

# IN-SERVICE TRAINING OF TEACHERS

## 1 Introduction

To enhance the quality of teaching and the outcomes of the basic education system, the national Department of Basic Education (DBE) developed a plan for the in-service training of teachers (INSET). The goal is to deepen their subject expertise as well as their pedagogical knowledge. The *Integrated Strategic Planning Framework for Teacher Education and Development in South Africa* emerged from extensive research and collaboration among a range of stakeholders, including provincial education departments, academics and teacher unions. It specifies what educators should know, and having established the nature of the gaps, identifies suitable institutions to provide the required training. The policy proposals are extensive and will require substantial public resources to implement.

To support planning, budgeting and implementation for INSET, a performance and expenditure review (PER) was commissioned to develop a costing model for the proposal. The PER was conducted between August and December 2013 by Cornerstone Economic Research. Some of its key outputs, insights and recommendations are summarised here. The full report and the costing model are available at [www.gtac.gov.za/programmes-and-services/public-expenditure-and-policy-analysis](http://www.gtac.gov.za/programmes-and-services/public-expenditure-and-policy-analysis).

## 2 Institutional context

The concurrent nature of basic education (with the national department setting policies and the nine provincial departments implementing and budgeting for them) creates a number of institutional and intergovernmental fiscal complexities. In respect of INSET, the DBE is to (i) identify system priorities for targeted teacher development; (ii) establish processes to assist teachers in identifying their development needs; (iii) expand access to quality continuing professional development programmes; and (iv) establish a National Institute for Curriculum and Professional Development. Provincial departments are responsible for managing provincial teacher development institutes, district teacher development centres and professional learning communities. Other role players include the South African Council of Educators, the Department of Higher Education and Training, and teacher unions. Table 1 lists the processes required to implement INSET and the responsible organisations.

*Table 1: Roles and responsibilities for various processes in INSET implementation*

Responsibility	Policy processes
National DBE	Develop and refine INSET policy
	Develop INSET implementation strategy
	Cost INSET implementation strategy
	Develop effective communications strategies with sector
	Establish National Institute for Curriculum and Professional Development (remains part of the DBE)
	Develop teacher self-assessment system
	Identify sector-wide priorities for teacher development
	Develop continuing education and development courses
	Monitor impact of INSET programmes
	Evaluation INSET effectiveness
	Provincial education departments
Develop effective communication strategies with sector	



	Establish Provincial Teacher Development Institute (remains part of provincial education departments)
	Develop continuing education courses
	Provide accessible physical space for training
	Manage INSET training
	Manage district teacher development centres
	Manage professional learning communities
	Monitor and evaluate
<b>District offices</b>	District teacher development centre
	Maintain resource centres of teacher support materials
	Provide facilities for INSET courses and for professional learning communities
	Manage teacher self-assessments and personal development plans
	Run INSET courses
	Maintain database of educator needs
	Facilitate professional learning communities
	Monitor and evaluate
<b>Schools</b>	Heads of departments fulfil management requirements for continuing professional development
	Organise self-help INSET

### 3 Expenditure analysis

In 2012/13 the DBE and provincial departments spent about R641 million (of a budget of R869 million for human resource development) on programmes that will be covered by INSET. These amounts include spending on bursaries and learnerships, with the remainder available for INSET. In terms of government's policy on continuing professional development of public servants, each department must allocate 1% of its budgeted cost of employment to human resource development. Table 2 compares human resource development spending of the nine provincial departments with their cost of employment in 2012/13 for the three budget programmes that relate directly to public school education (i.e. Programme 2: Public Ordinary School Education, Programme 4: Public Special School Education and Programme 6: Early Childhood Development – Grade R).

*Table 2: Human resource development spending in education departments, 2012/13*

R million	Cost of employment (CoE)	Budgeted HRD spending	Actual HRD spending	HRD spending as a % of CoE	1% of CoE	% shortfall
Eastern Cape	18 762	97	86	0.46%	188	53.9%
Free State	7 390	48	30	0.40%	74	59.6%
Gauteng	18 075	164	76	0.42%	181	58.2%
KwaZulu-Natal	26 411	171	71	0.27%	264	73.3%
Limpopo	16 554	34	31	0.18%	166	81.6%
Mpumalanga	10 496	42	40	0.38%	105	62.0%
North West	7 774	18	44	0.57%	78	43.5%
Northern Cape	2 858	50	15	0.52%	29	47.6%
Western Cape	10 122	185	189	1.87%	101	-86.6%
<b>Provincial total</b>	<b>118 442</b>	<b>809</b>	<b>580</b>	<b>0.49%</b>	<b>1 184</b>	<b>51.0%</b>
DBE			<b>61</b>			
<b>Total human resource development (HRD) expenditure</b>			<b>641</b>			

The table shows that in 2012/13, all the provincial departments, except the Western Cape, spent much less than 1% of their cost of employment on the three sub-programmes on human resource



development. The R641 million spent on human resource development in that year would have been sufficient to provide INSET training to about 29 000 educators, or 6.7% of the total teacher population of over 425 000. About 90% of this amount was spent by the provincial education departments.

## 4 Costing model

The PER developed a costing model based on cost drivers such as the number of educators who would participate in the training and the six main elements of the INSET plan: a diagnostic tool to identify individual training needs, short 5-day training courses, long 20-day courses, resource centres, professional learning communities, and an INSET communication strategy. The policy components and elements listed in Table 1 were the building blocks of the model. In many instances, policy processes were grouped together and not costed separately. Policy processes for INSET at school level were not costed, on the assumption that they form part of normal school functions and budgets.

The model permits a range of scenarios – users can define their own scenarios by varying the assumptions to test different policy scenarios. The PER focuses on three main cost scenarios:

- The *policy scenario* is based on the assumption that all teachers will participate in INSET each year, and provides for the ideal training environments and structures, as envisaged by the plan.
- The *pragmatic scenario* explores how the policy purpose of INSET might be achieved more cost-effectively, and assumes that INSET is likely to develop over time. It provides a benchmark against which the other scenarios can be assessed, and incorporates many of the cost-saving and efficiency measures discussed below.
- *Scenario 1* shows the pragmatic scenario over the medium-term expenditure framework from 2014/15 to 2016/17.

Table 3 summarises the *policy* and the *pragmatic* scenarios, listing the various cost reductions proposed in the latter scenario.

*Table 3: Assumptions about cost drivers in the policy and pragmatic scenarios*

Cost driver	Implications	Pragmatic vs policy scenarios
Number of training days educators are required to complete in a three-year cycle	The greater the number of training days educators are required to complete in a three-year cycle, the higher the cost.	Pragmatic scenario: 30 days. Policy scenario: 45 days. <i>The difference increases costs by R879 million.</i>
Average participation rate of educators in INSET courses	Not all educators will participate in INSET courses; some may study further or attend conferences or courses at other institutions.	Pragmatic scenario: 33% participation. Policy scenario: 100% participation. <i>The difference increases costs by R3.6 billion.</i>
Average number of learners per course	The greater the average number of trainees per course, the fewer courses are required and the lower the costs.	Pragmatic scenario: 30 learners per course Policy scenario: 20 learners per course. <i>The difference increases costs by R437 million.</i>
% of training days allocated to short courses	Long courses require trainees to be in residence, while short ones (especially in districts) may allow trainees to travel to class daily.	Pragmatic scenario: 40% short courses. Policy scenario: 10% short courses. <i>The difference increases costs by R133 million.</i>
Proportion of short courses that are residential	The lower the proportion of short courses that require trainees to be in residence, the lower the cost.	Pragmatic scenario: 10% residential. Policy scenario: 80% residential. <i>The difference increases costs by R124 million.</i>
Percentage of courses run during the school holidays – cost of locum teachers	The higher the proportion of courses run during the school holidays, the fewer educator locums need to be employed and the lower the costs.	Pragmatic scenario: 20% of courses. Policy scenario: 10% of courses. <i>The difference increases costs by R42 million.</i>
Number of INSET courses developed per year	A policy decision is needed on the appropriate level of course development per year.	<i>Assumed to be about R1 million per course.</i>

Reimbursements for educators attending professional learning community meetings	A policy decision is needed as to how the meetings are to be organised and whether teachers will be reimbursed for transport.	Pragmatic scenario: Meetings organised informally; teachers cover their own transport. Policy scenario: Meetings formally established; educators reimbursed for travel expenses. <i>The difference increases costs R884 million.</i>
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The costing model projects that if INSET were to be implemented according to the policy parameters set out in the plan (i.e. the *policy* scenario), the overall direct cost to the national and provincial government would be R12.3 billion per year, of which R168 million would be incurred by the DBE and the rest by the provincial departments (see Table 4). A further R6.7 billion would be required for capital infrastructure – mainly training facilities. In the *policy* scenario, a spending level of 10.2% of the 2012/13 cost of employment in the three sub-programmes relevant to INSET would be required. In the *pragmatic* scenario, this is reduced to 1.8%.

Expenditure at the level of the *policy* scenario is likely to be unaffordable, given fiscal constraints. The *pragmatic* scenario explores how the policy intent can be achieved more cost-effectively, by prioritising specific aspects of the INSET policy. It also assumes that only one-third of teachers will participate in INSET opportunities. This scenario is estimated to require R2.3 billion per year, with associated infrastructure costs of R804 million (see Table 4).

There appears to be a substantial funding gap. If INSET is implemented at too small a scale (e.g. only reaching 5% of teachers), it is unlikely to have the desired impact at a system level. However, whatever approach is taken, it would take a number of years to establish the systems to deliver at the requisite scale. It is therefore proposed that the DBE develop an eight-year implementation plan, which will require additional spending of around R220 million per year. (To put this into context, as noted, the DBE and provincial departments spent R641 million on human resource development in 2012/13 and the nine provincial education budgets amounted to R218.4 billion in 2012/13.)

Table 4: Fiscal implications of INSET under different scenarios

<b>SUMMARY</b>	<b>Pragmatic Scenario</b>	<b>Scenario 2</b>	<b>Policy Scenario</b>
	<b>2014/15</b>	<b>2014/15</b>	<b>2014/15</b>
<b>Total INSET</b>			
Cost of employment	R 331 383 865	R 225 428 624	R 1 128 847 340
Operational costs	R 1 917 883 905	R 628 409 696	R 11 046 836 079
Payments for capital assets	R 16 569 193	R 11 271 431	R 56 442 367
<b>Total operating costs</b>	<b>R 2 265 836 962</b>	<b>R 865 109 751</b>	<b>R 12 232 125 786</b>
<b>Total infrastructure costs (once-off)</b>	<b>R 804 000 000</b>	<b>R 168 000 000</b>	<b>R 6 618 000 000</b>
<b>A. National Management</b>			
Cost of employment	R 24 364 261	R 24 364 261	R 24 364 261
Operational costs	R 142 491 065	R 142 491 065	R 142 491 065
Payments for capital assets	R 1 218 213	R 1 218 213	R 1 218 213
<b>Total costs</b>	<b>R 168 073 539</b>	<b>R 168 073 539</b>	<b>R 168 073 539</b>
<b>B. Provincial Management</b>	<b>Total Provinces</b>		
Cost of employment	R 160 331 064	R 80 822 325	R 787 608 840
Operational costs	R 1 407 090 373	R 326 559 863	R 9 565 977 332
Payments for capital assets	R 8 016 553	R 4 041 116	R 39 380 442
<b>Total costs</b>	<b>R 1 575 437 991</b>	<b>R 411 423 304</b>	<b>R 10 392 966 613</b>
<b>C. Districts</b>			
Cost of employment	R 146 688 539	R 120 242 039	R 316 874 239
Operational costs	R 368 302 466	R 159 358 768	R 1 338 367 682
Payments for capital assets	R 7 334 427	R 6 012 102	R 15 843 712
<b>Total costs</b>	<b>R 522 325 432</b>	<b>R 285 612 909</b>	<b>R 1 671 085 634</b>
<b>D. Infrastructure</b>			
PED infrastructure	R 702 000 000	R 144 000 000	R 6 324 000 000
District infrastructure	R 102 000 000	R 24 000 000	R 294 000 000
<b>Total costs</b>	<b>R 804 000 000</b>	<b>R 168 000 000</b>	<b>R 6 618 000 000</b>

## 5 Findings

The INSET policy proposals are extensive and implementing the full proposal would require additional expenditure of R12.2 billion per year, as well as R6.6 billion for once-off infrastructure costs. The PER costed the INSET plan at provincial and district level, and proposed potential savings of R10 billion through targeted training approaches. These include reducing the volume and duration of training and extending implementation times to reach 90% of all teachers over a three-year period instead of in a single year. In addition, it recommended that the proposed reimbursement for travel for the professional development of teachers be scrapped.

System-wide reform processes such as the INSET proposal can fail if they lack detailed plans for implementation at subnational level. The study identified the need for a realistic roll-out plan with an eight-year horizon. This would help close the gap between policy development at the national level and implementation planning and budgeting in the provincial sphere. Policy processes often pay insufficient attention to the cost of implementation or the capacity of delivery agents to put the policy into practice. The success of the INSET policy depends crucially on the provincial education departments. It is therefore imperative for the DBE to give provincial departments in-depth guidance. This is particularly true for departments with limited implementation capacity.

Resources must also be invested in monitoring provincial plans, processes, budgets, spending and performance. Improving planning and implementation capacity can contribute to effective teacher

development only if processes to hold officials accountable for implementation are strengthened at all levels within the basic education system. Existing indicators are focused on high-level outputs and outcomes. They must be complemented by a set of indicators focusing on the actual implementation of the different INSET components by the various stakeholders.

More attention should be given to the practical implementation arrangements of the proposed interventions. For instance, it is not clear how the professional learning communities would be organised and monitored. The plan does not give sufficient attention to training the staff required to support the implementation of INSET at provincial and district level, which may detract from its impact. Detailed implementation planning and capacity development are crucial to ensuring that a pivotal programme such as INSET is an effective catalyst for better teaching and learning outcomes.

