

**CROSS-NATIONAL HIGHER EDUCATION
PERFORMANCE (EFFICIENCY) INDICATORS**

Grant Number: 1065-0828

Progress Report: 1 January 2009 – 30 June 2009

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1 July 2009

PROGRESS

The project has achieved the goals of the first two phases. The international seminar was held on 5–7 March 2007 at Spier Estate. International speakers included Prof Gareth Williams, London Institute of Education and international authority on higher education finance and performance indicators, and two representatives from the Center for Higher Education Policy Studies (CHEPS), Jon File and Ben Jongbloed, who are also part of the European Union task team on higher education performance indicators.

The project group mapped out the next steps and also agreed that there would be two separate, but linked, components to the project. The first component would compile a set of **Institutional Profiles** for all 23 South African universities that could be used by councils and institutional leadership to provide key indicators for governance and planning. The second component would be **Efficiency Indicators** for each of the major institutions in eight African countries. In the final phase, the Institutional Profiles and the Efficiency Indicators would be linked so that 'peer' comparisons between institutions in eight other African countries can be made with relevant institutions in South Africa.

Institutional Profiles

Upon compiling a first draft set of profiles, a seminar called *Indicators for Governance* was held on 2 November 2007 and attended by 60 people. The seminar was organised jointly with the Department of Education, Higher Education South Africa (HESA) and Integrated Technological Services (ITS).

This work has been conducted as part of the CHET Indicators to Improve Governance project, funded by the Ford Foundation. Each of the 23 higher education institutions in South Africa has been included in this study.

In November 2007 a set of institutional profiles covering the following areas was prepared:

- A. *Student Information*
 - total enrolments, both head count and full-time equivalent
 - growth rates in enrolments
 - shape of enrolments by qualification type, field of study, population group and gender
 - total graduates and average annual growth in these
 - success rates by course

- B. *Staff and Research Output Information*
 - permanent staff members in terms of the categories instruction/research and administration
 - ratios between instruction/research and administrative staff members
 - ratio of FTE students to FTE instruction/research staff
 - highest formal qualification of instruction/research staff

- weighted research outputs per permanent instruction/research staff member
- ratio of research publications to permanent instruction/research staff members

C. *Income and Expenditure*

- total income from all sources and total expenditure on all activities
- surpluses on all activities
- state funding and student fees as proportions of total income
- average income per FTE enrolled student

Data sources for this work incorporated the information submitted annually by each higher education institution to the national Department of Education, research outputs handed in by individual institutions to the DoE in November of each year, and institutional financial statements.

At the November 2007 seminar it was agreed that in addition to the profiles, work would be conducted on the establishment of peer groupings in order to produce analyses of the kinds of benchmarks institutions could use to measure their performance within different categories and contexts. The project team noted that the actual choice of peers will always depend on the particular focus of a specific performance study.

Each of the 23 profiles covers the academic period 2000–2006. As part of the above revision process, additional information on institutional plans for 2008, as well as the student enrolment and output targets set by the Department of Education for 2010, have been included. In September 2008, the Vice Chancellors and planning officials of each institution were sent their individual profiles and notes on the first peer group proposal.

Further extensive work has been conducted on the peer groupings. The new proposal for these covers the following areas:

- institutional categories (small and medium universities, universities of technology and comprehensive universities)
- student enrolment size (< 20,000 and > 20,000)
- regional groupings (Western Cape, Eastern Cape, KwaZulu-Natal, Gauteng, Free State and North West/Limpopo)

Institutional profiles also include targets set by the national government, partially based on previous work by CHET, and a comparison with a 'peer institution'. Such profiles have been presented to the Councils of the universities of Fort Hare and Nelson Mandela Metropolitan. Both councils and institutional leadership reacted very favourably; at Nelson Mandela the council adopted a resolution that such a presentation should be made annually.

Efficiency Indicators

There has never been a comparable comprehensive data set on a number of universities in Africa and it was expected that constructing such a set would be a major task – and we were not wrong. A great positive was that every Vice-Chancellor approached to participate reacted favourably, and some with considerable enthusiasm. An institutional researcher/data collector was nominated in each of the eight institutions. (For a list, see Appendix 2.)

One of the major problems is the notion of full-time equivalent (FTE) students and staff. It has become evident that the concept of FTE data is not used in the African universities and thus not collected or captured. It was also found that data are in most instances not available in electronic format. Owing to the absence of FTE data it was decided that headcount information would be used to calculate performance indicators. In view of limitations in available data the following basic set of tables has been collected per institution for the years 2000 to 2006:

1. Headcount enrolments per qualification type at undergraduate and postgraduate levels
2. Headcount enrolments per major field of study at undergraduate and postgraduate levels
3. Graduates per qualification type at undergraduate and postgraduate levels
4. Graduates per major field of study at undergraduate and postgraduate levels
5. Headcount of academic and administrative staff
6. Income and expenditure

It was also decided that a table would be compiled of the latest available qualification profile of the academic staff members of each university and a breakdown of third stream income between research and donor funds received.

Institutions Participating and Progress with Data Collection

Data sets for the institutions listed below has been received and analysed. We decided to extend the data sets from 2006 to end of 2007 and we are still editing these.

1. *University of Botswana*
2. *University of Dar es Salaam*
3. *University of Nairobi*
4. *Makerere University*
5. *Eduardo Mondlane University*
6. *University of Mauritius*
7. *University of Ghana*
8. *University of Ghana*
9. *University of Namibia*

Institutions from participating African countries have been compared to relevant institutions in South Africa, using size and programme mix (such as medical and engineering schools) as selection criteria.

Spier Seminar

On March 29-30 a workshop was held at Spier to amongst others, gain a better understanding of efficiency indicators in higher education in Africa and to start developing a greater capacity to engage with efficiency issues, conceptually and technically. The workshop I discussed complexities of data collection, the institutional profiles, and the 'peer' comparisons. It also talked about how to foster a greater awareness amongst leadership in higher education about efficiency indicators and the outline a book/web publication.

Appendix 3 is a copy of the programme and Appendix 4 a list of participating delegates.

Publishing the Institutional Profiles

In addition to making limited printed copies of each institutional profile available to the relevant institutions, the data will be published on the CHET website. The data will be made available in such a way as to allow users to manipulate and extract the data according to their particular requirements. Users will be able to select one or two indicators (e.g. student enrolments or head count enrolments and expenditure per graduate) and limit parameters such as date range and the number of institutions to compare. Graphs of data selected will be generated on the fly and users will be given the option to download the data tables generated from their selection in Excel format. This data manipulation tool will be of use to institutional planners as well as to higher education researchers wishing to compare data in greater detail than the graphic data presented in the printed reports.

Conclusion

The project is on track to deliver more than anticipated in the Deliverables. In addition to the interest by the university councils to whom presentations had been made, Charles Sheppard and Nico Cloete have been asked to present keynote speeches at the March 2009 ITS Users conference (400 data managers from universities in Africa, Europe, US and Australia).

Dr N Cloete
Director, CHET

APPENDIX 1

Overview of Proposed On-line HE Performance Indicators Tool

In summing up at the end of day one of the CHET Performance Indicators Workshop, Antony Melck concluded that the development of performance indicators for higher education serve two main purposes: (1) indicators enable better planning both at institutional and national levels, and (2) they allow for cross-institutional and national comparisons. When considering how to package and disseminate the output of the Performance Indicators Project, Melck's purposes help to identify suitable solutions. As do the requests of several participants at the workshops to allow institutions to select their own peer groupings for comparative purposes.

It is therefore clear that the data must be packaged in such a way so as to allow planners at institutional and national levels to:

- (1) not only have access to the data but to extract and adapt the data in order to match their own specific needs; and
- (2) make comparisons across institutions of their own choosing.

The proposed solution to accommodate these needs is to make the data available via an on-line graph and data-table generating tool. Hosted as part of the CHET website, the tool will allow users to select universities and indicators, and will then generate the relevant graph and data table on-the-fly. The graphs will be downloadable as images and the data tables as Excel spreadsheets.

The performance indicators website will also

- (1) make each institutional profile available as a downloadable PDF file;
- (2) provide definitions for key terms and data constructs; and
- (3) provide links to relevant comparative data (e.g. World Bank's Knowledge Economy Index or UNESCO's EFA Global Monitoring Report) hosted on other websites.

A rough example of how the on-line tool is likely to work:

STEP 1: User selects universities (23 options; max selection = 4)

Result: User selects 2 universities: Stellenbosch and UCT

STEP 2: Select indicator (20 options; max selection = 1)

Result: User selects Indicator 4: Actual enrolments

STEP 3: Refine indicator (minimum 1; options determined by indicator selected in STEP 2)

Result: User selects "Undergraduates" from a list of "Undergraduates"; "Post-graduates up to Masters"; "Masters and Post-graduates"

STEP 4: Generate graph [in this case = bar graph] + Excel table

APPENDIX 2

Efficiency Indicators Project Group

Institution	Researcher	Position	Email / Phone
1. Eduardo Mondlane University	Arlindo Chilundo	Professor and Seconded to Planning Division of National Ministry	arliindo@zebra.uem.mz (o) 258 21494743 cell: 258 823022530 Prof. Filipe Jose 258 21 427851 ph 258 21 326426 fax
2. University of Dar-es-Salaam	Daniel Mkude	Retired Registrar and Deputy Vice-Chancellor	mkude@uccmail.co.tz (h)255 22 2410168 Cell: 255 713 325323
3. Makerere University	Florence Mayega	Senior Economist Planning and Development Department	fnakayiwa@pdd.mak.ac.ug (o) 256 414 542470 Cell: 256 772498058
4. University of Pretoria	Pieter Vermeulen Antony Melck	Director: Buro for Institutional Planning Advisor to the Vice Principal	pieter.vermeulen@up.ac.za (o) 012 4203786 or 012 4202666 antony.melck@up.ac.za (o) 012 4202229
5. University of Nairobi	Bernard Waweru	Registrar - Academic	(o) 254 020 318262 ext 28248 Cell: 254 722 825804 bmwaweru@uonbi.ac.ke bexeawa@yahoo.com
6. University of Mauritius	Kishore Bagaunt Anjana Monogee	Director: Quality Assurance Administrative Officer, Quality Assurance	(o) 230 4541041 ext 1517 bkb@uom.ac.mu a.monogee@uom.ac.za
7. University of Botswana	Dawid Katzke	Deputy Vice-Chancellor Finance and Administration	Katzkedb@mopipi.ub.bw (o) 267 355 2031
8. University of Ghana	Alfred Quartey	Director Planning and Management Information Services	aquartey@ug.edu.gh

APPENDIX 3 Spier Workshop Programme

Cross-National Higher Education Performance (Efficiency) Indicators

29–31 March 2009 | Spier, Stellenbosch, South Africa

AIMS OF THE WORKSHOP									
<p>The main objectives are to gain a better understanding of efficiency indicators in higher education in Africa and to start developing a greater capacity to engage with efficiency issues, conceptually and technically. The workshop will discuss complexities of data collection, the institutional profiles, and the 'peer' comparisons. It will also talk about how to foster a greater awareness amongst leadership in higher education about efficiency indicators and the outline a book/web publication.</p>									
PROGRAMME									
Sunday, 29 March 2009									
	Participants arrive and register								
18h30	Drinks and informal dinner at Spier								
Monday, 30 March 2009									
07h30	Breakfast								
08h45	Welcome and overview [Nico Cloete]								
09h15	<p>HIGHER EDUCATION DATA [Ian Bunting & Charles Sheppard]</p> <ul style="list-style-type: none"> • Data frameworks and policies • Data collection and management • Achieving comparability in cross-national data analyses 								
10h30	Tea / coffee								
11h00	<p>CONSTRUCTION OF PROFILES [Ian Bunting & Lisa Belding]</p> <p>Compromises made: data and performance indicators Selection of peer groupings and presentation of examples of profiles</p>								
12h15	KEY ISSUES [Nico Cloete & Ian Bunting]								
13h00	Lunch								
14h00	<p>COUNTRY RESPONSES (15 min each) [Chair: Larry Pokpas]</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">1. Botswana</td> <td style="width: 25%;">2. Dar-es-Salaam</td> <td style="width: 25%;">3. Eduardo Modlane</td> <td style="width: 25%;">4. Ghana</td> </tr> <tr> <td>5. Makerere</td> <td>6. Mauritius</td> <td>7. Nairobi</td> <td>8. Namibia</td> </tr> </table>	1. Botswana	2. Dar-es-Salaam	3. Eduardo Modlane	4. Ghana	5. Makerere	6. Mauritius	7. Nairobi	8. Namibia
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16h00	Tea / coffee								
16h30	SUMMING UP [Florence Mayega & Antony Melck]								
17h30	CLOSE								
19h30	Dinner and drinks at Spier								
Tuesday, 31 March 2009									
07h30	Breakfast								
08h30	DATA DISCUSSIONS WITH COUNTRY REPRESENTATIVES [Ian Bunting & Charles Sheppard]								
10h30	Tea / coffee								
11h00	<p>FURTHER INDICATORS</p> <ol style="list-style-type: none"> 1. Indicators for Governance [Charles Sheppard] 2. Knowledge Index Indicators [Richard Neill] 								
12h00	NEXT STEPS [Nico Cloete, Ian Bunting & Charles Sheppard]								
12h45	CONCLUDING COMMENTS [John Butler Adam]								
13h00	Lunch and departure								

APPENDIX 4 Spier Workshop Participants

Name	Institution	Email
1. Alfred Quartey	University of Ghana	aquartey@ug.edu.gh
2. Alois Fledersbacher	University of Namibia	afledersbacher@unam.na
3. Anjana Monogee	University of Mauritius	a.monogee@uom.ac.za
4. Annetjie De Waal	North West University	Annetjie.DeWaal@nwu.ac.za
5. Antony Melck	University of Pretoria, South Africa	amelck@up.ac.za
6. Arlindo Chilundo	Eduardo Mondlane University, Mozambique	arlindo@zebra.uem.mz
7. Bernard Waweru	University of Nairobi	bmwaweru@uonbi.ac.ke bexeawa@yahoo.com
8. Charles Sheppard	Nelson Mandela Metropolitan University, South Africa	Charles.Sheppard@nmmu.ac.za
9. Christo Christowitz	Integrated Tertiary Software (ITS)	christo@its.co.za
10. Colleen Howell	University of Western Cape, South Africa	chowell@uwc.ac.za
11. Daniel Mkude	University of Dar-es-Salaam, Tanzania	mkude@uccmail.co.tz
12. David Court	Independent Consultant, Kenya	davidcourt@iconnect.co.ke
13. Florence Nakayiwa	Planning and Development Department Makerere University, Uganda	fnakayiwa@pdd.mak.ac.ug
14. Francois Van Schalkwyk	Compress DSL	francois@compressdsl.com
15. Glen Barnes	University of Kwazulu Natal	Barnesg@ukzn.ac.za
16. Ian Bunting	Department of Education, South Africa	iabunting@telkomsa.net
17. John Butler-Adam	Ford Foundation	J.Butler-Adam@fordfound.org
18. Joppie Jansen	University of Namibia	jjansen@unam.na
19. Juma Shabani	United Nations Educational, Scientific and Cultural Organisation (UNESCO)	j.shabani@unesco.org
20. Kirti Menon	Department of Education	Menon.K@doe.gov.za
21. Kishore Bagaunt	University of Mauritius	bkb@uom.ac.mu

22. Lisa Belding	Independent Consultant, South Africa	lbelding@telkomsa.net
23. Lusani Netshitomboni	University of South Africa	Netshir@unisa.ac.za
24. Michael Gregory	University of Botswana	gragorym@mopipi.ub.bw
25. Nasima Badsha	Cape Higher Education Consortium, South Africa	nb@chec.ac.za
26. Ndivhuwo Luruli	Department of Education	luruli.n@doe.gov.za
27. Nelius Boshoff	Stellenbosch University	scb@sun.ac.za
28. Nico Cloete	CHET, South Africa	ncloete@chet.org.za
29. Pearl Whittle	Department of Education	whittle.p@doe.gov.za
30. Pieter Vermeulen	University of Pretoria, South Africa	pieter.vermeulen@up.ac.za
31. Ria Steynberg	University of Limpopo	riacs@ul.ac.za
32. Richard Neill	Tertiary Education Council, Botswana	neill@tec.org.bw
33. Rod Bally	University of Fort Hare	RBally@ufh.ac.za
34. Rolf Stumpf	CHET Board	rolfstumpf@gmail.com
35. Sandy Stephenson	Rhodes University	s.stephenson@ru.ac.za
36. Seamus Needham	FET Colleges	sneedham@uwc.ac.za
37. Trish Gibbon	University of Johannesburg	trishg@uj.ac.za
38. Willem Malherbe	University of the Free State	MalherbeW.RD@ufs.ac.za