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LMIP WORKING PAPER 3

Developing a Framework for Institutional Planning and Monitoring in FET Colleges

Anthony Gewer

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Preface

One of the gravest economic challenges facing South Africa is high unemployment, but at the same time, a skills mismatch. The market demand for skilled labour is greater than the number of individuals completing post-school education and training. Prospective employers often complain that the education system does not give individuals the necessary skills to be productive in the workplace, or to start their own enterprises.

Government acknowledges that the unemployment crisis is a systematic problem and cannot be addressed by ad hoc interventions scattered across line departments. With this 'big picture' thinking in mind, DHET aims to create broad and equitable access to a full spectrum of post-school opportunities and lifelong learning encompassing adult education and training, workplace training, the FET college system, artisan and technical training, higher education and innovation.

DHET's ability to create these learning opportunities requires a network of partners to gather and maintain a labour market intelligence system. Such a system can provide analytical insights to support policies and intervention programmes.

In February 2012, therefore, DHET commissioned a HSRC led research consortium to support its capacity to create and maintain a labour market information and intelligence system, guided by the national Delivery Agreement 5. The primary focus is the development of a 'strategic intelligence capability' towards the establishment of 'a credible institutional mechanism for skills planning'. The HSRC coordinated research project is organised in terms of six interlocking research themes, two which focus on labour market information and four which focus on labour market intelligence:

- Theme 1. Establishing a foundation for labour market information systems in South Africa
- Theme 2. Skills forecasting: the supply and demand model (*a Wits EPU project*)
- Theme 3. Studies of selected priority sectors
- Theme 4. Reconfiguring the post-schooling sector
- Theme 5. Pathways through education and training and into the workplace
- Theme 6. Understanding changing artisanal occupational milieus and identities

The consortium made a strategic decision that their research must not duplicate or repeat existing research about the challenges facing South Africa's education and training system and labour markets. Their research must address gaps, promote synergies and explore complementarities.

Hence, as a first step, working papers were commissioned to inform the research agenda for each theme. Although the working papers cover different issues, each has four common dimensions: policy challenges to institutionalise and build a post-school education and training system in South Africa, lessons from seminal national and international research, conceptual frameworks, methodological issues and data challenges raised by this research, and potential research gaps.

One of the HSRC led consortium's goals is to create a living community of practice that researches and debates education, skills and labour market issues. These working papers were presented at a conference in May 2012 to start building such a research network.

The dissemination of these working papers is intended to encourage more individuals to join the research community. We look forward to individuals' comments. They can be emailed to agoldstuck@hsrc.za.za. Welcome to the research community!

Theme 1:	Theme 3:	Theme 4:	Theme 5:	Theme 6:
Establishing a foundation for labour market information system in South Africa	Studies of selected priority sectors	Reconfiguring the post-schooling sector	Pathways through education and training into the workplace	Understanding changing artisanal occupational milieus and identities
Simon McGrath Some international reflections on developing VET indicators	Haroon Bhorat and Morne Oosthuizen Studies of Selected Priority Sectors in the South African Labour Market: A Proposed Research Programme	Andre Kraak Private post-school education in South Africa	Michael Cosser Pathways through education and training and into the labour market	Angelique Wildschut Conceptualising the study of artisans
Phil Toner Establishing a foundation for labour market information systems in South Africa	Peter Jacobs and Tim Hart A critical review of the research on skills development in rural areas	Andre Kraak Differentiation in the post-school sector	Pundy Pillay Pathways through education and training and into the workplace: a concept paper	Jeanne Gamble Models and pathways to institutionalise apprenticeships
Anthony Gewer Developing a framework for institutional planning and monitoring in FET Colleges	Shirin Motala A critical review of research on skills development and labour market demand in the early childhood development sector	Joy Papier et al Contemporary issues in public FET colleges	Sharlene Swartz Navigational capacities for youth employment: A review of research, policies, frameworks and methodologies	
Carmel Marock Developing a framework for understanding SETA performance: Monitoring and evaluating their role in skills planning, steering and enabling a supply within their sector	Thembinkosi Twalo A comparative review of skills development in cooperatives	Veronica McKay A critical review on Adult Basic Education (ABET) in South Africa	Fiona Lewis Traffic jams or trees – how are South African youth progressing through the higher education sector? And what lessons can we learn from current studies?	

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Bongiwe Mncwango Towards a demand side firm level survey of labour information in South Africa	Margaret Chitiga and Stewart Development of a national skills forecasting model	Thenjiwe Meyiwa and Nolutho Diko The state of graduate teacher transitions to the labour market	Stephanie Alais Jobs? What jobs? Skills? What skills? An overview of studies examining relationships between education and training and labour markets	
Michael Cosser and Fabian Arendse Education and labour market indicators	Imraan Valodia Conceptualising skills development in the informal sector	Felix Maringe An overview of studies exploring systemic issues related to the South African post-school sector		
Joan Roodt National database sets and research on labour market demand		Peliwe Lolwana Is post-school education adult education and training? The shape and size of post-school education		
Mariette Visser National database sets available for post school sector (supply side)		Michelle Buchler A critical review of research on skills development qualifications structures		
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ACKNOWLEDGEMENTS

This report is an abridged and adapted revision of an original report titled ***FET Study in support of a Monitoring and Evaluation System for FET Colleges***, prepared by JET Education Services in August 2011 for the Department of Higher Education and Training (DHET). The research conducted which formed the basis for the original version of the report for the study was funded by the Belgian Development Agency.

The DHET has adopted the Monitoring and Evaluation Framework and began with phase one of implementation in June 2011.

EXECUTIVE SUMMARY

FET Colleges are in the midst of a significant period of transformation. The establishment of the Department of Higher Education and Training (DHET) in 2009 and the imminent promulgation of the FET Colleges Amendment Bill shifts the oversight and accountability function for colleges from the provinces to the DHET and locates them firmly within the post-schooling arena. This shift enables the DHET to devise and drive a coherent strategy for a national post-school system. However, this shift also brings with it a new layer of accountability to which colleges must adhere. In order to achieve this, an effective planning, monitoring and evaluation framework is paramount. This paper draws on the existing framework for Monitoring and Evaluation which was adopted by the DHET in June 2011 and for which phase one of implementation has begun.

The legislative requirement for monitoring and evaluation is rooted in the National Education Policy Act (NEPA) (Act 27 of 1996) which requires the Minister to monitor and evaluate the standards of education delivery. The FET Colleges Act (Act 16 of 2006) further requires the Director-General to monitor and report on the quality of deliver in FET Colleges. More recently, government has introduced a Performance Monitoring and Evaluation (PME) framework which commits the Minister of Higher Education and Training to specific targets for growth and improvement of delivery in FET Colleges and other subsystems in the post-schooling arena. However, M& E in the FET College subsystem has operated in the absence of a coherent framework and weak data management standards and capacity, which impacts on the reliability of data. Monitoring of college performance has been limited primarily to input factors, with little focus on performance.

Drawing on international models of good practice, this concept document outlines the emerging framework for M&E, introduced by the DHET in 2011, which takes into account the relationship between system-level monitoring and institutional monitoring. The document brings structure to the system-level framework, while at the institutional level it broadens the current range of measures within the college subsystem and locates them within a model that incorporates context, input, process, output and outcome measures. The framework seeks to achieve coherence between the measures and provide the DHET and the colleges with a basis from which to understand and analyse the relationship between different measures towards the achievement of outputs. This should enable the DHET and colleges to identify key obstacles which warrant intervention.

The largest threat to implementing the M&E framework is the persistent weaknesses in the system with respect to data management and reporting. The current data gaps in the subsystem continue to produce unreliable data that impacts significantly on the ability of the DHET to track performance and hold colleges accountable. This weakness also impacts on effective planning at an institutional level as the targets set by colleges are not based on a reliable assessment of past performance. This report outlines the key data gaps in the subsystem and the level of risk that these data gaps create.

INTRODUCTION

1. BACKGROUND AND CONTEXT

FET Colleges are in the midst of a significant period of transformation. The establishment of the Department of Higher Education and Training (DHET) in 2009 and the imminent promulgation of the FET Colleges Amendment Bill shifts the oversight and accountability function for colleges from the provinces to the DHET and locates them firmly within the post-schooling arena.

This represents a new phase in the transformation programme for FET Colleges which was first established by the FET White Paper of 1998 and enacted by the FET Act of that same year. Premised

on the need for a more co-ordinated FET system, the FET Act of 1998 provided the basis for institutional restructuring and subsequently limited delegated autonomy (through the FET Colleges Act of 2006). The state also initiated a substantial recapitalization programme and introduced a new curriculum.

However, through the decade of transformation, the vision of a co-ordinated FET system was not realized and colleges continued to operate on the periphery of the secondary education system and were subjected to high levels of neglect at a provincial level. The split of the Department of Education which gave rise to the DHET, brought FET Colleges into a national framework for post-school provision alongside universities and occupational training in the workplace. The shift of responsibility for the FET College subsystem away from provinces to the DHET was the next logical step in the process of transformation. This shift enables the DHET to devise and drive a coherent strategy for a national post-school system. However, this shift also brings with it a new layer of accountability to which colleges must adhere. In order to achieve this, an effective planning, monitoring and evaluation framework is paramount. This concept document outlines a framework for institutional planning, monitoring and evaluation for the FET College subsystem that will contribute to realizing this this next phase of transformation

2. THE CURRENT LEGISLATIVE FRAMEWORK FOR M&E IN FET COLLEGES

2.1 NEPA

The policy base for monitoring and evaluation (M&E) in FET Colleges lies in the National Education Policy Act (Act 27 of 1996) or NEPA, which sets the scope and limitations of authority and responsibility of the Minister of Education in determining national policy. In terms of the NEPA:

Section 3 (4)the Minister shall determine national policy for the planning, provision, financing, staffing, co-ordination, management, governance, programmes, monitoring, evaluation and well-being of the education system, and without derogating from the generality of this section, may determine national policy for-

(a) education management information systems, including the provision of data in accordance with the international obligations of the government.

In terms of monitoring and evaluation of education the Act stipulates that:

Section 8 (1) The Minister shall direct that the standards of education provision, delivery and performance throughout the Republic be monitored and evaluated by the Department annually or at other specified intervals.....

Section 8 (3) The Department shall undertake the monitoring and evaluation contemplated in subsection (1) by analysis of data gathered by means of education management information systems, or by other suitable means, in co-operation with provincial departments of education.

Section 8 (4) The Department shall fulfill its responsibilities in terms of subsections (1) to (3) in a reasonable manner, with a view to enhancing professional capacities in monitoring and evaluation throughout the national education system.....

Section 8 (5) The Department shall prepare and publish a report on the results of each investigation undertaken in terms of subsection (3) after providing an opportunity for the competent authority concerned to comment, which comment shall be published with the report.

2.2 FET Colleges Act of 2006

These provisions in NEPA therefore entrench an M&E requirement at a national level across the education system. For the FET College subsystem specifically, this legislative requirement is further stipulated in the FET Colleges Act, 2006 (Act 16 of 2006) states,

Section 42 (1) Subject to the norms and standards set by the Minister in terms of section 3 of the National Education Policy Act, 1996 (Act No. 27 of 1996), and by SAQA, the Director-General must

- (a) promote quality in further education and training; and
- (b) assess and report on the quality of education and training provided at colleges.

Since 2008, the growth trajectory of the FET College subsystem has been guided by the National Plan for FET. The Plan maps out targets for massive expansion of enrolments to 1-million by 2014, 800,000 of which is expected to be in public FET Colleges. The Plan lays out a coordinated approach to growth in the FET College subsystem, guided by effective planning and measurable outputs. This Plan preceded the establishment of the new Department of Higher Education and Training but already signaled the need for greater co-ordination and a shift to a nationally-driven approach to growing the sector. However, the plan neglected to provide any meaningful baseline data that could inform the operationalisation of the plan, save to say that the Department needs to move urgently to establish the necessary systems to provide this data for more effective planning.

2.3 PME

Subsequent to the publication of the National Plan, the South African government has adopted a Performance Monitoring and Evaluation (PME) framework which incorporates 12 outcomes. These outcomes guide the government's work until 2014. Each of the outcomes has a limited number of measurable outputs with indicators and targets. These outcomes, outputs and indicators form the basis for delivery agreements between the President and Cabinet Ministers and are expected to guide improvement in service delivery and results.

Within Outcome 5: *A Skilled and Capable Workforce to support an Inclusive Growth Path*, The Minister of Higher Education and Training has committed to 5 outputs, two of which have a direct bearing on FET Colleges. This performance orientation frames the college-level medium-term target setting and provides the basis for monitoring and tracking of progress within colleges towards realizing these targets.

Output 2: Access to programmes leading to intermediate and high level learning

Indicators

- Success rate of enrolled NC(V) students : 50% certification at all levels by 2014
- Matric equivalent second chance programmes : 100 000 by 2014
- Learning options for those with Matric : 400 000 by 2014

Output 3: Access to occupationally directed programmes

Indicators

- Number of Learnerships completed: 20 000 by 2014
- Number of qualified artisans: 10 000 per annum by 2014
- % trade test pass rate: 60% by 2014

- % placement rate of Learnerships, apprenticeships, and NCV students into workplace experience : 70% by 2014

The introduction of the PME against the backdrop of the National Plan for FET, provides the basis to integrate targets for enrolments to outcome targets, thereby ensuring that expansion of the college subsystem is met with adequate output.

In order for the PME to be effective, all data collection and reporting must enable the Minister to report on progress against these outputs. At the same time, the data should also inform any interventions by the DHET that will enable the colleges to progress towards these targets. Considering the data gaps in the subsystem, providing a reliable base for measurement will be a significant challenge.

2.4 Norms and Standards for Funding

A critical instrument that enables the DHET to enforce M&E is through the National Norms and Standards for Funding of FET Colleges, gazetted in 2009 in terms of the FET Colleges Act. Given that colleges remain a concurrent function until the gazetting of the FET Colleges Amendment Bill, the role of the DHET is primarily to set policy (as mandated by NEPA) and promote quality. The funding norms are the key instrument available to DHET to ensure that colleges are complying with national policy and are improving performance. As the colleges become a national function and the subsystem matures, the primary focus of M&E shifts towards driving institutional change.

The norms and standards for funding are geared to expanding equitable access to technical and vocational education and training, which is a constitutional responsibility of the state. The funding norms foreground the importance of efficiency measures in the allocation and utilisation of public funds. Therefore, colleges are expected to provide annual plans that indicate their capacity to expand, based on a reliable assessment of past performance, and there is provision to link funding to outputs.

The funding norms also require the DHET to:

“... ensure that the core national set of service delivery indicators and reporting requirements developed with National Treasury in terms of the Public Finance Management Act, and partly applicable to the FET College sector, are applied at the province and college level in order to advance an integrated quality monitoring system embracing financial and non-financial data.” (RSA, 2009: 30)

3. MONITORING & EVALUATION IN VET – GLOBAL TRENDS

The drive towards the use of performance indicators is part of a global move towards data-driven educational planning. The development of standardised indicators allows for cross-country comparison and increasingly provides a picture of how a country is performing relative to countries at similar stages of development. In general, countries will strive to develop indicators that can achieve the dual objective of improved performance and accountability relative to its own past performance, as well as improved performance relative to other countries. The extent to which the latter is achieved will depend on the capacity of the national system to generate reliable data that meets international standards. Also, countries will have their own unique approaches to monitoring and evaluation and the scope of the indicators will invariably be aligned to this. In some cases, such as the European Union, a regional approach is adopted.

The examples below provide a few illustrations of the indicators and structures for M&E being adopted across particular regions. The purpose of these examples is to set the tone for

recommendations that follow on the approach that South Africa should take in developing its own VET monitoring and evaluation system.

3.1 Australia

The National Centre for Vocational Education Research (NCVER) and the Australian Bureau of Statistics (ABS) are the key organisations responsible for the collection and management of VET data in Australia. The Australian Vocational Education and Training Management Information Statistical Standard (AVETMISS) provides a national framework for the consistent collection and dissemination of vocational education and training (VET) information throughout Australia. “The AVETMISS specifies what information will be collected, the timing frequency of collection, classifications to be applied to describe the information that is collected and data formats.” (National Institute of Labour Studies, 2010)

Over the past decade, Australian federal and state governments have established a comprehensive set of objectives for the national VET system and key performance indicators (KPIs) to measure progress against those objectives. The data collected by NCVER through the national VET collections are used by policy makers and VET administrators to measure the performance of the VET system against the KPIs. The performance indicators are grouped according to the following categories: Enrolments for each unit of competency or module enrolment; Students; Qualifications; Unit or module; Training Provider; and Training Provider campus.

In addition, sample-based surveys of VET sector graduates, employers and client groups are conducted by NCVER on issues related to outcomes and perceptions of vocational education and training. The NCVER also manages the the Longitudinal Survey of Australian Youth (LSAY) which tracks students as they move from school into further study, work and other destinations. Annual tracer studies and provider collection is also carried out.

Data from the National VET Provider Collection and the surveys are used to report on the following key national performance measures (KPMs):

- KPM 1: Student participation and achievement in vocational education and training
- KPM 4: Vocational education and training outcomes for Indigenous Australians
- KPM 6: VET system efficiency.

NCVER generated data is complemented by statistical data generated by the Australian Bureau of Statistics which provides a regular Labour Force Survey, Survey of Education and Work, the Survey of Education and Training, the Adult Literacy and Lifeskills Survey, and the Training Expenditure and Practices Survey. As stated above, government uses these various sources of data to inform decisions about training provision, to forecast future skills needs and to monitor the performance of providers.

3.2 Scotland

The Scottish Funding Council is the national body responsible for funding of teaching and learning, research and other activities in the 41 colleges and 19 higher education institutions in Scotland. The SFC publishes an annual report on the performance of the college system, using a set of key performance indicators. According to the SFC report for 2008-9, “the purposes of the indicators are to inform stakeholders about the performance of the sector, and to help colleges benchmark their own performance as well as against other similar colleges thereby supporting a wider quality improvement agenda.”

This reporting is guided by a Statistical Advisory Group for Further Education comprising members from the college sector and other stakeholders. The indicators cover areas such as the volume of Further Education (FE) and Higher Education (HE) being delivered by colleges; the quality of provision reported by HMIE; student and employer satisfaction with the service; student retention rates; student achievement rates; staff qualifications and financial indicators. The SFC also collects and reports annually on a comprehensive set of key performance indicators related to funding and financial performance. This full range of quantitative PI's is then complemented by a range of qualitative indicators which form the basis for the external quality assessment process. The external quality assessment, conducted by the HMIE incorporated into the SFC's annual report, seeks to answer four questions:

High quality learning

1. How well are learners progressing and achieving relevant, high quality outcomes?
2. How effective are the college's learning and teaching processes?

Learner engagement

3. How well are learners engaged in enhancing their own learning and the work and life of the college?

Quality culture

4. How well is the college led and how well is it enhancing the quality of its services for learners and other stakeholders?

The HMIE then focuses its evaluation on four elements:

- Element 1: Key performance outcomes
- Element 2: Impact on learners and other users of college services
- Element 5: Education, training and lifelong learning
- Element 9: Educational leadership and direction

At an institutional level, therefore, the HMIE therefore provides a mechanism to better understand the factors that impact on the performance and to engage with each college in a developmental process to implement improvements. This engagement process which starts with the review, results in a set of recommended interventions, which is presented to the college Board.

3.3 European Union

While member states of the European Union have unique VET measures in place, there has been a process since 2002 to agree on a coherent set of indicators. These can be represented as follows:

COMPONENT OF VET	SUB-COMPONENT	EXAMPLES OF INFORMATION
Inputs	Student characteristics	<ul style="list-style-type: none"> • student's country of birth; native language of student • obstacles to participation
	Teachers/trainers characteristics	<ul style="list-style-type: none"> • qualifications; teachers' salaries
	Educational institutions characteristics	<ul style="list-style-type: none"> • number of personnel broken down by type • number of new entrants / students by age and gender;
	Financial resources devoted to VET	<ul style="list-style-type: none"> • education expenditures by source of finance
	Curricula/programme characteristics	<ul style="list-style-type: none"> • average duration of programme in days/hours;
Processes	Learner time allocation	<ul style="list-style-type: none"> • time allocated to VET • participation in IVT, CVT;
	Management	<ul style="list-style-type: none"> • guidance
	Teaching/learning methods	<ul style="list-style-type: none"> • institutional/workplace training
Outputs	Learner attainment	<ul style="list-style-type: none"> • graduates by age and gender; drop-outs;
	Equity effects	<ul style="list-style-type: none"> • number of graduates by age and gender; location, etc.
Outcomes	Impact on students	<ul style="list-style-type: none"> • returns to VET (through higher income); • labour force status;
	Impact on economy and development	<ul style="list-style-type: none"> • growth; poverty
	Impact on health and citizenship	<ul style="list-style-type: none"> • health

According to Seyfried (2007) there were few European countries that had a coherence set of indicators in place to improve the quality of VET provision. Therefore the indicators could not be used yet for comparative benchmarks.

The EU Member States and the European Commission have since 2009 embarked on a process to establish a European Quality Assurance Reference Framework (EQAVET) to promote and monitor continuous improvement of national systems of VET. EQAVET is a tool for policy makers based on a quality cycle which incorporates the following steps: goal-setting and planning, implementation, evaluation and review. The key benefit is that the EQAVET provides a basis for countries to standardise their monitoring and evaluation requirements to allow for comparability. The EQAVET framework should be applied at the VET-system, VET-provider and qualification-awarding levels and should emphasise monitoring and improving quality – combining internal and external evaluation as well as improvement processes. Key indicators in the EQAVET framework include:

Indicators Supporting Quality Objectives for VET Policies

1. Participation rate in VET programmes (input / process / output indicator):
2. Completion rate in VET programmes (process / output / outcome indicator):
3. Placement rate in VET programmes (outcome indicator):
4. Utilisation of acquired skills at the workplace (outcome indicator):

Context Indicators

5. Unemployment rate according to individual criteria (context indicator)
6. Prevalence of vulnerable groups (context indicator):
7. Mechanisms to identify training needs in the labour market (context/ input indicator):
8. Schemes used to promote better access to VET (process indicator):

3.4 Jordan

Building on the emerging EU indicator framework and with support from the EU, the government of Jordan embarked on an intensive process from 2005, involving the primary TVET providers, the Department of Statistics, the National Centre for Human Resources and Development (NCHRD) and

chambers of industry to define a common set of TVET indicators which could form the basis for analysis of the sector and guide decision making around future priorities. The indicator project drew on and supported the country's Human Resource Development Strategy. The project to develop indicators in Jordan was part of the *MEDA Observatory Function Project* of the EU aimed to contribute to the development of human resource development policies and VET strategies in the Mediterranean countries.

The performance indicators in Jordan are categorised according to the following themes:

- Context Indicators (schooling levels, employment/unemployment rates)
- Participation (Equipping Jordanians for the World of Work):
- Encouraging upper and horizontal mobility in the LM (not measured)
- Achieving equitable outcomes (NER and GER)
- Performance / Outcomes (completion and drop-out)
- Maximising the value of public TVET expenditure

3.5 International Framework for comparative data

The International Standard Classification of Education (ISCED) belongs to the United Nations International Family of Economic and Social Classifications, which are applied in statistics world-wide with the purpose of assembling, compiling and analysing cross-nationally comparable data. It was designed by UNESCO in the early 1970's to serve 'as an instrument suitable for assembling, compiling and presenting statistics of education both within individual countries and internationally. UNESCO Institute for Statistics (UIS) is the main institution providing education statistics on an annual basis internationally.

The ISCED TVET indicators cover primarily two cross-classification variables: *levels* and *fields* of education. The indicators measured include:

- Enrolment in TVET by age, grade and gender (upper secondary and post-secondary); number of first time enrolments
- Number of Teaching Staff (Full-time and Part-time); Number of Trained Teaching Staff (full-time and Part-Time)
- Graduation Rates

The Access Indicators is covered by the following measurements:

- Gross Admission Rate (GAR) - the ratio between the number of new students admitted to the first year in a given level of education and the population having the official admission age at this level, for a given year;
- Net Admission Rate (NAR) - ratio between the new first year students in a given level of education having the official admission age at this level of education and the corresponding population, for a given year;
- Gross Enrolment Ratio (GER) - number of pupils enrolled in a given level of education, regardless of age, expressed as a percentage of the population in the theoretical age group for the same level of education;
- Net Enrolment Rate (NER) - number of pupils in the theoretical age group for a given level of education enrolled in that level expressed as a percentage of the total population in that age group;

- Age-Specific Enrolment Rate (ASER) - ratio between the number of educated pupils of a given age and the population of the same age.

At the national level, many countries have begun to set up some TVET coordination and planning structures based on statistical data analysis and labour market forecasts, and on ensuring that there is complementarity between education and employment policies. However, national TVET statistics are not often available and even when available, they are often of poor quality. According to UNESCO (2009: 9), "Sub-Saharan African countries are at varying levels of development in educational statistical data production processes in general, and TVET in particular." An analysis of statistical data from Sub-Saharan countries conducted by UNESCO in 2009, categorised these countries into three groups:

- Countries where data systems are functional and in the process of decentralization (Burkina Faso, Cameroon, Ethiopia, Ghana, Madagascar, Uganda).
- Countries where data systems are in embryonic phase so data collection is still ad hoc (Chad, Guinea, Mauritania, Niger)
- Countries which have no data systems for TVET (Cote d'Ivoire, Nigeria, Sierra Leone, Tanzania).

4. THE CURRENT STATE OF M&E IN FET COLLEGES

4.1 Importance of Reliable Data

Sound aggregated data is the basis on an effective framework for accountability. In the case of FET Colleges, there are a range of local and international reporting agencies to which both the DHET and government more broadly must report.

At the macro level the measurement of Performance Indicators is required for:

National

- Annual Education Statistics in South Africa publication which combines data from the education system as a whole
- Government Performance Monitoring and Evaluation (PME) (against the Minister's delivery targets)
- Treasury purposes (for funding purposes)

International

Beyond the internal data reporting requirements, data on the VET system is provided to international agencies that are tracking the achievement of internal objectives. These include:

- UN Convention reporting such as Education for All which is determined by the Department from UNESCO specifications
- Millennium Development Goals
- Reporting in terms of the SADC Protocol and AU

College Level

At College level the measurement of performance indicators is required for:

- Funding Norms for FET Colleges by 30th April of each year.
- Determining enrolment targets and budgets by 31 March of each year.
- Annual Survey data of current data due on the last working day in February in the year following the completion of instruments. This means that typically between October and November of each year data would be collected from colleges.
- Institutional monitoring of performance against targets

4.2 Data Weaknesses

The collection, analysis and utilisation of data within the VET system in South Africa at present is fragmented and lacking in rigour. The location of the FET College subsystem on the periphery of the education and training system for the past couple of decades has limited any meaningful attempt to develop coherent data systems. Isolated studies by NGOs have not provided a consistent research base and have had little take up in the system.

These data weaknesses impact on the reliability of data that colleges are able to provide. High levels of variance in data can have significant implications for DHET planning and monitoring. For example, unreliable enrolment data can impact on the total budget allocation for the particular college. It also impacts on the DHET's ability to meet its obligations in creating a sound framework for accountability. Data reporting has largely been linked to the funding mechanism (the conditional grant framework) and is the DHET's legislated tool for holding colleges accountable. The shift of colleges to the DHET from the provinces has reinforced this responsibility and the voted funds available for disbursement into the colleges to fund programme delivery is allocated to colleges on the basis of input factors – primarily enrolment numbers, with some funding for capital expenditure where such funding is available and needed (during the period 2005-2007, a recapitalisation grant of R1.9billion was issued by treasury and used to upgrade infrastructure to support the implementation of the new NCV curriculum).

Table 1 below provides an example of the impact of unreliable data on the system. The colleges are required to report on enrolments at fixed intervals. The table indicates the enrolment report for Report 191 (N1-N6) programmes for the first trimester/semester of 2011. In addition, a snap survey was conducted within a few days of closing enrolments. The table indicates the discrepancies in reporting across the two reports from the same colleges. The data suggests that colleges continued to enrol students after the close of enrolment and did not factor these new students into their enrolment report. This reporting inconsistency results in a discrepancy of 2500 learners for the first enrolment phase alone. From a funding perspective, if such misreporting is extrapolated over the year it would result in a difference of R53,000,000 which would have to be accounted for. This is indicative of weak data management practices in colleges.

Table 1: Monitoring Enrolment data versus Snap Survey data - 2011 Headcount per province

Prov	Report 191 N1 Programmes		Report 191 N2 Programmes		Report 191 N3 Programmes		Report 191 N4 Programmes		Report 191 N5 Programmes		Report 191 N6 Programmes		Grand Total	
	Enrolment Report	Snap Data	Enrolment Report	Snap Data	Enrolment Report	Snap Data	Enrolment Report	Snap Data	Enrolment Report	Snap Data	Enrolment Report	Snap Data	Enrolment Report	Snap Data
1	329	354	686	755	1 686	1 869	1 889	2 037	735	757	637	593	5 962	6 365
2	0	1	151	158	34	33	916	1 286	246	310	201	303	1 548	2 091
3	255	191	220	209	525	511	4 012	4 419	1 190	1 326	1 069	1 237	7 271	7 893
4	1 360	1 092	1 405	1 754	2 057	2 038	11 810	11 497	3 213	3 050	2 724	2 567	22 569	21 998
5	108	111	529	585	259	286	542	676	437	637	721	771	2 596	3 066
6	100	175	574	527	725	728	4 089	4 786	1 290	1 314	1 410	1 481	8 188	9 011
7	555	557	651	654	1 296	1 241	5 393	5 466	1 888	1 939	1 570	1 589	11 353	11 446
8	777	995	920	1 033	1 689	1 601	11 069	11 114	5 603	5 415	4 810	4 675	24 868	24 833
9	34	38	337	507	605	643	3 904	4 002	1 439	1 556	1 177	940	7 496	7 686
DHET	3 518	3 514	5 473	6 182	8 876	8 950	43 624	45 283	16 041	16 304	14 319	14 156	91 851	94 389

Data Source: Monitoring Enrolment data for Y1, T1 & S1 as on 3 March 2011

Data Source: Public FET Snap Survey for 2011 as on 1 March 2011

Source: Department of Higher Education and Training

Challenges in data management at college level emerge from a number of factors, including variable use of Education Management Information Systems (EMIS), poor connectivity between campuses and central offices, weak administrative capacity and human error. More importantly, data management has operated in the absence of clear standards for best practice.

In addition to enrolment reporting, colleges are expected to report on a quarterly basis against a set of key indicators. Until 2011, the quarterly reporting was limited to input factors with little focus on performance targets (process or outputs). These reports have historically provided limited data, primarily focused on human resource development spend, infrastructure, equipment and enrolment numbers. Performance tracking took the form of two proxy measures – retention and anticipated certification. There were no standardised guidelines on how such data should be collected, rendering much of the data unreliable, and there was limited scope for analysis due to the limited number of indicators.

In addition, the tracking of performance in the colleges was not governed by a coherent conceptual framework and there was no basis for seeing the relationship between different indicators and how they impact on performance. Ultimately, the quarterly reporting instruments did not provide a coherent and reliable picture of the performance of the FET College subsystem.

5. FRAMEWORK FOR A M&E SYSTEM IN FET COLLEGES

5.1 *The Value of M&E*

M&E is the key to an effective system-level measurement and an indispensable tool of ensuring quality improvement. Using appropriate Performance Indicators (PIs), tools and processes, M & E establishes performance standards that would be useful in tracking past performances and help predict future outcome and directions.

“There is general consensus that indicators for observing and/or measuring quality are key instruments for guiding and improving the quality of education and vocational training and are necessary for the good governance of training systems and structures.” (Seyfried, 2007: 13)

Furthermore, as Blom and Meyers (2003: 2003) indicate, “[t]he purpose of indicators is twofold: they provide information to policy-makers to assist in policy formulation, and they demonstrate accountability.”

The data and information generated can give one an indication where intervention or corrective action is necessary. Additionally, M&E can help clarify people's responsibilities, forms a sound, logical basis upon which to allocate resources, and ensures a goal-oriented focus.

According to Seyfried (2007), the role of performance indicators in VET is to:

- describe the current status or the baseline from where we are starting in our efforts to increase the quality of VET;
- quantify (as much as possible) the quality objectives which have been set;
- provide continuous information on the extent to which those objectives have been met;
- provide an idea of the factors which might have contributed to attainment of certain results.

“A further operational element is that indicators should produce information to help relevant actors in VET not only assess the extent to which their predefined objectives have been met, but also to help communicate the results, negotiate the effects, discuss influential factors and adopt the consequent decisions.” (ibid.)

Systems generally start out with the development of input indicators which tend to be developed first as they are easiest to measure, but as the systems becomes more complex, there is an increasing need to foreground output and outcome indicators, and ensure that all stakeholders buy into these. This is the context in which South Africa finds itself – the FET College subsystem has been driven primarily by input factors (budgets, enrolments and resources) and little emphasis has been given to outputs and outcomes. The broad shift within government towards outcomes provides the opportunity to reorient the FET College subsystem towards improved performance.

The alignment of the M&E framework with an outcomes-based approach provides the basis for:

- better and more reliable information on the achievements and impact of FET colleges;
- college self-evaluation that can lead to self-development;
- enabling individual colleges to benchmark their own achievements against that of other colleges and thus lead to quality improvement;
- informing policy developments/enforcement; and
- enhancing accountability for use of public funds in colleges.

In 2011, the DHET sought to expand and redefine the indicators that colleges must measure and report against. Drawing on the EU framework, these indicators and data requirements are framed in terms of input, process, output, outcome and context indicators which allows colleges to best set targets and measure and analyse the variables that impact on the achievement of these targets. In this way, appropriate interventions can be developed and focused on critical obstacles in the delivery chain. The input, output and outcome indicators (with respect to learner data) in particular must be clearly aligned to the various reporting requirements so that the system can operate as efficiently and reliably as possible.

5.2 Establishing learner record data

A key weakness in the VET system as a whole is its inability to generate reliable data on the learners that enter the system and to track these learners throughout their learning pathway. This weakness manifests in unreliable data and the poor capacity of many colleges to manage data in an efficient and effective manner. As indicated above, while all colleges operate management information systems, their capacity to integrate data from different campuses and across different line functions is weak in many cases. Lack of connectivity in some colleges also impacts on this. However, the systems are able to generate the necessary data if they are properly set up and managed.

The college systems must be able to clearly track a learner from the day they enrol to the day they leave the college and through their entry into the labour. The reporting timeframes will dictate the intervals for which the data must be collected and it will require sufficient capacity within the DHET to consolidate the data into the necessary reporting formats.

Ultimately, the learner record data is intrinsically linked to funding and enrolment planning. Without accurate tracking of learner progress colleges are unable to accurately project the movements of learners through and out of the college, and thereby find it difficult to project how many spaces will be made available for new enrolments. This also impacts on planning around resource utilisation, operational budget plans and staffing requirements. This will fundamentally impact on the college's ability to accurately plan and budget. The budgets allocations that are provided by DHET are not necessarily be based on an accurate analysis of enrolment targets.

5.3 Aggregating data

The quarterly and annual aggregation of data is initially a consolidation of the learner record data received from colleges. Based on the data received, the DHET should be able report on four elements at a system level:

- Profile of learners, by age, gender, race and home language. The data should also indicate how many students are first-time entrants into the VET subsystem. (Context/Input indicators)
- Enrolments, by programme/qualification, sub-field and level. (Input Indicators)
- Efficiency in terms of pass rates and throughput. (Process / Output Indicators)
- Labour Market Outcomes, in terms of work placement for workplace experience (including apprenticeships, internships and learnerships) and formal employment, or self-employment (Output/Outcome Indicators)

This aggregation is specifically geared to enabling the DHET to report on the performance of the colleges for the purpose of the PME and Treasury requirements. This involves dedicated monitoring capacity within DHET.

The next level of aggregation requires additional data to provide a broader analysis of the performance of the subsystem. Aggregated learner data should be combined with other institutional and context data to measure the following:

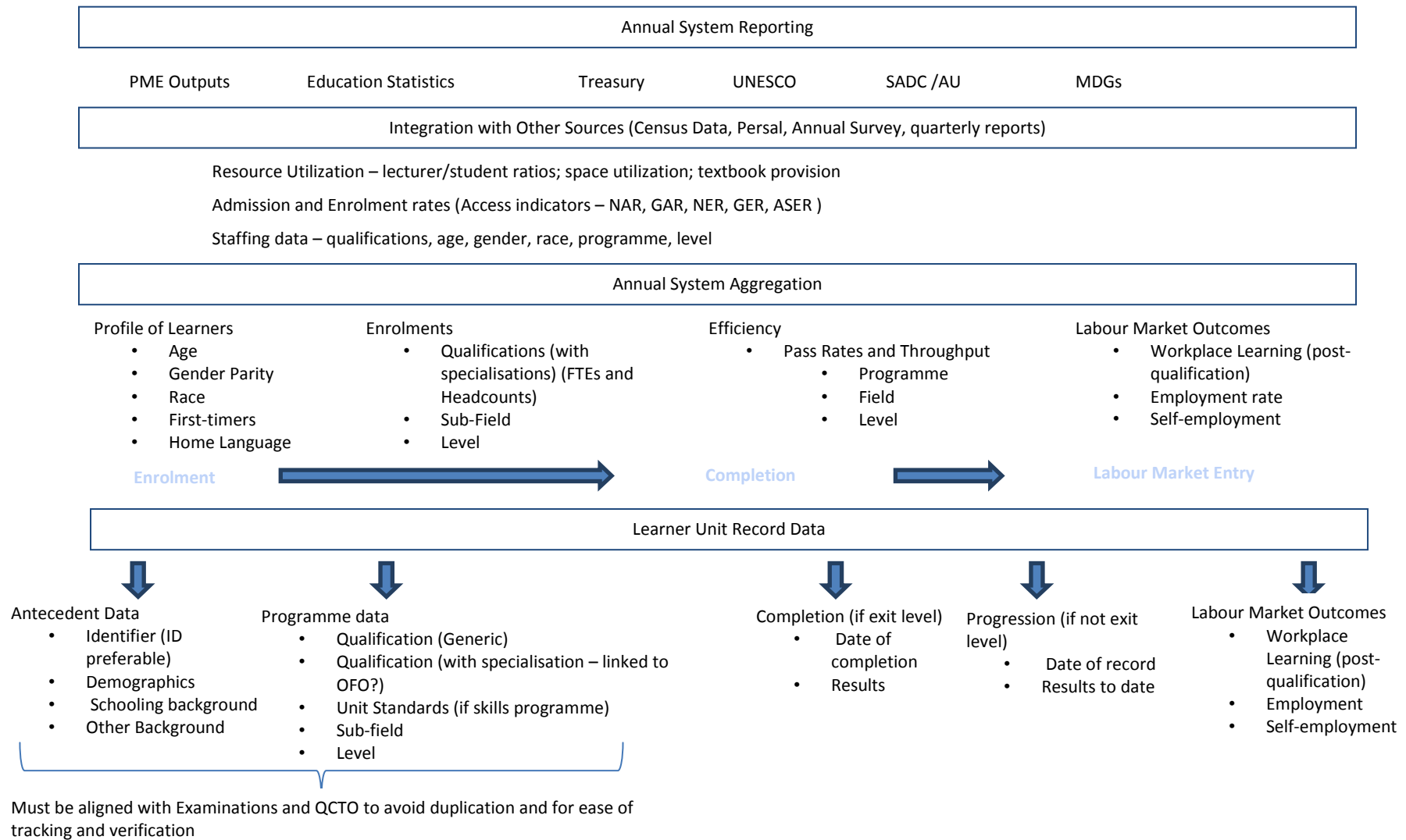
- Resource Utilisation (lecturer/student ratios; space utilization; textbook provision) (Process Indicators)
- Participation Rates (Access indicators - NAR, GAR, NER, GER, ASER) (Input/Context Indicators)
- Staffing Data (by qualifications, age, gender, race, programme, level, as well as human resource development data) (Input/Process Indicators)

To place the college sector within the broad education system, other databases such as census data, annual survey data, PERSAL, labour force data and other data will be used. This requires the necessary systems for data integration which can bring these various data sets into an integrated framework for analysis. The form that such data integration for aggregation purposes takes is an area which requires further investigation. This level of aggregation provides a more contextual understanding of the learner data. It also enables the DHET to meet its broader reporting requirements (national and international).

5.4 A consolidated system framework

Based on the legislative mandates, Minister's performance agreement, literature review and current practices within the DHET, the following M&E framework for the TVET system is proposed.

Figure 1- Framework for System Monitoring



The diagram above indicates the process of learner tracking, the aggregation of unit record data and the relationship to reporting. In order for this aggregated to inform meaningful planning it must be linked to credible demand-side data. The DHET has sought to begin aligning college provision with scarce and critical skills demands. The effectiveness of this has been limited by a lack of clear data on labour market outcomes. While the scarce and critical skills lists are generally regarded to be unreliable, tracking labour market outcomes would enable some measure of the skills demand that colleges are addressing. It would also provide some indication of the factors that assist graduates in finding meaningful employment.

However, effective labour market outcomes will most likely not be achieved if the enabling conditions are not created for young college graduates to access workplace learning opportunities. The colleges must play a critical role in engaging with industry around access to workplace learning, following which industry will take up its role of absorbing those graduates that are able to compete for the available employments opportunities once they have demonstrated their potential value through the initial opportunity. Therefore, the placement of college students into workplace learning opportunities may have the effect of creating its own demand but this will need to be monitored further to assess the extent and nature of this demand so that colleges can respond accordingly.

5.5 Linking system M&E to institutional performance

Ultimately, for system monitoring to be effective there must be an effective model of institutional monitoring and evaluation. This would assist in achieving the second objective outlined above: It should enable the DHET to identify key obstacles that are undermining progress towards achieving the delivery targets so that the necessary interventions can be put in place.

The emerging model of institutional performance draws on the PME model, comprising four categories :

- 1) Context Indicators are linked to broader social and economic policy objectives that inform and guide VET delivery and will indicate its impact, such increased participation or job growth.
- 2) Input and Process Indicators - factors which are derived from VET policy and which can be influenced by the stakeholders in this field. These factors therefore have a direct bearing on how VET activities take place. Measurement of these indicators delivers information on the resources mobilised to improve the quality of VET and can be both qualitative and quantitative in nature.
- 3) Output Indicators - the direct result of VET activities, which can be influenced directly by organising the input and process of VET accordingly.
- 4) Outcome Indicators – measures of results which are indirectly related to the VET system, but which logically flow from the delivery of VET, including the placement in jobs.

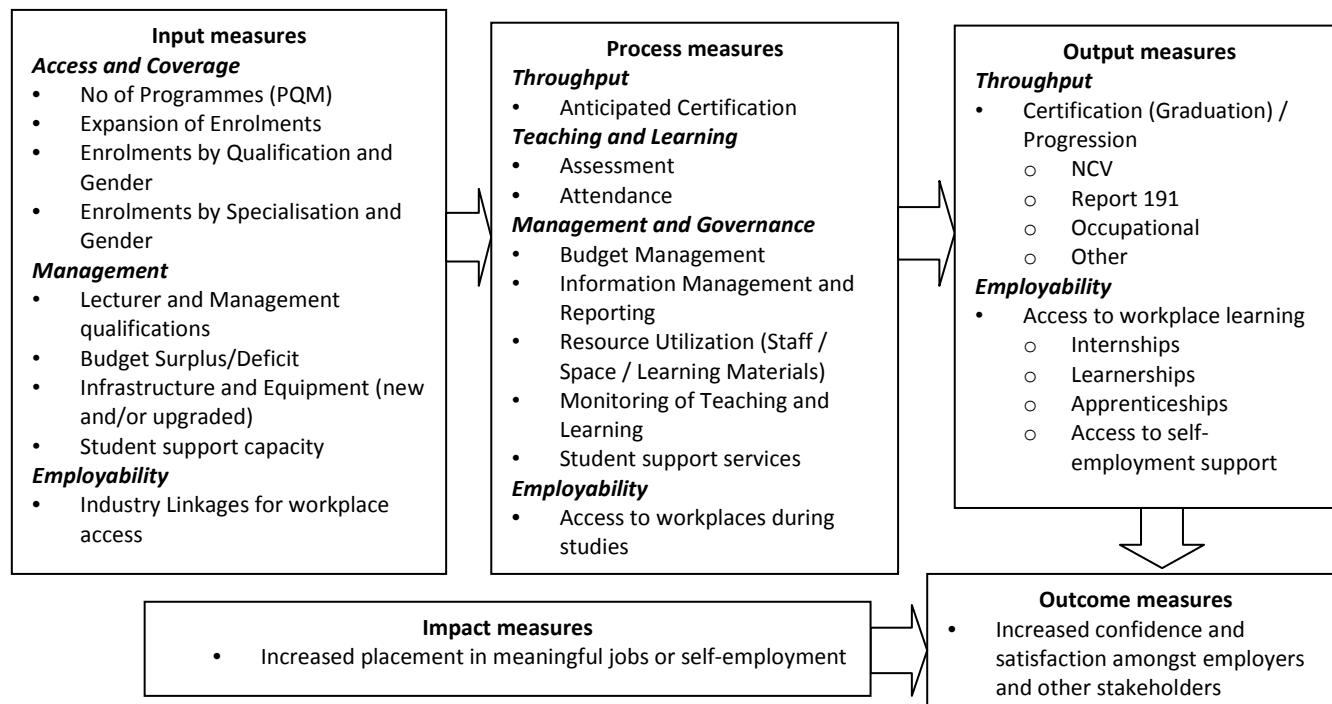
Drawing on the experience of the international models, five themes are identified

- Participation (Access)
- Management
- Teaching and Learning
- Throughput
- Employability

These five themes are then aligned with input, process, output and context indicators. Outcome indicators are not directly useful from a management perspective as they will be outside the control of the colleges. However, the measurement of outcomes indicators from a broader system perspective is critical.

Depending on the type of measure, the five themes may fall into one or more categories, as outlined in the institutional framework below:

Figure 2-Framework for Institutional Monitoring



The diagram above attempts to provide some logical coherence in the relationship between themes and indicators.

The ACCESS measures relate directly to the range of programmes to which the Minister has committed under output 2, while the OUTPUT measures are central to the both outputs 2 and 3. The EMPLOYABILITY measures speak to placement in workplaces for apprenticeships, internships and learnerships, which is likely to provide the learners with a first foothold into industry which can enhance their employment prospects. Each of these indicators speak most directly to target setting that can be aligned to the strategic framework of government and the extent to which the college will contribute to the achievement of government’s strategic objectives.

The process measures are reflective of quality issues in colleges. They indicate the effectiveness of college provision and where the obstacles to delivery exist. The process measures are therefore fundamental to the management of effective programme delivery. The key challenge is to ensure that each of these themes contains measurable (i.e. quantifiable) indicators. As a result, in the case of measures of teaching and learning specifically – the indicators will invariably be proxy rather than direct measures. This is because teaching and learning is difficult to measure in a valid and reliable manner.

In this framework, the key proxy measures for monitoring of teaching and learning are as follows:

- *Anticipated Certification* – this requires the college to monitor the performance of learners on a continuous basis and be able to identify those that are at risk for failing. In the case of the NCV, certification requires the learner to pass 7 subjects at the particular level at which they are registered. For the N1-N6, certification requires the learner to pass 4 subjects.
- *Assessment Retention* – this is a measure of the extent to which all learners have completed their requisite assessment tasks. This is a key requirement for learners to meet the eligibility for the final examinations, but it is also an essential component of monitoring learner performance as the college will not be able to measure the progress of learners without the necessary assessment results.
- *Classroom Attendance* – this measures the extent to which learners and lecturers are in class for all the required lessons. Absenteeism has been identified as a critical challenge in colleges but the extent of it is unclear. Classroom attendance is a necessary prerequisite for teaching and learning to happen and colleges need to monitor it to ensure that

The combination of these three measures provides an indication of whether or not teaching and learning is happening effectively. These measures were selected through rigorous engagement with the DHET and the colleges themselves. Given the difficulty of objectively monitoring teaching and learning in the classroom from a systemic perspective, the proxy measures were viewed as the most accessible and achievable in the short- to medium term, although these may be refined and changed over time. As such this is the first phase of the M&E framework and will need to be accompanied by rigorous support and training to ensure not only that the data outputs are reliable, but that these data outputs are being utilised to inform strategies for improving teaching and learning.

5.6 Linking institutional performance to planning

The framework for institutional monitoring also provides a guide for planning. In their annual operational plans colleges are required to set targets, particularly for teaching and learning. These targets should draw on past performance in order to ensure guide a strategy for improvement. It is clear, however, from the first year of implementation of the M&E framework that much work is required to achieve sufficient data reliability. This implies that much of the operational planning completed to date has been fundamentally flawed. Given the resource limitations in the system, planning on the basis of flawed data will be detrimental to optimal use of these resources.

This also has implications for system planning and points to the urgency in the need to bring the M&E system to an adequate level of maturity. The key challenge therefore is to identify the key knowledge gaps that are critical for system monitoring and planning, and need to be prioritised in the short-term. This is based on the assumption that if certain key data requirements are met, the DHET can begin to immediately intervene and better understand the issues at an institutional level and thereby plan appropriate interventions. As the data becomes increasingly reliable, so does the ability of the DHET to identify and address these issues.

5.6 Emerging data gaps

There are three key drivers of knowledge from the FET College sub-system.

- The first driver is that of *measuring system performance*, i.e. the output being provided by the system against what is being put into it. This involves accurate and reliable measurement of enrolments and throughput, which can then be analysed in the first instance against budget allocations (in terms of financial returns) and against access and equity indicators

- The second driver is that of *measuring system quality*, i.e. measuring the delivery of the curriculum against a set of benchmarked quality indicators that provide a proxy for institutional effectiveness. These quality indicators must be measurable and, if reliable, provides data that can guide further interrogation of institutional challenges.
- The third driver of knowledge is *measuring system impact*. This refers to the contribution of the system to enhanced labour market outcomes, in the form of access to workplace and ultimately, employment creation.

Within each of these three drivers, there are critical knowledge gaps that prevent a proper analysis of system issues and thereby warrant immediate interventions to strengthen the reliability of the data. Once this prioritised data has been strengthened, the next step is to interrogate more empirical what this data is saying. These represent secondary institutional data-gaps that can only be filled on the basis of reliable data. The table below delineates the data gaps identified in the initial investigation into the development of a college M&E system and their implications for the development .

Table 2: Primary and Secondary data gaps in FET College subsystem

Driver	Key Indicators	Key data gaps	Level of Priority	Current Level of Reliability	Secondary data gaps
Measuring System Performance	Enrolments	Inconsistent enrolment numbers across institutions	High	Medium	Key enrolment trends according to race, gender, region
	Throughput (certification)	Inaccurate data on learner progression	High	Low	Repetition rates, survival rates, progression trends
Measuring System Quality	Quality Assessment and Moderation	Inconsistency in internal assessment results	High	Medium	Interaction between internal assessment and throughput
	Retention of Learners	Retention not tracked on an ongoing basis	High	Low	Interaction between retention and throughput
	Classroom Attendance (Lecturers and Learners)	Ineffective tracking of class attendance	High	Low	Interaction between attendance and throughput
	Budget management	Tracking of actual programme costs	Medium	Low	Assessment of efficacy of programme funding formulas
	Resource Utilisation	Unreliable measures of resource utilisation	Medium	Low	Models of effective resource utilisation at campus level
	Management Development	No clear profile of management capacity	Medium	Medium	Models of good practice in institutional management
	Lecturer Development	Insufficient breakdown of lecturing staff per programme, qualification and campus	Medium	Medium	More detail on challenges facing lecturers with respect to curriculum delivery in the classroom
	Support Staff Development	Insufficient data on support staff capacity	Medium	High - Medium	
	Workplace Exposure	Colleges not measuring workplace exposure effectively	High	Low	Interaction between workplace exposure and post-college workplace access
Measuring System	Workplace Experiential	Limited data on workplace	High	Low	Tracer study data to establish the relationship between experiential

Driver	Key Indicators	Key data gaps	Level of Priority	Current Level of Reliability	Secondary data gaps
Impact	Learning (Internships, Apprenticeships & Learnerships)	experiential learning, needs to be disaggregated by sector, region etc.			learning and employability

Table 2 above indicates the scope of data gaps in the FET College subsystem. The primary data gaps which are rated “high priority” are critical for national planning and therefore require urgent attention. Addressing these information gaps will involve rigorous process of further data collection at an institutional level.

6. CONCLUSION

The M&E Framework presented above, if implemented correctly, will be a significant step forward for colleges. The persistent data gaps have been key factor in the misunderstanding around the past role of FET Colleges and the role that they should play going forward. For DHET to achieve its objective of an integrated post-school education and training system, the generation of a coherent data system will be a necessary requirement. This data must emanate from the institutions and must be reliable. It must also enable the system to plan and respond appropriately to key issues. \

In order to contribute meaningfully to the Labour Market Intelligence project, the following studies should be undertaken:

- Mapping the outcomes of the college curriculum against industry requirements in order to assess the extent to which graduates are equipped to go into the workplace and the associated learning gaps.
- Analysing the factors that contribute to poor performance and the implications thereof for effective skills supply. What is the role of industry in more effectively inform the filling of knowledge gaps and how can this role be realised in a sustainable manner.
- Analysing the relative cost benefits of college and industry-based training. Given the relative per capita investment of the state and industry in training of young people, it is important to assess whether the relative investment is appropriate and providing the necessary return. In addition, the research should contribute to a model of cost-sharing between state and industry that can be of benefit to all and maximize the contribution of the respective parties to the development of skills
- Investigating effective models for integrating datasets to guide effective planning in vocational education. The model of monitoring and evaluation proposed here will require an interface of large datasets from varying sources. Appropriate models for how these datasets can interface will be key to the success of the system.
- Tracer/panel studies of college graduates would provide an indication of the current demand for college students and the factors that impact on employability.

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ANNEXURE A: DETAILED INSTITUTIONAL INDICATORS

Theme 1: Access

Measure	Key Performance Indicator / Sub-indicator	
Enrolments (Input Indicators)	Number of FTEs enrolled in NC(V)	Number of FTEs enrolled in Level 2
		Number of FTEs enrolled in Level 3
		Number of FTEs enrolled in Level 4
	Number of FTEs enrolled in Report 191	Number of FTEs enrolled in N1
		Number of FTEs enrolled in N2
		Number of FTEs enrolled in N3
		Number of FTEs enrolled in N4
		Number of FTEs enrolled in N5
		Number of FTEs enrolled in N6
	Number of students enrolled in Occupational and Other Programmes	Number of students enrolled in Post-Matric Programmes (Learnerships): L5-6
		Number of students enrolled in Occupational Programmes (Learnerships and Skills Programmes): L2-4
		Number of students enrolled in Occupational Programmes linked to specific artisan trades (knowledge component other than N1-N3)
		Number of students enrolled in Other Programmes
Programme/ Qualification Mix	Number of Programmes and Qualifications	Number of NC(V) programmes
		Number of Report 191 (N1-N3) programmes in support of artisan development
		Number of Occupational Programmes (Learnerships and Skills Programmes): L2-L4
		Number of Post-Matric programmes: N4-N6
		Number of Post-Matric Occupational Programmes (Learnerships): L5-L6
		Number of Occupational Programmes linked to specific artisan trades (knowledge component other than N1-N3)
		Number of Other Programmes

Theme 2: Management

Measure	Key Performance Indicator / Sub-Indicator		
Lecturer Capacity (Input Indicator)	Increased number of lecturers with teaching qualifications	Number of lecturers of fundamental components (English, Mathematics and/or IT) with teaching qualifications	
		Number of lecturers of NC(V) programmes with teaching qualifications	
		Number of lecturers of Report 191 programmes to support artisan development (N1-N3) with teaching qualifications	
		Number of lecturers of post-Matric programmes: N4-N6 with teaching qualifications	
		Number of lecturers of post-Matric Occupational Programmes (Learnerships): L5-6 with teaching qualifications	
		Number of lecturers of Occupational Programmes (Learnerships and Skills Programmes): L2-4 with teaching qualifications	
		Number of lecturers of Occupational Programmes (Apprenticeships (knowledge component other than N1-N3)) with teaching qualifications	
		Number of lecturers of Other Programmes with teaching qualifications	
Support Staff Capacity (Input Indicator)	Improved support staff capacity	Improved administration and student services	
Infrastructure and Equipment (Input Indicators)	Number of teaching and support rooms	Number of Workshops / Practical rooms built or bought	
		Number of Classrooms built or bought	
		Number of Admin / Student Support Offices built or bought	
	Number of teaching and support rooms	Number of Workshops / Practical rooms upgraded	
		Number of Classrooms upgraded	
		Number of Admin / Student Support Offices upgraded	
	Number of structures installed with modern equipment (fit for purpose)	Number of Workshops / Practical rooms equipped with modern equipment	
		Number of Classrooms equipped with modern equipment	
			Number Local Area Networks (LAN) as installed at college sites
			Number of Wide Area Networks (WAN) as installed at college sites
Budget Management (Process Indicators)	Operational budget surplus / deficit	Change in % budget surplus / deficit against total income	
	Level of student debt	Change in % student debt against total income	
Human Resource Development	Improved management capacity	Number trained towards improved Management skills	

Developing a framework for institutional planning and monitoring in FET colleges

Measure	Key Performance Indicator / Sub-Indicator	
(Process)		
Indicators)	Improved Subject Knowledge	Numbers trained towards improved subject knowledge for NC(V) fundamental components (English, Mathematics and/or IT)
		Numbers trained towards improved subject knowledge for core NC(V) subjects
		Numbers trained towards improved subject knowledge for Report 191 programmes to support artisan development (N1-N3)
		Number trained towards improved subject knowledge for programmes for post-Matric students : N4-N6
		Numbers trained towards improved subject knowledge for programmes for post-Matric students : Occupational Programmes (Learnerships) L5-6
		Numbers trained towards improved subject knowledge for Occupational Programmes (Learnerships and Skills Programmes) L2-4
		Numbers trained towards improved subject knowledge for Occupational Programmes: Apprenticeships (knowledge component other than N1-N3)
		Numbers Trained towards improvement of subject knowledge for the Other Programmes
	Improved Classroom Practice	Numbers trained towards improved classroom practice for NC(V) fundamental components (English, Mathematics and/or IT)
		Numbers trained towards improved classroom practice for core NC(V) subjects
		Numbers trained towards improved classroom practice for Report 191 programmes to support artisan development (N1-N3)
		Number trained towards improved classroom practice for programmes for post-Matric students : N4-N6
		Numbers trained towards improved classroom practice for Occupational Programmes (Learnerships) for post-Matric students: L5-6
		Numbers trained towards improved classroom practice for Occupational Programmes (Learnerships and Skills Programmes): L2-4
		Numbers trained towards improved classroom practice for Occupational Programmes: Apprenticeships (knowledge component other than N1-N3)
		Numbers Trained towards improvement of classroom practice for the Other Programmes
	Improved Lecturer Access to Workplace Exposure	Numbers of fundamental lecturers (English, Mathematics and/or IT) gaining access to workplace exposure
		Numbers of NC(V) lecturers gaining access to workplace exposure
		Numbers of Report 191 lecturers (N1-N3) gaining access to workplace exposure
		Number of N4-N6 lecturers gaining access to workplace exposure
		Numbers of lecturers for post-Matric Occupational Programmes (Learnerships): L5-6 gaining access to workplace exposure
		Numbers of lecturers for Occupational Programmes (Learnerships and Skills

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Measure	Key Performance Indicator / Sub-Indicator	
		Programmes): L2-4 gaining access to workplace exposure
		Numbers of lecturers for Occupational Programmes: Apprenticeships (knowledge component other than N1-N3) gaining access to workplace exposure
		Numbers of lecturers for Other Programmes gaining access to workplace exposure
	% HRD Budget Spend	% spend of Management HRD Budget as per ops plan
		% Spend of Lecturing Staff HRD Budget as per ops plan
		% Spend of Support Staff HRD Budget as per ops plan
Resource Utilisation (Process Indicators)	Optimal space utilisation for all programmes	Average Lecturer : Student (Headcounts) Ratio
	% of students who have all necessary textbooks	% of NC(V) students that have all required textbooks
		% of Report 191 students have all required textbooks
Information Management (Process Indicators)	Number of campuses with up to date enrolment databases	
	Number of data report that are quality checked by EMIS manager	

Theme 3: Teaching and Learning

Measure	Key Performance Indicator / Sub-Indicator	
Attendance (Process Indicators)	Student attendance rate	Student attendance rate in NCV Programmes
		Student attendance rate in Report 191 programmes in support of artisan development (N1-N3)
		Student attendance rate in Post-Matric programmes: N4-N6
		Student attendance rate in Occupational programmes: L2-4
		Student attendance rate in Occupational programmes: L5-6
		Student attendance rate in Occupational programmes linked to specific artisan trades (knowledge component other than N1-N3)
		Student attendance rate in Other Programmes
	Total Lecturer classroom attendance rate	
Assessment (Process Indicators)	Monitoring of Assessments	Rate of assessments for all subjects conducted to date for NCV
		Rate of assessments for all subjects conducted to date for Report 191
		Rate of assessments for all subjects conducted to date for Occupational Programmes

Theme 4: Throughput

Measure	Key Performance Indicator	
Assessment Retention (Process Indicators)	Number of students retained in NC(V)	Number of students retained in NCV Level 2
		Number of students retained in NCV Level 3
		Number of students retained in NCV Level 4
	Number of students retained in Report 191 programmes	Number of students retained in N1
		Number of students retained in N2
		Number of students retained in N3
		Number of students retained in N4
		Number of students retained in N5
		Number of students retained in N6
	Number of students retained Occupational Programmes	Level 2-4 Learnerships and Skills Programmes
		Level 5-6 Learnerships
Number of students retained in Other Programmes		
Pass and Certification Rates (Process / Output Indicators)	Anticipated Certification rate for NCV students (based on standardised monitoring of ICASS for 2011)	Anticipated Certification Rate for Level 2 students
		Anticipated Certification Rate for Level 3 students
		Anticipated Certification Rate for Level 4 students
	Anticipated Certification rate for Report 191 students (based on standardised monitoring of ICASS for 2011)	Anticipated Certification Rate for N1 students
		Anticipated Certification Rate for N2 students
		Anticipated Certification Rate for N3 students
		Anticipated Certification Rate for N4 students
		Anticipated Certification Rate for N5 students
		Anticipated Certification Rate for N6 students
	Anticipated pass rate for students in Occupational Programmes	Anticipated pass rate for students in Occupational programmes (Learnerships and Skills Programmes) : L2-4
		Anticipated pass rate for students in Occupational programmes (Learnerships and Skills Programmes) : L2-4
		Anticipated pass rate for students in Occupational programmes (Learnerships and Skills Programmes) : L2-4

Theme 5: Employability

Measure	Key Performance Indicator	
Workplace Exposure (Process Indicator)	Number of students placed in workplaces for workplace exposure (during qualification)	Number of NC(V) students placed for workplace exposure
		Number of N1-N3 students placed for workplace exposure
		Number of Post-Matric: N4-N6 students placed for workplace exposure
		Number of students in Other programmes placed for workplace exposure
Workplace Experience (Output Indicator)	Number of students placed in workplaces for experiential training (as part of a qualification, for example: internships, Learnerships, apprenticeships)	Number of N2 or N2+higher (Artisan Development) students placed in workplaces for experiential training
		Number of N6 (Diploma) students placed in workplaces for experiential training
		Number of L2-L4 learnership students placed in workplaces for experiential training
	Number of L5-L6 learnership students placed in workplaces for experiential training	
	Number of students placed in workplaces for experiential training (post qualification, for example: internships)	Number of Post NC(V) L4 students placed in workplaces for experiential training
Self-Employment Support (Output Indicator)	Number of students provided with business skills for self-employment	
	Number of students provided with support to access self-employment opportunity (mentoring and support)	
	Number of students supported to expand or sustain existing self-employment opportunities	