



CONFERENCE  
Strategies to Overcome Poverty & Inequality  
"Towards Carnegie III"  
University of Cape Town, 3 - 7 September 2012



This paper was presented at "Towards Carnegie III", a conference held at the University of Cape Town from 3 to 7 September 2012.

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## **Toward social transformation: Addressing poverty and inequality in the Southern African educational context**

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### **Introduction**

This paper is written from an educational perspective. We do not pretend to address the political or the economic factors that perpetuate the seemingly endless and heart-breaking cycles of inequality and poverty that we see around us. However, we argue that actions can be taken through educational interventions that may contribute to social transformation.<sup>1</sup> These actions require in the main a change of thinking about the critical factors informing educational decision making at the macro and the micro level.

A general approach currently believed to produce efficacy in the educational system is characterised by demanding accountability from the teachers and the schools.<sup>2</sup> The reasoning behind the accounting process is as follows. The formal curriculum (defining what is to be taught in a specific subject area and centrally prescribed), is assumed to be implemented without question, and without regard for what is required in specific educational contexts. The implementation is then assessed through systemic tests. The design of the tests, their administration, and the analysis of the data is generally outsourced to an external institution which then produces reports which are fed back to the schools. The schools are required to use the information to improve outcomes.

The fundamental problems with this type of unidirectional accountability system, as noted by Bennett and Gitomer (2009), is that firstly this system has very limited educational value, and secondly that there are significant negative consequences for principals, schools and teachers if their students do not meet the specified common grade achievement targets. The inferences made from such results far exceed their warrant, as explained by Bennett, (2011) and Wu, (2009).

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<sup>1</sup> See Batra, (2009) for an account of the teacher education role in social transformation in India.

<sup>2</sup> Accountability in this context has a somewhat narrow focus on the teacher and the school that may in many cases not consider the larger social and educational context.

The main critique of limited educational value rests on a number of factors, one of which is that “the cognitive models underlying these systems” are outdated (Shepard, 2000, cited in Bennett & Gitomer, 2009). As currently implemented, evidence is collected “only on a single proficiency through multiple choice items when the nature of performance is more complex”. The presumed link between the poor results and teacher and school factors have resulted in too many teachers and principals becoming obsessed with improving the performance in tests, without paying attention to the deeper domain knowledge the curriculum is meant to represent (Bennett & Gitomer, 2009). In the United States, the enactment of the *No Child Left Behind Act* has resulted in a direct but counter-productive connection between “high stakes assessment and instructional practice” (Bennett & Gitomer, 2009). A consequence of the teachers’ and school’s obsession with achieving targets is that the holistic development of the learner is compromised.

The South African education system, we maintain, mirrors the picture presented of education in the USA above. Despite 15 years of concerted testing by the national and provincial governments, our teachers have not benefited, but rather been left bewildered about what action to take. Parents are concerned that their child is at “Level 2” but are not sure what this label means! The pertinence (and limitations) of annual momentary systemic tests for the enduring classroom or for parental involvement is left unexplained. In this scenario it is no surprise that the results of systemic tests in most provinces have not improved in spite of claims of best and frenetic efforts to improve the results.

The critique that the current model of accountability<sup>3</sup> places the responsibility for the learner’s development primarily with the teacher and the school, for which there are serious consequences, (for example, closing the school), is applicable in South Africa. Issues of curriculum appropriateness, the associated workbooks that have been prescribed, the nature and efficacy of subject adviser interventions and the quality and usefulness of the systemic tests, are largely ignored, and assumed to be unproblematic, whereas it is at this system level where at least part of the problem resides.

While the critiques of the systems of accountability noted above are substantial, we propose that the primary reason that these actions and interventions have not been effective is that the critical role of the teacher as an agent of educational and social transformation has been sidelined. Here we propose two contrasting roles for teachers: the first is where teachers are

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<sup>3</sup> An exception to attributions limited to school and teacher may be the NEEDU initiative whose evaluations address the implementation at the provincial, district as well as the school level.

considered as “instruments” for the delivery of the curriculum (the syllabus which denotes the subject disciplinary content of the curriculum). The delivery of the curriculum (syllabus) is required within a specified time (even if many of the class are not keeping up), then monitored (through multiple-choice tests and one word answers) for the effectiveness of the implementation, and finally consequences are decided on the basis of these results.<sup>4</sup>

An alternative model is proposed where the teachers play a central and critical role in the process from the curriculum-in-development phase to the assessment phase of the educational process. At the heart of this model is the psychosocial well-being of the teacher and the child with strategies proposed to support this goal.

In this paper we note several factors but choose to focus on two factors involving the interaction of the school and class level (meso and micro levels) and the system level (macro level), through which we argue for holistic innovations, focused on the successful development of proficiency in a subject area<sup>5</sup> at the level of the learner, while attending to the psychosocial well-being of the learner. In order to provide the educational context of the proposed innovations we note some essential features of an educational reform programme.

### **Educational reform**

We propose changes at all levels of the system that are more in keeping with democratic imperatives,<sup>6</sup> and the goals of social transformation. In essence, we align our thinking with the notion that the trichotomy, comprising *knowledge* (academic and cultural heritage for learning and future development), *social preparation and needs* (issues relevant for inclusion from the perspective of societal trends) and *personal development* (elements of importance to learning and development from the personal and educational needs and interests of learners themselves), is critical for developing educational objectives that support a social transformation goal (Tyler, 1949, cited in Thijs & Van den Akker, 2009, p. 14). Likewise, the initial and continuing education of teachers requires the same balance of knowledge, social needs and personal development. We propose that the trichotomy works interactively in the interests of the holistic development of the child and the resulting social transformation.

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<sup>4</sup> Again here we cite the warning from Bennett that that inferences to be made from assessment and the actions that are then taken have to be clearly distinguished, with questions of validity of the test as judged by the larger subject domain factors and the coherence with learning theory.

<sup>5</sup> We use mathematics education to illustrate the model but propose the principles discussed may be applied to other subject areas.

<sup>6</sup> In essence the democratic imperative is that each person is accorded the rights of self-government, reason and conscience, and their voice is heard when decisions are made that may affect them and their community. See also Young (1990), on Critical Education: Habermas and our children’s future.

From the knowledge perspective we propose a *developmental* rather than a *deficit model* (Griffin, 2009). The adoption of an approach to learning and assessment that acknowledges that each learner is on a developmental path and that our role is to support the learner in this journey (a developmental model), through providing appropriate support and scaffolding, is more productive than highlighting what the learner cannot do (a deficit model). Aligned with this model is the proper organisation of learning experiences in order that learners are not demoralised by either of two prospective scenarios: The work required at any particular moment may be much too difficult, or a group of children may be bored because the work does not present any challenge at all.

A developmental approach that is aligned to meet the specific needs of all learners may be identified with the construct “zone of proximal development” a conceptual space where optimal development of an individual may take place (Vygotsky, 1962). It is the specifying of this zone for each particular child, or groups of children, that is the major challenge confronting the teacher in the classroom. This challenge will be attended to in the description of the proposed innovations.

We acknowledge the importance of appropriate and in-depth subject knowledge for teachers. We should not underestimate the work required for teachers firstly to engage with, for example, the mathematics of even the foundation years,<sup>7</sup> and secondly to construct an environment with the necessary resources where the learning of mathematics is facilitated. Providing learning experiences that are meaningful and relevant to the particular children concerned contributes to an optimal learning environment.

It is here that we observe the interaction of appropriately targeted (and meaningful) learning experiences with the psycho-social wellbeing of the child. While this requirement is needed for all learners, this aspect may be particularly pertinent where adequate learning structures are not in place and where there may be other barriers to learning. The personal development and social preparation requirements of a balanced education system may be subsumed under the heading psychosocial support.<sup>8</sup>

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<sup>7</sup> See Usiskin (2012) in which many dimensions of mathematics are proposed. See also Davis and Johnson (2007) where the barriers to learning are identified in the presentation of the mathematical concepts.

<sup>8</sup> The term psychosocial support does not in any sense imply the “poor child” syndrome but acknowledges the potential that with some support may be unleashed.

## **Psychosocial support**

Wiliam (2011) noted that “a successful school is no more than a cluster of successful classrooms” (p. xx). We extend this view to assert that a successful classroom is no more than the aggregation of children eager to learn, and one or more motivated, committed (and organised) teacher. To achieve this goal psychosocial support strategies are needed to ensure that the emotional and social aspects of a child’s life are addressed in a way that the child can live with hope and dignity (Simfukwe, 2012)<sup>9</sup>. And likewise the teacher.

The current situation is that across Southern Africa there are few schools with structured procedures to identify vulnerable learners or to provide emotional support, resulting in the learners depending solely on the teacher. From the teacher education perspective there is no specific training for teachers in psychosocial support, and from a social work perspective, there are no specific curricula dealing with specialised areas, such as social work services in schools (Simfukwe, 2012).

The question arises how to equip schools and teachers to support the social and emotional needs of learners, and to work effectively with community members, caregivers and service providers to create networks of care for learners (Simfukwe, 2012). Some progress in this regard is evident in the Southern African Development Community (SADC) *Care and Support for Teaching and Learning* (CSTL) Programme, which promotes a comprehensive approach to addressing the societal and intrinsic barriers to learning and teaching evident in many children. To this end SADC completed a baseline in 2009 in the Democratic Republic of Congo, Mozambique, South Africa, Swaziland, Zambia, in which it was recommended that teachers receive basic training in Psychosocial Support (PSS) (MiET Africa, 2009). In response to the overwhelming need, the Regional Psychosocial Support Initiative (REPSSI) has designed a programme “Teachers’ Program in Psychosocial Care, Support and Protection”, which aims to provide enabling environments for the psychosocial wellbeing of children, and where schools work collaboratively with caregivers to support systemic change at both school and community level. An extract from the course follows.

Mainstreaming of psychosocial care, support and protection into a school is the deliberate and planned inclusion of psychosocial care, support and protection into all levels of the school from the leadership and policy level, through the school culture to all areas of in school and after school learning. When psychosocial care, support and protection is mainstreamed, school policies and learning programmes are developed and delivered in a way that promotes

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<sup>9</sup> For more on the model see the REPSSI website, [www.repssi.org](http://www.repssi.org)

psychosocial wellbeing of teachers and other staff, male and female learners, youth, families and communities (Extract from REPSSI Teacher Diploma, Module 1, p. 18).

Here we note the democratic imperative, that of acknowledging each person's right to self-government, reason and conscience.

A critical feature in the Southern African landscape is the rural and urban divide, more marked in some countries than in others. To reduce the effects of the divide on learning and performance, we might seek to recognise the strengths of rural children and youth and develop educational materials that align with the context in which those learners operate. By alignment we do not mean to lower the conceptual complexity or the cognitive demand, but rather to engage learners with issues which excite their interest.

An aspect of critical importance for the well-being of youth is to consider that the school to work transition for African youth has been changing, with the youth staying longer in school than their parents (Leibbrandt & Mlatsheni, 2004). They further noted that there is evidence indicating that African youth are combining schooling with part-time work, especially in rural areas. This phenomenon suggests that the education curriculum for the youth, especially the rural youth, should address not only the classroom environment but also how the youth are engaged after school. Building interest and passion in the curriculum content that promotes a wide range of skills, may go some way to developing in learners the confidence to become an entrepreneur, and prepare the learner for the job market.

The approach advocated here that of a developmental model aligns with psychosocial support in that a child anticipating support for a next step will be a more active learner than the child fearing failure. As claimed previously, psychosocial wellbeing functions interactively with an educational programme where children are being optimally engaged in learning, by focussing upon individual zones of proximal development.

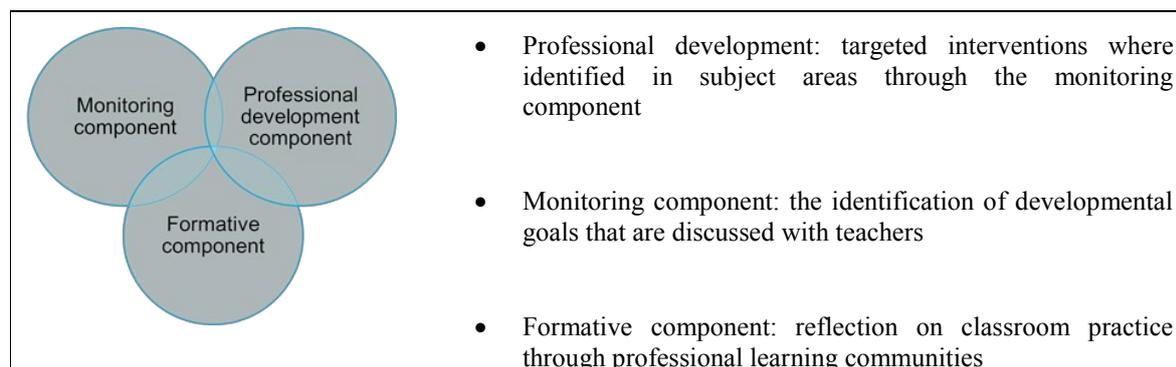
### **An integrated assessment model**

However we propose a model of assessment, incorporating a holistic education model, which may support the teacher in improving the effectiveness of her classroom practice. Following Bennett & Gitomer (2009) we propose that the current approach to systemic assessment be replaced by an elaborated system with three intersecting components, a monitoring component<sup>10</sup>, a professional development component and a formative component within

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<sup>10</sup> Bennett and Gitomer (2009) use the term accountability. We prefer the term monitoring as we are taken as given that the supported and empowered teacher will be accountable to her children.

which the teacher, with the support of a professional learning community, reflects on classroom practice<sup>11</sup>.



**Figure 1: Model for system assessment adapted from Bennett & Gitomer, 2009**

The three components are integrated and work interactively. The *professional development component* of this elaborated system of interventions should be informed by a deeper insight into the essential nature of the knowledge domains. For example, re-examining with the education role players the factors involved in mathematical proficiency, teachers and decision-makers should explore the reasons for these critical factors being absent from the school classroom, and address strategies to change that absence. Here one may draw on the work of Usiskin (2012), who has identified five dimensions which together constitute mathematical understanding, and Davis et al (2009 – 2012)<sup>12</sup>, who have through fine-grained mathematical analysis, identified critical areas of concern.

For the *monitoring component* we propose that any mode of assessment should be aligned with cognitive models that are current, and that modern scientific techniques for the generation and analysis of data are used. These modern scientific techniques, as exemplified in the Rasch measurement theory, adopt criteria for tests that ensure some analogue of dependable scientific measurement, and hence can permit possible quantitative evidence of the extent of any progress (Rasch, 1960/1980); Wright & Stone, 1979; Andrich, 1988). These methods not only provide information about the individual student, but they also ensure reflection on the test instruments themselves and their constituent items. Suitably supported these methods also permit the tracking of individual needs and performance in the classroom, and evidence for the extent of change, progress and redress of performance, for the specific

<sup>11</sup> We may here be accused of idealism in a difficult context. However we remain with the view that at heart our teachers, as ourselves, do their best within circumstances that are difficult, and therefore with the right kind of support, will become the agents of transformation (see Batra, 2009).

<sup>12</sup> The mathematics education group at UCT are doing fine-grained analysis of mathematics teaching with particular attention to how mathematics is constituted in school mathematics. This work has the potential to inform professional development programmes.

child. With the technical tools available report back sufficiently close in time to assessment is available to timeously inform the teacher's allocation of suitable learning tasks and challenges to elicit development. For a detailed discussion of the models see Dunne, Long & Craig, (in process). The application of the Rasch model together with a coherent theory of learning and teaching, for example the theory of conceptual fields (Vergnaud, 1988; 2009), enable the proper targeting of zones where optimal learning may take place (see also Long, 2011).

The *formative component* requires that teachers be provided with information obtained through the *monitoring component*. This information should enable them to reflect on how best to meet the needs of the learners that emerge from the assessment. This component ideally should unfold in an environment where the teacher is supported in the process of reflection and perhaps change through professional learning communities (see Brodie & Shalem, 2011; Brodie, 2011). We acknowledge that there will be circumstances in which this reflection will have to be accompanied by improvement of mathematical skills, the task of the professional component. In essence the professional development component is required to build with the teachers a model of mathematical development against which teachers may gauge the development of their learners. The intended curriculum performs in part this function.

We propose that the social justice imperatives of education require measures of educational performance that robustly assess current proficiencies (the monitoring component), that support immediate classroom interventions geared to individual needs and that provide evidence for realistic and evidence-based reviews of classroom efficacy (the formative component). Simultaneously these measures, with the technology now available, allow education decision-makers and stakeholders insights into the nature of the educational challenges, the current strategies being adopted in any specific classroom, and evidence for policy choices that promote classroom effectiveness (professional development component).

Here, we do not envisage taking away from the prerogative of teachers to make decisions regarding teaching, but rather to support the process of learner-teacher engagement.

### **The interaction of educational reform and psychosocial support**

South Africa has the potential to re-engineer its education system to balance grade achievement targets with quality of learner educational experience. We claim that the

education departments cannot attain that state under their current policy and practice orientations.

Strengthening the capacity of the teacher to educate and support the emotional wellbeing of the learner is critical for quality education. The teacher requires the ability to focus on the whole child - developing the literacy, numeracy and emotional resilience skills. An effective education system goes beyond providing a teacher on time in class and a textbook to each child. It also keeps the teacher motivated to engage with the learner on his learning path and make the best use of the text book. The best possible scenario is for the education system to support teachers to create space for the learner's best thinking, demand the best work from the learner and create rapid learning cycles. Wiseman (2012) states that "requiring people's best work is different from insisting on desired outcomes". She further asserts that "(s)tress is created when people are expected to produce outcomes beyond their control" but they "feel positive pressure when they are held to do their best" (p. 4, 5, 53). This argument is true for the teacher as well as the learner.

For the implementation of any new curricula, or even specific aspects of the curriculum, psychosocial support elements need to be in place. For many children the reality is that many difficulties confront them individually. An education system that is in a rush to attain grade achievement targets will do little to address the psychosocial needs of the individual learner. This limitation is bound to create a situation where learners underperform, precisely because the education process leaves emotional stresses unaddressed or exacerbated.

## **Discussion**

The arguments offered for an integrated assessment model, which supports the broader educational aims including psychosocial support, claim these features are necessary (but not sufficient in themselves) to properly deliver education. The child as person engages in learning processes in closer proximity to the teacher than any other agent. Their interaction is the fulcrum of education, but both those parties must be supported. Psychosocial support enhances the efficacy of the engagement with cognitive challenges. New types of assessment inform the interaction processes timeously.

This current predicament of top-down implementation of the curriculum, calls for political leaders and senior education officials to find a way of effectively engaging the teachers in educational system change processes. The repercussions of an integrated education model (which includes monitoring, professional development and a formative classroom

component) may impact on the education system and society in that teachers are perceived as the agents, rather than the objects, of change (Batra, 2009).

### **Future directions**

What is being proposed here is not a soft option but a call to all role players in the public education system and the private sector to take seriously the developing potential and the possible vulnerability of the child and ensure that the structures are in place for that development to take place. While there may be teachers whose subject expertise and pedagogic skills are poor and worse, partly as an apartheid era artefact, it is not sufficient to identify this difficulty without providing effective professional development which targets the identified critical features informing for example mathematical development. Attention to the problem areas, in for example the learning of mathematics, require the collaboration of researchers and curriculum advisors.

Higher level decision-making has not yet orchestrated anything close to a coherent effective response to the needs of learners, despite 15 years of concerted testing. A deficit model identifying what our learners and teachers cannot do, may be replaced with a developmental model where current proficiency is mapped on to a developmental pathway. The tiers and structures in place at the macro level have an obligation to support the learner and the teacher in the classroom at the micro level, to address the context in which individual learners develop, remove obstacles and smooth pathways at that locus, and support committed teachers with their role in those processes. Attention to the mathematical development in conjunction with finely attuned instruments which work in an integrated way with classroom experience and professional development is required.

The development of curricula for any education system may be construed as a static top down order, or it may be construed as the continual unfolding where the interactions between the component parts, including teacher engagement, are informing and improving the system. The model proposed here affirms the critical role of the teacher as an agent of educational and social transformation, in addition to providing the educational and psychosocial support. The aspect of the cycle of educational and social transformation, where there is a turnaround in the economy, is not elaborated here. However, “the seed is in itself”, and we may only envisage the outcome of a concerted focus on a quality intervention supported by a model where the teacher is a central role player.

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