OF STUDENTS IN WINNEBA, GHANA.

Salome Praise Otami
University of Education
Winneba on behalf of TESSA Open University UK
sandra.rowden@open.ac.uk; kelly-ann.joyce@open.ac.uk
+44 (0) 1908 653553

Abstract
The study was conducted to explore easy access of TESSAOERs using cell phones in a methodology class. A total sample of 174 students, comprising of 34 males and 140 females who were level 200 students studying courses in early childhood education were purposively selected for the study. The focus was on adaptation of culturally relevant and developmentally appropriate materials on lesson delivery strategies in the areas of Language and Literacy, Mathematics and Environmental Studies into our kindergarten system in Ghana, using TESSA OERs from African countries. The instrument designed was interviews and focused group discussions to elicit desired responses from the respondents. Thematic approach was used in analyzing data from the various groups composed for the study. Findings included ‘lower primary activities were not too different from kindergarten ones and majority of the materials accessed were culturally friendly across the countries’. Recommendations among others were that other departments of the university should be introduced to TESSA OERs and frequent advertisement through departmental bullet boards and Radio Windy-Bay should be utilized.

EVALUATION OF COLLABORATIVE MODEL OF PEER TEACHING IN GHANA USING TESSA MATERIALS:
EXPERIENCES OF TEACHERS.

Salome Praise Otami
Nixon Saba Adzifome
Ahmed Kobina Amihere

University of Education, Winneba
on behalf of TESSA Open University UK
sandra.rowden@open.ac.uk; kelly-ann.joyce@open.ac.uk
+44 (0) 1908 653553

Abstract
This study was conducted in the University of Education, Winneba. It involved three teacher educators and 21 prospective early childhood teachers who were randomly sampled and engaged during a peer teaching session using a proposed model christened the Collaborative peer teaching model. The study aimed at obtaining from the experiences of prospective teachers how the model promoted effective teaching and learning of numeracy and numeracy during their teaching practice. Data from questionnaire, interviews and reflective journals from the field were analyzed using the interpretive approach. Responses from participants suggested among others that the model was supportive during teaching practice and has equipped them with requisite skills needed for effective lesson delivery. Based on the findings recommendations were made for the adoption of the model by teacher educational universities, colleges of education and other educational entities.
IMPROVED ACCESS AND QUALITY THROUGH INTEGRATION OF ICT IN TEACHER PROFESSIONAL DEVELOPMENT

Mmabaledi Kefilwe Seeletso
BOCODOL
mmaba.see@gmail.com
+267 3646104; +267 721 061 48
+267 3191089 (fax)

Abstract

This study is about perceptions and experiences of learners pursuing a Master of Educational Leadership (MEdEL) delivered using blended approaches that leverage on ICT. The learners are practising educationists enrolled at the Botswana College of Distance and Open Learning (BOCODOL). A mixed methods approach was adopted. Learners were interviewed and a questionnaire was administered to establish the extent to which ICTs were being used by MEdEL learners. Key issues for data collection included experience regarding use of tablets, electronic content, frequency in search for extra online resources and general perceptions and experiences on internet connectivity, online support, interaction with tutors and other learners online and assessment. Descriptive statistics and thematic interpretation were used for data analysis. The study has revealed that learners downloaded the content and read it as a printed documents and were struggling with accessing other forms of assessment that they have to do online, such as chats and discussion forums. Findings suggest that using tablets to package content instead of print study materials has encouraged learners enrolled in the MEdEL programme to use ICT. Learners used tablets for various purposes including to study online, do their assessment, send their written assignments as well as to receive their marked assessments from tutors. However, during the first semester learners were not able to complete their assessment as they were not able to go into the discussion and chat forums. Learners who did not participate in forums had never accessed them. Overall, the integration of ICT in teacher professional development was perceived positively and their experiences revealed that they had acquired the necessary ICT skills and competencies needed for the knowledge society of the 21st Century. It is recommended that a longitudinal study be undertaken to further explore the impact of integrating ICT in professional teacher development in the entire country.

Keywords: adult learners, challenges, ICT mediated learning, interactivity, Moodle platform, open and distance learning, tablets, working adults
SCIENCE TEACHING AND LEARNING USING TESSA MATERIAL IN TANZANIA

Simon Shayo
Dar es Salaam University College of Education (DUCE)
on behalf of TESSA Open University UK
sandra.rowden@open.ac.uk; kelly-ann.joyce@open.ac.uk
+44 (0) 1908 653553

Abstract

This paper focused on the use of TESSA materials in Tanzania. The secondary science materials have been used in schools since they were versioned. They have been used by different teachers and teacher educators. The materials have been used for different purposes which include training of pre service teachers, mentoring of novice teacher, preparation for single teaching practice, classroom demonstration during microteaching and developing in-service training materials for teachers. The aims of the TESSA project fit into the Tanzania curriculum goal which emphasizes on competency-based teaching. Competency-based teaching considers a learner as the centre in the learning process. The science materials developed by TESSA are interactive and thus enabled the teachers to teach effectively. However, various challenges have been encountered using the materials. Such challenges include lack of internet connectivity and computers; inadequate knowledge of using computers among teachers; and lack of apparatus and other resources during classroom practices. In order to minimize the challenges different measures have been taken which include printing the materials in hard copies and conducting training on computer literacy skills. The use of the materials in teaching has prompted the need for employing new technology in teaching and learning such as computers, projectors, scanner, camera and printers.

In order to ascertain the impact of the TESSA project, a study was conducted in 2014. The study employed a descriptive survey that used questionnaire, interviews and classroom observations as means of collecting data. Three secondary schools and three teachers’ colleges were involved in the study. One science teacher from each school, one tutor from each college, three students from each school and one student teacher from each college were selected to participate in the study. The findings and observations indicated that secondary school teachers and students as well as tutors and pre-service teachers were using TESSA materials to improve classroom practices. Teachers explained that they used the materials as a means of assisting students to develop more understanding of science through practical activities. Science tutors used to give the pre-service teachers tasks of downloading TESSA materials, make critical analysis in relation to other available materials in secondary schools, establish differences and similarities and then judge the suitability of these materials in implementing school curriculum. The study therefore, concludes that the use of TESSA material in secondary schools and teachers’ colleges in Tanzania engages students into active learning environment. TESSA materials contribute to the availability of reference materials in the situation where schools and colleges lack enough books. To make the materials more effective, there is a plan to add more units and if possible to cover the science curriculum syllabi.
WHAT ARE THE CHARACTERISTICS OF MATERIALS DESIGNED TO SUPPORT TEACHER LEARNING?

Kris Stutchbury
The Open University

Abstract

Learning to teach is a complicated process. It is not the linear process that is often implied and pre-service teacher education is just the start of a life-long-learning journey. Open Educational Resources (OER) represent an opportunity to improve the quality of teacher education by making high quality materials that support effective teaching widely available, so that teachers can learn in their own classrooms. Teacher education is a multi-layered process and materials for teacher educators need to reflect what teachers need to do to ensure effective student learning, but at the same time, support teacher learning.

Drawing on the literature about effective learning and teacher education, I have identified two sets of principles that could guide the writing of OER to support teacher education across the whole range of curriculum subjects. This paper will explain those principles and how I applied them to the TESSA Secondary Science materials. I analysed the materials from the perspective of student learning and teacher learning. The analysis revealed some key strengths of the TESSA Secondary Science resources, but also indicated ways in which the pedagogy could be improved. The analysis framework will be of interest to people who looking for criteria that could be used to judge the quality of OER to support their work with teachers, or to people who are seeking to devise such materials themselves.

THE EFFECT OF COMPUTER TECHNOLOGY ON LEARNING IN A MULTILINGUISTIC LANGUAGE CLASS

Eva Johanna Sujee
University of Pretoria
Eva.Sujee@up.ac.za
012 420 5547; 0835562724
086 265 8702 (fax)

Abstract

Learners in a grade 11-multilingual language class who take Afrikaans First Additional Language (FAL) as a subject did not necessarily received instruction in Afrikaans as a home language in their primary school years. They have also not necessarily been taught Afrikaans FAL in the Foundation phase. There are first language, first additional language, second additional language and third additional language speakers of Afrikaans in one class. These learners furthermore have different backgrounds, cultures, and thus belong to different social circles. However, teachers are faced with the challenge that at the end of the year all of them have to reach the same learning outcomes and are evaluated by the same assessment criteria in Afrikaans FAL.

The literature review included an explanation of the theories of new literacies, FAL acquisition, the integration of emerging technologies and previous research. My framework adapts the conceptual theoretical framework, the Technological Pedagogical Content Knowledge (TPACK) framework to incorporate Vygotsky's Zone of Proximal Development. It was employed as a lens with which to evaluate the efficacy of computer technology on learning in a multilingual language class. By employing a qualitative case study, the researcher observed the development and learning of 19 learners in one of such a multilingual language class, utilising the power of the internet and harnessing the use of specially created blogs to collect data.
Technology such as blogs, chat rooms and e-portfolios was employed to observe learners’ language behaviour and the cyber-culture shared with each other. Learners engaged with technology and reflected on the blog on their learning experience. This data was supported by electronic interviews with learners and focus group discussions with other FAL teachers in the school, reflecting their thoughts, views and opinions on the effect of technology on language teaching and learning. The researcher benefitted from the automatic transcription and electronic analysis of the data. Findings indicated that learners and teachers in this inquiry preferred the integration of technology in the FAL classroom because of the positive effect it has on FAL learning such as language acquisition, learner-centred activities, self-directed learning, collaboration and motivation. Authentic instructions and written corrective feedback (WCF) were key components that encourage deep FAL learning. The integration of Turnitin software in second language classrooms has given rise to a different method of communication and resulted in spontaneous collaboration among all members interacting in the target language on the discussion board of Turnitin. This interaction in the target language lead to language acquisition and the new knowledge created in a social constructivist environment. The written corrective feedback started an iterative cycle of review and contribution. In conclusion, technology, specifically Turnitin, an existing plagiarism tool, provides learners with authentic opportunities to engage with written corrective feedback (WCF), to reflect on their work, to integrate the grammar rules which are a core part of second language learning with the authentic creative writing of the learners, in order to address the different levels of proficiency in the target language through written corrective feedback (WCF).

ICT -ASSISTED MATHEMATICS AND SCIENCE TEACHERS PROFESSIONAL DEVELOPMENT: INSIGHTS FROM RWANDA

Alphonse Uworwabayeho
University of Rwanda, College of Education
alphonse.uworwabayeho@kie.ac.rw

Abstract

In order to prepare young people for participation in the technological and knowledge driven society, policy makers in developing countries are emphasizing the use of ICT to transform economy from subsistence agriculture to knowledge-based economy. To achieve this goal, in their vision statements, the governments in the region have identified the use of ICTs as the key tool with education playing an important role. In this way, teacher training in ICTs should not just be about using new technologies but also about why and when to use them in transforming teaching and learning practices. For example, objectives of Rwandan ICT in Education Policy Statement include developing teachers’ capacity and capability in and through ICT at all school levels. It is within this context, some initiatives are currently taking place to integrate ICT (computer in the present case) in supporting the teaching and learning of mathematics and Sciences in basic education in Rwanda. Though there have been a range of initiatives for providing basic ICT infrastructure and computers in schools in Rwanda, research findings revealed a divide between urban schools and rural ones. Whereas schools in urban areas may have internet connectivity, only a small number of schools in rural areas are connected to the internet. This presentation aims at sharing with participants an experience from a participatory action-oriented inquiry for teacher professional development on integration of ICT in the teaching of Mathematics and Science in twelve Rwandan schools where university academics and primary/secondary school teachers
exploited software and science simulations available on computer in various ways such as whole class or group work. Through a series of teacher workshops, participant teachers would work together to develop their own skills and to plan activities to be carried out in their own schools. The workshops, which were generally scheduled at the end of every school year, usually lasted 4-5 days. During the period between two consecutive workshops, academics observed teachers teaching in their school as a way of follow up and data collection. Data were composed of videorecorded lessons and interviews with both learners and teachers after lessons. In particular, videorecorded lessons were used for sharing practices and analysing teaching and learning during teachers’ workshops. As teachers became involved in research in their own schools, they were able to contribute to the workshops themselves, presenting work they had done and suggesting ways forward. Whilst ICT helps teachers for demonstrations and presentations of their material, group work enhances the learning collaboration; thus breaking away from the practice of talk and chalk that is mostly teacher-centred to a more learner-centred teaching approach. Furthermore, the use of ICT in teaching and learning encourages team teaching and collaboration among teachers as was evident in some schools where 2-3 teachers worked collaboratively to plan and teach a mathematics lesson. Despite these achievements, teacher participants pointed out that use of ICT is time consuming in terms of lesson preparation and hides difficulties in classroom management especially where students have access to the internet.

MEDIOCRITY TO EXCELLENCE: TRANSFORMING INTERACTIVE WHITEBOARD TEACHING

Molly Patricia Van Niekerk
North-West University
molly.vanniekerk@nwu.ac.za
082 455 8552
018 285 2080 (fax)

Abstract

Interactive whiteboards (IWBs) have become an essential technological medium of instruction especially in distance education (DE). Recently IWBs have been increasingly utilised in education, enabling teaching and learning to take place over vast distances. Efficient utilisation of IWBs has the potential to enhance teaching and learning. IWB allows students to develop information-, higher order thinking-, communication and cooperation-, learning- and technology usage skills which are all much needed for the 21st century (Manny-Ikan et al., 2011). The availability and use of emerging educational technology influences how students envisage their learning (Rafferty et al., 2013). Teaching effectiveness is determined not only by the overall curriculum design, but also by the delivery of the programme (Francois, 2013). This presentation focuses on the perceptions of members of the school management team (SMT) pertaining to their numerous experiences with IWBs as part of the Advanced Certificate in Education: School Management and Leadership (ACE SL). Improvement of the training and development of educational leaders is high priority for most educational institutions and education departments, as large sums are allocated and invested annually for continuing professional development (CPD) (Bubb and Early, 2007). IWBs as technological medium of instruction, especially in distance education, can aid in the process of continuous professional development for SMT-members.
Students attended some contact classes and other sessions were presented through IWB. Although the students were adult learners, and leaders in education, it cannot be presumed that these students undergoing professional development via IWB are open towards lecturers using such a medium of instruction. Quality teaching through the utilisation of IWBs depends on the presenter who has to orchestrate all the features presented in that specific classroom environment in order to reach planned learning objectives (Kennewell et al., 2008). To unleash full IWB potential, presenters have to consider the characteristics of the group of students in the class as well as the contextual factors that will have an impact on presentations.

Open-ended questionnaires were completed by sixty students enrolled for the ACE SL. A computer-based qualitative data analysis program, Atlas.ti™, was used to aid the researcher in the data analysis process were the researchers identified and synthesized patterns of students' perceptions on their IWB experiences. Participants' mixed experiences led to factors being identified that needs to be addressed before and while an IWB session takes place for optimal interactive and cooperative teaching and learning experience. This presentation also provides an in-depth look at the skills the participant’s gained, opportunities to engage cooperatively, how they become involved with the curriculum content and the opportunity to construct their own meaning towards the content they had to study. Recommendations to improve IWB sessions will be made and focus will fall on certain crucial elements that have to be present in IWB sessions to ensure effective teaching and learning. It is important to learn from every experience with IWBS and share lessons learnt to improve current IWBs practices to reach the full potential that IWB have to offer.

**Keywords:** Interactive whiteboard (IWB), distance education (DE), school management team (SMT), continuing professional teacher development (CPTD), Information and Communication Technologies (ICT).
THE QUINTESSENCE OF TEACHING LARGE CLASSES: ROLE OF EDUCATION INNOVATION

Jan Verschoor
Dept Biochemistry
University of Pretoria
Pretoria, South Africa

David Wilson
Managing Director, Participate Technologies
Johannesburg, South Africa

Abstract
When university student enrolments for a module exceed 200, the quintessence of teaching comes under pressure: How is student engagement in the learning experience ensured in a crowd audience? The Quality of the materials and assessments, Unity within the learning experience to prevent prejudice, Integrity of the teaching, Newness of the content matter and the ability to be Thought-provoking in the presentation could be regarded as the five (QUINT) major principles of education that need to be maintained in large classes. Our experience in attempting to achieve this in a first year module of biology subscribed by 1800 students in 2013 and 2014 was rewarded with a Gold Certificate for Teaching Excellence and Innovation by University of Pretoria in 2014. It engaged with the innovation of the Audience Response System (Clickers) in the biggest ever roll-out of this technology in Africa. The experience by the teaching team, students and the supporting education industry is worthwhile to share with educators, as it may show a novel way for effective mass education of high quality and efficiency elsewhere in Africa where large student enrolment for modules provide similar challenges to the quality of education.

CHALLENGES OF EMBEDDING AND EXTENDING TESSA SCIENCE OERS FOR EFFECTIVE PEDAGOGY IN SECONDARY SCHOOLS IN KENYA

Patricia W Wambugu
Fred N Keraro

Egerton University, Kenya
on behalf of TESSA Open University UK
sandra.rowden@open.ac.uk; kelly-ann.joyce@open.ac.uk
+44 (0) 1908 653553

Abstract
TESSA (Teacher Education in Sub-Saharan Africa) is a research and development initiative creating Open Educational Resources (OERs) for teachers and teacher educators working in Sub-Saharan African countries. The project focuses on interactive pedagogical skill for Teacher Education programmes. It seeks to promote effective pedagogy through interactive curriculum materials intended to enhance learners’ participation in the learning process. The project described in this study was initiated in 2010 and focused on improving the quality of Secondary Science Teacher Education programmes. TESSA Secondary Science OERs project was funded by the Waterloo Foundation. It is a collaborative project, co-ordinated by The Open University UK with partners in Ghana, Kenya, Tanzania, Uganda and Zambia. The project was designed to support the pre-service, in-service and practicing secondary science teachers. The TESSA OERs which are activity based focus on five themes namely; probing students’ understanding, making science practical, making science relevant and real, problem solving and creativity and dealing with challenging concepts. The OERs were developed by teacher educators from participating institutions with support from
the Open University UK. TESSA OERs were contextualized to fit into respective country contexts and used to support pedagogy courses in teacher education programmes in the participating universities. In Egerton University, Kenya the TESSA materials are used by Science Teacher educators in preparing pre-service teacher trainees for the micro-teaching and during the practicum. The use of the materials is further extended by the teachers after graduation as they join the teaching profession. However, a survey conducted reveals a number of challenges that militate against effective use of the TESSA Science OERs in schools. These include; internet connectivity and lack of electricity in many secondary schools, ICT skills and infrastructure, lack of computers by teachers and change of attitude by the teachers and administrators. The teachers who had used the materials during their micro-teaching could not access them while on their practicum. This made it difficult for them to extend the use of TESSA material to their colleagues. It is anticipated that the integration of ICT in teacher education programmes would help to overcome the challenge of lack of skills. The Kenyan government has also embarked on connecting schools to the national grid for supply of electricity and provision of laptops to schools. There is an also consulted effort by schools to acquire computers and ICT related equipment. This it is hoped will go a long way in enhancing the use of TESSA materials. In the short term, however, the use of print copies of the TESSA science OERs is the most effective way of facilitating the use of TESSA science OERs in many Kenyan schools.

**Keywords:** Embedding, Extending TESSA Science OERs, Effective Pedagogy

---

**INCREASING TEACHER AGENCY THROUGH USE OF OPENLY LICENSED DIGITAL STORIES FOR EARLY LITERACY DEVELOPMENT**

Tessa Welch  
SAIDE  
tessaw@saide.org.za  
+27 82 785 9964

**Abstract**

While availability of decodable texts and carefully levelled readers to support the teaching of reading is crucial in any programme for the teaching of early reading, these alone are not sufficient. Decodable and levelled readers support struggling teachers with material that their learners can read on their own as they learn sounds and sight words. Usually, however, these resources are usually embedded in highly prescriptive programmes which allow very little scope for individual teachers to use their own creativity in response to the reading needs of particular children. If these are the only programmes and resources available to teachers, they are unlikely to develop the ability to analyse the knowledge and skills that learners have, and adapt resources and methods to ensure that learning takes place. An unintended effect of highly scripted teacher support programmes can therefore be the de-skilling of teachers. By contrast, a combination of openly licensed stories for early literacy development and the tools to adapt or translate the stories for language, level and context of the learners is potentially a powerful way of increasing teacher agency, and supporting learning-centred teaching.

The African Storybook Project provides an ideal opportunity to explore the relationship between teacher agency and resource utility. On the website, www.africanstorybook.org, there is a digital library of
illustrated stories for early literacy development, where teachers and learners are not only free to translate and adapt and create stories, but also to publish these for others to see. The open licence allows them to adapt and translate these stories without having to ask permission or pay a fee. Through being exposed to a wide variety of stories in a wide variety of languages from which to select, teachers’ critical literacy skills can be developed as they read to select appropriate stories for their learners. They are free to make their own translation, or change a translation if they think that the dialect used doesn’t suit their area. They can use the pictures to create their own stories or encourage their learners to do so. As teachers and learners engage actively with stories, they learn about writing as well as about reading, and the relationship between the two. And instead of waiting to receive the correct materials in the correct languages and correct numbers, they can make their own – downloading and printing or projecting on a classroom wall. They can reclaim their agency as teachers.

COMPUTER TABLETS IN THE NATIONAL TEACHERS’ INSTITUTE’S POST GRADUATE DIPLOMA PROGRAMME: EXPECTATIONS AND CHALLENGES

Dele Yaya
National Teachers Institute
Kaduna, Nigeria
on behalf of TESSA Open University UK
sandra.rowden@open.ac.uk; kelly-ann.joyce@open.ac.uk
+ 44 (0) 1908 653553

Abstract

Open and distance education has continued to use educational media in the delivery and support of teaching and learning. The print media blended with face-to-face tutorial support has been the dominant media. With the new emphasis on the 21st century education, skills and competencies, there is gradual transition to the use of e-learning. The use of digital resources and therefore digital devices in education and distance education in particular has become inevitable because of several advantages in the delivery, communication, assessment and curriculum renewal. It is in line with this that the National Teachers Institute, Kaduna, Nigeria, a parastatal of the Federal Ministry of Education, established to provide in-service training for teachers using the distance learning mode has made it mandatory for each student to have a multi-media device (computer tablet). With over 400 study centres, over 4,000 course facilitators, over 40,000 student-teachers, and contact with over 700,000 teachers through its MDGs capacity building programmes, the Institute is strategically placed to serve as a change agent in Nigeria’s educational space. As a member of the Teacher Education in Sub-Saharan Africa (TESSA) consortium, the Institute has been involved with the development, production and utilisation of open educational resources. The Institute has gained
experience in the use of digital media and has collaborated in various research projects on the use of digital media. The Institute is at the forefront of promoting innovative techniques of teaching. The Institute began to introduce the use of electronic media in her diploma and certificate courses through on-line admission and registration, use of GSM, e-mail and social media in communication, and uploading of the PGDE course materials on its website. For the first time since 2005 when the Postgraduate Diploma in Education (PGDE) commenced, the Institute has made it mandatory for each student to have a multi-media device (computer tablet). The first set of 479 students who had paid for the tablets as at 20th March, 2015 were issued with the tablets. As more students pay, they will be issued with the tablets until all the expected 15,000 PGDE students get the tablets. Before now, printed course materials have been used for programme delivery. This is supported with face-to-face tutorial contact at study centres across the nation. With the introduction of the computer tablets as additional medium for programme delivery and support, it is necessary to find out the expectations of the policy makers and end-users. This paper therefore presents the expectations of the Institute’s management, the field officers, centre managers and course facilitators as well as the students; identifies the achievements; the challenges facing the implementation and lessons learnt. Lessons learnt from this study will help in the successful implementation of the programme in future and prepare the grounds for the introduction of computer tablets next session in the bachelor’s degree programme which commenced this year in affiliation with the National Open University of Nigeria (NOUN).
QUALITY OUTCOME INDICATORS FOR SCHOOL PERFORMANCE IMPROVEMENT: THE CASE OF GHANA’S SPIP

Might Kojo Abreh
Centre for Educational Research, Evaluation and Development
University of Cape Coast
Cape Coast, Ghana
mightabreh@gmail.com
+233246462001

Abstract

Universal access and participation in education has seen significant leap both globally and regionally. In respect of agenda 2015 there has been several efforts geared towards making education both accessible and participatory. Immediately before 2015 however, the direction and focus has changed to delivery of quality education outcomes. Regardless of the high-level policy and structural inputs into education, besides substantial financial commitment of nations, quality education delivery for the masses still remain a dilemma for some countries including Ghana. There is evidence to suggest that the execution of a definitive plan for improvement of school’s performance relates with quality outcomes in schools. This paper focused on an examination of influence of School Performance Improvement Plan (SPIP) on the academic performance of students in selected schools in Central Region of Ghana. Data was collected by means of questionnaires and interviews guides from teachers and headteachers respectively. Using a survey design in case study setting, the study set out to study Eight (8) schools in four District/Municipal education directorates. Thus a total of Seventy-seven (77) teachers and Eight (8) headteachers provided data that informed this study. The study established that most of the teachers and the
headteachers have not had enough workshops on the preparation and implementation of SPIP. Again, most schools do not schedule SPIP meetings in their annual academic calendar while, almost half of the respondents did not have a clear distinction between SPIP and capitation grant. However, majority of the respondents attested to the fact that School Performance Improvement Plan has a positive influence on the academic performance of students. The following recommendations were suggested for consideration. Ghana Education Service and other stakeholders in education as well as organisations that have the education of the nation at heart should organise enough workshops on the preparation and implementation of SPIP for teachers and headteachers. There should also be a proper follow up to make sure the right ingredients are presented in the plans prepared. Also there should be close benchmarking in the execution of the SPIP in the schools.

TOWARDS THE CONSTRUCTION OF COMPULSORY EDUCATION OF BOYS AND GIRLS IN MAASAI PASTORAL COMMUNITY.

Caroline Marygorety Akinyi Otieno
Institute of Gender, Women and Development Studies

Abstract

This study was aimed at determining the spread of non-schooling and dropout rate, portrait of conditions, causes, solutions. The qualitative study focused on Maasai pastoral community in the marginalized regions (remote/isolated/alienated and the poor). The findings showed that the lives of the learners are so apprehensive concerning pastoralism, parent’s socio-economic condition, distance to school and socio-cultural practices. The causes are complex both from internal and external problems of the learners. Besides, the crucial problems such as lack of uniform, repeating classes and gender roles. It is recommended that the ‘dormitories’ be constructed for girls who have undergone the rite of passage, delaying moranism to a later date and most important to construct compulsory education comprehensively to address these factors.

Keywords: Pastoral community, non-schooling/dropouts, construction, education
ENSURING QUALITY DELIVERY OF OPEN DISTANCE LEARNING (ODL) TEACHER EDUCATION PROGRAMS

Ruth Aluko
Unit for Distance Education
Faculty of Education
University of Pretoria
Pretoria, South Africa
ruth.aluko@up.ac.za
+27 (12) 420 5604

Abstract

Open distance learning (ODL) has become a buzz word because of its ability to create access to education. It is on record in various parts of the world that the mode has been used among other things to upgrade teacher qualifications. However, a major challenge that remains for providers is to continually ensure the quality of their programs. This paper reports the findings of an evaluation study which investigated the impact of a distance education teacher program on the professional practice of graduates. Multi-stage and purposive sampling was used to select 300 graduates and 128 principals. The researcher used a mixed-methods research design with specific focus on Kirkpatrick’s, and Baldwin and Ford’s training evaluation models. Findings indicate that in order to ensure quality delivery of ODL teacher programs, providers need to focus on a clear institutional policy on quality assurance, practices guided by the policy, and an ongoing monitoring of the distance education students’ profiles. Others are improved program design, student support structures, program design, research focused on programs, and conducting impact study of programs. The author argues that higher education practitioners, irrespective of delivery mode or program, could benefit from these findings.

Keywords: open distance learning, quality, policy, professional development
CAREER AND PSYCHOSOCIAL CHALLENGES AND COPING STRATEGIES OF NEWLY QUALIFIED SECONDARY SCHOOL TEACHERS IN ZAMBIA

Madalitso Khulupirika Banja
Department of Educational Psychology, Sociology and Special Education
University of Zambia
chilusbanja@yahoo.com
+26 975 511 346

Abstract

The purpose of this study was to establish the career and psychosocial challenges and coping strategies of newly qualified secondary school teachers in Zambia.

The study used a descriptive survey design to collect data. Ninety two newly qualified teachers, ninety seven Heads of Department, fifteen headteachers and nine Senior Officers from Ministry of Education headquarters formed the sample. The respondents were selected using a combination of stratified random sampling and purposive sampling. Qualitative data were analysed using text and thematic analysis. The Statistical Package for the Social Sciences (SPSS) version 20.0. Computer programme for windows was used to analyse quantitative data and also generate descriptive statistics in the form of frequencies and percentages.

Prominent among the findings was the working environment in the schools was deemed unsupportive and hostile to newly qualified teachers. Further, newly qualified teachers struggled both in the preparation of lesson plans and in the delivery of lessons. This was blamed both on inadequate initial training and on the lack of mentorship in schools.

In the absence of well-structured mentorship programmes in schools, newly qualified teachers constantly consulted Heads of Department and other long serving teachers for help and guidance whenever they felt challenged in their work. The study also found that in the absence of mentorship, school authorities focused on Continuous Professional Development as an alternative system of supporting newly qualified teachers.

Based on the findings it is recommended that to overcome many of the challenges faced by newly qualified teachers, a multi-faceted approach was desirable. This approach should include among others, an improvement in the initial training; and offering school-based support to newly qualified teachers. Among this support, formal mentorship of newly qualified teachers should be institutionalized if we are to produce the ideal, excellent, and competent teacher that so far seems to be found only on paper.
SUPPORTING MATHEMATICAL LITERACY AND ACCOUNTING TEACHERS IN SOUTH AFRICA

Ingrid Bruynse
University of KwaZulu-Natal
Ingrid@brightmedia.co.za

Abstract

Teacher support in South Africa is in a critical condition. We need more, and better, well-trained and resourced teachers. We need an ongoing support strategy as well as high quality support materials that can be used in the classroom the day after training, with their learners, in class. We need confident and motivated teachers, if we are to make an impact on the quality of teacher education in South Africa.

This paper will talk about the support (or lack of support) for teachers of Mathematical Literacy and Accounting in the final years of school, especially the work of the “Managing My Finances” and “iCount” projects developed by Bright Media and implemented in collaboration with the Department of Basic Education, funded through a public-private partnership since 2009. The project has combined teacher workshops for methodology and pedagogy and resources for use in the classroom, reaching over 15 000 teachers in all provinces in the past seven years.

I will share some of the challenges, including overcoming accessibility issues in rural and remote areas, and achievements like the development of an integrated media education method, the trialing of “knowledge boxes” and iCount DVD / television episodes to support the subject matter, through the use of integrated multimedia education model™.

I am a teacher educator, and have worked with teacher education through a variety of media, since 1994. I began as a lecturer at Soweto College of Education in the 90’s, and on the closure of the college, I moved into publishing at Macmillan Education, developing textbooks and teacher support materials. Then my experience at the SABC in making educational television and radio for the formal education sector in South Africa.

My current work is both as a PhD student and my company Bright Media works with the National Department of Basic Education, in developing teacher support materials, as well as new media content the is accessible through technology. www.brightmedia.co.za
INTRA- AND INTERCONTINENTAL MIGRATION OF SOUTH AFRICAN TEACHERS: THE SHARING OF KNOWLEDGE

Rian De Villiers
University of Pretoria
rian.devilliers@up.ac.za
(012) 420 5529
(012) 420 5621 (fax)

Abstract

Human mobility is one of the most significant development, foreign policy and domestic issues in the world today. Teacher loss due to migration is a global phenomenon that is impacting both developed and developing nations the world over. The purpose of this case study was to find out how many newly qualified South African teachers were planning to teach in a foreign country; what were the prospective migrant teachers’ motives for migration; what destination countries were the most popular and why; and what were the prospective migrant teachers’ information needs before leaving South Africa. A group of final-year Bachelor of Education student teachers from a single university responded to a questionnaire on intra- and intercontinental migration. The responses were analysed quantitatively and/or qualitatively. The findings showed that 79% of the students indicated that they would be teaching in South Africa, 9% were planning to teach in another country, while 8% were undecided. More than a third of the students (38%) said that they would like to teach in another country in five years time. Just more than a quarter of the students (27%) preferred Australia as a destination, followed by the United Kingdom (16%), Korea (16%) and the USA (14%). The student teachers’ most important motive to teach in a foreign country was the opportunity to travel (27%), followed by earning a higher salary (26%) and professional development (23%). The student teachers indicated that their most important migration needs before leaving South Africa were information about health care, accommodation and banking assistance. Huge loss of teachers to host countries has a serious, negative impact upon the education system of most developing and/or source countries, including South Africa. Several steps and strategies to resolve teacher loss in South Africa are discussed.
QUALITY MATERIALS IN SUPPORT OF (QUALITY) TEACHER EDUCATION

Sheila Drew
Saide
Jean Baxen
Wits University

On behalf of the Cape Consortium in the EU project
South Africa
Corresponding author: Sheila Drew
sheilad@saide.org.za
+2711 403 2813

Abstract

This presentation is based on research conducted in a large collaborative study among four institutions in South Africa that focused on the relationship between quality teaching and teacher education practices. The paper focuses on one aspect of the larger research programme, namely teacher education support materials and their link to quality teacher education. It is framed around the following research question: “What kind of teacher educator support materials will improve quality of programmes and quality of classroom teaching practice of graduates?” The assumption was that teacher educator support materials do have a dual purpose; as resources which provide support to teacher educators by deepening their own understanding of particular concepts, as well as support in how to teach the concepts, and provide opportunities for student teachers to put into practice those concepts they learn. Throughout the materials development process we grappled with this ‘two hats’ role that the materials need to play.

This presentation presents the process and thinking that we went through to understand:

1. What constitutes quality in teacher education?
2. What constitutes Quality materials?
3. How do teacher educator support materials influence and support the development of teacher identity?
4. How can materials give epistemological access for students?
5. What is the relationship between teacher education support materials and teacher education practice?

The paper reflects on the process and product undertaken in establishing and producing teacher education support materials that might lead to quality teacher education.
DEVELOPING THE LINGUISTIC PROFICIENCY OF PRE-SERVICE TEACHERS WHO USE ENGLISH AS A MEDIUM OF INSTRUCTION.

Rinelle Evans
University of Pretoria, South Africa
Rinelle.evans@up.ac.za
+27 012 420 4272 ;+27 (0)837320099
+27 012 4290 4272 (fax)

Abstract

Currently the majority of prospective South African teachers entering the education system annually are not mother tongue speakers of English yet it is assumed that since they speak English socially with reasonable fluency, they will be able to teach content effectively through the medium of English. Complex cognitive processes related to learning take place as teachers and learners interact with each other and grapple with mastering content material during each lesson. In such an educational context, learning could ultimately be affected negatively by instructional dissonance (Evans: 2005) and ineffective classroom communication. The key research problem is the mismatch between expectations that a graduate entering the teaching profession has sufficient linguistic prowess to mediate learning and the actual inadequacy of many beginner teachers’ English proficiency in meeting the facilitation demands of the classroom. This inquiry rests on questionnaire data and audio recordings of multiple lesson presentations across grades while endeavouring to answer the following questions:

• What is currently the nature of Classroom English used nationally?
• What type of Classroom English does a beginner teacher require to teach effectively?
• What degree of oral proficiency is required to teach effectively?
• How can oral proficiency be measured satisfactorily?

This paper reports on the pilot phase which seeks to establish the nature and depth of Classroom English is i.e. the phraseology used by Grade 4 - 12 teachers when managing learner behaviour and facilitating content material during their daily interactions in the classroom. Emergent findings suggest that even mother tongue speakers of English require intervention as they are inclined to be unaware of language learning principles and how little learners actually understand of instruction conducted in English.
THE EXPANSION OF EARLY CHILDHOOD EDUCATION: DIFFERENCES BETWEEN RURAL AND URBAN SCHOOLS IN ZIMBABWE

Sara Fobelets  
VVOB, Flemish Association for Development Cooperation and Technical Assistance

Alvord Sithole  
VVOB, Flemish Association for Development Cooperation and Technical Assistance

Robert Chipimbi  
VVOB, Flemish Association for Development Cooperation and Technical Assistance

Oliver Mavundutse  
DTE, Department of Teacher Education of University of Zimbabwe

Roswitta Gatsi  
DTE, Department of Teacher Education of University of Zimbabwe

Corresponding author: Sara Fobelets  
sara.fobelets@vvob.be  
00263 776 621 439

Abstract

Zimbabwean education is known for its high literacy rate in the southern African region. Government and citizens believe in the power of education as a leverage for upwards social mobility. Despite the many years of economic hardship, parents want their children to get the best education possible. This belief in the power of education has recently led a growing enrolment in early childhood education.

There are many challenges related to the expansion of early childhood education such as a lack of qualified teachers, large classes, and inadequate infrastructure.

The expansion of education, especially in combination with the economic hardship, has also seen to students starting early childhood teacher training only because of job opportunities and not because of a passion for the profession. The growing demand for early childhood education also triggers business opportunities, which does not always guarantees quality education. Being a relatively new domain, it is not always easy for stakeholders and parents to distinguish good from bad quality early childhood education.

Schools are not isolated entities, but always in close relation to their environment. In Zimbabwe there is a major difference between rural and urban schools. The challenges related to an expanding ECE will be researched in both areas. Also differences between schools in the same area will be researched.

In general, urban schools in Zimbabwe are seen as more attractive for teachers and considered as providing more qualitative education than rural schools. Nevertheless education is increasingly seen as a business in the urban areas, resulting in a mushrooming of early childhood education centers with questionable quality guarantee.

Rural areas face generally more teacher shortage, have worse infrastructure, less comfort, higher poverty rates. However, education is less seen as a business.

Based on these general tendencies, this research carries out a context analysis and gathers testimonies of teacher trainers, student teacher
and teachers about the strengths, challenges and opportunities of education and teaching in early childhood education in the rural and urban areas. The research also maps why the interviewees chose for the early childhood teacher profession, how good they are prepared for teaching in rural and urban areas and which (quality) criteria they use to define a quality school. The research concludes with suggestions for (policy) measures to enhance quality early childhood education in general and in rural and urban areas specifically.

CHANGE OF THE SCHOOL STRUCTURE IN ZAMBIA: IS IT NEW WINE IN OLD WINESKINS?

Kalisto Kalimaposo
Department of Educational Psychology, Sociology and Special Education
University of Zambia
kkalimaposo@yahoo.com

Abstract

This study sought to investigate the perspectives of stakeholders on the transformation of basic schools to primary schools in Solwezi district of the North-Western province of Zambia.

A descriptive survey study design was used. 12 headteachers, 36 parents, 2 Non-Governmental Organisation representatives and the District Education Board Secretary (DEBS) were purposefully sampled, while 124 teachers and 72 pupils were randomly sampled. The headteachers, PTA chairpersons, NGO representatives, officials from the Ministry of Education Headquarters, and the DEBS were subjected to in-depth interviews. The pupils were subjected to Focus Group Discussions, whereas teachers answered the survey questionnaire. Data collected from survey questionnaires were analysed using the SPSS while the Interview data was analysed thematically.

Findings of the study revealed that most of the teachers, 124 (90%) were dissatisfied with the policy change. Most headteachers interviewed noted that as stakeholders, they were neither consulted nor sensitised on the change. Similarly, the NGOs and some parents interviewed also observed that the change lacked consultation and would affect their children negatively in terms of school progression. Some pupils also feared that the cut-off point at grade seven might
be raised which would in turn affect their progression to secondary schools. Similarly NGOs expressed worry on the availability of space in secondary schools to absorb pupils from the primary schools. Eminent retired educationists interviewed asserted that the re-introduction of the 7-5-4 structure was retrogressive.

Based on the findings, the study made the following recommendations: Government should extensively consult stakeholders before embarking on policy change in the education sector. This could be done through circulars, concept papers, public debates, consultative meetings with the Parents and Teachers Associations (PTAs) and other forms of communication. Government should ensure that teachers who are the implementers of education policy are consulted throughout the change process. Government should adequately plan and mobilise financial resources before the implementation process.

Keywords: educational change, school structure, policy change, stakeholders, consultation

CREATING THE FUTURE WE WANT THROUGH PROVISION OF QUALITY OF TEACHER EDUCATION FOR LEARNERS WITH EXCEPTIONALITIES

Kamau Geoffrey Karugu
Were Nelly Otube
Kenyatta University
Kenya
chairman-specialed@ku.ac.ke
0727405421; 0716916439
254208711575/8711517 (fax)

Abstract

Exceptional children are individuals who resemble other children in many ways but differ from social standards of normalcy. These differences may be due to physical, sensory, cognitive, or behavioral characteristics. When educators talk about a student with disabilities, they refer to their inability or incapacity to perform particular tasks or activities in a specific way because of sensory, physical, cognitive or other forms of impairment. Special education can be defined as a customized instructional program designed to meet the unique needs of the student. A special education may include the use of specialized materials, equipment, services or instructional strategies. Educators frequently work with a variety of other professionals representing several distinct disciplines. These individuals provide a wide variety of related services ranging from occupational therapy to therapeutic recreation to psychological services and even transportation to and from school. These professionals provide consultative services to both regular education and special education. Serving students in regular schools when they are integrated or when they are in special schools require a multiplicity of services which can only be done by collaboration with these other professionals with regular
teachers or special education teachers. The teaming models are frequently referred as multidisciplinary, interdisciplinary and trans-disciplinary teams. Schools need to adopt this approach in their quest to enhance quality in education as a prerequisite to establish “The Future We Want” for education if all learners, with or without exceptionalities in Africa. This addition will adhere with the universal design for learning, which is an instructional resource plan to meet the need of students with or without disabilities providing equal access to learning. This universal design for learning allows for multiple means of representation, expression and engagement. Currently, at twenty first century, we see learners with exceptionality requiring services across the life span. Today, services are needed even before children are six years old. Over the past two decades according to scholars, the issue of transition has become of the dominant themes in contemporary special education. All learners with exceptionalities are expected to have individualized educational programs (IEPs) and also Individualized Transitional Plan (ITPs). In the envisioned future that we want, all educators will require intense in-serviced courses in the areas of disability education so as to be able to serve all learners with or without disability in their schools. They will also need in-service on current teaching strategies such as cooperative teaching or co-teaching as it is sometimes called. It has become increasingly popular approach for facilitating successful inclusion of learners with disabilities in regular classes. Cooperative teaching is an instruction strategy designed to provide support to all students in the regular classroom. Teachers choose from multiple models to cooperative teaching depending on their specific circumstances. Our research subjects will be both regular teachers and special education teachers. Multidisciplinary personnel will also be in our sample subjects. We will use qualitative research design and will analyze data in line with emerging themes.

THE ROLE OF THE MODULE COORDINATOR IN A DISTANCE EDUCATION PROGRAMME DURING CONTACT SESSIONS.

Sharon Thabo Mampane
University of Pretoria
sharon.mampane@up.ac.za
0748880301
0124203581 (fax)

Abstract
The use of regular contact sessions, where Module Coordinators (MCs) give professional guidance to groups of facilitators for lesson presentation, have emerged as a popular mode of delivering education to Distance Education (DE) students in South Africa in recent years. To date, not much has been written about the role that MCs play during such Contact Sessions (CS) in distance education institutions. The module coordinators are lecturers who have expertise and experience in the modules they coordinate in the DE Bachelor of Education (B.Ed) honours programme. The role of MCs is critical for a successful organisation and effective education service delivery through the contact session model. MCs have to train and prepare facilitators of DE to improve their professional practice in the B.Ed Honors in the Education Management programme that teaches students who study on their own. Module coordination is the process of giving instruction and principles of student facilitation in order to implement practical, effective methods of teaching and learning that promote the teaching, learning, development and application of lessons learnt in practice. Module coordinators have to examine the arrangement prospects and facilitation problems of DE in order to address these at contact sessions. This paper explored the role and impact of the MC in DE settings, so as to offer insights and suggestions for best practices of module coordination in DE programmes.
Although MCs ensured that there is interaction between the facilitator and students, and among students, the collaboration between the facilitator and student does not always benefit the facilitator and the students because of how facilitators are trained and how students are prepared for the Distance Education Contact Sessions (DECSs). The effectiveness of distance education depends on how well it is designed and delivered. This paper was conducted through a qualitative research and within the interpretive paradigm. Purposeful sampling was used to select sixteen participants - eight MCs and eight facilitators involved in the DE programme in the University of Pretoria. The paper examined recent research and writing in this area, and identified research gaps in skills and competences necessary for leading groups of facilitators at DE. The findings from the study revealed inconsistencies in the practice of the different MCs. Not all MCs reviewed their module. Interaction and collaboration between the facilitator and students, and among students, indicated the importance of MC’s capacity to train, prepare and support facilitators as well as the need to address DE problems timeously for effective delivery of DECSs. Suggestions were that MCs be quality assured to ensure there is consistency in module reviews, training and preparation for DECSs. Further suggestions were that reports about areas of need sent to the Distance Education Unit be followed up and addressed to ensure an effective delivery of the programme at DECSs.

**Keywords:** Module coordinator, Facilitators, Contact sessions, Distance Education, Facilitation Skills. Facilitator Training, Student engagement.

---

**PERCEIVED BARRIERS TO LEARNING AND ACADEMIC SELF-EFFICACY OF PRE-SERVICE STUDENTS AND THEIR EFFECT ON ACADEMIC PERFORMANCE**

Sheila Nokuthula Matoti  
Central University of Technology  
Free State, South Africa  
smatoti@cut.ac.za  
0515073370  
051 507 3367 (fax)

Motshidisi Anna Lekhu  
mlekhu@cut.ac.za  
0515073831  
0515073367 (fax)

**Abstract**

This exploratory study is in two parts. The first part examined the relationship between barriers to learning and academic self-efficacy of first year pre-service students enrolled for the Bachelor of Education (B.Ed) degree during the first term of the academic year, 2015. The second part involves correlating the findings of the first part of the study to the students’ first semester examination marks in June. The aim is to assess the extent to which students’ perceived barriers to learning affect their self-efficacy beliefs and, consequently, their learning outcomes or academic performance. We now report on the results of the barriers to learning, self-efficacy beliefs as well as the relationship between the two. The sample consisted of 46 participants: 28 females and 18 males. All the students in the sample met the minimum requirements for admission to a Bachelor’s degree as stipulated by the National Department of Education in South Africa. A questionnaire comprising two parts, the first part being
LARGE CLASSES AND MICROTEACHING EXPERIENCE OF
STUDENT TEACHERS AND TEACHER EDUCATORS (WORK IN PROGRESS)

Sheila Nokuthula Matoti
Central University of Technology
Free State, South Africa
smatoti@cut.ac.za
(051) 507 3370
(051) 507 3367 (fax)

Motshidisi Anna Lekhu
Central University of Technology
Free State, South Africa
mlekhu@cut.ac.za
(051) 507 3831
(051) 507 3367 (fax)

Abstract

The growth of mass higher education in South Africa has made large classes an endemic feature of several courses at higher education institutions. Teacher Education programmes are affected immensely as the quality of activities like Microteaching and Teaching Practice which are integral components of these programmes are compromised when classes are too big to handle. Morrison (2010) defines Microteaching as a training context in which a teacher’s situation has been reduced in scope or simplified in some systematic way, involving ‘teaching for a short period of time, normally focusing on one particular aspect of a lesson or teaching technique’. Its training procedure is geared towards simplification of the complexities of the regular teaching–learning process. Class size, time, task, and content are scaled down to provide optimal training environments. Positive

biographical data while the second part consisted of two subscales measuring perceived barriers to learning and academic self-efficacy, respectively, was used as a data gathering instrument. The two subscales measured identical tasks categorized into four domains, namely, financial issues; academic ability; family related issues; and decision making skills. Their responses were measured using a 4-point Likert type scale for both subscales. The overall mean for the barriers scale was 1.873 (SD = 0.50). The overall mean for the self-efficacy scale was 1.747 (SD = 0.442). The financial issues ranked high on the potential barriers scale, the main problem being the high fees payable at the institution, as well as transport costs in commuting between home and the university, as only five students in the sample reported staying in a university residence. Other issues of note were perceived under-preparedness for the course, a lack of support from lecturers, support staff, parents and friends. The paper argues that for quality education to be achieved, the pre-service students, especially first year students need information about financial assistance, preferably while still at high school. Furthermore, they need emotional as well as social support.
effects of microteaching (Mergler and Tangen, 2010; Legutke and Shocker-v. Ditfurth, 2009) have been reported as well as negative effects.

This research is intended to examine the extent to which large class sizes affect the planning and implementation of microteaching at universities, as perceived by both student teachers and teacher educators, and to find possible solutions to the problems identified. It is an exploratory survey which is descriptive and explanatory in nature. The target population for the study are Post Graduate Certificate in Education (PGCE), and third-year Bachelor of Education (B.Ed) students and teacher educators or lecturers. Two universities in South Africa have been purposively selected for the study. Two questionnaires one for the student teachers and another one for the lecturers have been prepared. The questionnaires include the biographical information of the participants, issues regarding the planning of microteaching and its implementation, the nature of the problems experienced as well as what the participants perceive as possible solutions. The views of the students and the lecturers will be compared. Semi-structured interviews will be used as a follow-up to the questionnaire data to probe further. Classroom observations will also be undertaken as a way of triangulation, as data collected by different methods will be checked. Based on the findings, the recommendations will be made.

Keywords: large classes, microteaching, student teachers, teacher educators.

References


CREATING PLATFORMS FOR TEACHERS TO PARTICIPATE IN SCULPTURING THE FUTURE THROUGH LEARNER SUPPORT

NMM Mbunyuza-DeHeer
Department of Curriculum & Instructional Studies
University of South Africa

Abstract
Change of society is constant and definite. It presents in positive and negative ways. It is therefore incumbent upon members of society through their identified roles to influence developments and implant its avowed values. Schools are the most suitable catchment centres to groom and develop society. South African schools harbor learners of different calibre namely, different races, multi -grades and all sectors of inclusive schooling. Imbalances of society are clearly portrayed in the demographics of the country as they obtain in the classrooms. Teachers are prepared for mono-grade classrooms, emphatically so secondary school teachers. This paper argues for the strengthening of learner support systems for secondary schools. This a concept paper that seeks to understand reality through the lens of cognitive load theory. The author envisions preparation of teachers that will enable them to prepare inclusive, equality-conscious yet differentiative classrooms.

Keywords: adaptation, modification, differentiation.

RESEARCHING STUDENT SATISFACTION IN ODL LEARNING ENVIRONMENTS TO ENHANCE THE QUALITY OF EDUCATION IN AFRICA

Marry Mdakane
North-West University
Potchefstroom, South Africa
10911502@nwu.ac.za
+27 18 299 4567
+27 18 285 2080

Christo J Els
North-West University
Potchefstroom, South Africa
10856803@nwu.ac.za
+27 18 299 2140
+27 18 285 2080

Abstract
Student satisfaction, as a direct measure for the success of ODL, relates to the support and guidance that students expect from an open distance learning environment. It is therefore imperative for ODL institutions to continually assess and improve student satisfaction. Existing theories and models on student satisfaction are mostly derived from deductive research, i.e. considering the existing body of knowledge, followed by an investigation of a specific aspect or component, in order to reach a specific conclusion. Conversely, we uphold the inductive viewpoint that a research framework for student satisfaction in ODL should be derived from students themselves. We purposefully selected and interviewed 34 post-graduate students, representative of South Africa’s rich diversity of ODL students, with regard to student satisfaction. Using Atlas.ti, we created an integrated dataset comprising of two focus-group interviews, as well as written
narratives in response to qualitative questions. We conducted a meticulous qualitative data-analysis in which we detected data categories, themes, patterns and regularities in the integrated dataset, which we illuminated by existing theories. Accordingly, we inductively derived a framework that could be used by institutions to research student satisfaction in ODL learning environments, with the vision to enhance the overall quality of education in Africa.

PUTTING OUT FIRES IN URBAN SCHOOLS: A STUDY OF HOW SCHOOLS MANAGE CRIME

MAU Mohlakwana
University of Pretoria, Faculty of Education
Pretoria, South Africa
agnes.mohlakwana@up.ac.za

Abstract

Urban schools are fraught with challenges of crime which depletes the principal's time and management of other essential dimensions of his/her work. There are situational variables that happen unexpectedly. These situations require that the staff, under committed and supportive leadership, will have to put out fires in urban schools. Teachers need a support system that is available to them all the time. Schools must organize a programme to suit their circumstances, as well as a realistic understanding of each staff members’ role functions (Hazler, 1996)

Understanding key concepts

Urban schools experience a number of challenges. These challenges are associated with population density, dysfunctional systems, problematic funding, crime, gangsterism, and drug related activities, lack of facilities, sexual harassment, and vandalism, amongst others. These challenges are complex and difficult to manage. Schools find themselves entangled in a sociocultural context that influences the quality of teaching, learning and management. It is common knowledge that learning takes place inside and outside school premises. These community sites include, amongst others, libraries and industries (Sorenson, Buchmaster, Francis & Knauf, 1996)

Gallagher, Goodyear, Brewer and Rueda, (2012) think urban leadership requires special skills, exceptional competencies and a
high level of awareness. This study seeks to answer the question: to what extent does a local environment of crime affect school management practices? If leadership is about influencing people, the question is: how do principals influence their co-workers to take control of the undesirable situation? The researcher finds this problem to be globally familiar, with South African schools facing no unique experiences. "Education leaders should develop comprehensive discipline plans, encourage good classroom management, and foster healthy relationships with the external community."(Beachum & Obiakor, 2005). With this in mind, schools must establish good network systems to involve other stakeholders.

Crime history in South Africa

More than fifty years ago, urban systems attracted diverse people to settle in urban settings due to employment needs. Most parents migrated from rural to urban areas, impacting on teacher recruitment and learner demographics. Some of these areas are small in size, causing extreme overloading of resources. Classrooms are overcrowded, resources are overloaded. Features of modern schooling emerged, attracting a wide range of vocational courses. The change in South Africa’s political transition was characterized by a violent history (Louw, 1997). In spite of the above factors, South Africa security forces believe it is winning the battle against crime (Release of the 2012/2013 South African Police Service National Crime Statistics). South Africans are hungry for a “crime free” future. School performance must improve to ensure a better economy through quality skills development.

Methodology

This is a qualitative study sampling urban school leaders and teachers. The study aims to determine how schools manage crime in their environments; the influence crime has on the day-to-day processes of teaching and learning in a school. Primary schools in Limpopo and Gauteng provinces (South Africa) will be selected. Interviews, documents and note taking will be used as tools for data collection. This study is work in progress. Phenomenological approach will guide this study by “allowing the principals’ experiences to speak for themselves” (O’Donogue and Punch, 2003:42).

The researcher aims to explain the relationship of experience between the participants and criminal activities as they unfold in a school environment. Ten schools (possibly more) will be randomly selected. The phenomenon of crime will be understood in the context of “the core meaning of the individual’s experiences” (O’Donogue, et al, 2003:46). The use of qualitative interviews will assist the researcher to gain in-depth information about the participants’ experiences of how these criminal activities are managed (deMarais and Lapan, 2004).

References


Hazler, RJ. 19996. Breaking the cycle of violence. Interventions for Bullying and Victimisation.Taylor and Francis. USA.

CONTINUING TEACHER TRAINING AS KEY FOR SUSTAINABLE EDUCATIONAL QUALITY: A FOCUS ON TERTIARY EDUCATION IN BOTSWANA

Bantu L Morolong
University of Botswana
morolongbl@mopipi.ub.bw
+267 3555138/71238028
3909156 (fax)

V G Magang
University of Botswana
magangv@mopipi.ub.bw
+267 3552923/72110203
3909156 (fax)

Abstract

At all levels of the school system, achievement of good quality education is in part, a direct consequence of the quality of teachers that deliver the education. At tertiary education level, the teachers who deliver education are known as lecturers within the rungs up to professor. In spite of the few nuances in reference, depending on where we are in the world, usage of these in this paper regards the distinctions just as nomenclature. Otherwise, they all mean teacher, somebody who educates, coaches, trains and tutors. Within the thematic area of “Quality in education as a prerequisite to establish “The Future We Want” for education in Africa”, this paper uses Botswana as a point of reference within the Southern Africa context, first to present who these teachers are in many of the tertiary education institutions. Secondly the paper posits that, there are serious questions to be asked about the general grounding of tertiary education teachers in the field of education. As a result of this, the majority of teachers at tertiary level
DETA conference abstracts 2015

cannot be expected to be able to deliver to expectation. The paper argues that inadequate teacher training foundations and neglected continuous development of teachers at this level of education has had direct ripple effects on the poor educational delivery starting at the lower levels of the education systems. Using documented evidence and qualitative research approaches the paper seeks to demonstrate a close relationship between the increasing decline in performance and quality of school graduates at all levels and the training of teachers who deliver in these systems. With a special focus on Continuing Education and training the paper makes a critical review of the processes of teacher education at tertiary education level. Among the many strategies that could be used to improve the quality of teachers at this level, the paper concludes that continuing education holds promise for redressing the existing shortfalls in the teachers of tertiary education if they are to meaningfully contribute to good quality education for sustainable development. The paper challenges custodians of educational delivery to look to Distance education as one of the key strategies in the needed transformation of continuing teacher education in this millennium, well into the future we want.

Keywords: Teacher, Education, Training, Quality, Tertiary education, Continuing Education, Distance Education, Sustainable Development

PREPARING QUALITY TEACHERS – A CHALLENGE OF CONTEMPORARY TEACHER EDUCATION CURRICULUM DESIGN.

Innocent Mutale Mulenga
University of Zambia, School of Education.
Innocent.mulenga@gmail.com; i.mulenga@unza.zm
+260 979513215

Abstract

Teachers are one of the most critical assets of any formal education system. They play a very important role in the facilitation of the learner’s acquisition of desirable knowledge, skills, values and attitudes. Teacher quality is therefore crucial and has been globally accepted to be significantly important in order for effective learning to take place in schools. However, it should be acknowledged here that teacher quality is greatly determined by the teacher education regimen experience that a prospective teacher goes through. There is ample empirical research evidence to suggest that if anything is to be regarded as a specific preparation for teaching, priority should be given to how a teacher education curriculum is designed since learning to teach is a continuum that only begins with going through a teacher education programme in a college of education or university an extends throughout one’s career (Darling-Hammond and Bransford, 2005). This paper is based on a mixed method study that was conducted among a final year cohort of student teachers at a University in Zambia. The study arose out of a concern that the researcher observed that although students on the English Language Bachelor of Arts with Education programme spent four strenuous years of study, they did not seem to have acquired the required skills and knowledge that are vital for their future responsibility of teaching. Even those of the students just about to graduate after either four or
Five years of valiant instruction at the University had not seemed to portray any much difference in their understanding of the skills that they will have to teach. The continuation of the university graduating such students might be due to the lack of understanding of the extent of the problem and not re-examining its curricula design and implementation processes. Using both qualitative and quantitative data sets, the main findings of this study revealed that the university did not adequately prepare student teachers for their future jobs since they lacked necessary competencies for teaching English as a second language in secondary schools. Secondly, not conducting job analysis (situational analysis) of the university curriculum has resulted in student teachers not acquiring the appropriate knowledge and skills for their future jobs of teaching English as a second language in Zambian secondary schools. The study further revealed that the teaching of content courses in one school or faculty and methodology courses in a different school or faculty has created opposition intents for teacher education.

References


Zeichner, K. (2010). Rethinking the connections between Campus courses and Field experiences in College – and University Based Teacher Education. *Journal of Teacher Education*. 61(1-2) 89-99. Retrieved on 9\textsuperscript{th} April 2013 from http://jte.sagepub.com/content/61/1-2/89

**UNLOCKING THE POTENTIAL OF PUBLIC LIBRARIES IN SUPPORTING TEACHING AND LEARNING IN OPEN AND DISTANCE LEARNING IN MAKERERE UNIVERSITY.**

Harriet Mutambo Nabushawo  
Department of Open and Distance Learning  
Makerere University  
hnabushawo@gmail.com; hnabushawo@cees.mak.ac.ug

**Abstract**

This study examined the nature of services and facilities available and accessible in public libraries to ODL students and the challenges these services face. Library services are central in teaching and learning processes because they expose the students to a variety of resources which facilitate in-depth study and lead to development of intended competencies. However, according to Pernell (2002), traditional library services often fail to adapt to the needs of Open and Distance Learning students especially in dual mode universities. For instance they fail to provide off-campus library services like region-wide borrowers’ cards and consortia membership between academic libraries. This in the end affects students’ final grades as well as the quality of education they receive.

Using a cross sectional survey, from 422 respondents who include students, and staff both on campus and off campus and librarians, data was collected through questionnaires, interviews, focus group discussions and documentary analysis. The findings reveal that due to inadequate library services in study centres where ODL students are meant to receive remote support, the students have been utilizing library services from the public libraries. This support from public libraries however needs to be acknowledged and fully integrated in the University policy provision for effective collaboration and
knowledge sharing to ensure smooth coordination of library activities. This paper therefore seeks to examine the potential of public libraries in supporting distance learners in Makerere University and the need for policy to guide the collaborations and coordination of the library services.

**Keywords:** Library services, Open and Distance Learning, Study centres, Public Libraries

**References**


---

**EXPLORING ETHICAL DECISION-MAKING IN UNIVERSITIES**

Jan Nieuwenhuis  
University of Pretoria  
Pretoria, South Africa  
Jan.nieuwenhuis@up.ac.za  
+27124205571

**Abstract**

Educators are expected to act as the *diligens paterfamilias*, “careful head of a family”, towards learners within schools. Can this same principle be applied to students at university level, and, if so, what responsibility does it place on lecturing staff in their behaviour towards students? In this presentation I will use the legal principle, but argue from a philosophical perspective rooted in ethical reasoning and link it to the idea of business ethics. It is often regarded as permissible to favour one’s own business interests as part of good business sense. In this sense, doing the right thing is considered good for business from an ethical perspective. Here, acting ethically is considered as an approach to avoid legal and moral problems which may jeopardise the self-interest of the business and an orientation involving responsiveness out of a concern for others. A concern for others can be motivated by a genuine support for the public, while at the same time not neglecting self-interest. Such concern is generally guided by moral reasoning that is vital for all rational beings. Normative ethical theory offers different moral theories, each prescribing a set of moral rules that individuals can apply in the process of deciding whether an action is morally right or wrong in different contexts. This implies that ethical reasoning should be considered as necessary precondition for moral decision making. In the paper six ethical decision-making approaches are analysed and presented as possible ways of taking decisions where the interest of opposing interest groups must be
considered. The six normative ethical theories, representing relatively different moral principles that individuals can apply to reason their decisions and actions within organizations are: ethical egoism, utilitarianism, deontology, the ethics of care, rights theory, and the theory of justice. The criteria thus identified will be invoked to analyse a number of cases in universities where lecturer/student interaction created ethical questions regarding the diligens paterfamilias question. The author will first explore the possibility of applying the principle to an adult education context, such as a university, by interrogating the ethical code for lecturers. The best interest of the lecturer/student is then theoretically pitted against the interest of the organization in trying to determine which interest should be prioritized.

Keywords: ethical decision-making, moral reasoning, diligens paterfamilias, lecturer professionalism

EDUCATION ACCESS AND QUALITY EDUCATION IN RWANDA: ACHIEVEMENTS AND CHALLENGES

Wenceslas Nzabalirwa
Claudien Ntahomvukiye

University of Rwanda – College of Education (URCE)
Corresponding author: Wenceslas Nzabalirwa
wenceslasn@yahoo.fr
+250 (0) 788428454

Abstract

The paper originated from a broad study on the EFA 2015 Review that predominantly used a qualitative approach. Data collection mainly depended on secondary data sources. The EFA goals were adopted in Dakar in 2000. As a signatory of the Dakar Framework, Rwanda committed to achieve the six goals plus a seventh one related to HIV/AIDS in schools. This paper focuses on the achievement of the second and sixth goals set to ensure universal primary and quality education. A desk review was conducted to study relevant ministries, agencies, development partners and civil society documents. In addition to the desk review, data triangulation was achieved through a series of in depth interview and focus group discussions that were conducted to elicit information from a range of stakeholders who work in the field of educational development. The collected data was organized in three principal sections in accordance with themes developed and discussed in this paper namely, achievements in terms of access to education, impact of access on the quality of education and prospects of reconciling education access and quality education.

This paper indicates that, during the past 15 years, Rwanda made impressive growth in enrolment, particularly at the primary education
level as a result of ongoing policy developments and strategies such as school construction, teacher recruitment, capitation grants, teaching and learning materials, girls’ education, increased parent involvement and government encouragement towards private sector’s investment. Moreover, considerable progress was observed in terms of the increased number of schools, both primary and secondary, particularly as the universal primary education is considered as the foundation for the further development of secondary education. A significant increase in secondary schools emerges since 2009 due to the Nine Years Basic Education program for lower secondary education followed by the Twelve Years Basic Education approach for upper secondary education.

However, the quality of education has not been able to match the pace of improvements in access. The tricky equation to be solved by most of countries including Rwanda is to find out the right way of increasing access to education without compromising the quality of education in a resource-constrained environment. This paper is a contribution to the debate around the reconciliation between the access to education and the quality of education with specific reference to the context of Rwanda. It draws out recommendations and achievable strategies for quality improvement of aspects like teacher training and motivation, curriculum and training relevant to the labour market, instructional leadership and mentorship, teaching and learning language competency, early childhood education for school readiness, availability and adaptability of facilities and teaching and learning resources, awareness around parental responsibilities, school feeding programme, health initiatives in schools as well assessment strategies emphasizing on continuous assessment of learning. Conducting Learning Achievement in Rwandan Schools (LARS) Studies will provide valuable data to enhance effective teaching and learning in schools.

PART-TIME DISTANCE EDUCATION LECTURERS’ EXPERIENCES OF STUDENTS’ LEVEL OF READINESS DURING THE FIRST LEARNING SUPPORT SESSION FOR BE.D HONOURS STUDENTS

T A Ogina
University of Pretoria
Pretoria, South Africa
taogina@up.ac.za

Abstract

The University of Pretoria offers a Bachelor of Education Honours Degree in Education Management and Policy Studies as part of its Distance Education Programme to in-service teachers who needs to upgrade their qualifications and enhance their education management skills. The distance education students at the University of Pretoria receive learning support during contact sessions organized by the university. The term learner support is often used in distance education and it includes all interaction processes between the institutional personnel/lecturer and students enrolled for distance education courses. The purpose of such interaction is to assist students in meeting their objectives from point of first inquiry and registration through graduation and beyond. The purpose of contact sessions is to provide opportunities for students to interact with the lecturers, course material and their peers to enhance their learning ability. The university do sent learning materials to students to study before attending the contact sessions. There has been a lack of research on the experiences of the lecturers regarding the extent to which learners are prepared or the level of readiness for the initial contact sessions. The aim of this study was to establish the opinion of part-time lecturers regarding students’ preparation prior the contact sessions and determine what can be done to maximize the potential
of contact session as a learning support structure and plan for more effective and quality support sessions. The research questions were (a) what are the experiences of the distance education part-time lecturers regarding the first lecture at a contact session? (b) To what extent are students prepared for the first contact sessions? (c) What are the challenges experienced by the part-time lecturers during the first contact session? (d) How can the quality of the contact sessions be improved? The research consisted of semi-structured interviews with eight part-time lecturers facilitating learner support at a contact session. The purpose of the interviews was to explore the perceptions of part-time lecturers regarding student readiness for the contact session, the challenges experienced during the contact sessions and possible strategies of improving the quality of learning support during contact session. A qualitative constant comparative analysis was used in this study to analyse the data. The factors identified by the part-time lecturers as challenges and the level of students’ prior preparation and readiness for contact sessions are reported. Strategies for improving the quality of student support during contact sessions are discussed and the implications of the findings in terms of learning support structure and services are made.

Keywords: Distance Education; Student support, Contact sessions, Lecturer support; Prior preparation, Students’ readiness.

WHY DO ENGLISH SPEAKERS (OTHER THAN NATIVE) LACK FLAIR AND FLUENCY?

Rajesh Patil
Saraswati Junior College,
India
rajeshpatil1966@gmail.com
+91-9421837447

Abstract

India like African continent is a land of variety, especially in the languages. There are twenty two official languages and more than a thousand dialects and creoles. English is a compulsory subject from the primary education but the standards are not satisfactory. Very few students can exhibit speaking skills. Rural students lag behind in flair and fluency. Lack of listening and speaking opportunities, over-emphasis on grammar, drilling without context, limited use of dictionary, ignorance about sounds, translation method etc. are some of the causes at school level for the pathetic state of English. Hardly do students know about the different sounds of ‘a’ in pan, father and awesome. The words ‘of’ and ‘off’ are pronounced in the same manner. Misspelt and mispronounced words make the matters worse. ‘Acceptable Pronunciation’ is a term generally used by teachers and resource persons to shield their incorrect accent.

Eaton (2014) in her research states that, “Language acquisition is a complex process that involves communication, grammar and language production along with reading writing, speaking and listening.” English is a foreign language. We cannot expect the accent like native speakers but the goal should be to reach the nearest. India is a land of villages and the village students have problems of comprehension compared to the urban students. It has been labeled as a killer subject.
The researcher working as an English teacher in a village faced these problems and tried to find out some concrete solutions through classroom activities. The basic problem the researcher found was that students were not well versed with the sounds and intonation. They hardly received any listening practice till standard X. Researcher got two periods of 35 minutes each per week for tutorials which were used extensively to improve the speaking skills. Students of class XI science (72) and arts (65) were the samples taken for the study. The purpose was: i) to acquaint them with sounds and intonation, ii) to offer them listening practice and, iii) to improve their speaking styles.

Since last three years (2011 -14) the researcher has been conducting activities, such as, reading text: finding difficult words, mispronounced words, etc.; discussion: shades of various pronunciations of the word and listing words which are generally written incorrectly. In the initial stage students find it difficult to understand English to English as they were habitual to learn English through Marathi, the vernacular language. Difficult words were chosen, students got opportunities to read loudly and thus were detected the words they pronounce in a wrong manner. Dictionaries were carried to the classes and students searched for the actual pronunciation. This attitude helped a lot and they started consulting every word with the dictionary. Years of experience proved that within three months they start understanding the researcher’s toning. They start imitating and use common expressions in the classes. At various occasions students delivered speeches in English. The same classroom practices could be applied in the African classes, too. A detail qualitative analysis of this descriptive study will be discussed in the main paper.

**Keywords:** Language Acquisition, Intonation, Fluency & Flair, Language Skills, Dictionary Friendly Attitude, Dialects and Creoles, Acceptable Pronunciation.

---

**PROBLEM-BASED LEARNING (PBL) IN TEACHER EDUCATION: AN ACTION RESEARCH**

Shakuntala Payneeandy  
Mauritius Institute of Education  
s.payneeandy@mieonline.org  
230-57921156  
230-4673545 (fax)

Amrita Mosaheb  
Mauritius Institute of Education  
a.mosaheb@mieonline.org  
230-57329221  
230-4673545 (fax)

Pritee Auckloo  
Mauritius Institute of Education  
p.auckloo@mieonline.org  
230-54954787  
230-4673545 (fax)

**Abstract**

This research is a study of the implementation of the problem-based approach in the teaching of a specific module in the initial professional development of trainee teachers of the Mauritian primary sector.

The general feedback gathered from practicing teachers in Mauritius is that they scarcely put into practice the educational theories learned during their professional development. There seems to be a dissonance between the philosophy of teacher education and the pedagogical practices in the classroom especially in the primary sector. One of the main arguments of the teachers about the reasons
why they do not adopt more progressive and innovative approaches to teaching and learning is that they have not been able to grasp sufficiently the pedagogical concepts in order to be able to implement the appropriate teaching strategies. This situation has always posed a challenge to teacher educators who are sometimes looking for ways to make the content of the teacher education programmes more meaningful to their students.

This piece of research, an action research, intends to analyse to what extent the implementation of a specific pedagogical action, that is PBL, has helped in bridging the gap between theory and practice in teacher education. It also intends to assess the use of PBL as a teaching and learning tool to transform trainee teachers from passive recipients of educational theories and pedagogical principles into active, self-directed and reflexive learners taking ownership of their learning.

This study is conducted within the transformative paradigm. (Mezirow -1981,1994,1997) Transformational learning has been defined as learning that induces more far-reaching change in the learner than other kinds of learning, especially learning experiences which shape the learner and produce a significant impact, or paradigm shift, which affects the learner’s subsequent experiences (Clark, 1993).

This piece of research is about finding out the transformation which occurs in trainee teachers as well as the teacher educators as a result of the adoption of a new approach to teaching and learning, that is PBL.

Research Question: How far can Problem Based Learning approach be an effective tool to enhance the teaching and learning process in Teacher Education and make learning more meaningful for trainee teachers?

This research lies within a qualitative paradigm. The core of the research approach is that of an action research. The challenge for the teacher educators involved in this research was to design the PBL environment for the students and to plan for the action research so that both processes were being planned concurrently.

Action Research offers a systematic approach to introducing innovations in teaching and learning in higher education. It puts the Tutors/trainees in the dual role of producer of educational theory and user of that theory to reflect and improve practice.

The researchers feel that this piece of research may prove to be a thought – provoking way of producing knowledge about teaching and learning and may serve as a powerful way of improving learning and teaching practices in teacher education in Mauritius.

Keywords: teacher education, problem-based learning, transformative, active learning, pedagogy, teaching strategies, teachers’ beliefs, classroom practices,

References


Hökkää P, Eteläpeltoa A and Rasku-Puttonenb H.(2012) - The professional agency of teacher educators amid academic
PERCEPTIONS OF SECONDARY SCHOOL TEACHERS REGARDING HUMAN RIGHTS EDUCATION PEDAGOGY IN THE FREE STATE PROVINCE

Lethoyo Segalo
Department of Educational & Professional Studies
Central University of Technology
Free State, South Africa
Lsegalo@cut.ac.za

Abstract

The study investigated the perceptions of secondary school teachers with respect to their infusion of Human Rights Education in their practice. The assumption of the study was that teachers are living in a democratic South Africa as a result they must employ the pedagogy that advances the respect and protection of human rights amongst, their learners. A qualitative interpretivist research paradigm was used in this study employing an Ubuntu research framework. An Ubuntu research framework assumes the importance of equality, fairness and justice among the researcher and the participants in the research setting. The participants in the study comprised of ten secondary schools teachers which were purposively sampled in the Free State Province. A focused group was used to collect data on issues of human rights in particular the rights of learners using an Ubuntu framework. Data was analysed using a textual discourse analysis. The results of the study showed that teachers have not changed their mind-sets regarding the rights of learners as enshrined in the Constitution (Republic of South Africa), despite the New Revised Curriculum Statement stating that the rights of the learners should be respected and promoted.
Keywords: Human Rights Education, Pedagogy, learners, Constitution, New Revised Curriculum Statement, Ubuntu research framework, textual discourse analysis.

IMPROVING SERVICE TO STUDENTS THROUGH ENHANCEMENT OF ACADEMICS AS TEACHERS AT A UNIVERSITY OF TECHNOLOGY

Wendy N Setlalentoa
Faculty of Humanities
Department of Mathematics, Science and Technology Education
Central University of Technology
Free State, South Africa
wsetlale@cut.ac.za

Gregg Alexander
Faculty of Humanities
Department of Post Graduate Studies
Central University of Technology
Free State, South Africa
galexander@cut.ac.za

Abstract

The study examined current practices employed at a university of technology on how academics are enhanced as teachers. The discussion is structured on aspects such as academic staff development, excellence awards, recruitment, hiring and retention of academics, performance appraisal and promotion as well as student and peer evaluations of teaching and module content. This study followed an interpretivist approach and social constructivism of knowledge. Purposive sampling of academics across faculties was made. Data were collected using open ended questions in focus group discussions interviews with the academics across faculties and document analysis (the institutions vision 2020 and strategic plan 2010-2015). Recommendations are made to take the institutional perspective for enhancing academics as teachers for quality teaching.
that effectively aligns the university’s teaching and learning strategy with teacher training and assessment, quality assurance and to enhance professional development programmes.

**Keywords:** Professional development, teaching approaches

**WHAT ARE THE DEMANDS FOR QUALITY EDUCATIONAL TRANSFORMATION IN DIVERSE AFRICAN CONTEXTS REGARDING “THE FUTURE WE WANT?”**

Johannes Adrian Slabbert  
University of Pretoria  
jslabbert@up.ac.za  
+27124202773  
+27124205637

**Abstract**

The conference theme is of crucial importance while, at the same time, it presents dilemmas that need prompt resolution if we are serious about quality educational transformation.

The first dilemma is to determine what “the future we want” refers to: Which future or who’s future are we talking about? Is it the future of the world? (meaning the universe, our planet, our external environment on the planet, the intrapersonal well-being of the humans on the planet, the interpersonal well-being of the humans on the planet, the relationship between the humans on the planet and the other living and non-living external environment, the educational transformation on the planet, the teacher development on the planet, the teacher development of teachers in diverse contexts, some of these, and if so, why, or all of these and if so why?

What is of crucial importance to consider to resolve this dilemma is Howard Gardner’s (2008:17) statement in his ‘Five minds for the future’: “I believe that current formal education still prepares students primarily for the world of the past, rather than for possible worlds of the future”. He continues to admit: We … have not figured out how to prepare youngsters so that the can survive and thrive in a world different from one ever known or imagined before”.

Although the future has always been and always will be unknown, our dominant education practices have been and still is focusing on the acquisition of existing knowledge and skills – emanating from the past - as if the future is perfectly predictable. Unfortunately, in terms of the increasing speed, nature and felt impact of or changing existing world, Barnett (2007:36) claims that it is becoming “radically unknowable” and that the acquisition of more knowledge and skills as a resolution to this problem can never resolve this “supercomplexity”. Therefore we have to heed the profound statement of Einstein: A problem cannot be solved with the same consciousness that created it.

For this reason, this paper attempts to put the theme of this conference into proper perspective claiming that only when and if “the future we want” is explicitly established is it possible to determine the associated educational and subsequent teacher educational transformation and the required nature and structure of its corresponding qualitative transformatory curriculum and pedagogy.

Join me in this exploration.

References

