



higher education  
& training

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Department:  
Higher Education and Training  
REPUBLIC OF SOUTH AFRICA

**REPORT OF THE MINISTERIAL TASK TEAM ON:**

***THE ESTABLISHMENT OF A SOUTH AFRICAN  
INSTITUTE FOR VOCATIONAL AND CONTINUING  
EDUCATION AND TRAINING (SAIVCET)***

*December 2012*

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## ACRONYMS

|         |   |
|---------|---|
| AET     | Adult Education and Training  |
| BIBB    | Federal Institute for Vocational Education and Training (Germany)                     |
| CETC    | Community Education and Training Centre   |
| CEDEFOP | European Centre for the Development of Vocational Training (European Union)           |
| CHE     | Council for Higher Education  |
| CNFP    | National Council for Vocational Education and Training (Chile)                        |
| FET     | Further Education and Training  |
| FETI    | Further Education and Training Institute  |
| DHET    | Department of Higher Education and Training   |
| HSRC    | Human Sciences Research Council   |
| IAMR    | Institute for Applied Manpower Research (India)                                       |
| IACTE   | All India Council for Technical Education (India)                                     |
| JET     | Joint Education Trust   |
| KRIVET  | Korean Institute for Vocational Education and Training (South Korea)                  |
| MCEETYA | Ministerial Council for Employment, Education, Training and Youth Affairs (Australia) |
| MCVTE   | Ministerial Council for Vocational and Technical Education (Australia)                |
| MerSETA | Manufacturing, Engineering and Related Services Education and Training Authority      |
| NASCA   | National Senior Certificate for Adults  |
| NBI     | National Business Initiative  |
| NCERT   | National Centre for Educational Research and Training (India)                         |
| NC(V)   | National Certificate (Vocational)   |
| NCVER   | National Centre for Vocational Education Research (Australia)                         |
| NITTR   | National Institute for Teacher Training and Research (India)                          |
| NQF     | National Qualifications Framework   |
| NSF     | National Skills Fund  |

|         |  |
|---------|--|
| NWPA    | National Workforce and Productivity Agency (Australia)                       |
| NSA     | National Skills Authority  |
| OPET    | Federal Office for Professional Education and Technology (Switzerland)       |
| PALC    | Public Adult Learning Centres  |
| QCTO    | Quality Council for Trades and Occupations                                   |
| RPL     | Recognition of Prior Learning  |
| SAIVCET | South African Institute for Vocational and Continuing Education and Training |
| SFIVET  | Swiss Federal Institute for Vocational Educational and Training              |
| SEIFSA  | Steel and Engineering Industries Federation of South Africa                  |
| SENCE   | National Service for Training and Employment (Chile)                         |
| TAFE    | Technical and Further Education  |
| TVET    | Technical and Vocational Education and Training                              |
| VCET    | Vocational and Continuing Education and Training                             |
| VET     | Vocational Education and Training  |
| WCDE    | Western Cape Department of Education   |

## EXECUTIVE SUMMARY

The *Green Paper for Post-School Education and Training* (DHET, 2012a), proposes the establishment of a South African Institute for Vocational and Continuing Education and Training (SAIVCET) to support the public further education and training (FET) colleges and the wider skills development system, as well as the provision of general education to adults.

In March 2012, the Minister of Higher Education and Training established a task team on SAIVCET to:

- Examine the list of possible functions of the institute set out in the *Green Paper* as well as other functions that it may deem desirable and make recommendations regarding the role the institute could play in supporting and strengthening of vocational and continuing education and skills development in South Africa
- Make recommendations regarding the establishment of the institute, including its legal and organisational form
- Develop a draft framework for the establishment of SAIVCET.

In carrying out this assignment, the task team conducted:

- A desktop review of comparable international institutes
- Study trips to selected technical and vocational education and training (TVET) institutes and apex bodies in four countries: Republic of Korea, India, Switzerland and Germany
- Structured interviews with informed people in South Africa, drawn from DHET personnel involved in FET and AET, FET college principals and staff, private TVET providers, AET providers, higher education, organised and individual business, organised labour, SETAs, NGOs and civil society at large
- A review of those submissions to the DHET on the *Green Paper* that were relevant to the establishment of the South African Institute for Vocational and Continuing Education and Training
- A review of reports from other ministerial task teams on the Recognition of Prior Learning, on Community Education and Training Centres, on SETA performance and on the National Certificate (Vocational) [henceforth NC(V)].

## RECOMMENDATIONS

Having considered all the above inputs, the SAIVCET task team makes the following recommendations:

### Guiding Principles

Currently, the most pressing needs in continuing and vocational education and training in South Africa are to:

- Improve teaching and learning in public FET colleges, primarily by improving the quality of teaching staff
- Stabilise the college sector, especially with regard to the occupational and vocational programmes and qualifications being offered
- Facilitate the opening of viable pathways into continuing and vocational education and training for Grade 9 graduates from the basic education system
- Raise the profile and status of 'blue collar' work.

**These priorities should determine the roles and functions of the SAIVCET. It should therefore have a clear focus on post-basic education for skilled employment in the formal economy. This includes self-employment at a level above that of 'survivalist' enterprise. SAIVCET should support education and training that develops skills at the intermediate level and leads people towards decent work. This is the golden thread that should run through everything SAIVCET does.**

SAIVCET should not try to be 'all things to all people.' As proposed by the task team for Community Education and Training Centres, a separate institute should be established to support adult basic education, literacy, non-formal community and popular education at basic level. SAIVCET should concentrate on the roles and functions described below.

### Roles and Functions of SAIVCET

The task team believes that SAIVCET should have six primary roles:

- i. Applied research
- ii. Upskilling of TVET lecturers, instructors and trainers

- iii. Curriculum innovation and design
- iv. Monitoring and evaluation from a systemic view
- v. Co-ordination and linkages, especially between the public and private sectors and between the current FET colleges, TVET providers more broadly and higher education
- vi. Advocacy

These translate into a wider range of specific functions, namely to:

- Advise the Minister on any matter relating to intermediate-level TVET
- Advise the Minister on the provision of TVET by distance and open learning
- Support higher education institutions, FET colleges and technical experts in their development of learning, teaching and assessment materials
- Support institutions, organisations and agencies that deliver intermediate-level skills for employability; these may include public FET colleges, CETCs, private training service-providers, NGOs, and focus colleges such as agriculture and policing that have been under the authority of government departments other than DHET
- Ensure that curriculum development across the sector is coherent and consistent with a national curriculum framework and that public FET colleges progressively acquire institutional capacity for curriculum development
- Conduct or commission research on, and contribute to, innovative developments in TVET at intermediate-skills level; the focus should be on research that can lead to improvements in the TVET sector, and SAIVCET should become a repository of research for skills development in the sector
- Conduct or commission research on teaching and learning in vocational and occupational programmes at colleges that lead to qualifications or part-qualifications
- Upgrade the technical knowledge and pedagogical skills of teaching staff in TVET colleges, in line with the framework for lecturer development produced by DHET, and promote the professionalisation of TVET lecturers, instructors and trainers in both the public and private sectors
- Promote dialogue and partnerships between FET colleges, TVET providers of all sorts, industry and higher education
- Interact with professional councils and promote dialogue between those councils, FET colleges and the Department, especially with regard to curriculum development



- Advocate technical vocations as worthy and rewarding careers, and TVET as a pathway to skilled employment
- Publish a journal of TVET and skills development for employment.

The task team believes that it should **not** be SAIVCET's function to:

- Provide management training in colleges
- Provide management, leadership and operational training at all levels for Sector Education and Training Authorities
- Provide management, leadership and operational training for officials of the Department
- Establish and maintain a library information service in order to support the Institute and the institutes served by the Institute.
- Conduct and promote labour market research.

### **Size and location**

The task team proposes an organisation with a relatively small core of professional staff with administrative support, and a wide network of programme-implementation partners. We estimate a professional staff complement of about fifteen people to start with, i.e. a director, possibly a deputy, and at least two professional staff for each of the key roles. Along with about ten administrative staff, this would put the total staff complement in the range of 25-30. Given the desired high levels of involvement from and engagement with employers, the task team recommends that SAIVCET be physically located in central Gauteng, close to the main centres of commerce and industry.

### **Structure and governance**

The task team endorses the provisions made in the *FET Amendment Bill* for the institute to have a board, comprising a chairperson and up to 10 ordinary members, appointed by the Minister for a four year, renewable period of office from nominations put forward by the institute itself. The ordinary members may co-opt other members who may serve for up to four years at a time. For the first Board, nominations should come from the public. Thereafter, the full Board, including ordinary and co-opted members, should nominate future members.

The task team further recommends that the Board should quickly adopt a Board Charter that contains guidelines for its operation, including

- Amplification of the institute's role and functions
- Criteria for membership of the Board and its committees
- Rules of procedure
- The Board's own roles and responsibilities
- Legal and accounting compliance
- Provisions for review mechanisms on the institute's policies, strategies, internal lines of accountability, communications, risk management, etc.

The task team, and almost all its informants, strongly favour an expert-driven Board rather than one representing constituent stakeholders. Board members should be there to add value and not merely to represent a constituency.

The required areas of expertise and suggested number of representatives embodying them are:

- Skills development/CVET (4-5 members)
- Finance (1 member)
- Commerce, industry and the economy (3-4) members
- Legal (1 member)
- Research (2-3 members)

The composition of the Board must ensure that the above expertise is always present. Thereafter, a secondary consideration could be to promote representation from the following constituencies:

- DHET
- Business/Employers
- Labour
- Academia/Higher Education
- TVET colleges and industry or private providers
- AET

## Funding

The task team believes that, as a matter of principle, the fiscus should provide guaranteed funding for SAIVCET, with additional programme-specific funding coming from the NSF. Additional income may come from other government departments, institutes, clients, stakeholders and SETAs for commissioned work, and from fundraising from donors and grant-makers.

Assuming an establishment of 25-30 staff, SAIVCET's core operational budget would be in the region of R30,000,000 per annum.

## Performance Management and Evaluation

The task team recommends that SAIVCET's board be required to publish specific 3-5 year targets for its outputs, outcomes and impact. An independent review committee, comprising members nominated by the institute and some key stakeholders, should then be appointed by the Minister to review the institute's performance at least once every five years.

## Proposed roll-out

The task team proposes the following roll-out process:

**Table 1: Proposed implementation plan for SAIVCET**

| <i>Phase</i> | <i>Activity</i>  | <i>Time Frame</i>  |
|--------------|--|--|
| <b>1</b>     | <b>Secure mandate and funding</b> <ul style="list-style-type: none"><li>The Minister secures approval and funding for SAIVCET from Parliament</li></ul>  | March 2013   |
| <b>2</b>     | <b>Appointment of the Board</b> <ul style="list-style-type: none"><li>Task Team develops criteria for board membership</li><li>The Minister calls for nominations</li><li>The Minister appoints a committee to screen the nominees and provide him with a shortlist</li><li>The Minister will make a final decision and gazette his appointments</li></ul> | Early March 2013<br>Mid-March 2013<br>End March 2013<br>End April 2013 |

|   |                          |
|---|--------------------------|
| <p><b>3 Appointment of Director</b></p> <ul style="list-style-type: none"> <li>• The Board will recruit and appoint a Director</li> </ul>   | <p>End June 2013</p>     |
| <p><b>4. Operationalisation of Institute</b></p> <ul style="list-style-type: none"> <li>• Recruitment of staff</li> <li>• Development of human resource policies and procedures</li> <li>• Selection and equipping of premises</li> <li>• Development of an initial programme of action</li> <li>• Establishment of the Institute's corporate image (logo, letterheads, PR materials, etc.</li> </ul> | <p>End November 2013</p> |

It is therefore feasible that the institute could commence a preliminary programme of activities in late-2013 and be fully operational at the beginning of 2014.

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## INTRODUCTION – THE BRIEF OF THE TASK TEAM

In the *Green Paper for Post-School Education and Training* (DHET, 2012a), the Minister of Higher Education and Training signalled his intention to establish a national institute for Vocational and Continuing Education and Training. The *Green Paper* argues that there is a pressing need for such an institution to support the Further Education and Training (FET) colleges, enhance the provision of vocationally-orientated education for out-of-school youths and adults and generally develop the national public skills training system.

In line with this, the national Department of Higher Education and Training (DHET) endorsed the establishment of a South African Institute for Vocational and Continuing Education and Training (SAIVCET) as a key part of its long-term strategy to build institutional capacity in the post-school education and training sector.

In March 2012, the Minister set up a Task Team to:

- Examine the list of possible functions of the institute set out in the *Green Paper*, as well as other functions that the institute might fulfil, and make recommendations regarding these
- Make recommendations regarding the establishment of the institute, including its legal and organisational form
- Develop a draft framework for the establishment of SAIVCET.

In the course of its work, the task team was to:

- Conduct a review of relevant literature including a ‘desktop’ study of a number of institutes for vocational education and training in other countries
- Undertake study trips for close-up studies of the workings of at least two institutes in other countries
- Solicit the views of officials of the Department of Higher Education and Training, FET colleges, higher education institutions, SETAs, employers, trade unions and other interested or informed parties

In its recommendations, the task team was to indicate the DHET’s most pressing priorities and indicate a logical progression of activities to establish the institute while, if necessary, phasing in functions over a period of time.

The members of the task team were:

- Mr Ken Duncan (CEO, Swiss South Africa Co-operation Initiative), who served as chairperson
- Mr Godwin Khosa (CEO, JET Education Services)
- Ms Janet Lopes (Skills Development Executive, Steel and Engineering Industries Federation of South Africa)
- Ms Makano Morojele (Director: Human Capital Programmes, the National Business Initiative)
- Dr Joy Papier (Director, Further Education and Training Institute, University of the Western Cape)
- Dr Raymond Patel (CEO, Manufacturing, Engineering and Related Services Sector Education and Training Authority)
- Ms Danita Welgemoed (Chief Education Specialist, Western Cape Department of Education)
- Mr Samuel Zungu (Principal, Umfolozi FET College)

The task team was required to complete its work and submit a final report and recommendations to the Minister by 15 December 2012.

This report is the outcome of the work of the Task Team.

# CHAPTER 1: CONTEXT AND RATIONALE FOR A SAIVCET

## 1.1 A Vision for the Post-School System

Despite gains made since 1994, the post-school education and training system continues, by and large, to reproduce the inequalities of race, gender and class that bedevilled education and training in the Apartheid era.<sup>1</sup> This is immediately evident from the numbers and demographic distribution of graduates from FET colleges, universities of technology and universities.

It is also an unbalanced system. Currently, about three times more students enter university than colleges. This is because there are few educational opportunities for young people who have left school without completing a National Senior Certificate and therefore do not meet the admission and selection criteria for higher education. The result is chronic shortages of artisanal and other mid-level skills in the workforce.<sup>2</sup>

Then there is the issue of affordability. Provision of post-school education and training that is within the means of most South African families is largely confined to the fifty public FET colleges. With a current capacity of 300,000-350,000 full-time students spread across three or more levels of study, they could at best accommodate only a fraction of the 600,000 or so matriculants who exit the school system annually and of the hundreds of thousands more who leave school before Grade 12.

Finally, the quality of the post-school education and training system is uneven and, too often, unsatisfactory. Employment figures suggest that many graduates, especially from FET colleges, have not been well prepared for the skills demands of commerce and industry. Thus, a key component of the post-school system seems to meet the needs of neither society nor the economy.

The *Green Paper for Post-School Education and Training* presents a vision for building and sustaining a single, coherent, differentiated and highly articulated post-school education and training system. Key to that vision is a technical and vocational education and training (TVET) sub-system that provides a range of accessible alternatives for young people and adults alike. Prospective students will be able to choose a path appropriately pitched to their

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<sup>1</sup> *Green Paper*, p4

<sup>2</sup> *Green Paper*, p9

entering with either a Grade 12 or a Grade 9 school certificate. Out-of-school adults and youths will be able to access basic education at the level they require to complete their Grade 12 or an equivalent National Senior Certificate for Adults (NASCA) and to progress from there either to the TVET mainstream or to a non-formal path that will enhance their ability to lead productive and meaningful lives. The bold goal of DHET is to accommodate 4,000,000 learners in public education and training institutions, excluding universities, by 2030. This should significantly benefit the poor, who make up the bulk of those who struggle to complete school, who do not attain university entrance, who drop out of college and who thereafter find it difficult to access skilled employment.

In addition to a greatly expanded and strengthened FET college sector, this vision will also require improvements in the provision of adult education, which is currently very weak. To that end, the DHET is looking into the establishment of a new type of institution, provisionally called Community Education and Training Centres (CETCs), to address the needs of out-of-school youth and adults. The proposed CETCs are the subject of another task team, whose reports have influenced this one.

The obstacles to realising the vision are formidable. The *Green Paper* presents a frank assessment of the challenges facing post-school education and training, including the college sector which is so important to it. A sombre view of the post-school college sector was indicated by most of the responses elicited by the task team from experts in further and higher education and training, in both the public and the private sectors, and representing management, labour and civil society. These views are summarised in the next section.

## **1.2 The Situation in the FET College Sector**

### **1.2.1 Human Resources**

At present, the FET college sector lacks the human resources to make the vision of the *Green Paper* a reality. The number of colleges experiencing chronic financial difficulties, disruptive labour disputes and violent student unrest - with several having to be put under administration – indicates serious managerial incapacity in many instances. This, in turn, inhibits the colleges' ability to undertake rapid expansion. Only a few well-functioning colleges are in a position to expand their intakes significantly in the near future.



The quality of instruction at the colleges is an even greater cause for concern. Decades of inadequate support and development of teaching staff have left most colleges with a dearth of subject-matter expertise and of pedagogical skills in their faculties. It is exceptional to find a college with more than a handful of lecturers who combine relevant technical qualifications with pedagogical competence and current industry experience.<sup>3</sup> Most college teaching faculties conspicuously lack capacity to undertake applied curriculum development, action research or any form of academic self-development.

This is alarming because research and experience internationally suggest that the single greatest determinant of the quality of TVET colleges is the quality of the teaching staff.<sup>4</sup> It is no coincidence that, in South Africa, throughput rates are poor in the two main curricular offerings of public FET colleges – the National Certificate (Vocational) and the occupationally-orientated ‘N-courses’. The net certification rate of the N-courses has, over the years, remained consistently low, at around 12%.<sup>5</sup> The NC(V) has fared little better. Of its first intake in 2007, only 4% graduated on schedule at the end of 2009. The second intake fared somewhat better, with about 8% graduating in December 2010. The third intake reportedly did better still, so at least the trend is upwards. But it is still nowhere near good enough. Inadequate instruction may not be the only reason for this, but it is certainly a major factor. Such high failure rates constitute a huge waste of public funds on subsidies to unsuccessful students as well as an indefensible human toll in the form of shattered hopes. They also reinforce the pernicious but widespread public perception that FET colleges are for weak students and high-school dropouts.

### 1.2.2 Linkages

The lack of depth in the colleges’ teaching capacity is exacerbated by a shortage of meaningful partnerships with industry. Though most colleges declare numerous linkages with local companies, closer examination shows that these are often based on training-service contracts or corporate social investment contributions that have little or no developmental value for the college.<sup>6</sup> The result is that, at institutional level, the colleges’ curricula are not well aligned with, or responsive to, the needs of industry.

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<sup>3</sup> See the HSRC’s *FET Colleges Audit*, May 2011

<sup>4</sup> Dr Felix Rauner, University of Bremen: Address to MerSETA Annual AATP Symposium, Jhb, 26 Sept 2012

<sup>5</sup> *Green Paper*, p 22

<sup>6</sup> See SSACI’s *Review of FET College Partnerships and Linkages*, July 2011

Predictably, this has negatively affected the image of colleges and their graduates with employers.

Looking along a different trajectory, one sees little articulation between colleges and higher education institutions (HEIs). Most universities of technology and universities seem to be reluctant to register NC(V) graduates for degree or even certificate or diploma courses because of apparent gaps between the output competences of the NC(V) and the entry requirements for university-level courses.<sup>7</sup> Ideas about accrediting FET colleges to offer some higher education courses in partnership with HEIs have been mooted and useful work on articulation between colleges and universities is being done at the University of the Western Cape, Cape Peninsula University of Technology, the University of Johannesburg, the University of the Witwatersrand and possibly some other HEIs.<sup>8</sup>

Another neglected aspect of linkages between HEIs and colleges is their potential for strengthening the college system through pre-service and in-service lecturer training and development, curriculum development and research. Structures exist for HEIs to provide these services to the basic education system, but not yet to FET colleges.

### 1.2.3 Curricula

FET colleges are grappling with a number of issues around their two primary curricular offerings, the National Certificate (Vocational), and the Report 191 programmes, popularly known as N-courses, which historically provided the trade-theory component of apprenticeships.

Firstly, the colleges have battled to 'sell' the NC(V) to industry. Introduced in 2007 at NQF levels 2, 3 and 4, the NC(V) was an altogether new curriculum and qualification aimed at providing students with a broad, comprehensive and up-to-date foundation for lifelong learning and self-development. Its arrival coincided with signals from the Department of Labour that apprenticeships, of which the N-courses were an integral

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<sup>7</sup> There are exceptions. In 2009, two NC(V) programmes - *Finance, Economics and Accounting* and *Information Technology and Computer Science* – were assessed by Higher Education South Africa as being of a higher standard than comparable National Senior Certificate courses. Theoretically, then, they should qualify students for entry into university.

<sup>8</sup> A somewhat dated summary of them appears in Stumpf *et al* (2009), pp73-80

part, were to be abandoned in favour of learnerships. At the same time, the then Department of Education began scaling down provision of the N-courses with a view to phasing them out completely by 2012. None of this sat well with industry which was - with some justification – sceptical about the value of learnerships, especially in the artisan trades where the level and duration of training required are not easily delivered through a series of relatively short inputs like learnerships. Thus, the NC(V) was launched into hostile waters.

Since the NC(V) was not intended or designed to be part of a traditional apprenticeship, it did not seem to address the urgent need for more artisans and its credibility with industry suffered as a result. Moreover, despite being critical of the out-dated content of some N-courses, industry generally preferred these familiar, occupation-specific programmes to the new and as yet unproven NC(V). When, at the end of 2010, the DHET authorised colleges to resume registration of students for some N-courses, an unfounded rumour took hold in colleges and industry alike that the NC(V) had lost a head-to-head contest with the N-courses and was about to be abolished. This misinformed but widely held belief has yet to be dispelled.

As noted before, the colleges have not aligned their institution-level delivery of the NC(V) with the needs of local industry. Until very recently, few FET colleges arranged any workplace experience for NC(V) students. As a result, most NC(V) graduates have studied for three years, full-time, without ever setting foot in the industry for which they were supposedly being trained. This has not done much for the employability of the students or for the credibility of the NC(V).

A second curricular issue for colleges is that the N-courses are widely criticised for being out-of-date. It is indeed ironic that the NC(V) is often censured for not being like the N-courses, even as those same N-courses are being faulted for a lack of relevance to current technology and industry practice. It is a fact, however, that many N-courses have not been reviewed for decades, with the result that some of their content is now obsolete while other material that is important for today's industry has yet to be included.

A key problem here is that there are few formal mechanisms to facilitate input from industry on either the development or the delivery of college curricula. Regrettably, there is no strong tradition in South Africa, as there is in some other countries, of trades' guilds, professional associations, industry bodies and the like driving the process of

curriculum development. Nor have they provided many instructors, master trainers or technical advisors to help public colleges deliver the resulting new training programmes and qualifications.

Where industry does get involved in curriculum development, the 'great divide' between public and private sector colleges can be difficult to bridge. This is illustrated by the Quality Council for Trades and Occupations' (QCTO) recent development of new artisan-trade qualifications. The QCTO process included a concerted and commendable effort to include practitioners of the targeted trades amongst the 'development quality partners'. This resulted in well-founded descriptions of the knowledge, skills and competences currently required to practise those trades. However, despite the presence of some college personnel on the QCTO teams, there has as yet been no 'washback' effect on the college curricula, which are unchanged. In consequence, public FET colleges could find themselves being further sidelined by industry if they prove unready to deliver training that leads to the new qualifications. It is certainly anomalous and unsatisfactory that new qualifications for key artisan trades have been produced without any preparation for them within the public FET colleges - the nation's most important channel for the delivery of the transmission of knowledge related to intermediate-level vocational and occupational qualifications.

Related to this is the problem that public FET colleges are not set up to provide the necessary workplace or practical experience that enables students to acquire the necessary skills to enter the modern workplace. Thus, the colleges over-emphasise the academic components of the qualifications they offer. In consequence, outputs from FET colleges are commonly viewed by employers as being out-of-step with the skills needs of the economy.

#### **1.2.4 Student Support**

Support systems for FET college students, though undoubtedly better than they used to be, are still inadequate. The majority of college students, especially in rural areas, come from disadvantaged backgrounds. Having received poor quality basic education, they are ill-prepared for the increased demands of the college curricula. The colleges should therefore have systems in place to address these deficits in the students' readiness. In most cases, they do not and students fail and drop out who might, with a little extra academic or personal support, have graduated comfortably.

The net result of all these systemic weaknesses is that FET colleges are often at the bottom-end of career choices for school leavers. They are simply not perceived by the population at large to be a good pathway to decent work.

### **1.2.5 Quality Assurance**

The current quality assurance framework is confusing and complex, especially for FET colleges. Although each of the three primary quality assurance bodies - the Council for Higher Education, Umalusi and the QCTO - is supposed to have its own area of operation, there are overlaps and contestations. A college that offers N-courses from levels 1 to 6 and the NC(V) could potentially have to answer to all three quality assurance bodies. For its occupational courses it may also have to seek accreditation from several SETAs. All this is onerous, unnecessarily bureaucratic and, from a quality assurance point of view, counterproductive.

## **1.3 The Situation in the Adult Education Sector**

The public adult education centres (PALCs) are weak. Despite their having numbers comparable to enrolments in FET colleges, formal basic education for adults has not been successful. There is almost no progression from these centres to further learning. The *Green Paper* admits that this is partly the result of previous policy interventions and initiatives that were under-resourced or sporadically implemented. In many instances the centres have little or no clear institutional identity or capacity. They have no full-time staff and are staffed through short-term contracts. They function in the evenings in the premises of other institutions such as schools, community centres or workplaces. There are many problems with the curriculum and qualifications available.

As part of the expansion of the post-school education and training system, the DHET is looking into the establishment of Community Education and Training Centres (CETCs), which will incorporate existing public adult learning centres, as an alternative institutional form to address the needs of out-of-school youth and adults (*Green Paper* p 32). This will follow a lifelong learning approach that incorporates both formal and non-formal learning approaches that offer different routes to skills development and personal needs.

## 1.4 A Proposed Mechanism to Facilitate the Vision – SAIVCET

The *Green Paper* argues that education and training institutions should be supported by effective policy, management, administrative and regulatory institutions at the national level. These include the DHET itself, the quality assurance bodies, the levy-grant institutions and other support institutions. A South African Institute for Vocational and Continuing Education and Training (SAIVCET) is put forward as a central driver and co-ordinator of professional support to the post-school TVET system.

The *Green Paper* (pp34-5) proposed that the institute should:

- Develop curricula for FET colleges and adult education colleges, and ensure that curriculum development is institutionalised with long-term capacity
- Continuously update and improve FET programmes
- Serve as a centre of excellence for research and innovation for the FET colleges and possibly the levy-grant institutions
- Conduct and promote research in teaching and learning in vocational and occupational programmes, and in the progressive development of vocational and continuing education as a whole
- Advise the minister on vocational and continuing education at national level
- Develop materials for college programmes
- Develop materials for career guidance
- Develop capacity and upgrade teaching staff skills in vocational and continuing education
- Provide management training to the vocational and continuing education sector
- Provide management training at all levels for SETAs
- Promote dialogue between colleges and between colleges, employers and SETAs
- Interact with professional councils and promote dialogue between them and education and training institutions, the levy-grant institutions and the DHET
- Conduct and promote labour market research

This extensive list of possible functions was largely echoed by the draft *FET Colleges Amendment Bill*, published on 30 May 2012, which also proposed a legislative framework for

the establishment of SAIVCET. The draft bill added some functions to those proposed by the *Green Paper*, namely that SAIVCET must:

- Assist and support the development of lifelong learning
- Assist and support the development of open and distance education and training
- Assist and support in the development of learning, teaching and assessment materials
- Provide management training in the vocational and continuous education and training sector
- Provide management, leadership and operational training at all levels for Sector Education and Training Authorities
- Provide management, leadership and operational training for officials of the Department of Higher Education and Training
- Promote dialogue between colleges and between employers and Sector Education and Training Authorities
- Interact with professional councils and promote dialogue between them and education and training institutions and the department
- Publish a journal related to further education and training and skills development
- Establish and maintain a library information service to support the institute and the institutions served by the Institute
- Conduct and promote labour market research
- Perform any other function which may be prescribed by the Minister.

The Bill specifies that the institute will be governed by a board comprising:

- a chairperson
- Not more than 10 ordinary members.

The chairperson and ordinary members will be appointed by the Minister from nominations received in a manner yet to be prescribed and will hold office for a renewable period of four years. The board may co-opt additional members for periods determined by the board.

The Bill makes provision for the institute to be funded out of money appropriated by Parliament, donated, earned as interest on investment or otherwise acquired. It also

provides for intervention by the Minister in the institute's affairs if it fails in any of its duties and for its dissolution after consultation between the Minister and the Council for Higher Education.



## CHAPTER 2: THE TASK TEAM'S ACTIVITIES

To meet its Terms of Reference and fulfil its mandate, the task team undertook the following activities between April and November 2012:

- A desktop review of TVET apex bodies and support systems in seventeen countries (namely, Australia, Botswana, Brazil, China, Denmark, England, Ethiopia, Finland, Germany, Ghana, India, Norway, Singapore, Sri Lanka, Switzerland, Tanzania and Vietnam) and one supra-national institute serving the European Union.
- Study trips to apex bodies and support institutes in four countries (Republic of Korea, India, Switzerland and Germany) which were deemed to be particularly instructive
- Fifty-two structured interviews with a total of 61 key informants drawn from the DHET, public FET colleges (principals and staff), private TVET providers, AET providers, higher education, organised and individual businesses, organised labour, SETAs, NGOs and civil society
- A review of public submissions on the *Green Paper* to the DHET that were relevant to the establishment of a South African Institute for Vocational and Continuing Education and Training
- A review of reports from other ministerial task teams that potentially had some bearing on the work of SAIVCET; these were the task teams on the Recognition of Prior Learning, on the establishment of Community Education and Training Centres, on SETA performance and on the Review of the National Certificate (Vocational)

## CHAPTER 3: FINDINGS

*“Around the world, vocational educational education systems are faced with the challenge of offering qualifications tailored to the needs of the labour market and meeting the requirements of trade and industry for skilled workers. Due to demographic developments, meeting the increased demand for skilled labour has become of the utmost importance. Thus, there is barely any vocational education system that is not undergoing reform efforts in order to improve quality and outcomes, to make qualifications more employment-oriented and more closely aligned with the world of work”* (BIBB 2011; BWP Special Edition, Editorial, p3).

### 3.1 LITERATURE REVIEW OF COMPARABLE TVET-SUPPORT INSTITUTES

The task team chose to focus on institutes that:

- Were specifically initiated to provide a range of support services to enhance the implementation of vocational education and training;
- Are organised or conduct their activities at a centralised, systemic level though they may be located outside of a central authority such as a national government department;
- Provide support services such as capacity building of staff, curriculum development, research, monitoring and evaluation and data analysis to TVET delivery institutions
- Have been in existence for at least five years and appear to be viable, recognised, and respected for the work that they do.

An initial overview of TVET apex bodies and support systems in 17 developed and developing countries quickly led to a focus on a few “leading-light” institutes that specialise in:

- the professional development of TVET teachers and trainers (the Swiss Federal Institute for Vocational Education and Training, and India’s National Institute for Technical Teacher Training and Research)
- applied research (Australia’s National Centre for Vocational Education and Research and the Korean Institute for Vocational Education and Training)

- policy formulation and advice (Germany's Federal Institute for Vocational Education and Training, BIBB)
- systemic coordination (SENCE in Chile)

In addition, the task team looked at the work of the European Centre for the Development of Vocational Training (better known by its acronym, CEDEFOP) that supports the development of vocational education and training policies across EU member countries.

The full text of the literature review is attached to the report as **Annexure A**.

In brief, the main institutes considered, and their contexts, were in:

### **3.1.1 SFIVET in Switzerland**

Switzerland's TVET system is characterised by:

- High levels of participation by the private-sector in all aspects of the system, including policy development, curriculum development and training delivery; this is seen in the extent to which professional associations influence regular curriculum reviews and in the fact that, on any given day, about 30% of all companies in Switzerland are employing apprentices, a higher participation rate by employers than in most other countries.
- High levels of quality and relevance to the economy; for example, more than 80% of Swiss youths undergo apprenticeships after completing their compulsory basic education and most go straight from training into employment, leading to an exceptionally high youth employment rate (95%). They are productive, too: Switzerland is consistently ranked in the top three of the World Economic Forum's annual Competitiveness Index and its apprentices have always been placed in the top three teams at the biannual World Skills contests.
- A high degree of permeability, with seamless articulation between training programmes and qualifications. This allows for lifelong education and training after nine years of compulsory basic education, at both secondary and tertiary level. It also ensures portability of qualifications, mobility between different institutions and programmes, and multiple exit and re-entry points.

The distinctive outcome of the Swiss TVET system is a comprehensive skills mix of, firstly, highly qualified artisans and technicians at the intermediate skill levels and, secondly, a spectrum of highly skilled personnel in the applied sciences.

The Swiss Federal Institute for Vocational Education and Training (SFIVET) is responsible for initial and continuing training of TVET educators. It also conducts research and development into vocational education and training, at both intermediate and tertiary levels, and is influential in policy development. Importantly, it frequently serves as a channel through which industry and professional bodies provide input into national curricula and training programmes.

### **3.1.2 NITTTR in India**

TVET in India, like almost everything else in that vast and diverse country, is characterised by huge scale and complexity. The *National Skills Development Mission*, to which all TVET delivery is ultimately linked, calls for the upskilling of 500 million people by 2025. To that end, 17 central government ministries conduct some form of TVET, with some functions being delegated to the states. The two central government departments mainly responsible for TVET are:

- i. The Ministry of Labour and Employment, which is primarily responsible for artisan and craft-skills training within industry; it accredits and quality assures 3,000 public and 7,000 private TVET institutions with a daily enrolment of ±1,400,000 trainees
- ii. The Ministry of Human Resource Development, which oversees TVET in public schools and universities, as well as the training of vocational-subject teachers.

One of the most striking features of India's TVET system is an extensive post-school network of colleges, polytechnics, and university-style Institutes of Technology. This infrastructure has produced a very large pool of highly skilled, mobile and globally-oriented workers which benefits both the growing Indian and the global economy. Indeed, India has become a major international centre for the recruitment of high-quality IT and engineering staff. Many IT and engineering workers leave India, but many return,

and both directional flows contribute to significant knowledge transfers and linkages across business entities that benefit Indian society.<sup>9</sup>

However, a World Bank study (2000), detailed several deficiencies in India's scientific and technical manpower development system that urgently need to be addressed if India is to continue to fulfil its huge potential for economic prosperity. Some of these will resonate strongly with South Africa. These deficiencies include over-centralisation and lack of autonomy and accountability of institutions. Most have little authority on faculty appointments, student admissions, structure and contents of programmes, student performance evaluation, and financial management. In terms of physical infrastructure, technology and infrastructure support is poor in many tertiary education institutions, especially in laboratories, communication lines, computer and IT, as well as in library linkages. In addition, resource constraints prevent attracting the best academic minds. The quality of provision in many post-school institutions is often poor and quality assurance mechanisms are weak (WB, 2005: 54).

Under the national Ministry of Labour and Employment, the principal institute offering support to the TVET sector is the Central Institute for Research and Training in Employment Services. It focuses mainly on labour market research and analysis, and offers some training to employers in industrial relations issues pertinent to the employment of tradesmen and craft workers. Thus, the Ministry of Labour and Employment plays more of a regulatory than a supportive role to TVET training institutions.

By contrast, the national Ministry of Human Resource Development operates a number of support agencies for TVET providers. Foremost amongst these is the National Institute of Technical Teacher Training and Research (NITTTR). Established in 1966, with a site in each of the four national regions, it shares a similar mandate to SFIVET - of providing for the professional development of all TVET teachers and trainers in the wider education system. It is distinctive for its primary focus on supporting TVET in the engineering sector through the professional development of engineering lecturers and trainers at 350 colleges, 850 polytechnics and dozens of universities. It conducts research, develops curricula to meet employers' needs and assists in the development of teaching and learner materials.

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<sup>9</sup> World Bank, 2005: p56

Also under the Ministry of Human Resource Development are the three Central Institutes of Vocational Education, which were established 1993 to support the implementation of a new vocational training stream in schools, mainly grades 10-12. Their main functions are to:

- Develop and renew curricula and courses, including guidelines, model textbooks, reference materials and other resources for vocational teachers
- Pre- and in-service training for vocational teachers
- Develop a national qualifications framework for vocational education.

While the private-sector is quite well-represented on the governing body of the NITTTR, the All-India Council for Technical Education (AICTE) provides an additional and influential forum for employers to give input on quality assurance, curriculum and qualifications issues. Through its power to sets norms and standards for the accreditation of TVET and engineering education in India, the AICTE has been instrumental in promoting quality technical education in the country in a more coordinated and integrated manner.

The National Centre for Educational Research and Training (NCERT) is an apex body responsible for conducting and supporting research on education, including VET. Its sub-units, the four Central Institutes of Vocational Education, are responsible for all NCERT-mandated research on vocational education. It also has an advisory role to the Ministry of Human Resource Development.

### **3.1.3 KRIVET in the Republic of Korea**

The Korean Research Institute for Vocational Education and Training (KRIVET) was established in 1997 by the then Prime Minister specifically to promote the employability of TVET students and thus address labour shortages in industry. Under the aegis of the Prime Minister's office, it operates in close collaboration with two ministries, Education, Science and Technology, and Labour.

KRIVET's specific functions have been quite changeable as the demands of the economy have changed, but its current focus is on:

- support HRD policies that lead to the establishment of a knowledge-based society

- support a demand-driven vocational competency development system that establishes and maintains the link between education, training and employment
- support the establishment of individual, organisational and social learning networks that accelerate social integration
- provide for the development and dissemination of career information
- act as a global hub for research projects on human resource development.

KRIVET is especially interesting to South Africa for two reasons:

- I. Traditionally, there was little formal engagement by Korean employers with the public TVET system. However, the government recognised that closer engagement was critical to the system's success. Hence one of KRIVET's specific roles is to establish and maintain the links between education and training institutions and employers.
- II. KRIVET has been very successful in helping South Korea make the transition from an industrialised, manufacturing economy to a knowledge-based one, an important element in the government's 'developmental state' objectives.

#### **3.1.4 NCVET in Australia**

The Australian TVET system is recognised as one of the most sophisticated in the world because it is:

- Industry led, in the sense that employers and industry representatives define what outcome is required from training
- Integrated, with the system jointly managed by state and federal governments
- Client-focused, flexible and responsive to client needs.

The National Centre for Vocational Education Research (NCVER), founded in 1981 and based in Adelaide, is one of the premier research centres globally on TVET. NCVER provides research and statistical information to a wide range of stakeholders, including federal, state and Commonwealth departments of education and training, TVET practitioners and providers, research and education institutions, international agencies, industrial skills councils, employer and employee-based organisations, and community organisations.

It funds research and builds research capacity, disseminates research findings, and holds briefing sessions to a wide range of interested parties.

The NCVET in Australia is an outstanding example of how a research institute can support a national TVET system by enabling government to make evidence-based policy decisions and create well-informed policies and regulatory environments.

### **3.1.5 BIBB in Germany**

Germany's TVET system is highly regarded globally because of its high quality dual system of secondary schooling – one an academic track, the other a vocational track. The vocational track is by far the largest field of education at upper secondary level, with approximately 53% of any age cohort trained for a recognised training occupation. After completing their training in the dual system, the majority of participants then take up employment opportunities as skilled workers. Later on, many of them make use of the opportunities for continuing vocational training.

The Federal Institute for Vocational Education and Training (BIBB) is a national research institution which works to identify future challenges in TVET, stimulate innovation in national and international vocational systems, and develop new, practice-oriented solutions for both initial and continuing vocational education and training.

BIBB also plays an active role within the academic research system. Its research is directed towards significant issues relating to vocational education and training and contributes to theoretical development. BIBB's research is of an interdisciplinary nature and is bound by academic research standards. It cooperates with institutions of higher education and research bodies, fosters up-and-coming academic talent and enables the field of academic research to gain access to its research data. BIBB also cooperates with international partners and offers consulting services worldwide.<sup>10</sup>

BIBB's responsibilities go beyond research activity, to include the development and updating of initial and continuing training occupations, the management and supervision of national and international TVET programmes, the support of in-company vocational

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<sup>10</sup> BIBB, 2009: pp1-2



training practice with training materials and training media, and the development of concepts for qualifying company trainers. BIBB works closely with federal and state-level ministries, employers' organisations, trade unions, professional associations and the various state-level chambers and offices responsible for vocational training.

### **3.1.6 SENCE in Chile**

*Servicio Nacional de Capacitacion y Empleo* (SENCE) is both an apex and support body for TVET in Chile. The defining features of SENCE are its decentralised structure and its location within a highly privatised TVET system dominated by the needs of employers and the private market for training.

SENCE has a fairly different role from the institutes in most other countries. It is a regulatory, administrative and financial body managing the national training system. The case study of institutes operating in the Chilean TVET sector illustrates the difficulty of identifying a single entity that undertakes all of the programmatic work necessary to promote and develop the TVET sector.

The Chilean National Council for Vocational Education and Training is a tripartite body representing government, employers and unions and it seeks to take Chile into the next phase of economic development – towards the knowledge economy. It is too early to determine what its exact role and impact will be.

The main functions of SENCE are managing the tax exemption scheme for employers who implement TVET and coordinating the training programmes for socially disadvantaged groups. These programmes are executed through training institutions, universities, educational institutions and centres of technical education.

It was set up as a regulatory, administrative and funding body managing the national training system. Nowadays, SENCE focuses on expanding the coverage of the programmes and intensifying entrepreneur training activities, through private agencies allocating money for training courses. SENCE also works on course quality and the provision of information about the system.

SENCE has focused on intervening in the vocational training system as a coordinator and regulator of training, particularly the training of unemployed and vulnerable workers.

It also has a large career counselling role, as well as managing the programme of tax rebates for employers who train.

### **3.1.7 CEDEFOP in the European Union**

The European Centre for the Development of Vocational Training (CEDEFOP) helps the European Commission and EU Member States to develop coherent and compatible TVET policies.

CEDEFOP has primarily a research and advisory role to governments and assists them in the development of policy on TVET. It specialises in comparative analyses across national systems and acts as a central clearing-house for national data, research reports, policy papers, comparative analyses of qualifications, etc. and provides specialised advisory services to government agencies in EU member countries. With its overarching remit from the national governments of EU member states, CEDEFOP has the ultimate 'bird's-eye view' of all their TVET systems. To that extent, it exemplifies a function that is almost entirely lacking in South Africa – the provision of consistent policy advice based on a strategic, long-term, system-wide view.

## **3.2 COMMON THREADS**

### **3.2.1 Exclusive focus on TVET**

With the exception of SENCE in Chile, which concentrates on entrepreneurial skills training, all the leading international support institutes have an exclusive focus on vocational and technical education and training for employment in the formal sector. They are not responsible for adult and other non-formal education in their countries.

### **3.2.2 Structure and Governance**

The review found two types of institute in terms of their structures. There are those falling directly under the direct authority of a government institution, and those which operate with a degree of autonomy as separate institutes accountable to a board.

KRIVET in Korea operates under the aegis of the Prime Minister's office, and is directly accountable to it. It bridges the gap between two ministries, namely Education, Science and Technology on the one hand, and Labour on the other. SENCE in Chile operates under the auspices of the Ministry of Labour and Social Security.

SFIVET, the NITTR, NCVER, BIBB and CEDEFOP have high degrees of institutional autonomy, and are accountable to their own boards.

SFIVET's board is accountable to the Federal Council, and accounts to it on the objectives determined in its mandate. The Board of NITTTTR is headed by an eminent person from industry. It falls under the apex body, the All India Council for Education and Training.

The Board of Australia's NCVER comprises representatives of the different tiers of government, industry, unions and the training authorities. BIBB has a stakeholder board (employers, employees and federal government) with equal parity. It falls under the legal supervision of the Federal Ministry of Education and Research.

CEDEFOP is an autonomous structure governed by representatives of government, employees and the state from each member state of the European Union.

### **3.2.3 High Level Participation of the Private Sector**

The TVET systems in Germany, Switzerland, Australia, and the European Union have extremely high participation rates from industry and the private sector.

Where the TVET support institute operates as an autonomous structure, industry has meaningful representation so that activities to support TVET institutions produce outcomes in line with their skills needs. SFIVET, BIBB, NCVER, CEDFOP and NITTTTR outcomes are illustrative of this. The chairperson of the NITTTTR Board of Governors is an eminent person from industry.

Where institutes operate under a government department, as does KRIVET, the importance of obtaining active private-sector participation is highlighted as a key organisational objective.

### **3.2.4 Funding**

Most of the institutes reviewed are funded directly by their respective governments. CEDEFOP is funded by the European Commission. Government allocations are usually supplemented by grants or service fees from clients. All research funded by the NCVER in Australia is contracted by various state departments, with additional contractual work coming from an assortment of other clients in both the public and the private sectors. KRIVET receives 44% of its budget from fees generated through contractual work.

### **3.2.5 Summary of Roles and Functions**

Although the support institutes discussed each have a primary focus, many also perform a range of additional roles. These are shown on the table on the following page:

**Table 2 : Type of International TVET Institution, Roles and Structure**

| Apex Body<br>(if separate<br>from<br>government<br>department) | Support<br>Institute | Primary Roles                     |            |                                 |  |                   |   |   |                |                                |   |                   | Structure                      |            |  |
|--|----------------------|-----------------------------------|------------|---------------------------------|--|-------------------|---|---|----------------|--------------------------------|---|-------------------|--------------------------------|------------|--|
|  |                      | Professional devmt of<br>teachers | Research   | TVET training and<br>regulation | Curriculum (to meet<br>industry needs) | Quality assurance | Develop teaching<br>materials and resources | Collaboration and<br>interface between role-<br>players | Qualifications | Advisory role to<br>government | Develop policy<br>frameworks and inform<br>policy | National planning | Under government<br>department | Autonomous |  |
| <b>Switzerland</b>   |                      |                                   |            |                                 |  |                   |   |   |                |                                |   |                   |                                |            |  |
| OPET   |                      |                                   |            | yes                             |  |                   |   |   |                | yes                            |   |                   | yes                            |            |  |
|  | <b>SFIVET</b>        | <b>yes</b>                        | <b>yes</b> |                                 |  |                   |   | <b>yes</b>  |                |                                |   |                   |                                | <b>yes</b> |  |
| <b>India</b>   |                      |                                   |            |                                 |  |                   |   |   |                |                                |   |                   |                                |            |  |
| IAMR   |                      |                                   |            |                                 |  |                   |   |   |                |                                |   | yes               |                                |            |  |
| AICTE  |                      |                                   |            | yes                             | yes                                    | yes               |   |   | yes            |                                |   |                   |                                |            |  |
| CIVE   |                      | yes                               | yes        |                                 | yes                                    |                   | yes   |   |                | yes                            | yes   |                   | yes                            |            |  |
|  | <b>NITTR</b>         | <b>yes</b>                        | <b>yes</b> |                                 | <b>yes</b>                             |                   | <b>yes</b>                                  | <b>yes</b>  |                | <b>yes</b>                     |   |                   |                                | <b>yes</b> |  |
| <b>Australia</b>   |                      |                                   |            |                                 |  |                   |   |   |                |                                |   |                   |                                |            |  |
| MCVTE  |                      |                                   |            | yes                             |  |                   |   |   |                |                                | yes   |                   |                                |            |  |
| MCEETYA  |                      |                                   |            |                                 |  |                   |   |   |                |                                | yes   |                   |                                |            |  |
| Skills Australia   |                      |                                   |            |                                 |  |                   |   |   |                | yes                            |   |                   |                                |            |  |
|  | <b>NCVER</b>         |                                   | <b>yes</b> |                                 |  |                   |   | <b>yes</b>  |                |                                |   |                   |                                | <b>yes</b> |  |
| <b>South Korea</b>   |                      |                                   |            |                                 |  |                   |   |   |                |                                |   |                   |                                |            |  |
|  | <b>KRIVET</b>        |                                   | <b>yes</b> |                                 |  |                   | <b>yes</b>                                  | <b>yes</b>  | <b>yes</b>     | <b>yes</b>                     |   |                   | <b>yes</b>                     |            |  |
| <b>Germany</b>   |                      |                                   |            |                                 |  |                   |   |   |                |                                |   |                   |                                |            |  |
|  | <b>BIBB</b>          |                                   | <b>yes</b> | <b>yes</b>                      | <b>yes</b>                             |                   |   | <b>yes</b>  |                | <b>yes</b>                     | <b>yes</b>  |                   |                                | <b>yes</b> |  |
| <b>Chile</b>   |                      |                                   |            |                                 |  |                   |   |   |                |                                |   |                   |                                |            |  |
| CNFP   |                      |                                   |            |                                 |  |                   |   |   |                |                                |   |                   |                                |            |  |
| Chilecalifica  |                      |                                   |            |                                 |  |                   |   |   |                |                                | yes   |                   |                                |            |  |
|  | <b>SENCE</b>         |                                   |            | <b>yes</b>                      |  |                   |   | <b>yes</b>  |                |                                |   |                   | <b>yes</b>                     |            |  |
| <b>European Union</b>  |                      |                                   |            |                                 |  |                   |   |   |                |                                |   |                   |                                |            |  |
|  | <b>CEDEFOP</b>       |                                   | <b>yes</b> |                                 |  |                   |   | <b>yes</b>  |                | <b>yes</b>                     | <b>yes</b>  |                   |                                | <b>yes</b> |  |

In summary, then, the roles and functions most commonly performed by the TVET support institutes covered in the literature review are:

- **Research** (all except for SENCE in Chile).

Research-focused organisations produce research that assists their governments in the development and review of TVET policy, as well as on best practice, and other action research on TVET outputs areas. Their activities, and funding, assist to develop research capacity within other higher education institutions in their countries. BIBB (Germany), NCVET (Australia), and KRIVET (South Korea) are good examples, as is CEDEFOP in relation to the European Union.

Institutes that focus primarily on professional development of teachers also play an important research and development role in the TVET field in their respective countries (SFIVET and NITTTR), particularly action research and research that will provide inputs for the development of curricula, innovative methods, processes and practices that will improve the teaching and learning environment in the sector.

- **Linkages**

All the support institutes reviewed play an important role in facilitating linkages, collaboration, and interface between all role-players in the sector. These roles are explicitly stated either in their mission or in their objectives. SFIVET acts as a central point of contact for all partners, namely trade associations, professional organisations, and the cantons. One of NITTTR's objectives is to establish and foster collaboration between industry, government, and national and international education and training institutions. KRIVET has a specific role to establish and maintain links between education and training institutions and employers.

- **Professional development of educators in the TVET sector**

SFIVET (Switzerland) and the NITTTR (India) have this as their main purpose, and focus on both initial and continuing training and development.

- **Advisory role to government**

There is no clear-cut case for which types of institutes play an advisory role to government. In some countries, as in Australia, it is the apex rather than the support institutes that do this, whereas in India, South Korea, Germany and the European Union, the support institutes do it.

- **Development of policy frameworks**

Apex bodies in Chile and Australia develop policy frameworks, although the NCVER research in Australia contributes significantly to this. BIBB and CEDEFOP also play a significant role in this in their contexts.

- **Development of curriculum to meet industry needs**

In most cases, support institutes provide research to others to inform this activity. In India and Germany, the support institutes NITTTR and BIBB, carry out this role themselves.

- **Development of learner materials and resources**

NITTTR in India and KRIVET in South Korea develop learner materials and resources. KRIVET, with South Korea having one of the highest rates of Internet usage in the world, has a strong interest in alternative forms of delivery, and has a division that focuses specifically on e-learning.

- **VET regulation**

Only Chile's SENCE and BIBB, to some extent, carry out this function, although others may contribute to the development of regulation. In Switzerland, India, and Australia, regulation is the responsibility of other apex bodies.

- **Qualifications and quality assurance**

Support institutes are generally not qualification or quality assurance bodies. KRIVET is the exception here, being the only one that develops qualifications.

- **National planning**

None of the support institutes reviewed carry out this role.

### **3.3 OTHER LEARNINGS FROM THE VISITS TO SELECTED INSTITUTES**

Findings from visits made to some of the leading overseas institutes in many ways complement the majority-views that emerged from the desktop review. These included the following insights:

#### **3.3.1 Size of the institutes**

It is best for an institute to start small and grow organically. Most of the leading overseas institutes did so. SFIVET in Switzerland, for example, was established in 1972 with a small number of staff serving primarily the German-speaking cantons. As the institute proved its worth, it opened a second campus in 1975 for the French-speaking region of Switzerland and a third in 1991 for the Italian-speaking region. KRIVET (South Korea) likewise came into existence as a small agency within the Prime Minister's office but, as its value became clear, it expanded to the size it is today. The CIVE in Bhopal, India, also started very small in 1993 and until 2011 had only 16 staff. Only now that its strategy is fully developed will it expand – to 250 staff over the next few years.

The NITTTR (India) and BIBB (Germany) are both today large organisations. The NITTTR has a staff of approximately 300 while BIBB has 630, including 170 research staff and 30 interns in the administrative and human resources fields. However, these are mature institutes operating in countries with highly developed TVET systems and extensive of capacity in the field. This level of capacity does not, as yet, exist in South Africa. Indeed, it would be part of a national institute's mandate to develop such capacity over time. To create a large organisation from the start would necessitate poaching skills from elsewhere in the sector – 'robbing Peter to pay Paul'. SAIVCET should start from a small organisational base and grow as its programmes became more influential and effective. The senior managers whom the task team's delegation met at BIBB and SFIVET were particularly clear in this advice: start small, do first things first and do them properly.



### **3.3.2 A Clear Mission and Focus**

The leading international institutes share a notable clarity of purpose. They do not try to be 'all things to all people'. The task team's delegation was told that 'KRIVET's core mission is simple and clear: Match today's TVET to today's industry; specific functions to address the mission can be – and have been - added or subtracted every year.' As a result, KRIVET is also a remarkably flexible organisation, able to respond to a changing context.

For South Africa, KRIVET's single-minded approach to achieving its core mission is noteworthy. All else is subject to achieving that. Before KRIVET, South Korea may have had a good college system in terms of academic standards and accessibility, but something was lacking: an ability to prepare young people for employment in a changing Korean economy. KRIVET was initiated specifically to help the colleges fill that gap and, with an almost laser-like focus, has done so with distinction.

BIBB and SFIVET are similarly clear about their primary roles and functions, research and policy-advice in the case of the former and teacher-training in the case of the latter. NITTTR, with its huge 'client base' of 16 Institutes of Technology (effectively universities of engineering), 350 engineering colleges and 850 polytechnics, concentrates on providing pre-service and in-service pedagogical training to the instructors at those institutions.

Confronted with many demands, 'must-haves' and 'nice-to-haves', SAIVCET will need to be similarly ruthless about pursuing only one or two clear, high-level strategic objectives.

### **3.3.3 Emphasis on expertise rather than infrastructure**

Organisations everywhere complain about inadequate funding. The successful ones put most of what they have got into attracting and retaining high-calibre staff. This was immediately evident to the task team delegations that visited overseas institutes, nowhere more so than in India. None of the premises visited there were especially impressive, but the staff at the institutes certainly were. The NITTTR in Bhopal, for

example, has an annual budget of ±R85-million to cover all its costs, including 300 staff. Sufficient, though not generous, this has mainly been spent on staff who have high levels of expertise - typically a Master's or PhD degree in a technical field in addition to pedagogical training. The relevance and currency of their classroom experience is maintained by teaching part-time, either at a nearby college or polytechnic, or in one of the Master's-level engineering courses offered by NITTTR itself. The staff at PSS CIVE were similarly impressive in both their academic qualifications and their professional experience.

It almost goes without saying that in Switzerland and Germany the faculties of SFIVET and BIBB were extremely well qualified, so much so that the best universities in South Africa would surely envy those institutes their teaching faculties.

It will take SAIVCET time to build up similar in-house expertise. From the start, however, SAIVCET must utilise whatever existing expertise it can harness and put its money into developing people's capabilities rather than into 'bricks and mortar' At the end of the day, what makes a good organisation is the quality of its people, not its buildings.

### **3.3.4 Active Cultivation of Partnerships**

All the institutes visited by the task team emphasised the importance of partnering closely with industry to ensure that the public TVET system meets the needs of the economy.

BIBB and SFIVET pay a great deal of attention to co-ordinating stakeholders, and building a partnership spirit. *"Germany's dual system is recognised as setting an international benchmark in work-based learning, acceptance of national training and quality standards, and in co-operation between state, private sector and social partners."*<sup>11</sup>

The private sector in Switzerland is an active and committed participant in SFIVET, and exchanges of personnel are common.

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<sup>11</sup> BIBB: 2011, p3

KRIVET's motto ("*With you*") expresses its participative approach and signals to private-sector companies that their interests are paramount. This is illustrated by the fact that KRIVET only does applied, action-based research at the behest of industry partners - not academic or 'blue-sky' research. (In fact, its Korean name does not have the word 'research' in it because KRIVET sees itself not as an academic institute but as a doer of whatever is necessary to align TVET with the needs of industry.) South Korea, it must also be said, has a high degree of policy focus, social homogeneity and cohesion.

The NITTTTR has strong industry connections and makes extensive use of staff exchanges. It also strives for community development through TVET, by establishing outreach programmes and extension centres in surrounding villages.

The lesson for SAIVCET is clear: TVET works best when it works with and for industry. That often makes for complicated relationships and time-consuming consultations but it pays off in the long term.

### **3.3.5 High levels of institutional independence**

With the exception of KRIVET, overseas institutes are highly independent of government, although they have government representation on their boards. This independence has developed over time. BIBB and SFIVET's strong advice on the establishment of an institute in South Africa is that it be located outside of a ministry and have an independent board.

## 3.4 FINDINGS FROM THE INTERVIEWS WITH STAKEHOLDERS

### Introduction

The Task Team conducted a series of interviews with role-players and people with expertise in the FET college, vocational education, SETA, adult education and higher education domains. Respondents included DHET personnel in AET and FET, public FET college principals and staff, private TVET providers, AET providers and experts, academics in Higher Education and from outside development agencies, organised and individual business, organised labour, SETAs, NGOs and individuals with specific expertise. In total, views were elicited from 61 respondents through 52 interviews.

The respondents, many of whom have long track records in education and training, also had extensive experience in the post-school education and training field. Most of them hold senior positions or responsible portfolios, and displayed a deep understanding of the needs of providers in the vocational and adult education environment. Interviewers asked a range of questions pertaining to the function, form, structure, governance, funding of an envisaged SAIVCET, and elicited additional relevant comments. The schedule of interview questions is attached to the report as **Annexure B**.

Responses were collated across all respondents for each question, and recurrent themes identified for each of the elements or features of a new SAIVCET. The integrity of the themes expressed is based on the degree of convergence of views gathered from the various respondents on a particular issue. The issue of 'role and function' of SAIVCET (Q3,5 and 6) garnered the most substantive comment relative to the other questions, followed by views on the 'idea of a national institute' (Q2). However, comments on these matters were also scattered across responses to the other questions and these have been incorporated in the appropriate sections below. Extracts from the interview transcripts have been used to illustrate overall evaluations of the responses.

#### 3.4.1 Responses to the Idea of SAIVCET

Responses here could be characterised as 'cautiously positive', since 80% of respondents agreed that a 'body' for vocational and continuing education was a good idea, but qualified their positive responses, making them conditional on how the institute would operate, its capacity, expertise, ability to coordinate, non- duplication of other structures and so on, for example:

- *“if such an Institute is managed well, has some expert capacity, is funded appropriately, has a clearly construed mandate...Yes”.*

The list of envisaged functions is too broad. An institute cannot be seen as a panacea for all the challenges in the sector. The SETAs are good examples of “*mandate creep*”, where they have had to deal with any number of skills related issues.

- *“...how it will operate is the issue”.*
- *“if it is able to pull all strands and advisory bodies, inputs from all angles together...it will be a good thing. If not, it will just be an additional body and a waste of time”*
- *“if just another organisation on an already cluttered policy landscape, then it should be aborted immediately”*
- *“an independent institute...professional, not bogged in bureaucracy, or getting involved in political activities”*
- *“...need to be staffed by experts in TVET and focused on outcomes”*
- *“...pros and cons – depending on the functions...”*
- *“depending on where it is created and how it will function”*
- *“if properly formulated...”*
- *“...(if) agile and flexible rather than bogged down in government regulation”*
- *“yes if outside the bureaucracy”*
- *“(if) it ties together all the work across the sector...brings coherence and coordination and identifies the needs...then it would be good”.*
- If it had guaranteed, sustainable funding. The examples of SAQA, which has a structure but is not funded properly, and the QCTO, which has also been hamstrung by funding issues, are illustrative. There was concern that institutionalising the functions needed could “*create another empire with a gatekeeper*”. As a result, funding would be skewed to that rather than towards concrete projects.
- If it does not replicate what is being done elsewhere. Many of the proposed functions are carried out by other role players, many of whom are already engaged in turf battles. Their relationship with an institute was questioned. Some of these are the HSRC (already allocated money for research), the NSA, SETAs, SAQA, CHE, Umalusi and the QCTO. Thus the roles of other institutes and advisory bodies need clarification.

Support for the idea of an institute was for how it could add, enrich and utilise existing capacity in the absence of any other support interventions. It was thought it would bring more coherence to the sector in terms of thinking, planning and implementation, and by building synergies between FET colleges, Universities of Technology, and AET. It could also help to co-ordinate TVET programmes within government, between government and the private sector, and pull together different strands and advisory bodies.

The 20% of respondents who were negative about the idea of an institute, cited reasons such as the following:

- *“can functions not be taken up in DHET?”*
- *“current organisations have enough difficulty establishing themselves in numerous boundary battles”*
- *“not sure what the rationale and thinking would be to set up another board or institution”*
- *“will they do differently what DHET was not able to do?”*
- *“when you try to establish a new structure in SA it takes a long time, involves a lot of bureaucracy, produces very little, and then makes absolutely no difference to the grassroots”.*

Additionally, there were concerns about the shortage of TVET experts in the country. Capacity in the sector is seen as weak and DHET has many vacancies. SAIVCET could draw capacity away from where it is needed on the ground. Even universities are struggling to find experts. There are too few people to staff a new institution without depleting existing ones.

Among private TVET providers, a majority were cautiously positive towards the idea of an institute. Even those opposed to the idea agreed that some of the proposed functions need to be discharged but they felt that this could best be done by the DHET itself. Government officials supported the idea of a dedicated institute, with some of the qualifications mentioned above. Labour respondents strongly supported the idea, with private sector employers being fairly divided. Academic and experts offered qualified support. Among the adult educators, those operating in the more formal domain supported the idea, with greater ambivalence expressed by those advocating inclusion of more non-formal and lifelong learning into the post-school framework.

### 3.4.2 Roles and Functions

This section covers three questions that dealt with the roles and functions of SAIVCET, i.e. what role it should play, what specific functions are absolutely necessary to perform, and what specific functions are not necessary for it to do. Respondents tended to answer these questions in an inter-related way – roles were described as slightly broader than functions but by and large described similar activities. The roles and functions on which there was agreement therefore are taken from comments in all three questions, as well as those extracted from other questions where respondents referred to the role/s of an institute. The bolded themes are used as broad categories in which to house related concepts used by respondents. Because of the substantive nature of comments in this section, numbers are used simply to indicate the volume/strength of responses to the particular issues, illustrated by extracts from the transcripts as well.

The overwhelming majority of respondents agreed that SAIVCET *should perform* the following roles (from highest to lowest number of responses):

- **Coordinate across all parts of the system:** collaboration, coherence, partnerships, articulation, dialogue (31). For example :
  - *“Maybe the institute should coordinate functions rather than bring them all in-house, and use the expertise that already exists elsewhere”*
  - *“promoting dialogue between colleges, employers, SETAs would be an important role”*
  - *“promote articulation between the various training entities”*
  - *“strengthening collaborative partnerships in the FET field”*
  - *“make sure all strands, bodies are pulled together”*
  - *“facilitate pathways into universities”*

Linking supply and demand factors (providers and employers) is an important value-adding role. The institute should use its strategic role to facilitate better understanding of the skills needs of the economy, including of large infrastructure developments. Better co-ordination of this nature will assist to develop relevant curricula. It needs to look at *“the big picture”*, of who is doing what, and then fit these together in a coherent approach of support to colleges.

It can play a role in facilitating partnerships between FET colleges and the workplace, to address blockages and create a platform for real meeting. This must secure high level input from employers on matters impacting on training, such as technological change.

Importantly, by becoming a credible institution within the employer community, it must facilitate partnerships between government and private sector employers.

- **Commission or conduct research to inform the sector:** policy evidence base, applied research, forecasting, data analysis, best practice, curriculum development, management information (26).

In its research role, the institute should develop in-depth knowledge of employers' needs, align curriculum towards those, and be guided by cutting-edge linkages with universities. Its seamless access to baseline information on curriculum development, lecturer development, and data management amongst other things would assist the sector to develop tools, guidelines, methodologies and approaches. Additionally, it should co-ordinate information on migration, skills need, higher education, and adults outside of the system so that it can forecast needs.

An institute should not necessarily do the research itself, although it may need to do some of it. Rather, it could advise, co-ordinate, support financially and with expertise the few existing pockets of research in this area, including case study and best practice analysis. This needs to include assisting colleges to conduct research into their own practice, and then assist to disseminate the lessons.

Specific responses included:

- *“must be able to look at impact of skills initiatives that have taken place – maybe that’s where things need to be monitored and evaluated”*
- *“research...should be more of a role for promotion and translation of research into usable products”*
- *“research and development aimed at promoting creativity and innovation in the TVET curriculum...in line with latest industry developments”*
- *“forecasting skills needs in relation to economy, and educational institutions”*



- *“The institute should set the research agenda and then create partnerships for its development”*
- *“bring research to the threshold of policy relevance...utilisation-focused, strategic research”*
- **Facilitate, support and monitor projects/initiatives** in the field, e.g. in lecturer development; coordinate, consolidate (11):
  - *“The institute could play a monitoring and evaluation role regarding interventions that are taking place...what is being provided, to whom, outcomes and so on...”*
  - *“facilitate programme, curriculum and lecturer development against the backdrop of the institute not being a service provider”*
  - *“coordinating and consolidating the efforts in the sector”*
  - *“support partnerships between colleges and other players to make things happen”.*

Professional development of college lecturers was seen as a central function for the institute to carry out, although once again, not necessarily with it doing all the implementation itself. It would be important for the institute to set the lecturer development framework and criteria for the training of lecturers, and then facilitate partnerships (for example, with Universities of Technology and Universities) to deliver the training.

- **Strategic, high level, advisory body** to Minister and the DHET; provide leadership (11):
  - *“The institute could do high level advocacy and information sharing”*
  - *“operates at a strategic level – not implementing itself but seeing how implementation is happening”*
  - *“must be high level institute that does not deal with operational issues, advises on policy, very forward looking”*
  - *“think-tank that anticipates trends and advises the Minister and the wider sector on policies, approaches, strategies and appropriate interventions”*

An institute playing a strategic advisory role, influencing policy and giving advice on implementation would create high value.

- **Support accreditation and quality assurance: benchmarking; mediation of quality assurance (8)**

FET colleges, in particular, would like the institute to help streamline accreditation processes. It is “*a big challenge for FET colleges to attain accreditation*”, as there are so many bodies a college may need to be accredited with.

- **Provide standardised materials (7)** (electronic access was also suggested here)
  - “*Feed curriculum materials down to the point where learners are*”
  - “*content needs to be in the public domain...colleges have to do it all on their own, there is no capability and it is extremely costly*”

The institute should look at innovation and different modes of delivery - for example, the use of visuals, computers and technology for learning. More innovative methods of delivery could mean that colleges make better use of existing facilities, a critical issue in view of the need to expand capacity within the FET college system.

- **Raise the profile of VET: advocacy (5)**

The institute should offer high level advocacy and information-sharing, provide leadership and “*champion the re-positioning of the TVET sector*”.

As the champion of the TVET sector, the institute needs to work to change perceptions of the college sector so that vocational education is seen as a real option. Its activities, including career advice in schools, should mobilise support for artisan occupations, and advocate a clear training route for these.

- **Upgrade curricula (5)**

The institute needs to update and support curricula, and commission research on curricula where necessary. It must be the “*...intermediary between education and business/industry to develop relevant curricula*”. It must “*ensure curriculum development is carried out with industry to ensure that TVET outputs are relevant to industry’s skills requirements*”.

Other roles/functions that were mentioned included:

- leadership and management development of college staff(4)
- plan lecturer professional development (3)
- deliver lecturer development (1)
- develop materials and deliver training (1)
- support adult education more (1)

Looking at which constituencies supported particular roles and functions for the institute, responses were fairly similar across the board. As could be expected, respondents from the FET sector generally believe that an institute should assist with capacity development, linkages and assistance with accreditation and quality assurance, as well as research into curriculum. Government, private sector and FET respondents see an advisory role for the institute. With their concerns about skills and employment, private sector and labour, joined by some FET people, were explicit about the institute playing a role in aligning curricula with the needs of the economy. Academics and individual experts, and government, tended to focus on research, co-ordination across the sector, and assistance to FET colleges.

### **Roles and functions SAIVCET should not perform**

Responses to this question were also found in the previous question, since many respondents, when outlining the functions that SAIVCET *should* perform, also mentioned what it *should not* do, as well as *who should* perform those functions instead. There was a high degree of synergy in responses along the lines that SAIVCET should avoid duplication of existing functions and, especially, should not do the job of the DHET. This is evident from the following quotations:

- *“...rather draw in expertise to do things that they are good at doing rather than the institute trying to do them”*
- *“research should remain a function of the HSRC and universities”*
- *“not conduct its own research internally – rather commission and drive research”*
- *“there are many good things happening that people have been quietly carrying on with”*
- *“...should not be involved in delivering training for FET college lecturers. It should leave such a function to UOTs and HEIs”*

- *“the Green Paper specifies a range of functions that are already being carried out by other bodies and agencies”*
- *“...must not do the actual work...(such as) go and teach teachers and run an institution – rather make sure that those that do are yielding required results”.*
- *“...should not duplicate the remit of any other body”*

Additionally, most respondents felt that SAIVCET **should not:**

- *“...deal with operational issues”*
- *“take over the functions of the DHET”*
- *“do quality assurance – there are just too many quality assurance bodies – if it delivers training it can’t be a referee and a player”*
- *“be a service provider”*
- *“formulate policy” – DHET does this*
- *“labour market research...HSRC already responsible for this”*
- *“be a data collection unit – job of DHET EMIS”*
- *“do materials development – can advise on it”*
- *“be too centralised...look at provincial activities and the gap in what’s happening on the ground”*
- *“be involved in human resource and labour relations issues or in regulation”*

### **3.4.3 Main Clients**

Respondents generally thought that the institute could offer service to all players in the TVET sector, although its main focus should be the FET colleges (management, lecturers, and students). Important users of its products and services should also be the DHET, including its policy planners and provincial units, employers, and private providers, including industry training centres.

### **3.4.4 Structure**

The responses to this question showed significant overlaps between Q7 and Q9 (To whom should the national Institute be accountable and how?), as well as with Q12 which asked for any other comments. Responses to the issue of structure are therefore drawn from across these three questions.

Themes dealing with structure and governance of the institute emerged as follows, and covered size, shape, location, board and accountability.

Most respondents favoured a lean, flat, small structure which could increase its capacity by outsourcing work. Many cautioned against creating a large bureaucracy that would slow down response time. Some argued for decentralisation in order to bring assistance closer to where it was needed: *“Service delivery points should be as near as possible to implementation.”*

While a small minority favoured a structure within the DHET, most advocated a national structure outside the DHET, governed by a board that would be widely representative but not a stakeholder body. Question 9, which dealt with the accountability of the institute, revealed that an overwhelming majority were in favour of the institute having a board that somehow reports to the Minister but is placed outside the DHET. The following excerpts from the interview transcripts provide an overview of comments in this regard:

On size and shape:

- *“lean tight structure, not bureaucratic monolith...decentralised approach”*
- *“bureaucracy at a bare minimum”*
- *“a relatively flat structure without too many layers of authority which impede quick responses”*
- *“tight structure with clear and dedicated remit to advise decision makers. Head should be a full time TVET expert with an appropriate management team...should not be a stakeholder body but engage with stakeholders where appropriate”*
- *“small staff that outsources work is always better”*
- *“a relatively lean central office, a large virtual institute of associates and collaborative agreements with units in universities and some colleges”*
- *“flexible structure that can change with needs”*

- *“independent from public service regulations which would make its operations inflexible...about 30 professionals and 10 administrators...spend most of its budget through a network of partners”*
- *“directorates to reflect priority areas”*

On a centralised or decentralised structure:

- *“could be centralised or decentralised depending on strategy”*
- *“first centralise it within the DHET and then start looking at other structures”*
- *“maybe small national structure with regional arms...what happens to the provincial structures that currently provide support to colleges?”*
- *“have a strong presence in the DHET – at least a Deputy Director with own branch”*
- *“need programmes and activities to be anchored – can’t do this on an ad hoc basis as it will not be someone’s job and will get no attention”*

On the Board:

- *“Must have constituent stakeholders on the board – government, business, labour”*
- *“advisory board, strategic in function e.g. CSIR, HSRC, NRF”*
- *“should have representatives of the colleges, DHET and also from the workplace – to address coordination between colleges and the workplace”*
- *“it must be people with expertise, but can’t exclude role-players in the sector”*
- *“needs to draw in people on the ground”*
- *“Independent body with own board”*
- *“Industry must drive it...a board with teeth”*
- *“engage private sector on non-formal side as well...include civil society”*

On accountability:

- *“Board must report directly to the Minister”*
- *“to Parliament via Minister of DHET”*
- *“Board should provide regular reporting to the Minister, DHET and sector”*

### **3.4.5 Funding**

There was little variation in the responses to this question. Given that almost all respondents saw SAIVCET as a creation of the Minister and DHET, there appeared to be general acceptance that it should be funded out of a national source such as Treasury, the National Skills Fund or SETA funding, although views on which national entity should manage the funding or how it should be dispensed differed. A few included private donor or business funding as an additional source. A number of respondents cautioned that treasury grants should be guaranteed and that government funding should not imply control. They stressed the importance of the institute maintaining an 'independent' voice.

Responses on funding ranged as follows:

- *“block grant for basic functions and activities”*
- *“earmarked funding for specific projects”*
- *“centres (providers) should not be charged for services”*
- *“importance of ensuring that the institute is properly funded to ensure its sustainability”*
- *“SETA funding or National Skills Fund”*
- *“maybe a top slice of the skill development levy funds”*
- *“other funded organisations for research work”*
- *“Ring-fenced DHET budget”*
- *“business and industry as well as government – that will help to ensure that the outcomes are closer to what business and industry need”*
- *“should have flexibility to raise funding from donor and business communities”*

### **3.4.6 Relationships with other bodies in the sector**

The theme of partnerships and linkages that came through strongly in earlier responses resonated throughout the responses to this question. The clear recommendation from respondents is that SAIVCET should play a strong coordinating role that feeds into and draws from other entities that cover similar ground, particularly in terms of research and development. An observation was made on the weak capacity in the field and that

duplication of research functions could dissipate that capacity further. An overview of the sentiment on this is provided by the transcript extracts as follows:

With regard to the institute's relationship with other role-players:

- *“it should involve such structures...should establish project reference groups”*
- *“co-ordinate or commission research...do not build own research capacity”*
- *“coordinate support to colleges...repository for information...a point of contact that brings things together”*
- *“form linkages and build relations, not duplicate functions”*
- *“universities can feed their database information into SAIVCET, to inform planning”*
- *“engage the private sector and professional bodies”*
- *“local agencies need to feed into it and draw information from it...have a regional or provincial presence”*
- *“relate to key role players within a consultative mode”*
- *“see other role-players as partners...quality assure role-players’ work in the sector...use the provincial players in their contexts for provincial needs”*
- *“close working relationship without duplicating their remit”*
- *“should serve as hub which draws in expertise in research and curriculum development”*
- *“partnerships with existing organisations rather than take over this work”*
- *“acknowledge differentiated roles of players in the sector”*
- *“current research capacity is weak and another structure could spread this even thinner.... SAIVCET could stimulate research and facilitate researchers’ ability to communicate with end users”*
- *“promote partnerships between government institutions and industry...links that benefit students and lecturers...providing information to industry”*

#### **3.4.7 Relationships with FET colleges and provincial bodies**



In light of the detail on functions and structure of SAIVCET provided by respondents, as well as Q10 immediately preceding, this question provided brief responses which touched on previous issues raised. The point of this question was the issue of the national SAIVCET's relationship with provincial bodies.

It seems imperative that the institute creates a role for itself that everyone sees value in. It should improve and support a weak FET college sector. Thus, the institute should support provincial regional capacity by working with regional offices to understand provincial economic dynamics. Umalusi uses a similar model, which works with colleges wherever they are. It could also:

- Set up provincial capacity to play a co-ordinating role and use what already exists to build strong provincial networks.
- Invest significantly in provincial authorities, including dissemination of events, training courses and workshops.
- Form networks with existing organisations across the country.

Looking at the programme quality mix, and differential offerings among colleges in different regions is an important function an institute could perform, for example, between rural and urban areas. Urban colleges may want more developed articulation with higher education institutions. Rural colleges may want programmes more in tune with their local needs. An institute that adds value would also pay attention to regional and sectoral initiatives that are geographically based, and around certain industries, for example the mining industry in certain provinces. It could then facilitate linkages and partnerships between those, and the FET colleges in the region, and support them to play a role.

Suggestions for interaction between SAIVCET and provincial bodies were as follows:

- *“on the basis of a ‘framework for interaction’...advisory and not decision making...‘serve’ FET colleges rather than dictating”*
- *“don’t duplicate DHET functions”*
- *“use the capacity that exists in provinces to build strong provincial networks that service national goals...capacity must be built close to where colleges and other providers need it”*
- *“support institutions...draw college data for analysis and planning...work with provincial structures to understand provincial economic dynamics”*

- “CETS should have a direct relationship with the institute”
- “invest in provincial dissemination events, training courses and workshops”

### **3.4.8 The value of the interviews**

The interview data is representative of voices on the ground, respected practitioners and players in their fields, who in the main displayed in interviews their deep knowledge of the policy environment within which vocational and continuing education operates. Responses were largely thoughtful and carefully considered, and brought collective local expertise, experience and wisdom into the deliberations of the task team. This highly contextualised source of information on the potential form, function, structure, funding and governance of SAIVCET has to be weighed up against the comparative information provided by a literature review of international institutes and study visits undertaken by the task team to some of them.

## **3.5 SUBMISSIONS TO THE DHET ON THE GREEN PAPER**

The task team received from the DHET submissions on the *Green Paper* relating to the establishment of SAIVCET. The DHET summary of responses did not identify the responding organisations, or even the sector from which they came. It is therefore impossible to weight the responses. However, they may be categorised as follows:

### **i. Points generally agreed upon:**

- There is a need to establish SAIVCET
- Lecturer development is critical, as well as a review of salaries
- Empowering of college management is crucial
- Strong college/industry linkages are critical
- Colleges should offer effective career advisory services to students
- The status of colleges should be enhanced
- Funding of SAIVCET is likely to be problematic
- Articulation issues should be an area of focus

- Industry linkages should be strengthened
- More comparative research should be done on international TVET systems
- Work should be done on effective partnerships with good providers

ii. **Areas of contradictory comment or disagreement:**

- Private TVET colleges should also be supported and even funded
- All TVET education should be free for students
- SETAs should fund skills programmes at colleges in full
- Quality courses should be quality assured by the QCTO
- A college star rating should be introduced and publicised
- A student voucher system should be introduced
- The institute should be established within a university
- NC(V) courses in engineering should automatically culminate in a trade test

iii. **Additional individual responses:**

- Colleges should remain a provincial competence
- AET should reside in a separate institution
- The NC(V) should be offered at technical high schools, not colleges
- Industry specific colleges should be established (e.g. engineering colleges)
- Short courses should be offered to support entrepreneurial development
- A simple roadmap of TVET pathways, linkages, articulation routes should be drafted and communicated to stakeholders
- Colleges, like SETAs, should publish an annual report, subjected to national scrutiny
- The UK college evening class system should be introduced
- The acronym SAIVCET should include an O for occupational (e.g. SAIVOT)
- One respondent did not support the establishment of the institute at all
- The role of the NSA should be re-examined for the future
- The problems of the basic education system need focused attention

- Public FET colleges should embark on greater specialization of course offerings

These comments obviously reflect a range of views. Overall, though, they point to the issues that the task team has tried to engage with in the course of carrying out its work. These include whether there is a need for an institute like SAIVCET, how it should operate, its roles, linkages with the workplace and higher education, curriculum issues, the need for certain kinds of research, and the place of adult education and training.

These will all be addressed in the analysis and recommendations in Chapter 4.

### **3.6 INPUTS FROM OTHER MINISTERIAL TASK TEAM REPORTS**

The Minister established a number of other task teams to investigate aspects of its vision for a post-school sector. Those with specific relevance to the establishment of SAIVCET are the task teams on Community Education and Training Centres (CETCs), Recognition of Prior Learning (RPL), SETA Performance, and the NC(V) qualifications. A brief outline of their relevant findings, and how they may affect the thinking around issues relating to the establishment of an Institute like SAIVCET, follows in this section.

#### **3.6.1 Task Team on Community Education and Training Centres (CETCs)**

The Task Team on Community Education and Training Centres investigated and made recommendations on an institutional model of CETCs that addresses the learning needs of adults and out-of school youth.

The report noted that international literature highlights the importance of a focus on adult and youth education, moving beyond literacy and towards a broader lifelong learning paradigm. *“Generally, and understandably, adult education policies in poorer countries tend to focus on literacy and basic education, whereas developed countries have moved into a broader lifelong learning framework. However, some South-East Asian countries with well-performing economies are making a ‘policy jump’ from adult education as adult literacy and basic skills towards adult education within a lifelong learning policy framework as seen in places like South Korea and China where there has been the development of comprehensive adult education policies (as adult education is seen as the necessary condition for the development of modern society and economy and the progress of science and technology) and regular national five-year plans”* (DHET; 2012f; p37).

Regarding the structuring of adult education systems, the international evidence looked at shows that the “*successful adult education systems have governance and planning nodes of some substance at both national and state/regional level and that they have a good degree of autonomy from the more conventional schooling bureaucracy. In many cases the more operational institutions or centres are paralleled (also at various levels) by inter-ministerial and stakeholder representative councils. By contrast South Africa’s adult education governance of adult education has been characterised by the retention of under-resourced low status sub-sections of the formal school education bureaucracy at national and provincial levels with little policy, planning or implementation capacity. The one major success in recent years, the Kha Ri Gude adult literacy campaign, had a degree of such autonomy*” (DHET; 2012f; p39).

Given that the sector is diverse, and the needs of adults and youth are not homogeneous, the task team offered an analysis of youth and adult target groups by age and learning needs, both formal and non-formal. These needs should be met through a network of diverse, but linked post-school programmes.

This network of institutions and programmes should have an “*integrated core curriculum that include communications and numeracy, enabling youth and adults to function in changing communities, a changing world and labour markets, combining formal learning opportunities, vocational and occupational electives, and non-formal and popular education programmes*” (DHET; 2012f; p7)

The CETC task team proposes a three-tiered post school system that will provide multiple access and progression opportunities to adults and youth, and will enable the post-school sector to double its size over the next two decades, in line with *Green Paper* and National Planning Commission proposals.

In this system, the main institutions would be universities of technology, universities, TVET colleges and community learning centres. Each type of institution will have a distinct mission, but a large degree of differentiation will be allowed. This is shown in Table 2.

**Table 3 : Proposed Institutional Model for Adult and Youth Education**

| <b>NQF</b>   | <b>Institution</b>  | <b>Mission</b>  | <b>Programme Offering<br/>(formal and non-formal)</b>   |
|--------------|---|---|---|
| <b>L 6-8</b> | HEIs  | Development of professional and research skills.  | Diplomas, certificates, degrees and post-graduate degrees.  |
| <b>L 4-5</b> | Differentiated college sector, including vocational and technology colleges, community colleges and single purpose colleges | Development of middle level vocational and artisan skills<br><br>Bridging programmes to University of Technology degrees  | NC(V ) and NASCA, Vocational and occupational programmes at levels 4-5 (more level 5) and the vocational education orientation programme<br><br>Para-professionals, learnerships, artisan and apprenticeships, non-formal and popular education<br><br>University bridging courses. Certificate and diplomas in area of specialisation of single purpose colleges, e.g. teaching or nursing |
|              | SA Institute for Vocational and Continuing education  | Development of the differentiated college sector.   |   |
| <b>L1-4</b>  | Community Learning Centres  | Adult basic education and GETC linked to vocational skills, NASCA and NSC. Institutional support to Kha Ri Gude network programmes at local levels  | Literacy and ABET to NQF level 1 and GETC. Kha Ri Gude learning network programmes: literacy and public education. NSC and NASCA Vocational education orientation Programmes, vocational and occupational courses. Community and non-formal education.  |
|              | Adult and Youth Community Learning and Popular Education Institute  | Establishment and development of the Community Learning Centres institutional network. Curriculum and materials development, and development of literacy, community learning, popular and public education. |   |

**Source: DHET: Report of the Task Team on Community Education and Training Centres; May 21 2012; p 8**

Although there are disadvantages to this model, largely related to high costs and capacity, it nevertheless advocates that the CLCs be clearly delineated from colleges. The CETC task team believes that, despite the disadvantages, the DHET should pursue this option, *“given the numbers of adults with limited literacy levels and the large numbers of young people dropping out of school and in need of second chance opportunities. To add the burden of providing education and training to this group to the current struggling FET college sector, may simply result in undermining further existing capacity, both institutional and human resources. In addition, at community level, we have been singularly lacking in recognising the role of community and popular education, despite the role – whether complementary or additional – they play in providing for a range of developmental needs in poor communities”* (DHET; 2012f; p91)

Locating some CLCs formally within FET colleges in a two-tier structure would have serious implications for an already under-capacitated sector. There are also other problems associated with this. At present, one of the key problems with FET colleges offering AET is access, especially to formal programmes. Many adults with NQF 1 cannot access FET programmes. The CETC task team argues that *“too close a link between CLCs and colleges may contribute to mandate drift at best and at worst the withering away of literacy and adult basic education capacity”* (DHET; 2012f; p91)

Clear links need to be made between separate FET colleges and CETCs. CETCs also need to address linkages, partnerships, articulation. They need to develop relationships with CBOs and NGOs, community groupings, universities, parastatals and the business sector.

To establish and develop the CLCs institutional network, the task team proposes a national institute, to be called the Adult and Youth Community Learning and Popular Education Institute. Therefore there should be two Institutes under DHET – Adult and Youth Community Learning and Popular Education, and SAIVCET. The CETC task team sees the AYCLPE Institute taking responsibility for NQF 1-4, with SAIVCET having the responsibility for the development and support of a differentiated college sector at the intermediate level (L4-5). The main role of the AYCLPE will be to establish and develop CLCs institutional networks, curriculum development and materials development, community learning, and popular and public education.

## Lessons for SAIVCET

The idea of separating responsibility for the intermediate college sector from that for adult basic, non-formal and community education resonates strongly with the literature on overseas TVET support institutes and the views elicited in drafting this report. The needs of the TVET sector and the AET sector are simply not the same.

The SAIVCET task team believes that this institute should provide support to any organisation, body or programme in the further education and training sphere that aims to develop skills for employability in the formal economy. On the other hand, adult basic education and any other learning below the intermediate skills level should be the domain of the proposed AYCLPE Institute.

### **3.6.2 The Task Team on a National Strategy for the Recognition of Prior Learning**

Recognition of prior learning (RPL), if properly implemented, can provide a mechanism for access into formal learning. *“The role of RPL, in providing alternative routes of access to further and higher education and training programmes, is vital in the promotion and delivery of the national ‘returning to learning’ strategy for unemployed and under-qualified youth and adults. It is pivotal to building a learning nation”* (DHET (2012d); Final Draft Report of the Ministerial Task Team on a National Strategy for RPL; p19).

The Task Team on RPL addresses issues of the different purposes of RPL, and for different segments of the population, and the different approaches required based on these purposes. There is a growing trend towards differentiation in terms of approach, and of increasing decentralisation so that it can be accommodated in a variety of contexts. RPL must *“provide possibilities for career-pathing and develop alongside greatly increased flexible learning provision opportunities for adults, at all levels of education and training.. with part-time provision receiving greater emphasis within a lifelong learning philosophy and approach.”*

The Final Draft Report of the Ministerial Task Team on a National Strategy for RPL (DHET; 2012d) report argues the case for an RPL institute to embed RPL practice across all sectors. RPL must be embedded in *“appropriate system changes at appropriate times”*. If it becomes mandatory, it needs its own driver, in the form of a centralised RPL institute that will be well



positioned to facilitate it across industry, education and training, and community development sectors.

The development and role of an RPL institute would be complementary to other proposed plans to bring greater organisation and effectiveness in education and training, such as SAIVCET, the creation of a network of Community Education and Training Centres, and the renewed role of SETAs.

Some of the roles that an RPL institute should perform are:

- Directed and commissioned research
- Programme development and management
- Development and management of RPL processes within broader strategic initiatives
- Development and maintenance of a national database of registered RPL practitioners
- Capacity building in the broad sector as well as in previously under-resourced sectors, such as trade unions
- Advocacy and being part of relevant policy development processes
- Linkages with international RPL institutes
- Articulation of and support for leading practices and
- Formative and summative evaluation of RPL and RPL-related projects.

The RPL task team suggests that the establishment of an RPL institute be in two phases. In the first phase (3-5 years), it would be attached, as a semi-independent body, to an existing organisation such as SAQA, falling under their governance system. During this time, work would be undertaken to develop a process to establish it as an independent, legislated entity in the second phase.

#### Lesson for SAIVCET

A comprehensive strategy for the recognition of prior learning would ensure access to learning opportunities at public and private TVET colleges for those who have insufficient basic education and therefore do not meet the formal entry criteria. This would in large measure obviate the need for SAIVCET to undertake large-scale support programmes for non-formal education and training agencies.

### 3.6.3 The Task Team on SETA Performance

The Ministerial task team on SETA performance made 17 recommendations to address problems within SETA system, including the mandate of SETAs, quality assurance processes and governance.

The SETA performance task team makes a number of recommendations that have a bearing on SAIVCET and that the SAIVCET task team would endorse. These are:

#### I. The Role of the SETAs

*“The SETAs need to have a tighter focus that must be reflected in their vision, mission, governance structure and strategy”.* The focus will be on employed people in their respective industries (or unemployed people wishing to enter the sector). *“The Task Team recommends that the focus should be on skills development (including planning, enabling provision, allocation of grants and quality assurance related to same in established small, medium and large businesses/workplaces (for employed and unemployed people who wish to enter the sector) relating to sector priorities and the transformation charters of various sectors”* (DHET; 2012e; p13)

In order to do this, SETAs will have to interact with providers and employers in numerous ways, thereby strengthening the link between supply and demand. For example, SETAs will have to support programmes at all levels of the NQF, as required by the sector. They will have to work with providers to develop their capacity to conduct high quality, relevant training. This may bring them into closer contact with FET colleges in their capacity as providers. The SETA task team report noted that SETAs have already increased their engagement with FET colleges, but that the linkages *“are currently taking the form of ad hoc partnerships”*. The need to *“understand this work within the mandate of SETAs remains”* (DHET; 2012e p14).

This is an important point. For SETAs to engage with colleges is no bad thing in itself. But the engagement needs to be purposeful, developmental and focused. The current situation – in which SETAs are opening up offices on FET college campuses with no obvious purpose other than simply to ‘be there’ is a recipe for duplication of effort and confusion. Moreover, the myth that SETAs somehow represent or speak for employers needs to be dispelled. SAIVCET could play a very useful role in coordinating and systematising such engagements.

## II. The Role of the National Skills Fund

*“The NSF must continue to be responsible for funding broader national priorities that are not covered by the SETAs”.* (SETA task team report)

To do this, the SETA task team recommends that the NSF’s levy allocation be increased from the current 20% to 30%. The team further proposes a refined focus for the NSF with fewer but larger grants to targeted interventions. The NSF *“should have a distinct mandate to fund societal needs”* (DHET; 2012e; p15)

The majority of SAIVCET task team members endorse this recommendation. Once the institute is up and running, it will be able to make inputs on what sort of projects meet those criteria and may itself bring some projects to the NSF for funding.

## III. Skills Planning

The SETA task team argues that there needs to be a central mechanism through which skills demands in the short, medium and long-term are analysed. This body would ensure it makes effective use of workplace information collected by the SETAs, and should guide and inform processes to do this. Information would be used for scenario planning. It is, in fact, another argument for establishing SAIVCET.

## IV. Supporting Improved Supply

The SETA task team assigns to the SETAs themselves, possibly together with DHET, the responsibility for mapping out skills supply against demand and playing a proactive role in working with providers to understand short, medium and long-term priorities, and how these can be addressed.

Again, the SAIVCET task team endorses this recommendation. Analysis of labour market data is best located within the SETAs because they receive reports from their levy-paying companies over and above other data that comes into the public domain from sources such as the HSRC and the Department of Labour. If they do it properly, they will be performing a valuable service that several other agencies – including SAIVCET – can draw upon.

## Lessons for SAIVCET

The SETAs can provide a funding mechanism for colleges but should not get involved in training delivery, quality assurance, certification or other operational matters.

A more focused approach from SETAs on training people employed in their sectors, or for potential entrants going to a college to enable them to acquire the necessary skills to do so, will necessitate a great deal more work-integrated learning. DHET recognises the importance of this but, for it to happen more systematically, industry has to be more actively involved. This is where SAIVCET could play a role.

A sobering lesson from the SETAs' experience is the weak role that business has generally played in them, aside from paying levies. It is debatable whether some high level business involvement ended as a direct result of the many contests around governance, mandate and focus, but it is certain that these problems were exacerbated by that withdrawal.

SETA workplace skills plans and sector plans, even if drawn up perfectly, would simply offer a snapshot of current needs in that sector. They are therefore not in themselves a basis for long-term planning. Furthermore, they do not in any way integrate with one another and so cannot generate an overall picture even of the immediate skills needs of the economy.

Facilitating the involvement of industry and improved co-ordination of skills planning are important functions that an institute like SAIVCET could and should play, especially with regard to future needs in the further education and training sector.

There is an important cautionary lesson here as well: If SAIVCET is not from the start clearly mandated and well governed, it will experience similar problems to the SETAs.

### **3.6.4 The Task Team on the NC(V) National Certificate (Vocational)**

The Ministerial task team charged with the review of the NC(V) qualification addressed the numerous issues associated with it. It made 36 recommendations, of which those related to purpose of the qualification, recognition of prior learning, the structure of the qualification, and requirements for certification seemed relevant to the work of the SAIVCET task team.

- **Purpose of the qualification:** The NC(V) task team proposed a tighter focus on employment as the principal objective of the NC(V). The purpose statement of the NC(V) should be amended so that the NC(V)-4 is structured to provide students with employment at entry level, rather than at intermediate level as currently stipulated. Then FET colleges should develop and offer vocationally-oriented higher certificate and diploma qualifications to support NC(V) and NSC graduates who have limited mobility into either higher education or the job market. These recommendations fit in with the SAIVCET task team’s view that FET colleges should concentrate on skills training for employment and employability. This guiding principle will be developed further in the recommendations for SAIVCET.
  
- **Recognition of prior learning.** The NC(V) task team made a number of recommendations relating to entry requirements for the NC(V), which would require development of a rigorous policy on RPL and a centralised RPL office to handle applications. As noted, earlier, the SAIVCET task team supports the notion that RPL is the right mechanism for creating wider access to the colleges and further agrees that it should be done by a specialised RPL institute. RPL is therefore not one of the functions that SAIVET should discharge.
  
- **The structure of the qualification.** These NC(V) task team’s recommendations include:
  - *“Address the real concerns and problems pertaining to the lack of skilled academic staff in the colleges” (no 21).*
  - *“For the short to medium term, work integrated learning (WIL) should not be a mandatory component of the curriculum: rather it should be ‘highly recommended’ that it is included in the curriculum as far as is reasonably possible” (no 22).*
  - *“Identify and maintain the 3 distinct learning pathways namely academic, vocational and occupational “(no 23).*
  - *“Develop and implement a distinct vocational qualification and an occupationally-based learning experience with clear guidelines as to the articulation and credit transfer between the two pathways (no 24)”*
  - *“Review the various NC(V) programmes to identify which should remain as part of the NC(V) qualification cohort and which should be refocused towards the occupationally-based programmes of learning” (no 25a). “In conducting the*

*review, invite industry as a partner in the re-packaging process in respect of the design and development of the curricula” (n 25b)*

These are practical examples of what the SAIVCET task team believes such an institute could do to support the college sector.

To the NC(V) task team’s observations on that qualification, the SAIVCET team would add that popular perceptions of the NC(V) are currently skewed by a widespread failure to realise that:

- 1 The NC(V) was never meant to be an occupational qualification.** It was designed to be a broad-based vocationally-orientated qualification. Hence, NC(V) programmes cover a far broader range of vocations than the N courses and even within a given programme – such as Engineering & Related Design and Electrical Infrastructure & Construction – the foundational and core subjects are broader (and therefore less trade-specific) than any N course. The NC(V) is meant to equip its graduates for a range of possible occupations in technical fields, not merely for entry into an artisan trade. This is a good thing because there is a great demand in industry for ‘techies’ of all sorts, over and above the urgent need for artisans, and that demand is likely to increase in future as industry becomes more technologically sophisticated and diversified. That said, there is a growing body of anecdotal evidence to suggest that the NC(V) still provides a good platform for an apprenticeship. But to judge the NC(V) solely on how well it fits into current apprenticeships (as many employers and even college lecturers tend to do) would be like judging paramedics purely on their knowledge of midwifery and none of the other practices of their trade.
- 2 It is aimed at a different ‘target population’ from the N courses.** Employers often forget that only about 5% of school-leavers (exclusively white until 1981) ever entered apprenticeships. The remaining 95% (including almost all black school-leavers) were out of sight and out of mind. But the government has an obligation to address the training needs of the whole population. So the NC(V) was designed to provide marketable skills to the vast majority of school-leavers who did not qualify for higher education and could not get into an apprenticeship. Thus, the NC(V) can accomplish something that no amount of N courses could ever do because the N courses were designed exclusively to be linked to apprenticeships.

- 3 It was designed to be delivered through a very different modality from the N courses.** This makes perfect sense, given their different purposes and target populations. The NC(V) is by design, not by happenstance, a full-time, long-duration programme of study that incorporates both theory and practice. Again, that is something the N-courses can never be.

The SAIVCET task team's opinion, therefore, is that the NC(V) must stay – albeit with some revisions and improvements – and that it must become what it was originally intended to be, namely, a pathway from Grade 9 in the basic education system to an NQF Level 4 qualification in a vocational field. A modified version with most of the content of the fundamental subjects removed – 'NQF Lite', so to speak – could be offered to Grade 12 school-leavers, perhaps in conjunction with an RPL process that ensures parity amongst students from both sources who may well find themselves in the same core-subject classes.

## CHAPTER 4: ANALYSIS AND RECOMMENDATIONS

### 4.1 GUIDING PRINCIPLES FOR THE OPERATION OF SAIVCET

There is overwhelming support in training and education circles, in business and labour and across society as a whole for the establishment of a national institute to support vocational and continuing education in South Africa.

Given that the country's two most pressing developmental challenges are the high rate of youth unemployment and the shortage of skills needed for economic growth, **SAIVCET's focus should, at least initially, be on post-basic education for skilled employment in the formal economy.** To this end, SAIVCET's priorities should be to:

- Help stabilise the public colleges, especially with regard to programmes and qualifications in both the occupational and the vocational streams
- Improve the quality of teaching and learning in public FET colleges, primarily by addressing the quality of teaching staff
- Facilitate the opening of viable pathways into vocational education and training for Grade 9 graduates
- Promote more active participation by the private-sector, specifically employers, in the public TVET system
- Raise the profile and status of 'blue collar' work.

Characteristics of SAIVCET should be:

- **A clear focus**

Priorities must be focused on supporting institutions and organisations that offer education and training programmes to develop skills at intermediate level that make people employable in the formal economy. This includes self-employment at a level higher than mere survival. Whatever the exact wording of the institute's mission, its activities must be geared towards achieving this goal of 'decent work'. This is the "golden thread" that will run through everything it does.



The beneficiaries of SAIVCET's support could therefore include the current FET colleges and service-providers (public and private), SETAs, CETCs, NGOs and in-company training centres.

It must be recognised that the interests and problems of the TVET and AET sectors differ markedly. The institute should not be asked to take responsibility for adult basic education or the non-formal economy. Experience gleaned from the review of overseas institutes and input from the task team on CETCs strongly endorses this view. Making one institute responsible for supporting both sectors would most likely overstretch it to the extent that it could serve neither sector particularly well.

Moreover, in a contest between TVET and AET for the institute's resources, AET is almost certain to lose because it does not represent a 'well-heeled' constituency. Thus, for the institute to try to address both sets of interests would likely entrench the lack of attention paid to the adult education sector on one hand and dilute the focus necessary for support to TVET on the other.

A separate institution should be established for adult basic education, literacy and non-formal community and popular education, as proposed by the Task Team for CETCs. For SAIVCET, a strong and clear focus on vocational and occupational education and training is more likely to attract on-going participation from employers.

- **A support, not a line-management, function**

SAIVCET should focus on supporting training institutions, not managing them. It cannot be both an advisor and an inspector. Line management of the actual colleges and public training agencies is, and must remain, the responsibility of DHET.

An institute's proper role is to support and encourage innovation and improvement. Successful institutes abroad by and large play this role. They do not get involved in the day to day functioning of the delivery institutions.

Locating the institute outside of a government department would allow some flexibility in its provision of necessary support. Without the bureaucracy endemic to large government departments, a self-governing institute would probably be more responsive and flexible in forging partnerships, piloting new ideas, attracting private-sector funding and responding to rapidly changing and evolving circumstances in the TVET sector.

- **The role of a ‘critical friend’**

SAIVCET and DHET will always need to work closely together but one of the advantages of having a separate institution is that it can play the role of a ‘critical friend’ to government. It must be given space to do so without fear of losing funding.

The institutes studied in Switzerland, Germany, Australia and India are highly autonomous but operate in very close co-operation with their government ministries or apex bodies for TVET. Even KRIVET in Korea, which is ultimately answerable to the Prime Minister, has a high degree of operational independence.

Support institutes work best, it seems, when their independence is institutionalised and respected and they have the latitude to express divergent views from those of any government department.

- **A structure that follows function**

It follows from what has already been said about SAIVCET’s focus and function that it should be an independent, expert-led body with sufficient core capacity to generate new knowledge, maintain institutional memory and get on with its various activities through a network of partners from all corners of the TVET field.

As an expert-led body, it will need to bring in high-level professional staff, as the best institutes in other countries have done. This will be expensive and, if there has to be a trade-off between hiring good people and paying for Grade A premises, as there is in India, then this task team unhesitatingly recommends the former. This point is developed further in Section 4.3 that follows.

It is worth re-iterating here that, if SAIVCET’s mandate covers adult education and training, as well as TVET, the institute would effectively split into two silos and AET and TVET would operate quite separately anyway. It is highly unlikely that sufficient staff could be found with high-level expertise in both AET and TVET.

- **Partnerships**

SAIVCET must be a partnership-orientated organisation. There are two main reasons for this:

- I. Where there are numerous developmental demands but limited human and material resources – as is the case in South Africa – those resources must be made to go as far as possible. Partnerships are a means to accomplish that.
- II. Around the world the provision of TVET is strongest where the private-sector is closely involved but government also takes some responsibility for it. That, too, demands partnerships.

There is already a multiplicity of agencies in the field, not all of them good. SAIVCET should not try to replace or displace any of them but should seek out the good ones and find productive ways of collaborating with them. Eventually, natural selection will determine which are fit to survive and, when it does, SAIVCET should not be one of the dinosaurs. For the time being, there are no other such comprehensive support interventions.

- **Funding from existing resources**

As a matter of principle, the bulk of SAIVCET's funding should come from the state because most of its clients will be public institutions. Additionally, South Africa's vision of a developmental state necessitates public funding for the institute. Simply stated, only the state has both the mandate and the resources to bring quality TVET to the whole population and the institute will be an important part of that provision.

From another point of view, employers are already paying a skills levy for which, in the opinion of many, they are not getting value for money. It is therefore unlikely that they would voluntarily pay for SAIVCET's services. But, if SAIVCET is to succeed, it must have stable funding. Although there are indications of a period of budget constraints ahead for all government departments, the fiscus must cover SAIVCET's core organisational running costs and activities. In this regard, the examples of SAOA, which has a structure but is not funded properly, and the QCTO, which has also been hamstrung by funding issues, are illustrative.

SAIVCET should also be able to obtain programme or project-specific funding from the National Skills Fund. The task team on SETA performance recommended that the NSF

look to supra-sectoral priorities not covered by the SETAs. SAIVCET must surely be one mechanism for identifying and addressing such priorities. .

Provision for possible additional funding from other sources such as local and international donors, and for some income from fees or grants, must also be made.

## 4.2 RECOMMENDED ROLES AND FUNCTIONS OF THE INSTITUTE

Taking account of the all the inputs received, the critical needs of the sector and the ‘golden thread’ of supporting organisations, agencies, institutions and programmes that result in employability in skilled positions in the formal sector, this task team recommends that SAIVCET should have six primary roles:

- Applied research
- Lecturer development
- Curriculum innovation and design
- Monitoring and evaluation at a systemic level
- Co-ordination and linkages
- Advocacy

Each of these is elaborated on in the paragraphs that follow. Direct quotes from stakeholder interviews are offered in italics.

- **Research** of a type that advances the employability of students in the TVET sector.

SAIVCET should inform the research agenda and serve as a clearing point for the dissemination of research. As a strategic research body, it should identify the needs of the sector, help set the research agenda, create partnerships for its development and generally “*bring research to the threshold of policy relevance*”.

Expert views from within the sector and the experience of all the overseas institutes reviewed indicate that this is a role that SAIVCET should play. At the one end of the research scale, BIBB in Germany plays an active role within the academic research system. Its research is directed towards significant issues relating to vocational

education and training and contributes to theoretical development. KRIVET, in South Korea, on the other hand, only carries out applied and action-based research appropriate to its context. At least to begin with, SAIVCET's research must be focused on very practical issues. SAIVCET must also encourage action-based research in the re-focused TVET colleges. This should be part of lecturer development and in itself will contribute to improving practice and enhancing the capacity and ability of the TVET colleges to solve their own problems themselves.

SAIVCET may do some research itself but should also tap into existing research capacity at, *inter alia*, the Human Sciences Research Council, the universities, institutes such as FETI at the University of the Western Cape and SALDRU (South African Labour and Development Research Unit), the Department of Trade and Industry, and the SETAs. They need to be utilised as components of a network.

SAIVCET should not do labour market research as it is being done elsewhere.

- **Lecturer Development**

Massive and co-ordinated professional development of college lecturers and instructors is an urgent priority if they are to deliver the skills needed by the economy. International experience supports this assertion. A 2004 study of further education colleges in Britain found that a significant common feature of successful colleges is a focus on teaching and learning.<sup>12</sup> Good colleges invest in high-calibre professional staff and ensure that they have ample opportunities for continuous professional development. Interestingly, a parallel study of weak colleges in Britain found that their common feature was a focus on peripheral, non-teaching activities.<sup>13</sup> Senior management in these colleges spent most of their time developing strategic plans and creating new organisational structures but were unable to improve the performance of their teachers in terms of planning and delivering lessons, monitoring students, managing their own performance and developing their own capabilities. There are many echoes of these findings in the research literature.

Evidence from interviews in Chapter 3, submissions received on the *Green Paper* and the report of the task team reviewing the NC(V) qualification concur. The latter report points to the need to “*address the real concerns and problems pertaining to the lack of*

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<sup>12</sup> Ofsted, 2004: “*Why Colleges Succeed*”

<sup>13</sup> Ofsted, 2004: “*Why Colleges Fail*”

*skilled academic staff in the Colleges”<sup>14</sup>. It states that “at the heart of the concerns regarding curriculum implementation is the issue of lecturer competence and ability. The successful implementation of the NC(V) curriculum assumes lecturer capacity in place to deliver in terms of the intended purpose – this is unfortunately not the reality and is an issue that DHET needs to address with urgency and as a priority initiative. This is often evident with regard to the practical training where College staff members have themselves never practised the trade being taught.”<sup>15</sup>*

Presently, the school system draws on teachers with higher education qualifications. No such system exists for the TVET colleges and the resultant weakness in both technical and pedagogical expertise is everywhere apparent. This ought not to be allowed to continue. SAIVCET should prioritise the upskilling and professionalisation of the TVET lecturer corps. The DHET has already pointed the way towards this by producing a draft qualification framework for lecturers. The challenges, of course, will be to implement it and to bring in higher education qualifications without diluting the value of industry experience for lecturers.

Though South African universities have generally been slow to take an interest in secondary-level TVET, that is starting to change. There are notable academics at the University of the Western Cape, the University of the Witwatersrand, the University of KwaZulu Natal, the University of the Free State and elsewhere who are keenly interested in contributing to the improvement of TVET colleges and the broader TVET system. SAIVCET must tap into their expertise. SAIVCET should also be in a position to draw upon international institutes.

Not to be overlooked is the considerable TVET expertise to be found in industry, which could also be harnessed to the TVET colleges. Staff exchanges could be a powerful mechanism for improving the competence and morale of college lecturers and an excellent means to align curricula at college level with the needs of local industry.

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<sup>14</sup> DHET 2012g, 984

<sup>15</sup> DHET 2012g; p37

- **Curriculum innovation and design**

Drawing upon inputs from all stakeholders, SAIVCET should contribute to the revision of national curricula and then support TVET colleges, industry training centres and other service-providers in the delivery of institution-level programmes that realise those 'paper curricula'. As one interview respondent put it, SAIVCET could act as an "*intermediary between education and business/industry to develop relevant curricula.*" Several international institutes, including SFIVET in Switzerland, BIBB in Germany and the NITTTR in India perform this function.

This does not mean that SAIVCET should get involved on a micro-level, doing what the colleges should do themselves, such as developing lesson plans or classroom assessment tools. But it should point colleges in the direction they ought to be going with their training delivery.

Since curricula must speak to future as well as current needs, SAIVCET's research must ensure that it is at the forefront of changes in the economy and can inform the development of curricula ahead of industry needs. If necessary, it should commission research on curricula. What is taught at college level must then be aligned with that.

- **Monitoring and evaluation at systemic level**

The DHET's VCET branch monitors the performance of public TVET colleges. SETAs (in theory at least) monitor employers' workplace skills planning and implementation. NAMB monitors the training of artisans. Who monitors the effect of their collective efforts? How do we know the extent of their impact on the economy? There is a gap here that SAIVCET ought to fill.

SAIVCET should be constantly assessing the extent to which the post-school TVET and VCET systems respond to the country's needs and the initiatives, inputs and programmes that are designed to address them. "*It must be able to look at the impact of skills development initiatives that have taken place – maybe that's where things most need to be monitored and evaluated*".

- **Co-ordination and linkages**

SAIVCET must play a role where linkages and co-ordination are required to address blockages to developing intermediate skills for employability in the formal sector. This is a role played by all leading international TVET support institutes and was strongly advocated by all stakeholders consulted.

It must secure high level input from employers on matters impacting on training, such as technological change, and facilitate increased participation in workplace-based experience from industry. Importantly, by becoming a credible institution with the employer community, it must facilitate partnerships between government and employers.

Articulation between further education and higher education and training institutions also requires co-ordination, especially in relation to the recognition of post-school TVET qualifications as pathways to higher education and training.

- **Advocacy and lobbying**

A critical need for the post-school college sector, as argued in the guiding principles for SAIVCET, is to raise the profile of technical and vocational education and training. SAIVCET therefore must play an advocacy role. Advocacy must be a thread running through all activities, addressing different audiences - such as employers, school learners, their parents, HEIs, SETAs and the TVET colleges themselves.

An urgent priority is to convince employers of the value of college outputs like the NC(V) and to partner with FET colleges in expanding opportunities for all forms of work-integrated learning, including apprenticeships, learnerships, workplace exposure for TVET lecturers, work experience for TVET students and internships for college and university graduates.

On this point, the task team on the NC(V) review recommended that in the short to medium term, work integrated learning (WIL) should not be a mandatory component of the curriculum, but should be 'highly recommended' for inclusion as far as is reasonably possible. Ideally, it should be mandatory, but "*lessons from current practice indicate that workplace linkages between colleges and industry remain few, and WIL is simply not in place. Also, taking note of the location of some of the colleges, compulsory work integrated learning will be an insurmountable constraint*" (DHET 2012g; p37).



SAIVCET's advocacy should aim to ensure that this eventually changes and that, long before then, practical obstacles such as companies' concerns about health and safety and liability for injury to students are resolved.

Overall, SAIVCET "*should champion the re-positioning of the TVET sector*" so that its outputs meet the needs of the economy and the low status of TVET is transformed.

#### **4.3 COMPARISON WITH ROLES AND FUNCTIONS PROPOSED IN THE GREEN PAPER AND THE FET AMENDMENT BILL**

In the light of the task team's recommendations on SAIVCET's guiding principles, roles and functions, proposed functions listed in the *Green Paper* may need to be amended, revised or, in some cases, discarded.

The strongest message from all consulted is that, to be effective, the institute needs a clear mandate that focuses on a few selected outcomes. Based on an understanding of what the most pressing problems are and what could be done to address them, this task team recommends that SAIVCET be assigned **only those functions that advance post-basic TVET for skilled employment or employability in the formal economy.**

With reference to the *FET Colleges Amendment Bill*, these would be to

- Advise the Minister on any matter relating to intermediate-level vocational and continuing education and training
- Advise the Minister on the provision of vocational and continuing education and training by distance and open learning
- Support higher education institutions, TVET colleges and technical experts in their development of learning, teaching and assessment materials
- Support institutions, organisations and agencies that deliver intermediate-level skills for employability; these may include public TVET colleges, CETCs, private training service-providers, NGOs, and focus colleges such as agriculture and policing that have been under the authority of government departments other than DHET

- Ensure that curriculum development is coherent and consistent with a national curriculum framework and that public TVET colleges progressively acquire institutional capacity for curriculum development
- Conduct or commission research on, and contribute to, innovative developments in continuing education and training at intermediate-skills level; SAIVCET will focus research on where it can lead to improvements in the TVET college sector. It should become a repository of research for skills development in that sector
- Conduct or commission research on teaching and learning in vocational and occupational programmes that would lead to qualifications or part-qualifications at intermediate-skills level
- Upgrade the technical knowledge and pedagogical skills of teaching staff in TVET colleges, in line with the framework for lecturer development produced by DHET, and promote the professionalisation of TVET instructors
- Promote dialogue and partnerships between TVET colleges and industry
- Interact with professional councils and promote dialogue between those councils, TVET colleges and the Department, especially with regard to curriculum development
- Advocate technical vocations as worthy and rewarding careers and TVET as a pathway to skilled employment
- Publish a journal of TVET and skills development for employment.

It should **not** be SAIVCET's function to:

- Provide management training in every college
- Provide management, leadership and operational training at all levels for Sector Education and Training Authorities
- Provide management, leadership and operational training for officials of the Department
- Establish and maintain a library information service in order to support the institute and the institutions served by the institute.
- Conduct and promote labour market research

#### 4.4 SIZE AND LOCATION

There is inevitably a tension between having a centralised institution that plays an overarching support role and having one that is close to the actual work being carried out on the ground. To enable SAIVET to provide the required leadership role in supporting TVET delivery, some level of centralisation will be required. The model envisaged - of a relatively small core organisation with a network of partners, associates and collaborative agreements - should reconcile some of these tensions.

Although the international institutes tend to be large, they are also all mature. South Africa does not yet have sufficient experts to set up a new, large organisation without severely depleting capacity elsewhere – where it is already stretched. Once SAIVCET has been in existence for a while and has proved its value, it can begin to grow. By that time also, it should have contributed much to the development of new capacity in the field.

As stated before, the task team recommends that SAIVCET's key functions should be:

- Research
- Lecturer development
- Curriculum innovation and design
- Monitoring and evaluation
- Co-ordination and linkages
- Advocacy

In order to discharge these six key functions, SAIVCET will need to have a core professional staff of about 15 to start with: a director, possibly a deputy, and at least two professionals for each of the key functions. This professional team would need to be supported by approximately 10 administrative staff, taking the total staff complement to around 25.

To place this in some context, the annual reports of some other comparable institutes or organisations show that:

- The Matthew Goniwe School of Leadership and Governance has 49 employees, 20 of whom are professional staff (6 senior managers and 14 middle managers). This organisation offers an especially useful comparison. It is an independent institute tasked with developing leadership in schools in Gauteng, and therefore offers professional services. Initially incubated within the Gauteng Department of Education, it has evolved into an independent institution.

- PALAMA (the Public Administration Leadership and Management Academy of South Africa) has a total of 71 employees. PALAMA has a national responsibility to offer training and development opportunities to government employees at all levels of government.
- SACE (South African College of Educators) has a staff complement of 65. It operates nationally, maintaining a register of qualified educators and managing and implementing a professional development system for school teachers.

Thus, the proposed initial staff complement for SAIVCET is fairly small in comparison with established organisations. Given that SAIVCET needs to be an expert-led body providing specialised services, it can be expected that there will be more professional than administrative staff.

With respect to the location of SAIVCET and the desired high levels of involvement from the private sector, the task team recommends that it be in central Gauteng, close to the main centres of business and industry.

#### **4.5 STRUCTURE AND GOVERNANCE**

The *FET Amendment Bill* provides for the institute to have a board, comprising a chairperson and up to 10 ordinary members. These members are all appointed by the Minister for a four year, renewable period of office from nominations put forward by the institute itself. The ordinary members may co-opt other members who may serve up to four years at a time. The task team agrees with this process, with the obvious rider that, for the first board, nominations will have to come from the public. Thereafter, the full Board, including ordinary and co-opted members, will nominate future members.

The task team further recommends that the board quickly adopt a board Charter that contains guidelines for its operation, including

- Amplification of the Institute's role and functions
- Criteria for membership of the board and its committees
- Rules of procedure
- The board's own roles and responsibilities
- Legal and accounting compliance

- Provisions for review mechanisms on the institute's policies, strategies, internal lines of accountability, communications, risk management, etc.

### **Composition of the Board**

Many experts whom the task team consulted advised an expert-driven board rather than one representing constituent stakeholders. Meaningful involvement of stakeholders is of course essential to the overall legitimacy of any organisation but experience also cautions against setting up a board to be a battleground between rival constituencies. This happened to the SETAs and paralysed some of them for years. It should be possible to appoint people on the basis of their specific expertise, first and foremost, and still draw them from major stakeholder groups. This will impress upon board members that they are there to add value and not merely to represent a constituency.

The required areas of expertise and suggested number of representatives embodying them are:

- Skills development/CVET (4-5 members)
- Finance (1 member)
- Commerce, industry and the economy (3-4) members
- Legal (1 member)
- Research (2-3 members)

The composition of the board must ensure that the above expertise is always present. Thereafter, a secondary consideration could be to promote representation from the following constituencies:

- DHET
- Business/Employers
- Labour
- Academia/Higher Education
- TVET colleges and industry or private providers
- AET

## 4.6 FUNDING

The task team believes that, as a matter of principle, the fiscus should provide guaranteed funding for SAIVCET, with additional programme-specific funding coming from the NSF. Additional income may come from other government departments, clients, stakeholders and SETAs for commissioned work, and from fundraising from donors and grant-makers.

Personnel costs for an institute comprising a director, eight senior professional staff, six mid-level professional staff, an office manager and nine administrative staff would be in the region of:

| <i><b>Position</b></i>  | <i><b>No</b></i> | <i><b>Post costs p.a. (Rands)</b></i> | <i><b>Total</b></i> |
|-------------------------|------------------|---------------------------------------|---------------------|
| Director                | 1                | 1 500 000 – 1 800 000                 | 1 600 000           |
| Senior professionals    | 8                | 900 000 – 1 200 000                   | 8 000 000           |
| Mid-level professionals | 6                | 700 000 - 900 000                     | 4 800 000           |
| Office administrator    | 1                | 500 000 – 600 000                     | 600 000             |
| Support staff           | 9                | 200 000 – 300 000                     | 2 700 000           |
|                         |                  |                                       |                     |
|                         | <b>25</b>        |                                       | <b>R17 700 000</b>  |

Based on this, an estimated annual budget for SAIVCET could be:

- Annual post costs                      R17m – R18m
- Operating costs                         R10m – R12m

Thus an estimated R30-million per annum will be required as guaranteed baseline funding from the fiscus to cover the core operational and running costs of the institute. This excludes any additional programmatic funding. It is in line with the national norm that salaries account for no more than 63% of an institution's total operational expenditure.

Once again, it is informative to benchmark this estimate against annual expenditure of other organisations, according to their latest available annual reports:

- The Matthew Goniwe School of Leadership and Governance reported a total expenditure of R35,6m (including programme expenditure) for 2010-2011.
- The AgriSETA's actual organisational expenditure for 2011-2012 was R24m.

- PALAMA's 2011-2102 expenditure of R118,4m was divided into R57,2m on administration costs (including salaries), and R61,1m on programmes.
- SACE's operating expenses of 2011-2012 were R39,9m, with staff costs being R17m.

An additional factor always to be kept in mind is SAIVCET's need for a high concentration of professional staff.

#### 4.7 PERFORMANCE MANAGEMENT AND EVALUATION

The board of SAIVCET should publish specific 3-5 year targets that relate to outputs, outcomes and impact. The task team recommends that an independent review committee, comprising members nominated by the institute and some key stakeholders, be appointed by the Minister to review the institute's performance at least once every five years.

#### 4.8 ROLL-OUT

The task team proposes the following roll-out process, with indications of timeframes.

**Table 4: Proposed implementation plan for SAIVCET**

| <i>Phase</i> | <i>Activity</i>   | <i>Time Frame</i>  |
|--------------|---|--|
| <b>1</b>     | <b>Secure mandate and funding</b> <ul style="list-style-type: none"> <li>• The Minister secures approval and funding for SAIVCET from Parliament</li> </ul>   | March 2013   |
| <b>2</b>     | <b>Appointment of the Board</b> <ul style="list-style-type: none"> <li>• Task Team develops criteria for board membership</li> <li>• The Minister calls for nominations</li> <li>• The Minister appoints a committee to screen the nominees and provide him with a shortlist</li> <li>• The Minister will make a final decision and gazette his appointments</li> </ul> | Early March 2013<br>Mid-March 2013<br>End March 2013<br><br>End April 2013 |
| <b>3</b>     | <b>Appointment of Director</b> <ul style="list-style-type: none"> <li>• The board will recruit and appoint a Director</li> </ul>  | End June 2013  |

|  |                          |
|--|--------------------------|
| <p><b>4. Operationalisation of Institute</b></p> <ul style="list-style-type: none"> <li>• Recruitment of staff</li> <li>• Development of human resource policies and procedures</li> <li>• Selection and equipping of premises</li> <li>• Development of an initial programme of action</li> <li>• Establishment of the Institute's corporate image (logo, letterheads, PR materials, etc.)</li> </ul> | <p>End November 2013</p> |
|--|--------------------------|

It is therefore feasible that the institute could commence a preliminary programme of activities in late-2013 and be fully operational at the beginning of 2014.

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## BIBLIOGRAPHY

AgriSETA (2012) *Annual Report 2011-2012*; accessed from [www.agriseta.co.za](http://www.agriseta.co.za)

Akoojee, S, McGrath, S and Visser, M 'Further Education and Training Colleges', in Kraak A and Press, K (eds) *Human Resources Development Review 2008: Education, employment, and skills in South Africa*, Cape Town: HSRC Press, 2008.

Alda, H and Rohrbach-Schmidt, D (2010) 'New Data and Services for Vocational Education and Training Research – Research Data Centre of the Federal Institute of Vocational Education and Training (BIBB-FDZ)' *Schmollers Jahrbuch*, 130, pp. 253 – 267.

Allais, S (2010) *The implementation and impact of national qualifications frameworks : report of a study in 16 countries*, International Labour Office, Skills and Employability Department, Geneva.

Australian Productivity Commission (2011), *Vocational Education and Training Workforce*, Research Report, Canberra.

Bartram, A, Stanwick, J And Loveder, P (2010) *Review of NCVER building researcher capacity initiative*, National Centre for Vocational Education Research, ( NCVER), Adelaide.

BIBB (2009) *Mission statement of the Federal Institute for Vocational Education and Training: Researching – Advising – Shaping the future*, brochure issued by BIBB, Bonn.

BIBB (2011) *BWP Special Edition*, Editorial, p3

CEDEFOP, *Annual Report 2012*, European Centre for the Development of Vocational Training

Curtin, P and Loveder P (eds) (2007) *Informing policy and practice in Australia's vocational education and training sector*. Reflections and futures, proceedings of the 25th anniversary forum of the National Centre for Vocational Education Research Editors, National Centre for Vocational Education Research, ( NCVER), Adelaide.

DHET (2011) *Policy on Professional Qualifications for Vocational Education Lecturers*, DHET, Pretoria. Draft Discussion Document: October.

DHET (2012a) *Green Paper for Post-School Education and Training*. Pretoria: Department of Higher Education and Training, January.

DHET (2012b) *Further Education and Training Colleges Amendment Bill*, Government Gazette, 2 March, Number 351133, General Notice 181.

DHET (2012c) 'Terms of Reference: Researcher', Ministerial Task Team on the Establishment of a South African Institute for Vocational and Continuing Education and Training, (Chair: Ken Duncan).

DHET (2012d); Ministerial Task Team on a National Strategy for the Recognition of Prior Learning (RPL): *Final Draft Report incorporating a proposal for the national implementation strategy*; September

DHET (2012e); Ministerial Task Team on SETA Performance

DHET (2012f); Report of the Task Team on Community Education and Training Centres; May

DHET (2012g); Report of the Task Team Appointed for the Review of National Policy Regarding Further Education and Training Programmes: Approval of Documents, Policy for the National Certificates (Vocational): Qualifications at Levels 2-4 on the National Qualifications Framework

FDEA (2012) *Vocational and Professional Education and Training in Switzerland 2012*, An initiative of the Confederation, the cantons and professional organisations, Published by the Federal Department of Economic Affairs (FDEA).

Gonon, P (2004) 'The dynamics of vocational training innovation in Switzerland' in *Towards a history of vocational education and training (VET) in Europe in a comparative perspective: Proceedings of the first international conference, Florence, Volume I*, Cedefop Panorama series; 103, Luxembourg: Office for Official Publications of the European Communities.

Haertel, M (2009) 'Germany: TVET for Sustainable Development: Policy-Making Strategies and Project Experiences' in *McLean, R, Fien, J and M-G Park Work, Learning and Sustainable Development: Opportunities and Challenges*, UNESCO-UNEVOC Book Series Technical and Vocational Education and Training: Issues, Concerns and Prospects, Volume 8.

Hippach-Schneider, U, Krause, M and C Woll (2007) Vocational education and training in Germany, Cedefop Panorama series; 138, Luxembourg: Office for Official Publications of the European Communities.

Keating, J, Medrich, E, Volkoff, V and J Perry (2002)'Review of research: comparative study of vocational education and training systems pressure of change - national vocational education and training systems across three regions', National Centre for Vocational Education Research (NCVER), Adelaide.

Kim, A and Rhee, B S(2007) 'Meeting Skill and Human Resource Requirements' in Suh, J, and DHC Chen (Eds) *Korea as a Knowledge Economy: Evolutionary Process and Lessons Learned Korea Development Institute*, The World Bank Institute and the World Bank, Washington, DC.

Kis, V and Field, S (2009) Learning for Jobs: OECD Reviews of Vocational Education and Training: Chile - A First Report, Organisation For Economic Co-Operation And Development, Paris.

Knight, B and Mlotkowski, P (2009) *An overview of vocational education and training in Australia and its links to the labour market*, National Centre for Vocational Education Research (NCVER), Adelaide.

KRIVET (2005) brochure, Published by KRIVET, Seoul, Korea.

Kraak (2011) 'Cross-sectoral state coordination, TVET policies and economic development: lessons for South Africa from Finland, Ireland, Malaysia', Research Report commissioned by UNESCO, Paris, July 2011.

Kraak, A (2012) 'State failure in dealing with NEET in South Africa: What way forward?', *Research on Post-Compulsory Education*, forthcoming in 2012.

Kuczera, M, Kis, V and G Wurzburg (2009) *Learning for Jobs: OECD Reviews of Vocational Education and Training – Korea*, published by the Organisation for Economic Co-Operation and Development (OECD), Paris.

Lazo P (2009) 'Implementing Public TVET Programmes in the Midst of the Financial Crisis - HRD Policies in Collaboration with Employment Security: Chilean Experience' APEC Forum on HRD 2009: Chiba, Japan, November.

Lee, HJ (2005) 'Promoting the Knowledge-based Economy through e-Learning' in J-H Kim (ed) *New Paradigm Of Human Resources Development: Government Initiatives for Economic Growth and Social Integration in Korea*, Published by KRIVET, Seoul, Korea.

Lim, E and J Mi-Sug (2005) 'Career Guidance: Taking a Lifelong Career Development Perspective' in J-H Kim (ed) *New Paradigm Of Human Resources Development: Government Initiatives for Economic Growth and Social Integration in Korea*, Published by KRIVET, Seoul, Korea.

Majumdar, S (2005) 'Open & Distance Learning for Rural Development in India', background paper in workshop entitled Open and Distance Learning for Agricultural Development and Rural Poverty Reduction, A Workshop to Explore Innovation and Best Practices in Asia and the Pacific, 28-30 June, Bangkok, Thailand.

McMillan, G (2009) 'India's Vocational Training System', commercial feasibility study produced by HTA Inc., Brisbane, Queensland.

MGSLD (2011); *Annual Report 2010-2011*; Matthew Goniwe School of Leadership and Governance; accessed from [www.mgslg.co.za](http://www.mgslg.co.za)

Musker, P & Associates (2011) "Technical and Vocational Education and Training Apex Bodies: A Review of Selected International Literature"; for the Swiss South Africa Co-operative Initiative; July

National Planning Commission (NPC-South Africa) (2011) *Diagnostic Overview*, National Planning Commission, Government Printers, Pretoria, June.

NCVER (2010) *2010-2013 Strategic Plan*, National Centre for Vocational Education Research, (NCVER), Adelaide.

NCVER (2012) *Getting to know NCVER: A guide to NCVER's information resources*, National Centre for Vocational Education Research, (NCVER), Adelaide.

NITTTTR (2011a) 'Report of International Seminar on the Washington Accord: India's Preparedness', 6-7 January, Bhopal.

NITTTR (2011b) 'Information Brochure On The Full Time Doctoral Research Fellowship In Engineering Education', May.

Nzimande, B (2011a) Statement by the Minister of Higher Education and Training on Recertification and the new Boards, 4 April.

Ofsted (2004) "*Why Colleges Succeed*" (HMI2409); Office for Standards in Education, Children's Services and Skills (Ofsted), November 2004; accessed from [www.ofsted.gov.uk](http://www.ofsted.gov.uk)

Ofsted (2004) "*Why Colleges Fail*" (HMI2408); Office for Standards in Education, Children's Services and Skills (Ofsted), November 2004; accessed from [www.ofsted.gov.uk](http://www.ofsted.gov.uk)

Ortiz, L O (2010) 'Linkage of Public Employment Services (SPEs) with vocational education systems and information systems: Continuing Education System', SENCE Chief of Staff. National Office, December. PowerPoint presentation.

PALAMA (2012); *Annual Report 2011-2012*; Public Administration Leadership and Management Academy of South Africa; accessed from [www.palama.gov.za](http://www.palama.gov.za).

Radrihan M and A G Watts (2003) Public Policies and Career Development: A Framework for the Design of Career Information, Guidance and Counselling Services in Developing and Transition Countries, Country Report On Chile, World Bank, May.

Rajput, JS (2009) 'India: Policy Perspectives and Challenges Ahead', in *Mac Lean, R, Fien, J and M-G Park Work, Learning and Sustainable Development: Opportunities and Challenges*, UNESCO-UNEVOC Book Series Technical and Vocational Education and Training: Issues, Concerns and Prospects, Volume 8.

SACE (2012); Annual Report 2011-2012; South African Council for Educators; accessed from [www.sace.org.za](http://www.sace.org.za).

SENCE (2007) *Recognition of Non-Formal and Informal Learning: Country Background Report Chile*, Prepared by the Lifelong Learning System Chilecalifica in collaboration with the Higher Education Division of the Ministry of Education and National Service the Training and Employment. Chile.

Singizi Consulting (2007) *Seta Review*, Employment Promotion Programme. Singizi Consulting, Johannesburg.

Sondermann, T (2005) 'The German Vocational Training Reform Act of 2005: What is new, what is different?' *BWP Special Edition 2005*, BIBB journal.

SSACI (2011); "A Review of FET College Partnerships and Linkages"

Stanwick, J, Hargreaves, J and F Beddie (2009) *Assessing the impact of NCVET's research*, National Centre for Vocational Education Research (NCVER), Adelaide.

# **ANNEXURE A: COMPARATIVE STUDY OF TVET INSTITUTES**

**DHET Ministerial Task Team on the**

**Establishment of a South African Institute for Vocational and Continuing Education  
and Training**

**23rd July 2012**

## **PART ONE: INTRODUCTION**

Chapter 1: Determining a Typology of Apex Bodies in TVET

## **PART TWO: TVET INSTITUTES IN COMPARATIVE PERSPECTIVE**

Chapter 2: A TVET teacher training role – Switzerland’s SFIVET

Chapter 3: A TVET teacher training role – India’s NITTTR

Chapter 4: A research role – the case of Australia’s NCVER

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SENCE

## PART ONE: INTRODUCTION

### Chapter 1:

#### **Determining a Typology of Support Bodies in Vocational Education and Training (VET)**

In July 2012, the Ministerial Task Team on the establishment of a South African Institute for Vocational and Continuing Education and Training (SAIVCET) undertook a literature review of national institutes that support technical/vocational education and training in their respective countries. The scope of the review initially encompassed agencies, institutes and centres that:

- Were specifically initiated to provide a range of support services to enhance the implementation of vocational education and training
- Are organised or conduct their activities at a centralised, systemic level though they may be located outside of a central authority such as a national government department
- Provide services in the vocational education and training arena in, for example, capacity building of staff, curriculum development, research, monitoring and evaluation, data analysis
- Have been in existence for at least five years, and appear to be viable, recognised, and respected for the work that they do.

The literature review was intended to identify, in each case, how the entity was set up, its structural arrangements, funding arrangements, legislative status, functions, target audience, accountability lines, location, staffing, relationship to other relevant regulatory bodies and any other salient features.

The Task Team soon realised that this broad purview would be a massive undertaking. There are numerous bodies around the world that serve a wide range of functions across the primary, secondary, further and higher education fields. Some are state entities, reporting directly to a government ministry. Others are independent or, at least, operate at a significant distance from government. With so great a variety of agencies and institutes to look at, there was a risk that, without further refinement of scope, the literature review would produce much descriptive data without necessarily generating a corresponding number of useful insights for the Task Team's purposes.

The Team therefore decided to sift out agencies that are involved in activities unlikely to be at the core of SAIVCET – namely, setting norms and standards, doing quality assurance, directly implementing vocational training or undertaking curriculum development in general schooling and higher education. Instead, the review would focus on institutes that do the things most likely to be central to SAIVCET, i.e.:

- I. Promote the professional development of teachers and trainers in the TVET or adult education and training (AET) sectors
- II. Undertake research on TVET or AET curricula and pedagogy, and thereby promote the development of innovative curricula and teaching methods in those sectors.

This eliminated a great deal of clutter and soon yielded a working typology:

1. Institutes that emphasise the **professional development of TVET teachers and trainers**, exemplified by SFIVET in Switzerland and NITTTR in India.
2. Institutes that have a **strong research role**, such as NCVET in Australia and KRIVET in South Korea.
3. Institutes that play a strong role in the **formulation of TVET** policy and regulations, such as BIBB in Germany.
4. Institutes that **coordinate key aspects of the national system** for skills development, of which SENCE in Chile is a good example.

The exemplars of each type were then examined more closely. This is captured in the case studies that follow.

## **PART TWO: TVET INSTITUTES IN COMPARATIVE PERSPECTIVE**

### **Chapter 2:**

#### **A TVET teacher training role – Switzerland's SFIVET**

Switzerland's Federal Institute for Vocational Education and Training (SFIVET) is part of an 'ideal-type' system, from which much can be learned but which cannot be easily replicated in another context.

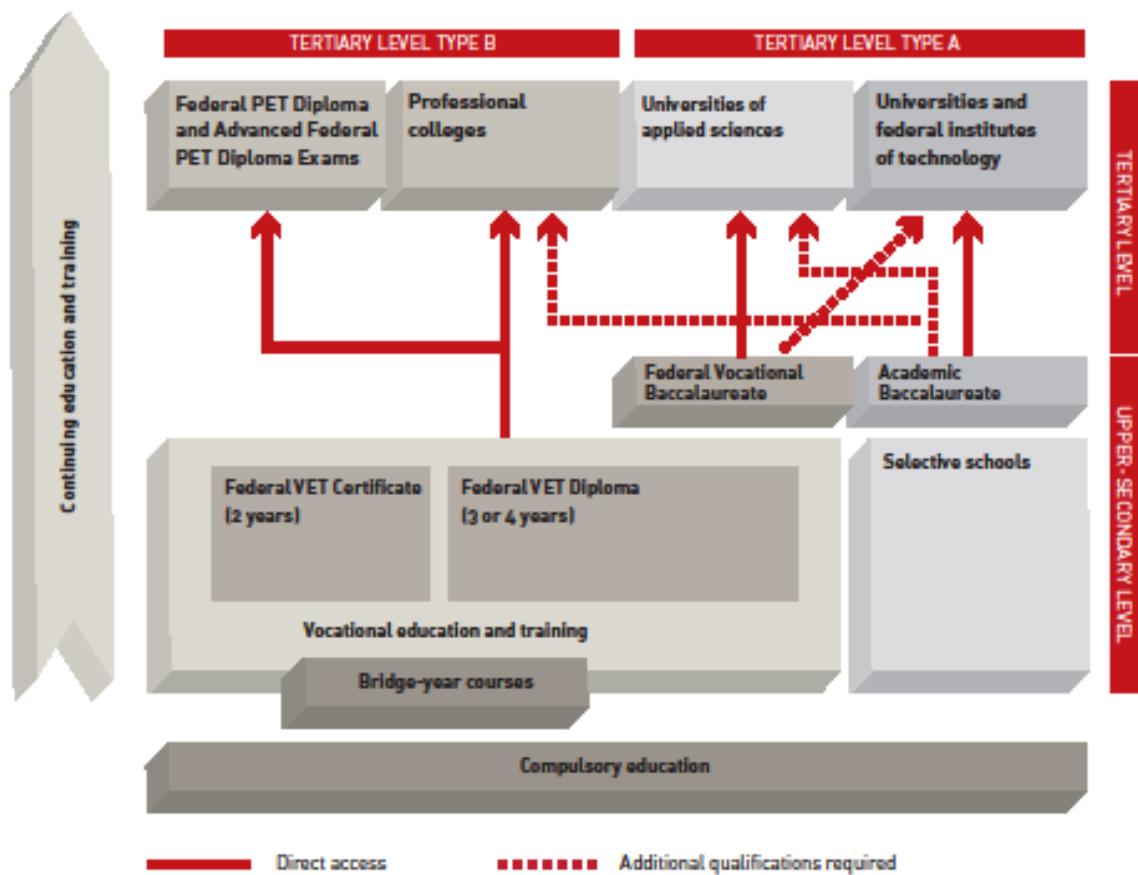
The primary focus of SFIVET is the professional development of TVET teachers and trainers. Switzerland is also best-practice because of the quality of its TVET system, which comprises a large part of senior secondary schooling and professional higher education. A brief outline of the Swiss education system is required before the strengths of the SFIVET can be considered.

#### **HISTORY OF SWISS EDUCATION**

Switzerland is a small country with about 8 million people. Its TVET system is often associated with the German 'dual system'. However, the Swiss TVET system is unique and more expansive than the German dual track system. Switzerland stands out as the European country with the lowest proportion of students going on to university and one of the highest proportions of young adults achieving a vocational (skilled worker) qualification. Upper secondary education is divided into two streams, a vocationally oriented one which attracts more than two-thirds of pupils and a general education stream which comprises the balance – one third of the pupil cohort (Kiener and Gonon, 1998). The Swiss education system is illustrated in more detail in Figure One below:



Figure One: the structure of the Swiss education system



Source: FDEA, 2012: 5

As is illustrated in Figure One, there are two types of TVET qualifications obtainable at the end of senior secondary school – a 2-year TVET certificate and a 3-year or 4-year TVET diploma. The two-year programme leads to the Federal TVET Certificate and is intended for students whose academic achievement during compulsory education is low and does not permit them to enrol directly into a three- or four-year TVET programme. Students who complete a two-year TVET programme receive a Federal TVET Certificate, which gives them the option of completing the three-year or the four-year TVET programme in less time (Weber and Kull, 2009: 26).

Students who complete a three-year or four-year TVET programme receive a Federal TVET Diploma, which allows them (with work experience) to continue their education at the tertiary (professional and applied higher education) level and progress to professional college degree programmes or to prepare and take national professional examinations to earn the Federal PET Diploma or the Advanced Federal PET Diploma (Weber and Kull, 2009: 26).

VET students who obtain their Federal TVET Diploma and who complete additional general education courses may also take an examination to obtain the Federal Vocational Baccalaureate. It entitles the holder to study in any of Switzerland's universities of applied sciences (UAS). If the holders of the Federal Vocational Baccalaureate successfully pass an additional University Aptitude Test, they are entitled to enrol in any of Switzerland's cantonal Universities (a tertiary level A or 'traditional' university) or in either of the two federal institutes of technology (Weber and Kull, 2009: 27).

A single or dual-track approach is used to provide students with vocational education and training. With the single-track approach, all general education courses, vocational courses and vocational training courses are provided exclusively by the vocational school as part of a fulltime TVET curriculum. This is also referred to as an entirely school-based TVET programme. With the dual-track option approach, vocational schools partner with host companies and – in some cases – industry training centres to share the burden of education and training across school-based and work-based training segments. This is also referred to as a school/work-based TVET programme. About 90% of all TVET programmes in Switzerland are based on the dual-track approach.

With the dual-track approach, practical training courses are carried out by host companies. These host companies organise paid apprenticeships for TVET students. The apprentices spend three or four days per week at the host company where they do productive work while undergoing practical training. The vocational schools provide students with general education courses and vocational instruction courses. TVET students spend one to two days per week at the vocational school. (Weber and Kull, 2009: 28).

Dual-track TVET programmes (i.e. part-time vocational school, part-time apprenticeship at host company) are by far the most common form of vocational education and training. Full-time TVET programmes at vocational schools are more popular among students in the French- and Italian-speaking regions of Switzerland than among students in the German-speaking region – who prefer the dual-track route (FDEA, 2012: 12).

A distinctive feature of Swiss society and Swiss education is the high proportion of young people who choose a vocational senior secondary schooling and a vocational (termed 'professional' in the Swiss system) higher education. As is visible in Figure one, TVET programmes provide upper-secondary school students with recognised qualifications and pave the way for lifelong learning. Three- or four-year TVET programmes leading to a Federal TVET Diploma provide students with the qualifications needed to carry out a specific

occupation and gain access to tertiary-level professional education and training (PET) programmes.

## **PROFESSIONAL HIGHER EDUCATION**

Tertiary-level professional education and training (PET) programmes provide students with specific qualifications and prepare them for managerial and specialised positions. There are around 400 PET programmes leading to national professional examinations and 400 PET programmes leading to professional college degrees (FDEA, 2012: 3).

PET programmes can be split into two main categories: PET programmes leading up to the national professional examinations (Federal PET Diploma Examination and Advanced Federal PET Diploma Examination) and PET programmes offered by professional colleges. Professional colleges provide specialised degree programmes. In addition to attending theoretical courses, students either work in their field or take part in a traineeship. The degree programmes provided by the professional colleges are regulated and recognised by government. They are based on the curriculum established by the corresponding professional organisation and therefore are strongly based on the needs of the market. Around 4,000 professional college degrees are awarded each year (Weber and Kull, 2009: 29).

The Federal Vocational Baccalaureate (FVB) was introduced in 1994. It is awarded to about 14% of TVET students who have strong academic skills. Issued as a complement to the Federal TVET Diploma, the FVB entitles the holder to enrol directly in a Swiss university of applied sciences (FDEA, 2012: 16).

Universities of applied sciences provide practical education and training at tertiary A (traditional university) level. Universities of applied sciences act as a relay for holders of the Federal Vocational Baccalaureate (FVB), allowing them to raise their level of qualifications to university level. Unlike PET programmes, universities of applied sciences also focus on fundamental and applied research (Weber and Kull, 2009: 32).

The UAS system was launched in 1996. This led to a major overhaul of the professional education and training domain. Seven UASs were created out of 28 engineering colleges, 21 economics and management colleges and nine design colleges. The seven public and two

private UAS provide education and training in several key fields such as: technology, business, design, social work and art (Weber and Kull, 2009: 32).

The distinctive outcome of the Swiss TVET system is a comprehensive 'skills mix' of firstly, highly qualified artisans and technicians at the intermediate skill levels, and secondly, a spectrum of highly skilled personnel in the applied sciences.

## **GOVERNANCE OF THE TVET SYSTEM**

The governance of the system is shared across three key stakeholders: the Confederation, the cantons and professional organisations. These three partners are jointly committed to the highest possible standard of VET/PET.

Switzerland is one of the few countries that does not have a national ministry of education. Education is one of the main responsibilities of the cantonal governments.

The sole exception is vocational training which for historical reasons, is firmly linked to the running of the national economy. Because of these dual federal-cantonal competencies, and because of regional, cultural and linguistic influences, there is significant variety in the TVET system across the whole of Switzerland. In the German-speaking part of Switzerland, the dual system has become firmly established. However, the predominant vocational training model in the French- and Italian-speaking parts of the country is the full-time vocational school, offering a combination of technical and general subjects (Gonon, 2004: 91).

### **Other Ministry bodies**

The Federal Department of Economic Affairs (FDEA) works in the area of education through the Federal Office for Professional Education and Technology (OPET). OPET is the federal competence centre for vocational education and training (VET, upper secondary level), professional education and training (PET, tertiary level type B), universities of applied sciences (UAS), occupational, educational and career guidance counselling, training of TVET professionals and innovation technology grants (Weber and Kull, 2009: 26).

The legal basis and the definition of content for each vocational education and training programme can be found in the education ordinances issued by the Federal Office for Professional Education and Technology (OPET). They are prepared through the joint efforts of the Confederation, the cantons and the corresponding professional organisations (trade

associations, social partners and other organisations and VET/PET providers). In addition to the education ordinances, there are training plans to structure vocational education and training courses. Professional organisations are responsible for establishing and updating the content of TVET and PET programmes (Weber and Kull, 2009: 28).

Responsibility for vocational and professional education and training is shared by the Confederation, the cantons and the professional organisations. The cantons are responsible for implementing and supervising the VET/PET system. Each of the 26 cantons therefore has its own VET/PET agency. Cantonal activities specifically include creating vocational schools and introducing TVET programmes in these schools, providing advice to the parties to apprenticeship contracts (VET students and host companies), and drawing a sufficient number of companies willing to offer paid TVET apprenticeships. Professional organisations (which include trade associations, social partners and other organisations and VET/PET providers) are responsible for establishing and updating the content of TVET and PET programmes (Weber and Kull, 2009: 29).

Companies provide TVET apprenticeships and PET traineeships, thereby ensuring the next generation of qualified workers. In order to formalise the in-company training relationship, apprenticeship contracts are signed by TVET students and the host company (Weber and Kull, 2009: 29).

## **SFIVET**

SFIVET's primary mandate is the professional development of TVET teachers and trainers and the improvement of TVET pedagogy and TVET curriculum in Switzerland.

SFIVET was established as the Swiss Pedagogical Institute for Vocational Education (SPIVE) – its predecessor – in Zollikofen in 1972. A second campus of SPIVE was opened in Lausanne in 1975 for the French-speaking region of Switzerland and a third in Lugano in 1991 for the Italian-speaking region. SPIVE's mandate covered basic and continuing training of vocational teachers in the commercial-industrial field, particularly full-time and part-time vocational teachers responsible for teaching and/or managerial, guidance or mediation activities. Further tasks included the implementation of research and development projects in the vocational education field and the publication of studies and technical reports.

In January 2007, SPIVE became the Swiss Federal Institute for Vocational Education and Training (SFIVET). SFIVET is today considered to be the Confederation's primary competence centre for basic and continuing training of VET/PET professionals as well as for

research and development in the VET/PET field. SFIVET provides services in the following areas:

- Basic training of VET/PET professionals
- Continuing training of VET/PET professionals
- Research and development in the VET/PET field.

The Basic Training Division provides training to full-time and part-time teachers working at vocational schools and professional colleges as well as to other VET/PET professionals. Launched in autumn 2007, the Master of Science (MSc) degree programme in Vocational Education and Training provides university graduates with the opportunity to gain academic qualifications in the VET/PET field.

The Continuing Training Division offers continuing training courses designed to upgrade the skills of VET/PET professionals; enable TVET organisations to develop their activities; provide VET/PET managers with advanced training; and promote quality and innovation within the Swiss VET/PET system.

The Research and Development Division explores and lays the foundations for basic and continuing training in the VET/PET field. In particular, it carries out evaluations and impact assessments or develops competence measurement concepts that serve as the basis for further VET/PET developments.

SFIVET acts as an interface between trade associations, professional organisations and the 26 cantons (with hundreds of vocational schools and professional colleges). As a national institute, SFIVET plays an important role for these partners, acting as a central point of contact for all matters relating to the basic and continuing training of VET/PET professionals.

### **Research role**

In addition to providing basic and continuing education and training, the Swiss Federal Institute for Vocational Education and Training (SFIVET) also carries out research and development activities in the area of upper-secondary level vocational education and training (VET) and tertiary-level professional education and training (PET). Both teaching and R&D are essential core competencies for SFIVET. By examining the correlations that exist between the Swiss education system and the Swiss labour market, SFIVET makes a

substantial contribution to the analysis, optimisation and on-going development of Switzerland's VET/PET sector.

## **SFIVET QUALIFICATIONS OFFERED**

SFIVET offers three types of professional development qualifications for TVET practitioners – a certificate, degree and Master's programme in VET:

- **Certification programmes:** Basic training certification programmes are intended for TVET professionals at upper-secondary level (i.e. part-time and full-time vocational trainers at host companies; part-time and full-time vocational teachers and FVB teachers at vocational schools) as well as for PET professionals at tertiary level (i.e. professional college teachers). Basic training certification programmes are modular in design.
- **Degree programmes:** SFIVET has degree programmes to prepare people for challenging vocational (upper-secondary level) and professional (tertiary-level) education and training activities. These degree programmes are based on: the experience that SFIVET staff have gained working with day-to-day VET/PET aspects; the knowledge generated by its R&D division; and the know-how of VET/PET professionals who teach and train in the field. The content of the degree programme is updated on an on-going basis.
- **Master of Science:** SFIVET's Master of Science in Vocational Education and Training is unique in Switzerland's education landscape. Students undergo intensive training to prepare for the growing challenges associated with VET- related developments at both national and international levels. Graduates of the MSc in TVET programme are able to take on important managerial tasks and make valuable R&D contributions to the Swiss TVET sector. SFIVET's MSc in Vocational Education and Training:
  - is multidisciplinary, combining economic, sociological, psychological and education science aspects
  - is practical, providing specific, scientifically-proven answers to practical problems
  - makes use of innovative teaching and learning processes
  - helps strengthen Switzerland's VET/PET system, thanks to federal recognition of the MSc degree and the equal weight given to German, French and Italian both linguistically and culturally.

## **CONCLUSION**

The strength of the Swiss TVET system is the comprehensive spread of well-articulated programme offerings across senior secondary school and higher education. There is a large cohort of TVET teachers and trainers at both the senior secondary school level and in higher education who need initial and then continuing professional development throughout their working lives in the TVET system. SFIVET performs this professional development role very competently.



## Chapter 3

### A TVET teacher training role – India's NITTTR

India as a TVET case study stands in sharp contrast to Switzerland. Its population is in excess of 1.2 billion people and its total education system is larger than 200 million people. Switzerland is miniscule in comparison. Nonetheless, its apex TVET institute – the National Institute for Technical Teacher Training and Research (NITTTR) – shares a similar mandate to SFIVET, of providing for the professional development of all TVET teachers and trainers in the wider education system.

Apart from scale, what immediately sets India apart from countries such as Switzerland is its levels of poverty and inequality. About 260 million people in the country live below the poverty line. Of these, 75 per cent live in the rural areas (Majumdar, 2005: 3). However, significant progress has been made in reducing inequality and poverty in the past two decades. Rates of literacy, for example, have risen considerably in India in the past 20 years. The 2001 census recorded literacy rates of 65.4 per cent, up from 52.2 per cent in 1991. The male literacy rate is 75.9 per cent (up from 56 per cent in 1981), compared with 54.2 per cent for women (30 per cent in 1981). Considerable regional variations exist, however: Kerala has a literacy rate of 91 per cent, whereas Bihar's is only 48 per cent (WB, 2005: 44).

#### EDUCATION

The Indian system of education is massive: it has 320 universities, 102 'deemed universities' and nearly 17,625 colleges of higher education. It has over 3,000 teacher training institutions. 'Deemed university' status is a sought after tag for new government universities, private higher education institutions and foreign providers. A deemed university has the autonomy to set its own syllabus, course work, admission guidelines and fees, among other things.

Even with this growth in educational services in India, significant challenges still remain. School dropout rates are one of these hurdles as is evident in Table 3.1. In 2000, 42 per cent of senior secondary students did not complete formal schooling. School enrolments will need to expand by 75 million students in the three final years of schooling to close the gap – a daunting task.

Table 3.1: drop rates in India, 1980 -2020

|                            | 1980 actual (%) | 2000 estimated (%) | 2020 business-as-usual (%) | 2020 best case scenario (%) |
|----------------------------|-----------------|--------------------|----------------------------|-----------------------------|
| Primary enrolment (1-5)    | 80              | 89                 | 100                        | 100                         |
| Elementary enrolment (1-8) | 77              | 79                 | 85                         | 100                         |
| Secondary enrolment (9-12) | 30              | 58                 | 75                         | 100                         |
| Drop-out rate (1-5)        | 54              | 40                 | 20                         | 0                           |
| Drop-out rate (1-8)        | 73              | 54                 | 35                         | 0                           |

Source: Rajput, 2009: 346

Higher education enrolments are another problem. The participation of the relevant age group in higher education is around 11 per cent, which is very low comparatively yet large in aggregate terms (Rajput, 2009, 2009: 345).

### School Education

Table 3,2 shows the enrolment of students in primary, secondary, and tertiary education in India and illustrates the large expansion in student intake that has taken place at all levels. The rate of enrolment in primary schools has increased in the past decade, from 97 per cent of the eligible age group in 1990 to 99 per cent in 2001 (Figure 3-3). The corresponding rate for secondary schools rose from 44 per cent in 1990 to 50 per cent in 2001

Table 3.2: Enrolment by educational stages in India, 1990 - 2002

| Stages                     | 1990 | 2002  |
|----------------------------|------|-------|
| Primary (Grades 1-5)       | 97.4 | 113.9 |
| Upper Primary (Grades 6-8) | 34.0 | 44.8  |
| Secondary (grades 9-12)    | 19.1 | 30.5  |
| Tertiary                   | n/a  | 9.2   |

Source: WB, 2005: 46

Despite these accomplishments, India still accounts for one-quarter of the world's 104 million out-of-school children. Poor quality of education, widespread teacher vacancies and teacher absenteeism, high dropout rates, inadequate teaching and learning materials, and uneven levels of learning achievement are all major problems. Girls in the 6 to 14 year-old age group still exhibit relatively low participation in elementary education (WB, 2005: 47).

## **Growth of private education**

Four main school types for primary and secondary education exist in India:

- Schools run by the government (central, state, or local government)
- Those run by local bodies
- Those run by private management, but with government grants-in-aid, and
- Those under private management and run without state aid. The latter run entirely on fee revenues and receive little government interference in matters such as teacher recruitment (WB, 2005: 48-49).

Private unaided schools have been increasing at a rapid rate in India. By 2001-02, they had increased their share by more than four times to reach 24 per cent of secondary schools (WB, 2005: 48-49).

## **Post-school education**

In 2001 India had a tertiary gross enrolment ratio (GER) of 11.4 per cent. China has surpassed India in this domain (with a tertiary GER of 12.7%) and is continuing to make rapid progress. But even so, India and China are no match for Poland and South Korea, which have impressive tertiary GERs of 59 per cent and 82 per cent respectively (WB, 2005: 52).

There are some laudable achievements. For example, India has one of the world's largest systems of post-secondary technical science and engineering education. As a result, it has one of the largest labour market stocks of scientists, engineers, and technicians in the world. At the apex of India's technical education institutions are the Indian Institutes of Technology (IITs). India also has some front-ranking universities and institutes for engineering and applied sciences education. The government has established 17 regional engineering colleges (RECs) with a primary focus on high-quality engineering practice. These colleges, along with about 30 well-established state colleges and government-aided private colleges, form the second tier of leading technical institutions. The RECs are followed by some 500 government/government-aided and self-financing engineering colleges offering only degree programmes and some 1100 polytechnics offering diploma programmes. Most of these institutions operate under the strict control of the State Directorates of Technical Education in each of the states. Although IITs and a few other first-tier institutions offer world-class

education and training in engineering and technology incorporating “best practices”, a large number of institutions offer rather outdated programmes with inflexible structures and content. Within each category of public, privately aided, and private unaided institutions, wide variation in quality exists (WB, 2005: 55).

### **The Indian Institutes of Technology (IITs)**

The IITs are a group of fifteen autonomous prestigious engineering and technology-oriented institutions of higher education established and declared as Institutions of National Importance by the Parliament of India. The IITs were created to train scientists and engineers, with the aim of developing a skilled workforce to support the economic and social development of India after independence in 1947.

The National Institutes of Technology (NITs) are esteemed colleges of engineering and technology education in India. They were originally called Regional Engineering Colleges (RECs). In 2002, the Ministry of Human Resource Development decided to upgrade all the original 17 Regional Engineering Colleges (RECs) as National Institutes of Technology (NITs). There are currently 20 NITs.

### **Community polytechnics**

Among one of the prominent government initiatives for rural development is the Scheme of Community Polytechnics started in 1978-79. The Scheme was launched in 35 campuses on an experimental basis, with a view to ensuring that rural society gets a fair share of benefits from the Technical Education System. Presently, there are about 700 Community Polytechnics in the country. Each of these polytechnics has four to five extension centres in the various village localities (Majumdar, 2005: 8-9).

It is clear that the defining feature of India’s vocational and technical education system is not so much a school-based vocational education system, but rather a very extensive post-school network of colleges, polytechnics, and various types of Institutes of Technology. This infrastructure has produced a large, highly skilled, mobile and globally-oriented work force which benefits both the growing Indian and also the global economy. Indeed, India has become a major international centre for the recruitment of high quality IT and engineering staff. Many IT and engineering workers leave India, but many return, and both directional flows lead to significant knowledge transfers and linkages across business entities that benefit Indian society (WB, 2005: 56).

But a study by the World Bank (2000) detailed several deficiencies in India's scientific and technical manpower development system that urgently need to be addressed if India is to continue to fulfil its huge potential for economic prosperity. These deficiencies include over-centralisation and lack of autonomy and accountability of institutions. Most have little authority on faculty appointments, student admissions, structure and contents of programmes, student performance evaluation, and financial management. In terms of physical infrastructure, technology and infrastructure support is poor in many tertiary education institutions, especially in laboratories, communication lines, computer and IT, as well as in library linkages. In addition, resource constraints prevent attracting the best academic minds. The quality of provision in many post-school institutions is in general poor and quality assurance mechanisms are weak (WB, 2005: 54).

## **NQF**

Interestingly, India has recently moved towards a national skills framework. The recently created National Vocational Qualification Framework (NVQF) will provide open and flexible pathways for individuals. It will recognise prior knowledge and skills through testing and certification and allow access into higher diplomas and degrees. Similar to the Australian AQTF system, the NVQF has performance objectives that require all qualifications to reflect market needs and workplace requirements; that training processes are validated; that assessment is based on national competencies and that training is delivered by competent and qualified trainers in appropriately managed and resourced institutions (McMillan, 2009:5).

## **The NITTTR**

The National Institute of Technical Teachers Training and Research (NITTTR) is India's major TVET support institution, although there are at least two other apex bodies which work in the TVET sector – see the later section on AICTE, NCERT and the IAMR. NITTTR has its headquarters in Kolkata, with an additional three campuses in:

- Chandigarh for Northern Region
- Bhopal for Western Region
- Madras for Southern Region.

The mission of the NITTTR is to:

- Offer quality, flexible, relevant and cost-effective training programmes for technical teachers, in various modes including web based programmes
- Demonstrate leadership by organising dynamic and leading edge programmes to meet the changing needs of industry and Indian society
- Develop into a “Deemed University” in order to provide effective and efficient services to technical teachers
- Help in solving problems in Engineering Education through research, development and extension activities
- Establish and foster collaboration between industry, government and national and international education institutes.

The objectives of the NITTTR are to:

1. Act as a centre for offering quality training programmes for teachers as per needs of the client system, covering the entire gamut of technical education including engineering colleges, polytechnics, and vocational and management education, at regional and national levels
2. Arrange for the training of technical teachers in industry
3. Undertake systemic research to provide inputs for the development of technical education training systems and their management
4. Undertake and guide research with respect to the development of innovative methods, processes and practices for improvement of the teaching-learning environment in technical and vocational education institutions
5. Design new instructional systems and strategies for production of multimedia learning materials
6. Develop and disseminate learning resources like Textbooks, Laboratory Manuals, Video Programmes, Computer-Assisted Instructional Multimedia Packages to technical and vocational training institutions and other organisations
7. Offer programmes for technical and vocational teachers in distance learning mode using state-of-the-art technologies
8. Offer courses/programmes for technical and vocational teachers to suit overseas demand especially the South Asian countries.
9. Institute and award fellowships, scholarships, prizes and medals

10. Collaborate with communities and industry in organising continuing and non-formal vocational education programmes and provide extension and consultancy services
11. Undertake consultancy and extension work for industry
12. Establish extension centres of NITTTR in different States with the approval of the Government of India, to serve the specific needs of each State
13. Provide support services to the government of India on issues related to the technical and vocational education system.

Today, the NITTTR has acquired the status of one of the premier technological institutions in India for the training of technical teachers in engineering colleges and polytechnic colleges. It also offers post graduate diploma and master's programmes in the field of Education Technology, and Human Resources Management. The Institute also offers a PhD. Programme in the areas of Engineering, Educational Technology, Educational Management, and Engineering Education. A key-objective of all this teaching is to create a breed of qualified, innovative and dynamic teaching professionals for engineering colleges and polytechnic colleges, the service industry, for self-employment and for academic and research institutions of national importance.

The NITTTR has a range of programmes for the teaching of TVET teachers in the post-school system, from certificate level to doctoral level. It trains about 5000 polytechnic teachers and 3000 engineering teachers every year. Short-term staff development programmes are also a priority area. In recognition of this, the Institute is conducting a variety of short-term and long-term training programmes for teachers and other staff of the Polytechnics and short-term courses for the teachers of Engineering Colleges and overseas teachers to enable them to acquire competencies relevant to their respective areas of work.

Short course topics include themes such as:

- Content Updating
- Instructional Material and Media Development
- Instructional Design and Delivery System
- Guidance and Counselling
- Induction Training
- Student Support - Services and Career Counselling

- Student Evaluation Techniques
- Engineering & Technology
- Information Technology & Application
- Educational Media
- Vocational Education and Training Programmes
- Community Polytechnic Schemes
- Integrating Disabled Persons with Main Stream Technical & Vocational Education

The Master of Technology (Human Resource Development) programme aims to develop appropriate models for planning and development that are relevant to the resolution of issues confronting HRD in technical education including topics such as globalisation and the future capabilities needed across the system.

A second M.Tech programme in Technical Education is now offered through a link with the University of Madras. It is aimed at both engineering teachers and those with no teaching experience. While 70 per cent of the course deals with core engineering subjects, especially those requiring interdisciplinary expertise, 30 per cent of the programme focuses on effective teaching techniques.

A new full time Doctoral Research Fellowship Scheme was introduced in 2008 to attract young talent to join the institute and pursue doctoral research in the interdisciplinary area of Engineering Education. A total of 10 fellowship positions have been instituted annually.

The institute also hopes to expand its doctoral research programme, which has produced 47 PhDs so far and a further 55 currently enrolled. The institute also plans to tie up with other technical training institutions and universities in the US, Singapore and Switzerland. Joint courses will be offered and expertise shared through faculty exchanges.

### **Structure of NITTTR**

The NITTTR has the following eleven organisation departments:

- Civil Engineering
- Correspondence Courses
- Education



- Electrical & Electronics Engineering
- Educational Management & Applied Psychology
- Educational Technology & Multimedia
- Mechanical Engineering
- Policy Planning and Educational Research
- Computer Centre
- Centre for Environmental Management
- Centre for Sustainable Development

## **MEETING INTERNATIONAL QUALITY STANDARDS**

In 1989, the Washington Accord was signed by six countries. The Accord recognized substantial equivalence in the accreditation of qualifications in engineering education normally of four years' duration between the six countries. India became a provisional member of the Washington Accord in 2007. India's bid to become a fully-fledged member of the Washington Accord was not acceded to in 2009. However, as a special case, India's provisional membership was extended for another two years (NITTTR, 2011a: 2)

Recognition by the Washington Accord would ensure that Indian undergraduate engineering degrees would be accorded an equal status in all member countries and recognized as engineering degrees of high international standards.

In an evaluation of why India's engineering education and training system was not fully compliant with the demands of the Washington Accord, the NITTTR produced the following recommendations for improvement:

1. There is a need to strengthen accreditation of TVET institutions and make them more independent. Significant investment in information systems, staff and a peer review system was needed. Accrediting over 10,000 engineering, computer science, and technology programmes across the country is a gigantic task demanding huge resources (NITTTR, 2011a: 8)
2. There is a need to overcome the shortage of faculty with PhDs in Engineering. A large number of PhDs need to be produced in future and this will require incentivisation if young people are to join the engineering teaching profession

3. Modern curricula are needed that develop the necessary professional competencies. Therefore, it is necessary for institutions to modernise curricula and teaching-learning methods, upgrade equipment, and invest in research
4. TVET Institutions need to become more autonomous and accountable to compete at the global level
5. Substantial investments in engineering training institutions will be needed in the future to give them a fair chance to compete at global standards (NITTTR, 2011a: 8-9)

## **RESEARCH**

The NITTTR also fosters research in the inter-disciplinary area of engineering education and offers consultancy and extension services to engineering colleges, polytechnics, vocational training institutions, industry, the services sector and the community at large. Research is done in the following priority areas:

1. Human resource development (training and development of staff in technical education institutions, industries and government departments)
2. Curriculum development and evaluation
3. Instructional materials and media development, including e-learning
4. Pedagogy and teaching-learning
5. Testing and evaluation
6. Human Resource Management
7. Governance and educational management including management information systems, and student support services such as guidance and counselling
8. Sustainable development
9. Technical education for disadvantaged persons [persons defined as belonging to lower castes, minority communities, disabled persons, persons living in difficult circumstances, and women] (NITTTR, 2011b: 2)

## **OTHER APEX BODIES**

Given that India is such a large country with an equivalently large state apparatus, it comes as no surprise that other apex bodies function alongside the NITTTR in delivering services to the Indian TVET sector. These include the All India Council for Technical Education (AICTE) which is the national level apex advisory body, with responsibility for developing and promoting quality technical education in the country in a coordinated and integrated manner. AICTE is also a regulator, setting norms and standards for the accreditation of TVET and engineering education in India. Another major responsibility of the AICTE is to weed out those institutions that do not meet its standards. The AICTE's domain includes both institutions and programmes, and the scope covers engineering, technology, architecture, town planning, management, pharmacy, applied arts and crafts and hotel management and catering (McMillan, 2009:5).

### **The NCERT**

The National Centre for Educational Research and training (NCERT) is an apex body which is responsible for conducting and supporting research on education, including VET. Its sub-unit - The Central Institute of Vocational Education – which was established in 1992, is responsible for all NCERT research on vocational education. It also has an advisory role to the Ministry of Human Resource Development. It is structured into the following six sectoral research departments:

- Division of Agriculture
- Division of Business and Commerce
- Division of Engineering and Technology
- Division of Health and Education for the Disabled
- Division of Home Science
- Division of Humanities Science and Education

The major activities of the NCERT include development and renewal of curricula and instructional materials for various levels of school education and making them relevant to the changing needs of children and society. It also publishes textbooks for different school subjects for Classes I to XII. It publishes workbooks, teachers' guides, supplementary readers, and research reports.

## **The IAMR**

India's Institute for Applied Manpower Research, based in New Delhi, is a government institution located under the Planning Commission. It is the only think-tank of the Planning Commission. One of the Planning Commission's key roles is to prepare the five-year plans of India. The IAMR works in close collaboration with the Planning Commission in developing the five-year plan. The IAMR was initially established in the Indian Institute of Public Administration campus as an autonomous institute in 1962. It moved to a new campus in Narela in 2002. The primary objectives of the Institute include research, data collection, and education and training in all aspects of human capital planning and human resource development (HRD). The faculty of the Institute specialises in a variety of disciplines and has strong multidisciplinary expertise.

Research forms a core activity of the Institute and includes such efforts as developing methodologies for the assessment of stock, forecasting demand for and supply of skills, as well as more analytical and theoretical studies on HRD. IAMR regularly publishes research reports and seminar proceedings. The Institute publishes the *Manpower Profile India Yearbook* which is regarded as the most definitive document on all aspects of HRD in India. The Institute's *Manpower Journal* is a refereed journal published quarterly by the IAMR since 1965.

## **CONCLUSION**

Selecting a single apex body responsible for the development of the TVET sector in India has proven difficult. There are additional TVET apex bodies such as the IAMR (which contributes to national planning), AICTE (which attends to quality assurance, and to curriculum and qualifications issues) and the NCERT (which has a research role in VET). Nonetheless, the NITTTR is distinctive through its primary role in supporting the TVET and engineering sectors by promoting the professional development of TVET and engineering teachers, lecturers and trainers.

## **Chapter 4:**

### **A research role – the case of Australia's NCVET**

Australia presents a different type of TVET support body to that of Switzerland and India – one that is predominantly research-focused. The National Centre for Vocational Education Research ( NCVET), started in 1981 and based in Adelaide, hosts one of the world's foremost research centres on TVET.

#### **BACKGROUND TO THE EDUCATION SYSTEM**

Australia has a population of 22.6 million people and its TVET system currently comprises about 1.7 million learners in the public system and a further 1.5 million in the private system. This is a relatively high participation rate, particularly if compared with South African statistics. The success of Australia's broader education system, including the TVET sector is reflected in the education profile of its employed workforce. Currently, 59 per cent of employees possess a post-school qualification, with the remaining 41 per cent possessing a lesser qualification. This is a highly skilled labour force if compared with the South African reality.

#### **The size of the education system**

In 2008 the higher education sector graduated about 1.1 million students. The schools sector educated about 3.5 million students in 9500 schools (Australian Productivity Commission, 2011: 16). Almost 5000 registered training organisations (RTOs), both public and private, deliver TVET today. In the public sector, there are 59 TAFEs (FET colleges) delivering TVET across 1300 locations (Australian Productivity Commission, 2011: 18).

An interesting feature of the Australian TVET system – unlike its South African equivalent – is the high participation of older employed workers in the system who are busy retooling and upskilling themselves. As is evident in Table 4.1, more than 56 per cent of TAFE and TVET learners are 25 years of age and older.

Table 4.1. The age profile of TVET students in Australia

| <i>Age</i>         | <i>Number of students</i> | <i>Proportion of students</i> |
|--------------------|---------------------------|-------------------------------|
|                    | '000                      | %                             |
| 14 years and under | 12.9                      | 0.8                           |
| 15 to 19           | 447.4                     | 28.2                          |
| 20 to 24           | 287.4                     | 18.8                          |
| 25 to 44           | 601.4                     | 35.2                          |
| 45 to 64           | 312.7                     | 18.5                          |
| 65 and over        | 25.9                      | 1.5                           |
| Unknown            | 18.9                      | 1.1                           |

Source: Australian Productivity Commission, 2011: 21

### The Australian Qualifications Framework

The TVET system in Australia historically has been dominated on the supply-side by the TAFE colleges for many decades. However, in the early 1990s the Australian government began to radically restructure the TVET system through the creation of an entirely new training regime with a new institutional architecture. South Africans will be very familiar with the core components of this new architecture, as the new Australian model provided major policy inspiration for the development of a similar training regime in South Africa with the publication of the Skills Development Act of 1997. However, whereas South Africa's training regime today suffers from institutional fatigue and maladministration, the Australian model has prospered through a number of iterative reforms. What is now in place is a successful demand-led national training system which provides nationally recognised TVET qualifications to all working-age Australians. The primary instrument developed to assure the quality and consistency of training throughout the national network of public and private registered training organisations is the Australian Qualifications Framework and the Australian Quality Training Framework (Knight and Mlotkowski, 2009: 37). Each of these key elements will be briefly examined.

The Australian Qualifications Framework (AQF) provides a single framework for all qualifications from Senior Secondary Certification to PhD. Within the TVET sector, the following qualifications can be issued:

- Certificate I
- Certificate II
- Certificate III

- Certificate IV
- Diploma
- Advanced Diploma
- Vocational Graduate Certificate
- Vocational Graduate Diploma.

## **The Australian Quality Training Framework**

The Australian Quality Training Framework (AQTF) is the national set of standards which assures nationally consistent, high-quality training and assessment services for the clients of Australia's vocational education and training system.

### **Registered training organisations**

Training organisations must meet the AQTF norms and standards for registration. Only registered training organisations (RTOs) can issue AQF qualifications and deliver accredited training and assessment. Australia has 4000 registered RTOs which include TAFE colleges and institutions, adult and community education providers, private providers, community organisations, schools, higher education institutions, commercial and enterprise training providers, industry bodies, and other organisations that meet registration requirements.

### **State training authorities**

Registering authorities in each state and territory are responsible for registering and monitoring training organisations and ensuring they comply with AQTF standards. They also accredit TVET courses and approve training organisations' delivery of TVET to overseas students.

Each state has a government agency - a state training authority – responsible for implementing and managing the AQTF within its jurisdiction, for managing publicly funded TVET provision and undertaking state-level policy development and planning. The state training authorities also represent their jurisdiction at national level and are responsible for the funding that states receive from the Australian Government as specific-purpose payments for TVET (Knight and Mlotkowski, 2009: 27).

## **Employers and Industry Skills Councils**

Employer representatives participate in the development of policy and strategic directions for the national training system through their involvement on a range of advisory bodies. At the national level, the major formal arrangements where there is a statutory or administrative requirement for industry representation and advisory input include:

- the National Industry Skills Council (NISC), which provides advice directly to ministers - specifically, to the Ministerial Council for Vocational and Technical Education - about training needs, including workforce planning and future training priorities
- 11 industry skills councils (ISCs), which provide industry intelligence to the TVET sector about current and future training requirements, including industry skill reports. A specific responsibility of each industry skills council is development and maintenance of national training packages. This provides employers with a mechanism for identifying the competencies and qualifications they need and incorporating these in national training packages, promoting alignment between the knowledge and skills that TVET students acquire and what employers need (Knight and Mlotkowski, 2009: 28)

ISCs provide advice to Australian, state and territory governments on the training that is required by industry. The key purpose of an ISC is to provide:

- comprehensive representation of industry in the management and planning of vocational education and training (VET)
- advice and participation in the development of training products and services to meet industry needs.

Training package development and endorsement has a high level of employer involvement through their representatives on the industry skills councils. In the early years of their establishment, national training packages were often described as being developed by industry for industry', indicating the central role that industry plays in their development and maintenance (Knight and Mlotkowski, 2009: 32).

The Australian vocational education and training (VET) system is recognised as among the most sophisticated in the world because it is:



- Industry led - employers and industry representatives define what outcome is required from training.
- National – the system is jointly managed by state and federal governments.
- Client focused – it is flexible and relevant and responsive to client needs.

## **THE NCVER**

The National Centre for Vocational Education Research (NCVER), launched in 1981, is a not-for-profit company owned by state, territory and federal ministers responsible for training. It is a professional and independent body responsible for collecting, managing, analysing, evaluating and communicating research and statistics about TVET (NCVER, 2010: 1-4).

### **History**

The first direct role for the centre in statistical collection began in 1991 when it assumed responsibility for the national TAFE statistical collection. Until that time, the statistical collections in this area were neither consistent nor representative (Curtin and Loveder, 2007: 6).

Another early trigger which shaped the eventual role of the NCVER was the realisation by government in the 1990s that the TVET sector made little use of formal evaluations. TVET research had little influence on TVET policy-making. Policy-makers were focused at the macro level, while much of the research at that time was focused very narrowly on particular issues.

To resolve these problems government proposed the drafting of a 'national TVET research strategy' in 1996. Government argued for a more strategic approach to research and emphasised the importance of focusing on areas of high priority to the sector, on improving the quality and quantity of research and enhancing the means of its dissemination (Curtin and Loveder, 2007: 14). This intervention led to the commissioning and production of various pieces of research that examined the impact of TVET research on policy.

The first national TVET research strategy was an important development. It established areas of investigation to focus on and to prioritise. It was the first national TVET research

strategy developed in any country and it was specifically aimed at research having a greater role in policy formulation and revision, and indeed on practice.

Research into the economic and social implications of TVET was extremely rare before this strategy, so the priority became to increase significant research in these areas, with the aim of relating the research to policy development. However, research also continued to look at other issues of importance to the sector such as the transition of young people from school to work, the quality of TVET provision, and ways to increase the effectiveness of practice in the TVET sector (Curtin and Loveder, 2007: 8).

### **Vision and Mission**

With such a background, it is no surprise that the NCVER's current vision is to contribute to the improvement in Australia's education and training system by ensuring that policy and practice are based on sound evidence. Its mission is to be Australia's leading provider of high-quality, independent information on vocational education and training to governments, the education sector, industry, and the community. NCVER's main areas of research activity are:

- Undertaking a strategic programme of vocational education and training (VET) research, including the management of the national TVET research competitive grants programme and the analytical services of the Longitudinal Surveys of Australian Youth (LSAY)
- Collecting and analysing national TVET statistics and survey data
- Collecting and making available research findings on TVET from around the world through the VOCED plus research database
- Disseminating the results of research and data analysis
- Building links with similar international organisations to foster comparative analysis and collaborate on issues of mutual interest
- Undertaking commercial consultancies. (NCVER, 2010: 1-4)

### **Target users**

NCVER provides research and statistical information to a wide range of stakeholders, including:

- Ministers of federal and state departments of education and training
- VET practitioners and providers
- Educational institutions
- Researchers
- International agencies
- Industry skills councils
- Employer- and employee-based associations or organisations
- Community organisations. (NCVER, 2010: 1-4)

### **National Statistics**

The portfolio of national statistics updated annually by the NCVER is very large. It includes the following key data categories:

- Apprentices and trainees
- Employers' use and views of the TVET system
- Student outcomes and pathways
- Students and courses
- VET finance
- VET in schools.

Periodic surveys are also undertaken in the following areas:

- Apprentice and trainee destinations
- Student intentions
- Tertiary education and training in Australia (NCVER, 2012: 4)

### **NCVER funds university TVET research**

In the period 1997 to 2002, 218 projects were funded through the national TVET research competitive grants programme administered by the NCVER. Of the 218 research awards, 53% were conducted by university-based researchers, 27% by consultants, 11% by TAFE-based researchers and 10% by researchers in government departments.

The NCVER is associated with 20 research centres - the majority of which reside in universities. The amount of TVET research these centres undertake is heavily dictated by the availability of funding from the NCVER (Curtin and Loveder, 2007: 18).

## **NCVER STRUCTURE**

The NCVER is governed by a board of nine directors, who represent state, territory and Commonwealth governments as well as industry, unions, and training authorities ( NCVER, 2010: 1-4). Internally, the NCVER is currently organised around five research themes:

1. Students and individuals
2. Teaching and learning
3. Industry and employers
4. VET system
5. VET in context.

Current research topics include:

1. Access to tertiary education for rural Australians
2. An analysis of effective pathways from TVET to higher education
3. Intergenerational mobility
4. Increasing TVET participation amongst lower paid workers over the life-cycle
5. Promoting social inclusion for disadvantaged groups through education and training
6. Older workers and the role of TVET
7. The impact of low-skill jobs
8. The role of training in social inclusion ([http://www. NCVER.edu.au](http://www.NCVER.edu.au))

## **Building of research capacity**

The NCVER has committed itself to building researcher capacity in the vocational education and training (VET) sector by encouraging early-career researchers, TVET professionals and experienced researchers from outside the sector to undertake research in vocational education and training. In support of this, NCVER allocated \$450 000 over three years to four programmes: community of practice scholarships aimed at novice researchers

undertaking a workplace-focused research project; academic scholarships aimed at TVET professionals undertaking an academic course of study such as honours or masters by research; a fellowship scheme; and the TVET Researcher of the Year Award (Bartram *et al*, 2010: 1)

### **Managing Knowledge**

A key part of the NCVET's vision is 'for policy and practice in vocational education and training to be based on sound evidence'(NCVER 2007, p.2). In line with this vision, the organisation manages the national competitive grants programme, undertakes strategic in-house research and collects and analyses statistics and survey data. The outcomes of these activities are made freely available to government agencies, training providers, peak industry bodies, enterprises and individuals. National and international sources and resources are also available via the world-class research database, VOCED plus.

Such a vast collection of knowledge, most of which is readily accessible and down-loadable, is an invaluable resource for TVET researchers, students of vocational education and training, as well as practitioners, planners and managers in the field (Curtin and Loveder, 2007:16).

### **Information Brokerage**

For the last decade, NCVET has used multiple strategies to bring research into the many arenas where potential end-users reside. Acknowledging the diverse needs of the sector, publications like *Research Messages*, *Insight* and *At a Glance* are designed to provide key information in summary form, while the NCVET's website (<[www. NCVER.edu.au](http://www.NCVER.edu.au)>) allows electronic access to full research reports and a wide range of summarised information.

In addition, NCVET conducts state-based forums on key priority areas and brokers research findings to targeted stakeholder forums and briefing sessions to ensure connections are made with those who can best use the outcomes. Identified by Robinson (1999, p.14) as a core and critical priority for NCVET', this brokerage role continues to be a major activity in building research capacity in the sector (Curtin and Loveder, 2007: 17).

## **VOCED plus**

VOCED plus is a free research database on TVET focusing on workforce needs, skills development, and social inclusion. In 1997, the first web version of VOCED was made available from the NCVET organisational website. In 2001, VOCED plus, together with the NCVET and the Adelaide Institute of Technical and Further Education were declared as a joint UNESCO Regional Centre of Excellence in Technical and Vocational Education and Training. This endorsement has strengthened links with all UNESCO member countries and facilitated the acquisition of information from their sources.

## **OTHER STATE AGENCIES**

### **Role of the TVET ministerial council**

The peak government body responsible for TVET policy and planning is the Ministerial Council for Vocational and Technical Education (MCVTE), which complements the Ministerial Council for Employment, Education, Training and Youth Affairs (MCEETYA). These peak ministerial councils provide a mechanism for developing and implementing national policy in a constitutional environment in which the formal authority for education and training rests with the states. A practical effect of the peak ministerial councils is that national policy development and implementation proceed consultatively and there is generally in-principle agreement and commitment to new policy directions by the Australian Government and state governments by the time formal ministerial decisions are taken. A weakness of these arrangements is that states, on occasion, modify agreed national policies during the implementation phase, no doubt to accommodate local circumstances. In the last 15 years, the ministerial councils have had ultimate responsibility for a number of significant developments in TVET in Australia. These include:

- employer involvement in the development of the formal TVET system via industry representation
- adoption of an Australian Qualifications Framework covering all post-compulsory education and training
- implementation of a national training framework (now the AQTF), including provision for recognition of prior learning and mutual recognition of national qualifications and units of competency across states and providers

- national training packages that apply to a majority of occupations where TVET is relevant
- a national apprenticeship and traineeship system, supported by Australian Government incentive payments to employers
- funding agreements for TVET (Knight and Mlotkowski, 2009: 27)

### **Skills Australia and the National Workforce and Productivity Agency**

*Skills Australia* was an independent statutory body established in 2008 to provide advice to the Minister of Education, Employment and Workplace Relations on Australia's current, emerging and future workforce skills needs and workforce development needs. Skills Australia's advice covers a broad range of areas that affect the demand for and supply of skills, including (but not limited to), migration, the resources sector, the defence industry, the tertiary education system and the effective use of skills in the workplace.

The mission of Skills Australia is to provide independent and high quality advice to ensure the government's investment in education and training promotes the development of a highly skilled workforce, increases workforce participation (especially among less advantaged groups), meets the needs of industry and increases Australia's productivity.

In May 2011, a new \$558 million National Workforce Development Fund designed to upskill Australia's workforce over the next four years was announced in the 2011-12 Australian government budget.

The Australian government also announced its intention to provide \$25 million for a National Workforce and Productivity Agency to administer the new fund. The new agency will work closely with industry to ensure the fund delivers training outcomes that meet the needs of industry, workers and the economy. Skills Australia was to transition into the new agency as from 1 July 2012. The new agency will have a stronger research, analysis and advisory role to address improvements in Australian workforce productivity. The revised functions will also ensure the agency can advise the government on the allocation of Commonwealth industry skills funding, including the National Workforce and Development Fund.

## CONCLUSION

The NCVET is perhaps unique in the world body of TVET institutions because of the high-quality and comprehensiveness of its research and its evidence-based impact on the policy process. The NCVET argues that its impact on policy is not a one-to-one linear relationship between one research project and one consequent policy change. The process more resembles 'osmosis', where gradually the research findings and the analysis filter down to become part of the knowledge base of people working in the sector and people planning in the sector. In this context, the NCVET argues that undertaking a range of research projects in one thematic area, rather than a single project, has a far more significant impact, especially when that work is coming from different angles and offering differing perspectives (Curtin and Loveder, 2007: 10). The NCVET sees its impact on Australian education in terms of four impact indices:

- It produces knowledge which is related to dissemination, general awareness of and engagement with the research, contributions to the literature and ability of the research to inform future activities in policy, practice and research.
- It builds capacity which supports the abilities of researchers to undertake fit-for-purpose research, improves the skills of relevant stakeholders to engage with the research and enhances their decision-making abilities. It also supports and encourages the training of early career researchers.
- It informs policy encompassing research that is used to guide the actions of decision makers.
- It informs practice broadly encompassing the behaviour, actions and knowledge of how things are done (Stanwick *et al*, 2009: 7).



## **Chapter 5**

### **A research role within a 'development state' - the case of South Korea's KRIVET**

The Korean Research Institute for Vocational Education and Training (KRIVET) was established in 1997 to conduct research on technical and vocational education primarily to support the government's 'developmental state' objectives. KRIVET conducts research on TVET to assist government in undertaking evidence-based policy reviews and revisions. What is significant in South Korea is its transition from an industrialised to a knowledge-based' economy (KBE), and the new demands that this has placed on education. This has resulted in greater emphasis being placed on the post-school tertiary sector as a key stepping stone to the KBE.

#### **BACKGROUND**

Education has been a key factor in the rapid economic growth of Korea over the past four decades. Since the 1960s, government-led economic development plans have been directly reflected in education policy and planning.

Vocational high schools were established in the 1960s to provide training in craft skills in support of the growing labour-intensive light industries. Free, compulsory middle-school education began in 1985 in farming and fishing areas and gradually was expanded nationwide. Middle-school graduates have two options: to attend an academic general high school or a vocational high school. Those who are admitted to a vocational high school cannot transfer to an academic high school (Kim and Rhee, 2007: 108). In addition, vocational junior colleges were set up to supply technicians for the heavy and chemical industries.

During the 1970s and 1980s, higher education was expanded in two ways: firstly, through increased student enrolment, and secondly, through the greater diversification of institutions in higher education. Junior colleges were expanded, taking a larger share of tertiary enrolments. Their programmes were diversified to meet industrial needs (Kim and Rhee, 2007: 114).

As the social demand for secondary education increased because of universal primary education, and as the demand for skilled human resources increased with the shift to heavy

industry, government had to invest more in secondary education. As the number of high-school graduates increased and the average income of households rose, so the social demand for higher education increased (Kim and Rhee, 2007: 116).

Higher education expanded rapidly during the 1980s and 1990s. The main areas of expansion were in the two-year vocational colleges and in fields such as engineering and natural sciences at the four-year colleges and universities (Kim and Rhee, 2007: 116). As a consequence of this massive expansion, Korea today has a large pool of highly educated workers. More than 80 per cent of high school graduates go on to college.

It is clear that higher education (with a strong vocational and applied thrust) is the priority education sector in contemporary Korea. This emphasis is part of its plan to become a knowledge-based economy (KBE). A clear shift has occurred, with government increasing its spending on higher education. This policy change is caused by two factors. On the one hand, government recognizes that the quality of human resources is the key factor in further economic growth. It regards the higher education sector as the key player in achieving that growth. On the other hand, the performance of the current higher education system in Korea is perceived to be lower than expected in terms of the efficiency of educational spending. These observations have led to calls for reform in higher education (Kim and Rhee, 2007: 126).

A number of reviews of the Korean education and training system have identified quality as a major problem now facing Korea. Whilst the Republic of Korea has experienced remarkable educational expansion over the past three decades, and whilst Korean results in international achievements tests such as the TIMSS are impressive, there is an emerging problem of poor quality provision in certain corners of the Korean education system (Kim and Rhee, 2007: 107). These observations are confirmed by an OECD review of Korean education which identified the following strengths and challenges:

### **Strengths**

- The level of educational attainment among young people is very high: 97% of 25-to-34-year-olds have completed upper secondary education and 53% have tertiary education
- Education is highly valued by all parts of Korean society
- 15-year-olds perform very well in numeracy, literacy and science, as illustrated by PISA and TIMSS results

- The government is committed to increasing employer involvement in TVET policy development and implementation, as illustrated by the recent creation of sector councils and Meister schools
- The tertiary TVET sector is well developed; around 32% of tertiary students are enrolled in junior colleges and polytechnic colleges (Kuczera *et al*, 2009: 5)

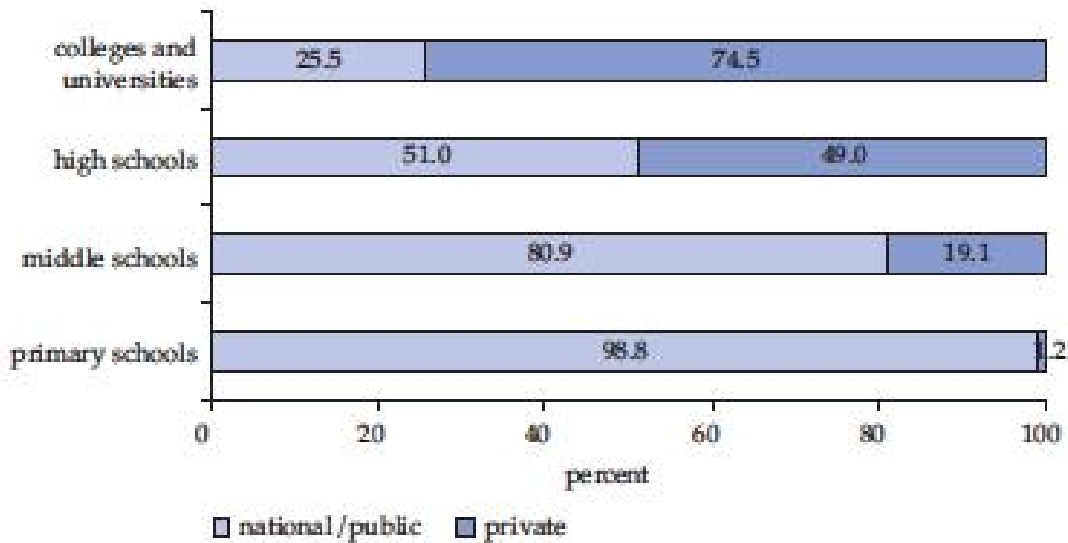
### **Challenges**

- On one hand, TVET institutions often see themselves as having a largely academic orientation; on the other, they are expected to provide job-ready recruits for industry. This is a dilemma not unique to South Korea
- School-industry partnerships are typically established to satisfy the needs of local firms rather than to provide broader occupation-specific and transferable skills. Beyond such local initiatives, there is little employer engagement in the initial TVET system
- Workplace training is not systematically provided in TVET programmes and quality standards for workplace training are weak
- VET teachers have strong academic and pedagogical preparation, but often lack practical work experience in their field (Kuczera *et al*, 2009: 5-6)

### **Problems with private provision**

A further contributor to quality problems has been the extraordinary growth of private provision both in senior secondary schooling as well as in post-school education and training. Figure 5.1 illustrates the enrolment ratios between the public and private sectors in Korea and the expansion of private enrolment is very evident at both the senior schooling and the higher education levels:

**Figure 5.1: Enrolment ratio of private to public schools, Korea, 2005**



**Source: Kim and Rhee, 2007: 110.**

At secondary school level, the private share of enrolments is 49 per cent, and at the tertiary level, it is over 74 per cent. Because of budget constraints, the government encouraged private foundations to establish secondary schools and higher education institutions. Private schools are funded primarily through user fees. Private financing accounts for about two-thirds of total direct costs in education (Kim and Rhee, 2007: 117).

Initially, by leaving higher levels of education to the private sector and targeting public resources for primary education, Korea has been able to address one of the main equity issues: basic education for all (Kim and Rhee, 2007: 118). The central government supported private-school foundations through tax benefits.

For example, private-school foundations are regarded as non-profit organisations, so they can save on corporate tax, which for-profit organisations cannot do. They are also allowed to receive tax-exempt donations and endowments. In addition to these benefits, government promoted private schools through loan systems. The Korean Foundation for the Promotion of Private Schools was established in 1989 to support the growth of private schools (Kim and Rhee, 2007: 119).

## **Quality problems constrain the knowledge based economy**

A number of specific problems face the public education system in Korea today. These include: the quality of management schools at university level; the chronic brain drain; and the shortage of professional and technical workers. The government-led, supply-side educational policy and planning system has caused rigidity in the education system and an imbalance between quantitative expansion and qualitative improvement (Kim and Rhee, 2007: 111, 114).

In the school system itself, the heavily “teacher-centred” approach to classroom interaction along with rote memorisation, has crowded out opportunities in schooling for the development of innovation and creativity (Kim and Rhee, 2007: 121):

*“Korean education, having registered a marked growth in quantitative terms in the era of industrialisation, will no longer be appropriate in the era of information technology and globalization. It will not be able to produce persons who possess high levels of creativity and moral sensitivity, which are required to sharpen the nation’s competitive edge in the coming era”* (Presidential Commission on Education 1995, as cited in Kim and Rhee, 2007: 121).

Another problem facing Korean TVET is the low incidence of strategic partnerships formed among knowledge producing institutions such as corporations, universities and research institutes. Such systemic weaknesses are also found in the international exchange of people and Korea’s inadequate participation in joint international research projects. In addition, the brain drain from Korea has accelerated with the increased international competition for highly skilled workers.

Exacerbating problems further, universities in Korea have focused on the traditional mission of training scholars in society. They have remained passive with respect to the practical application of knowledge and have failed to respond effectively to job market realities. The universities have not succeeded in specialising in a manner that reflects the uniqueness of local industry, and consequently, their role as a centre for creating and disseminating knowledge in the local community has remained weak (Kim and Rhee, 2007: 123).

In an effort to foster proactive collaboration and create a channel for communicating the demands and needs of industry to the education community, the government is formulating a new industry-academia collaboration system, which is based on the Act on the Promotion of Industrial Education & Industry/Academia Collaboration. Policy implementation and financial

support will be closely tied to the growth of industry-academia collaboration (Kim and Rhee, 2007: 129).

## **KRIVET**

As indicated earlier, the Korean economy is embarking on its next major economic transition – a leap forward into the ‘knowledge economy’ which will entail a shift away from reliance on low value-added export-oriented manufacturing to higher value-added manufacturing and services. KRIVET will play a crucial role in determining the education and skill requirements of this transition. KRIVET’s core functions are:

- To support HRD policies that lead to the establishment of a knowledge-based society
- To support a demand-driven vocational competency development system that establishes and maintains the link between education, training and employment
- To support the establishment of individual, organisational and social learning networks that accelerate social integration
- To provide for the development and dissemination of career information
- To act as a global hub for research projects on HRD (KRIVET, 2005: 7)

## **Structure**

KRIVET is a state-run research institute under the Prime Minister’s Office. It has 140 staff members who are organised into the following seven research themes:

1. HR policy
2. Employment and competency development
3. Industry-Academia cooperation
4. Qualifications
5. Career development
6. e-Learning
7. International studies and cooperation

It has the following administrative and research departments and centres:

- Office of the President (administration)
- Office of Planning and Coordination (administration)
- Office of Administration (administration)
- Department of HRD (research)
- Department of Vocational Education (research)
- Department of Vocational Training and Qualifications (research)
- Centre for TVET curriculum development and evaluation (research and development)
- Centre for Career development (research and development)
- Centre for E-Learning (research and development)

In October 2000, KRIVET was inaugurated as the first UNESCO Regional Centre of Excellence in Technical and Vocational Education and Training in the Asia-Pacific region.

### **Research focus**

Though KRIVET does not include the word “research” in its Korean name, it has since its inception undertaken a number of research projects at the behest of its clients and partners. These include examining the human resources required by each sector within the new growth path, investigating how jobs could be created for the socially underprivileged as a means of social integration, and how elderly people can be kept productive to pre-empt the problem of a growing retired population. KRIVET has also looked at state coordination of the links between HRD and labour market, as well as the internationalisation of vocational certification (KRIVET, 2005: 9).

Other functions of KRIVET include the compilation and publication of teaching and learning textbooks in vocational education, and the promotion of collaboration and dialogue between industry, government, academia and research institutes.

### **Qualifications function**

KRIVET leads and supports the establishment of a user-oriented qualification system through the development of national qualification policies, and reinforcement of qualifications in linking education and training to employment. KRIVET facilitates the establishment of an integrated system of work, education and training, and qualifications to ensure the relevance

and practicality of education and training as well as qualifications. KRIVET strives to establish infrastructure for the effective management of qualification information.

### **Information role**

KRIVET plays an important database and information role in Korean society with regard to TVET data. To fulfil this role it:

- Conducts research on HRD at the national and regional levels
- Designs the master plan on HRD at the national level
- Evaluates and reviews national HRD projects
- Develops HRD indicators and indices
- Forecasts the supply and demand of manpower
- Manages labour market information
- Operates the [www.nhrd.net](http://www.nhrd.net) website, a comprehensive information database on HRD (KRIVET, 2005: 11)

### **Focus on career counselling**

In order to support career education in schools, it is necessary to develop accurate information on jobs and education. The Career Development Centre at KRIVET develops career information programmes. It also develops psychological tests and information packages on jobs and schools that are hosted on a web-based comprehensive career guidance system called 'CareerNet' (see <http://careernet.re.kr>) (Lim and Jin, 200: 124).

### **E-Learning**

Another responsibility of KRIVET is to promote the use of e-Learning in education and training institutions. E-Learning has been widely adapted by the Korean government as e-Learning overcomes the limits of time and space and contributes to knowledge expansion through interaction. Korea has one of the strongest foundations for e-Learning in the world. In a report by England's Economist Intelligence Unit, which compared the e-Learning readiness of 60 countries, Korea ranked among the top five countries (Lee, 2005: 137).



The e-Learning Centre at KRIVET has the responsibility to evaluate the standard of e-learning programmes and the appropriateness of internet-based training courses. KRIVET not only evaluates the appropriateness of internet-based training courses, it also carries out research on the standardisation of e-Learning (Lee, 2005: 142).

## **CONCLUSION**

KRIVET plays a critical role as part of the Korean developmental state in helping to align education and training to the requirements of the Korean economy. In the period 1960-2000, South Korea emerged from the destruction of civil war to become a dynamic and industrialised manufacturing economy. In the current period, Korea is seeking to make the transition to a knowledge-based economy based on a highly educated labour force and continuous innovation in the national economy. KRIVET was formed in 1997 to help steer this transition. KRIVET is clearly part of the larger Korean 'developmental state' system, taking instructions directly from the Ministry of Education and HRD. As a research agency, it does not share the autonomy and independence that characterises the NCVET in Australia. Yet, its participation in the successful evolution of the Korean economy and society is admirable and enviable, certainly from a South Africa point of view.

## Chapter 6

### A research role in a 'social market' economy – the case of Germany's BIBB

#### BACKGROUND

The Federal Republic of Germany – with a population of 82.4 million people - comprises 16 'länder' (states) with many sovereign responsibilities. Each länd has its own executive, legislature and judiciary, giving rise to a second decision-making level. The länder are responsible for education and culture. In the field of VET, the federal government is responsible for in-company vocational training, while the Länder are responsible for vocational training in schools (Hippach-Schneider et al, 2007: 7).

The economic system of the Federal Republic of Germany is best described as a 'social market' economy. From a TVET perspective, this means that TVET policy frameworks and their implementation are the result of co-determinist agreements between all the key social partners in the TVET system – employers, unions and the state (Federal and Länder).

The German economy is strongly export-oriented. Germany's main exports include cars and car parts, machinery, chemical and electrical products and foods. In recent decades, there has been a steady decrease in economic growth. Between 1981 and 1991, the average annual increase in GDP was 2.6 %, but between 1992 and 2001 the figure was down to 1.7 %. There was a slight recovery between 2004 and 2006. However, the global economic recession of 2008-2012 made this recovery very short lived (Hippach-Schneider *et al*, 2007: 9).

Germany has a highly skilled technical workforce. This is evident in European Union data on educational qualifications of employed workers, where Germany has the highest percentage (60%) of employed workers with a completed school certificate (ISCED 3-4). Interestingly, with regard to higher education, Germany is in the middle of the range (24%) compared with the EU as a whole (See Table 6.1). These results are clearly outcomes of Germany's dual system of secondary school education which has a strong emphasis on the production of large numbers of intermediate level artisanal workers with the equivalent of a Grade 12 school-leaving certificate.

**Table 6.1: Population aged 25 to 64 years by highest educational attainment in Germany and selected EU member states, 2006**

| Country        | ISCED 0-2 | ISCED 3-4 | ISCED 5-6 |
|----------------|-----------|-----------|-----------|
| EU-25          | 30        | 46        | 23        |
| Czech Republic | 10        | 77        | 13        |
| Austria        | 20        | 63        | 18        |
| <b>Germany</b> | <b>16</b> | <b>60</b> | <b>24</b> |
| Denmark        | 18        | 47        | 35        |
| Finland        | 21        | 45        | 35        |
| United Kingdom | 27        | 42        | 30        |
| France         | 33        | 41        | 25        |
| Italy          | 49        | 38        | 13        |
| Portugal       | 72        | 14        | 13        |

Source: Hippach-Schneider *et al*, 2007: 12.

## GERMANY'S DUAL SYSTEM

Germany's TVET system is highly regarded globally because of its high quality dual system of secondary schooling – one an academic track, the other a vocational track. The vocational track is by far the largest field of education at upper secondary level, with approximately 53% of any age cohort trained for a recognised training occupation. After completing their training in the dual system, the majority of participants then take up employment opportunities as skilled workers. Later on, many of them make use of the opportunities for continuing vocational training. This can be done by obtaining the academic standard required for entrance to a Fachhochschule in one year at school full-time, and then to go on to higher education. Successful participants in continuing vocational training are also increasingly permitted to study at colleges.

The full-time vocational schools have the highest numbers of students. These schools prepare students for an occupation. Entitlement to study at a college or Fachhochschule can be acquired in some educational programmes in the full-time vocational schools. Educational programmes last one to three years, depending on the particular vocational orientation and objective. Large numbers of students also attend schools for nurses and midwives, which

provide training for non-academic occupations in the healthcare sector (Hippach-Schneider *et al*, 2007: 22).

The system is described as dual because training is conducted in two places of learning – in companies and in vocational schools. It normally lasts three years. Training takes place on the basis of a vocational training contract between a training enterprise and the trainee. The latter are trained in the enterprise for three to four days a week and in the vocational school for up to two days a week (Hippach-Schneider *et al*, 2007: 25).

The enterprises bear the costs of the in-company training and pay the trainee remuneration for training that is regulated by collective agreement between the parties. The amount of the remuneration increases with every year of training, and averages out at about one third of the starting pay for a trained skilled worker.

The professional competences in the occupation to be acquired in in-company training are specified in what is termed a ‘training directive’ and put into concrete form by the training enterprise in an individual training plan. For the teaching in the vocational school, a framework curriculum, harmonised with the training directives, is drawn up for every recognised training occupation (Hippach-Schneider *et al*, 2007: 26).

### **The ‘Fachoberschulen’: Grades 11 and 12**

The ‘Fachoberschulen’ cover classes 11 and 12. The first year comprises in-company specialised practical training and teaching, while the second year involves general and specialised teaching. It leads to the academic standard required for entrance to a Fachhochschule. Fachoberschulen are subdivided into the following specialisations: business and administration, technical skills, healthcare and welfare, design, nutrition and home economics and agronomy (Hippach-Schneider *et al*, 2007: 28).

### **Higher education: Fachhochschulen**

Once trainees graduate from Fachoberschulen, they can then pursue post-school studies in Fachhochschulen. Of a total of 338 institutions of higher education, 164 are Fachhochschulen. In some instances, the numbers of students and the programmes offered vary widely (Hippach-Schneider *et al*, 2007: 31). Fachhochschulen offer courses of study in the following fields: engineering sciences, economic sciences/commercial law, social affairs, administration and administration of justice, computer science, design, mathematics,

information and communication technology, healthcare/nursing (Hippach-Schneider *et al*, 2007: 32).

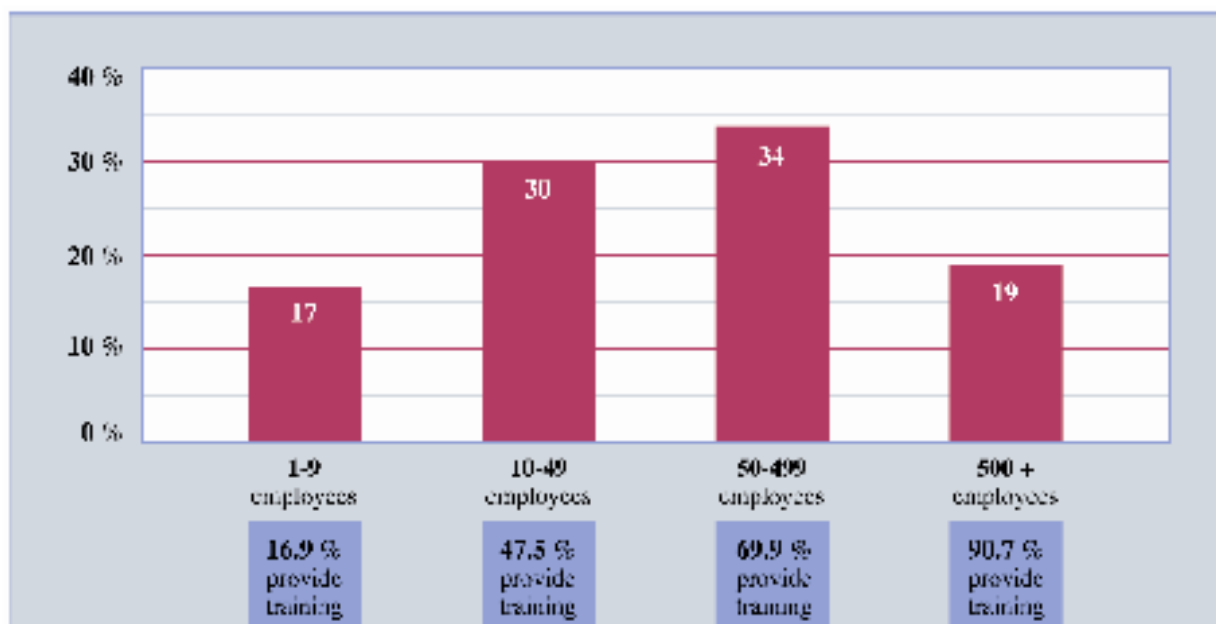
### Labour mobility

Given that Germany is one of the world's leading export economies and is located in the heart of Europe, the promotion of labour mobility and qualification equivalence is of particular importance. There is a marked focus on imparting international skills in education and training, such as knowledge of foreign languages and an understanding of foreign markets and corporate cultures. At European level, Germany is concerned to ensure that TVET provision can be linked internationally. It should be possible for qualifications and competences acquired in the German TVET system to be put to use in the labour markets and education systems of other countries in Europe – and vice versa (Hippach-Schneider *et al*, 2007: 1-2).

### Firms that train

The distribution of firms that train in the German TVET system is interesting. Figure 6.2 shows that small and medium-sized enterprises (SMEs with more than 10 but fewer than 499 employees) offer the lion's share of training places:

**Figure 6.2: Distribution of German trainees and proportion of training enterprises by firm size, 2004**



Source: Hippach-Schneider *et al*, 2007: 13.

Over the past decade there has been a substantial decline in the number of in-company training places. Small and medium-sized enterprises in particular are often unable to provide all the learning content. Sometimes they lack suitable training personnel, or, owing to their particular specialisation, do not cover all the training content themselves. There may also be other reasons why training is made more difficult or is even prevented. There are various possible ways of overcoming these problems: Educational institutions offer intercompany training periods designed to supplement in-company training. They are often sponsored by autonomous bodies in the relevant sectors of industry (Hippach-Schneider *et al*, 2007: 26-27).

The public sector has responded with additional measures involving skills training for young people not provided for with incentives to make enterprises more willing to provide training (Hippach-Schneider *et al*, 2007: 9). An apprenticeship pact was concluded between the Federal Government and the central associations of German industry in June 2004 for a term of three years and it has made a major contribution to resolving the shortfall in training. In this pact, the partners undertook to work closely with the Länder to effect a substantial increase in youth training provision.

### **The Federal Institute for Vocational Education and Training (BIBB)**

The Federal Institute for Vocational Education and Training (BIBB) is a national research institution which works to identify future challenges in VET, stimulate innovation in national and international vocational systems, and develop new, practice-oriented solutions for both initial and continuing vocational education and training.

BIBB was founded in 1970 as a federal government institution for policy, research and practice in the field of vocational education and training. For over 35 years now, BIBB has continued to fulfil this role. Being directly accountable to the Federal Government, BIBB is funded directly from the federal government budget and is subject to legal supervision by the Federal Ministry of Education and Research (BMBF). Since 1999 its headquarters have been in Bonn.

BIBB also plays an active role within the academic research system. Its research is directed towards significant issues relating to vocational education and training and contributes to theoretical development. BIBB's research is of an interdisciplinary nature and is bound by academic research standards. It cooperates with institutions of higher education and research bodies, fosters up-and-coming academic talent and enables the field of academic

research to gain access to its research data. BIBB also cooperates with international partners and offers consulting services worldwide (BIBB, 2009: 1-2).

### **BIBB's research work**

The research work done by BIBB currently revolves around five focal areas:

- Training placements in the private sector and the employment system
- Updating vocational training and improving quality
- Lifelong learning and the permeability and equivalence of training paths
- Vocational training for specific target groups
- The international mobility of vocational qualifications, especially within the European Union.

### **Target groups**

BIBB addresses its research to three target groupings:

1. Those involved in TVET planning
  - Federal government and Länder ministries and other authorities, bodies and committees involved in TVET planning
  - Employers' and employees' organisations, chambers of industry and commerce
  - Trade associations
2. Those involved in TVET practice
  - Professional associations and bodies for initial and continuing vocational education and training and their vocational training committees
  - Specialist staff responsible for initial and continuing vocational education and training in companies, training and continuing education establishments and vocational schools
  - Members of examination boards

- Management, human resources managers, works councils and staff councils in companies, training and continuing education establishments and administrations.
3. The TVET research community:
- Researchers at universities and universities of applied sciences (particularly in the disciplines of vocational education, educational sociology and economics, and labour market research)
  - Researchers in non-university research institutes.

## Structure

BIBB is organised into four departments with 16 sections and a Central Services department. Currently the Institute employs 500 members of staff. Overall authority for BIBB rests with the Board and the President.

The President is the Institute's director and its public representative. The Board provides a cross section of expertise on all issues relevant to vocational education and training (VET) in Germany, and acts as the statutory advisory organ of the Federal Government. Board members include delegates representing:

- Employers
- Employees
- The federal states and the federal government.

These stakeholders have voting parity – a key feature of Germany's social market economic system.

## Research programmes

The next section will outline a number of research programmes and projects currently being undertaken by BIBB. They are:

- **Vocational training supply and demand:** This programme monitors and analyses quantitative developments with respect to training placements, training supply and



demand, and the factors that influence training placements. This programme conducts several longitudinal surveys and primary data surveys annually on various topics related to the above.

- **Qualifications, occupational integration and employment:** One of the core tasks of BIBB is to identify training trends and new training requirements at an early point in their evolution, and to put this information to use for regulatory work and training research. For this purpose, the programme monitors and analyses structures and trends in individual occupations.
- **Costs, benefits, financing:** The costs, benefits and financing of initial and continuing vocational training are the focus of this research programme.
- **Skills and competences:** This project conducts research on issues involving teaching, learning and the development of skills and competences in the vocational training field.
- **Promotion of the TVET System:** The work of this programme revolves around the practical needs of target groups and focuses on solutions. Its duties include identifying the organisational, didactic and methodological conditions for shaping and organising vocational learning. It combines application-oriented and implementation-oriented research, development and advisory tasks and carries them out in close contact with vocational training practitioners on the ground.
- **Vocational learning pathways:** research work here focuses on the transitions of individuals through the education system. It examines the permeability of the boundaries between the general, vocational and higher education sub-sectors.
- **Quality assurance and development:** The focus here is on fostering quality assurance and quality development in vocational training in general and, in particular, on ensuring quality assurance by training and professionalising instruction personnel.

### **Data information role**

BIBB has a long tradition of undertaking large-scale TVET survey research at both the individual and firm level. In 2008, BIBB founded a Research Data Centre to give researchers standardised access to BIBB data (Alda and Rohrbach-Schmidt, 2010: 253). Within the centre, data analyses and reporting is based on two types of data. On the one hand, BIBB publishes important TVET statistics based on administrative data collected from other

Federal institutions. On the other hand, BIBB itself undertake about 20 large-scale surveys annually (Alda and Rohrbach-Schmidt, 2010: 254). All of these data sets are then organised within a conceptual framework that is built along three dimensions: Firstly, a temporal design (i.e. year(s) of cross-sections and longitudinal data), secondly, a dimension of the unit of analysis (individual- versus firm-level data) and, thirdly, an analytic dimension capturing the thematic focus of the data. This latter dimension has six categories and represents the central transitions in the TVET system from a life-course perspective:

1. School
2. First transition: from school to initial TVET
3. Initial TVET
4. Second transition: from initial TVET to work
5. Work and employment
6. Continuing education (Alda and Rohrbach-Schmidt, 2010: 255).

### **Development and regulatory work**

BIBB is not only a research apex body like the NCVET in Australia. It has a number of other governmental responsibilities outside of research which have to do with the regulation of the training system. Two of these additional responsibilities are listed below:

- **Inter-company Vocational Training Centres:** The promotion of inter-company training centres and supporting the planning and establishment of these facilities is a core legislative responsibility of BIBB. It does this by developing and publishing planning aids, conducting empirical surveys and advising training facilities, chambers of crafts and trade associations.
- **Regulation of Vocational Education and Training:** This function is about developing and updating training occupations and continuing vocational training provisions and regulations.
- **Sector-based training services:** BIBB develops curricula for occupational training programmes and provides advisory and information services in the following key economic sectors:
  1. Trade
  2. Manufacturing and information technology

3. Financial services
  4. Real estate, facility management
  5. Transport services and logistics
  6. Recreation and event industry, tourism, hotel and restaurants
  7. Media and advertising sector, printing and paper sector
  8. Tax consultancy, accounting, bookkeeping, auditing, legal activities
  9. Community, social and personal services.
- **Industrial, Technical and Scientific Occupations:** BIBB conducts occupation- and employment-related research on industrial, technical and scientific occupations – what South Africans would call ‘scarce and critical skills’. It provides regular monitoring of these occupations and develops their structures and curricula.

For in-company training, the vocational competences to be acquired are laid down in a ‘training directive’. For every recognised training occupation a framework curriculum is drawn up in line with the training directive (Hippach-Schneider *et al*, 2007: 48). A training directorate is comprised of the following content:

- The name of the training occupation to be recognised
- The duration of training, which should be no more than three and no less than two years
- The occupational skills, knowledge and abilities to be taught, as a minimum, during the course of the initial vocational training
- An outline of the syllabus and timetable to be followed for the purpose of teaching the occupational skills, knowledge and abilities
- The examination standards (Sondermann, 2005: 20)

In view of the speed of technological and organisational change, many training directives require revision after a few years. The first step towards revising the training directives is often taken by enterprises. In such cases, enterprises notify their associations of the need for modernisation. The latter pass on the wish for modernisation, amendment or rewording of particular qualification profiles to BIBB. The Institute examines the facts of the matter by means of empirical studies and, if necessary, coordinates the rearrangement or amendment

of the training directives (Hippach-Schneider *et al*, 2007: 48). Currently, there are a total of 346 state-recognised training occupations. Between 1996 and 2006 alone, 68 new training occupations were developed and 206 were modernised (Hippach-Schneider *et al*, 2007: 48).

## **CONCLUSION**

As is evident from the above development and regulatory activity, BIBB's responsibilities go way beyond research activity, to include the development and updating of initial and continuing training occupations, the management and supervision of national and international TVET programmes, the support of in-company vocational training practice with training materials and training media, and the development of concepts for qualifying company trainers. In doing all of this research, development and regulatory work, BIBB works closely with federal and state-level ministries, central employers' organisations, unions, trade associations and the offices responsible for vocational training (chambers), i.e. persons and bodies involved in the planning of VET. It is a major component of the German state, entailing the delivery of wide-ranging responsibilities and services whilst being in continuous consultation with the other key societal stakeholders in VET.

## Chapter 7

### Location within a highly privatised TVET system – Chile's SENCE

Chile's National Service for Training and Employment (SENCE) is the final case study in this report. It provides useful Latin American insights and contrasts regarding apex and support bodies on VET. Most importantly, it emphasises the fact that most Latin American apex bodies on TVET follow the Brazilian SENAI model. This model, of focusing narrowly on vocational training only, and in some cases directly offering vocational training, has been very influential over the past decades and has been promoted by the ILO, OECD and World Bank.

Chile is also important to examine comparatively because it attained democracy from the Pinochet military dictatorship in 1990 - the same time in which the promise of democracy began to emerge in South Africa. Since 1990, Chile's national economy has prospered, with growth rates of 6 per cent annually, unlike in South Africa, which only came close to this kind of growth in 2006 and 2007.

Chile's phenomenal economic growth has been inspired by what some would term 'neo-liberal' reforms. These post-democracy developments of course build on the pre-democracy emphasis by the Pinochet government of radical free market reforms towards a market economy. Decentralisation, privatisation and marketisation became the three key themes of Pinochet's public policy - including education and training policies. In recent years, the radical market-oriented approach has been tempered, particularly during the years of socialist government in 1999-2004. Nevertheless, these three neo-liberal themes continue to be significant comparative characteristics of education and training in Chile. (Keating et al, 2002: 124-5).

Today, Chile's national development strategy is based on a free market economy open to international trade, where the foreign trade sector is a main driving force of growth. The core elements of the economic policy over the past 15 years have been based on macroeconomic stability, elimination of domestic market distortions and a gradual lowering of barriers to foreign trade (Lazo, 2009: 1).

Chile has a population of 16.8 million, an economically active population of 12.9 million, a labour force of 7.2 million, and an unemployment rate of 10.2%. This relatively high unemployment rate of course reflects the impact of the international economic crisis of 2008

on employment (Lazo, 2009: 2). This crisis has been more severe on the unemployment of young people between 15 to 24 years which went to 25, 0% in May-July 2009 (Lazo, 2009: 7). This is still relatively low compared to South Africa's unemployment rates of between 50-60% for the same age group.

## **THE TVET SYSTEM**

Compulsory education in Chile includes eight years of basic education and four years of secondary education. During the first two years of secondary education students follow a general curriculum. During the last two years they choose between the general track and the vocational track. Two thirds enter general programmes and one third enter vocational programmes.

The total number of students in the education system, at all levels, is 4 020 548, which is 26.6% of the total population. Table 7.1 shows figures for the different educational levels for the years 1990 and 2001. It also shows the proportion of the relevant age-groups who are in school at each level. This indicates that, in comparison with many other middle-income countries, Chile is at a relatively advanced stage of educational development, with near-universal coverage of basic education, and high levels of participation not only in secondary but also in tertiary education (Radrigan and Watts, 2003: 5).

Table 7.1: Educational enrolment for the different educational levels, Chile, 1990 and 2001

| Educational Level                 | 1990             |               | 2000                     | 2001             |               |
|-----------------------------------|------------------|---------------|--------------------------|------------------|---------------|
|                                   | Nº. of Students  | % of Students | Participation Level      | Nº. of Students  | % of Students |
| Pre-Primary Education             | 220,398          | 6.9%          | 32.4%                    | 287,298          | 7.1%          |
| Primary Education (ages 6-14)     | 1,991,178        | 62.7%         | 98.6%                    | 2,421,013        | 60.2%         |
| Secondary Education (ages 14-18)  | 719,819          | 22.7%         | 90.0%                    | 850,713          | 21.2%         |
| General Secondary Education       |                  |               |                          | 474,641          | 11.8%         |
| Vocational-Technical Education    |                  |               |                          | 376,072          | 9.3%          |
| Tertiary Education                |                  |               | 31.5%<br>(of ages 19-24) |                  |               |
| Technical Formation Centers (CFT) | 77,774           | 2.4%          |                          | 53,895           | 1.3%          |
| Professional Institutes (IP)      | 40,006           | 1.3%          |                          | 86,398           | 2.1%          |
| Universities                      | 12,682           | 4.0%          |                          | 321,233          | 8.0%          |
| <b>TOTAL</b>                      | <b>3,176,859</b> |               |                          | <b>4,020,548</b> |               |

Source: Radrihan and Watts, 2003: 5

Although levels of education for young people are now reasonably high, there are severe deficits with regard to adults. Around 4.5 million adults (39% of the total adult population) have not completed their basic compulsory 8th-grade education cycle, and a further 2 million have not completed secondary education. Around 500,000 adults (4.3% of the adult population) are illiterate – mainly older people, living in rural areas. Of the 7 million people in the labour force, only 8.7% have received some form of training under the earmarked training levy-rebate system operated by the National Training and Employment Service (SENCE) (Radrihan and Watts, 2003: 7).

## AN EARLY HISTORY OF VET: DECENTRALISATION AND PRIVATISATION

Chilean TVET has been the most prominent ‘laboratory’ for decentralisation. Between 1964 and 1973, Chile’s reforms concentrated on increasing TVET enrolments, which, in relative terms, rose from about 31.3 per cent to 36.6 per cent at the secondary level. Little attention

was given to curriculum content, teaching methods, teachers' skills, or the relationship between TVET and the labour market (Corvalan 1987, p. 9).

Over the past twenty years, however, Chile has undertaken a major overhaul of its system by diversifying and decentralising so as to increase the private provision of education and training. It has also expanded its post-secondary education capacity through the establishment of new private institutions, separate from universities. These are known as Technical Education Centres (Centros de Formación Técnica, CFT) and Professional Institutes (Institutos Profesionales, IP). They offer three to four year programmes in advanced technological education. By 1989, CFTs were drawing a higher percentage of secondary school graduates than universities (Wilson, 1996: 6).

One of the main steps in privatising TVET was to discontinue direct public financing of Chile's official national training institute (Instituto Nacional de Capacitación, INACAP) and turn it over to the private Trade and Production Federation (Confederación de la Producción y el Comercio). INACAP remains one of the country's most important vocational training institutions but now functions as a market-oriented agency selling its services to subsidised firm-based training and publicly sponsored programs. With the privatisation of INACAP, its clientele changed: from poorer urban students to the offspring of the well-to-do who were unable to gain entrance to universities and used INACAP as an alternative means of obtaining post-secondary credentials (Wilson, 1996: 7).

Post-secondary education is highly diversified. Public universities have now been complemented with a number of private universities. Professional institutions and technical training centres have also been established. The evolution of these institutions is indicated below. There are 24 public universities, 38 private universities, 51 professional institutions (mostly private) and 112 technical training centres (also mostly private) in Chile. What is clearly evident in both Table 7.1 and Figure 7.1 is the rapid growth of private senior secondary schooling and post-school education and training:



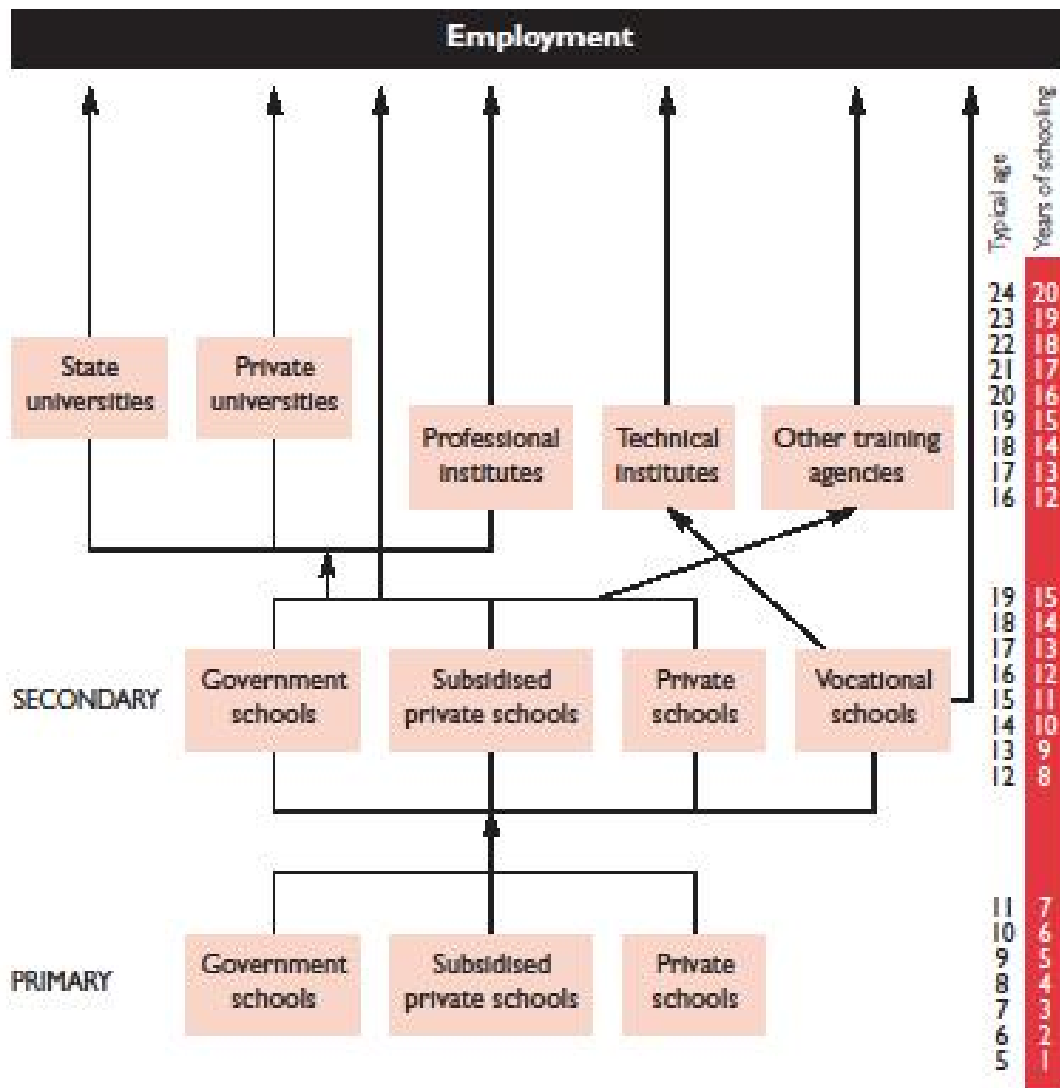
**Table 7.1: Number of post-secondary institutions by funding type**

|                               | 1980 | 1984 | 1986 | 1988 | 1990 |
|-------------------------------|------|------|------|------|------|
| Universities                  |      |      |      |      |      |
| With public funding           | 8    | 17   | 20   | 20   | 20   |
| Without public funding        | -    | 3    | 3    | 6    | 40   |
| Professional institutes       |      |      |      |      |      |
| With public funding           | -    | 7    | 4    | 4    | 2    |
| Without public funding        | -    | 18   | 19   | 26   | 80   |
| Technical training institutes | -    | 102  | 122  | 123  | 168  |

Source: Keating et al 2002: 128

Figure 7.1 illustrates the place of TVET in the wider Chilean education and training system:

**Figure 7.1: The Chilean education system**



Source: Keating et al 2002: 127

## **TVET IN SCHOOL**

Vocational schools offer 46 specialisation options grouped into 14 economic sectors such as electricity, commerce, tourism, agriculture and maritime. The majority of secondary TVET students come from disadvantaged socio-economic backgrounds and 88% attend municipal and subsidised private schools while the rest go to technical lyceums administered by NGOs. These lyceums are product of a 1980s arrangement where the government allowed industrial corporations and foundations to take over the administration of 70 public institutions (TVET Commission 2009).

## **Tertiary TVET**

Tertiary level TVET includes superior two-year programmes offered in specialised technical training centres (CFT - Centros de Formación Técnica), and four-year programmes provided by professional institutes (IP-Institutos Profesionales) where students can develop top-level technical careers in fields like technology, agriculture or commerce.

## **NQF**

The recent report of the Chilean TVET Commission (VET Commission, 2009) has proposed the establishment of a qualifications framework. The proposal aims to improve articulation within the education and training system. Currently TVET is provided at numerous levels and learning contexts, but the lack of institutional or curricular articulation between these inhibits progression within the system. The report recommends the creation of a National Council for VET, which would be responsible for developing the qualifications framework, implementing and continuously updating it, as well as providing information to stakeholders.

Chile has many years of experience in the workplace development of a national system for the certification of labour competences which shares similar aims and characteristics with many NQF systems (Allais, 2010: 36). Indeed, competency-based training has been the focus of most reforms of vocational and workplace-based training in Chile for many years. The World Bank played a major role in financing and supporting various reforms, and other international agencies such as the Inter-American Development Bank and the German Technical Cooperation were also influential. (Allais, 2010: 37).

In 2002 the Chile Qualifies programme was launched, which aimed at setting up a continuous training system that would link with the formal technical vocational education and training system. Set up in the Ministry of Education, but linked to other ministries, the programme involved all key role players. The institutionalisation of the National System for the Certification of Labour Competences was a key component of the Chile Qualifies programme. To date, there are around 30,000 workers who have obtained certificates through the Chile Foundation pilot project, although their certificates have not been recognised by the formal education and training system as yet because of legal complications. After an eight-year process, the national system for the certification of labour competences obtained legal status in 2008, and is in the process of becoming operational. There are continuing problems with the system of competences though. Currently the system covers only low level skills and there are no links between this and the formal TVET system (Kis and Field, 2009: 21).

### **Tax rebate scheme**

Chile currently has a tax incentive scheme, designed to encourage industry investment in training. Tax rebates of up to 1% of payroll can be used for a variety of training activities, including services provided by the more than 2000 private training agencies. These agencies include the private universities and professional institutes, vocational and technical schools, training centres, non-profit organisations (including industry associations), technical suppliers and consultancy firms. They sell services to private enterprises and government-sponsored training programmes (Keating *et al*, 2002: 130).

The rebate works as follows: the costs of internal and external training services contracted by an enterprise are deductible from enterprise tax up to 1% of payroll. This also covers the wage costs of apprenticeships, up to 60% of the statutory minimum wage. The system is administered by SENCE, which registers the training organisation that provides the service. Intermediate technical organisations (OTIRs) have been established with industry participation to plan and co-ordinate industry training with affiliated firms. They are non-profit organisations registered with SENCE and financed by their affiliates, whose contributions are tax deductible (Keating *et al*, 2002: 131).

At face value, the tax rebate scheme appears to be successful. There has been a significant increase in in-company training over a decade and a half. But only a small percentage of enterprises participate in the system. The system is biased towards large enterprises which previously funded their own training but now gain the windfall of a tax rebate. Smaller

enterprises tend not to participate in the scheme. There are doubts, therefore, about the capacity of the scheme to build a training culture across all enterprises (Keating *et al*, 2002: 132).

## **WEAKNESSES IN TVET**

Chile's TVET system faces a number of major weaknesses. For example, the various elements of the TVET system are weakly connected to each other, both in institutional and curricular terms. Workplace training, as part of TVET programmes, is weakly developed. Many upper secondary TVET students do not participate in workplace training and the mechanisms to assure its quality are weak. The literacy and numeracy skills of 15 year olds in Chile are not as strong as they should be. Institutional arrangements to link the mix of TVET provision to labour market needs are weak. Many TVET teachers and trainers are poorly qualified. There are no systematic mechanisms for the assessment of learning outcomes in upper secondary VET. And lastly, career guidance for TVET students is relatively weak.

In Chile there is evidence that graduates of TVET programmes may have inadequate general skills – both for the labour market and to underpin further learning. Thus:

- In Chile 36% of 15 year olds lack the necessary literacy skills to benefit from educational opportunities throughout their life. The challenge is even bigger in numeracy – 55% of 15 year olds will have serious difficulties in using mathematics as an effective tool to benefit from further education
- Employers put less emphasis on specific vocational skills but they argue that they do need more general skills (Laze, 2009: 5-6)

A recent OECD Review of the TVET system in Chile said the Chilean TVET system has a number of strengths:

1. It has been underpinned by a dynamic economy, with GDP growth averaging 6% over the last two decades – but Chile has not escaped the global economic slowdown in 2008-2012
2. Society places a high value on education and training, with strong social demand for education, and fast-increasing participation in post-compulsory education. Upper secondary graduation rates are up from 46% in 1995 to 71% in 2007 (EAG, 2009)

3. Efforts to improve schooling quality may be paying off. The reading performance of students in PISA improved between 2000 and 2006 (PISA, 2006)
4. The government's commitment to develop and reform the TVET system is illustrated by the recent work of the TVET Commission and the creation of the National Council for TVET (Kis and Field: 2009)

Among the challenges faced by Chile are:

1. The various elements of the TVET system are weakly connected to each other, both in institutional and curricular terms. The initiative to create a qualifications framework is a welcome attempt to address this challenge, but its implementation faces a number of obstacles
2. The literacy and numeracy skills of 15 year olds in Chile are not as strong as they should be, and this is likely to be a particular problem among those in vocational education and training programmes
3. Workplace training, as part of TVET programmes, is weakly developed. Many upper secondary TVET students do not participate in workplace training and the mechanisms to assure its quality are weak (Kis and Field: 2009)

## **SENCE**

The National Service for Training and Employment (SENCE), started operating in 1976 under the aegis of the Ministry of Labour and Social Security, as a regulatory, administrative and financial body managing the national training system. Originally set up as a funding agency, SENCE now works through private agencies allocating money for training courses. The main functions of SENCE are managing the tax exemption scheme and coordinating the training programmes for socially disadvantaged groups. These programmes are executed through training institutions, universities, educational institutions and centres of technical education.

Nowadays, SENCE is focusing its work on expanding the coverage of the programmes and intensifying entrepreneur training activities. SENCE is also working on course quality and the provision of information about the system. SENCE's vision and mission statement seeks for it to:

- Become an organising vehicle for continuing education, taking up the challenge of directing non-formal education and, in so doing, reducing social inequality

- Encourage more workers to obtain higher education and training certificates, enabling them to achieve higher levels of qualifications and income, and in so doing, increasing their opportunities to participate in the national economy (Ortiz, 2008)

SENCE's objectives are:

- To increase employability, contribute to the formation of human capital in the country by focusing on the lowest-income sectors
- To be an instrument to reduce unemployment
- To incorporate job training in a continuing education system whose organising principle is skill certification
- To make individuals the focus of job training decisions so that they themselves design their own educational pathways
- To strengthen the quality of the country's training system (Ortiz, 2008)

### **Career Guidance**

SENCE has played an important role in developing a national system of career guidance. It has responsibilities for the design, monitoring and evaluation of the career guidance and employment counselling activities carried out by the municipal Labour Information Offices (OMILs) with no direct participation in the actual guidance activities (Radrigan and Watts, 2003: 10). Services related to career guidance provided by SENCE include:

- SENCE's 'Unit of Employment Intermediation', which provides labour market information and technical assistance to the municipal Labour Information Offices
- Assistance with the purchase of equipment and development of specialised software
- Technical training of professional, technical and administrative staff at the municipal Labour Information Offices
- Development of standardised handbooks for use by those providing services to the public, with emphasis on systems for job identification and vocational counselling. These cover issues like: (i) identification of a typology of career guidance and employment counselling service users, (ii) specific issues related to the needs of vulnerable groups – young people, women, older people, and disabled people; and

(iii) management of information about the labour market (Radrigan and Watts, 2003: 11-12)

SENCE does not directly provide any of these services itself, but works through the municipalities' own Labour Information Offices (Radrigan and Watts, 2003: 25). This generates a very decentralised system. Currently, there are municipal Labour Information Offices in approximately 233 out of the total of 341 municipalities. All provide job-placement services and employment counselling services.

### **Training support to unemployed workers**

SENCE also provides support for the unemployed and underemployed, as well as independent workers and small firms' adult workers. This scheme has some similarities to the 'training credits' issued by the Training Enterprise Councils in the UK, but with an orientation to adult and continuing education and training. Workers are selected for the scheme according to a range of criteria, and training is delivered by private training agencies through a bidding process. SENCE finances and supervises the programmes. Together with the National Women's Service, SENCE also manages training programmes for low-income female workers. This service is also provided by private training agencies through a bidding process (Keating *et al*, 2002: 133). The main beneficiaries of SENCE's services in the area of career guidance and employment counselling are primarily unemployed and underemployed persons, and within this group, young persons between 14 and 28 years old, and head-of-family women (Radrigan and Watts, 2003: 17).

### **OTHER INSTITUTIONS**

As indicated earlier, a new apex body has begun in Chile as a consequence of recent institutional reforms of VET. It is the National Council for Vocational Education and Training (CNFP) which was recommended by the Commission on TVET in 2009 - an external commission organised by the Ministry of Education to analyse the previous developments in TVET and to formulate proposals to strengthen the provision of future VET. The role of the National Council is to create a platform where industry representatives, trade unions and stakeholders from the education and training sector can work together (Kis and Field, 2009: 32).

These institutional developments have been motivated by the important role that mobilising human capital must play if Chile wants to face the global economic slowdown and continue growing and overcome informal employment, poor working conditions, especially for the female labour force.

### **Chilecalifica**

In 2002 Chilecalifica was launched with the support of three separate ministries – Education, Labour and Economic Development. The institution and its programme has the objective of developing a continuous training system that, among other things, supports social development and employment for people throughout their lives. It deals with the issue of the recognition of non-formal and informal learning (SENCE, 2007: 23). In addition, Chilecalifica has a mission to establish a system for lifelong learning. Within the organisation, there are five divisions that deal with educational upgrading, technical education, training, skills certification and labour information (SENCE, 2007: 32).

### **CONCLUSION**

The Chilean case study of institutions operating in the TVET sector illustrates the difficulty of identifying a single entity that undertakes all of the programmatic work necessary to promote and develop the TVET sector. In the Chilean case, SENCE has focused on intervening in the vocational training system as a coordinator and regulator of training, particularly the training of unemployed and vulnerable workers. It also has a large career counselling role, as well as managing the programme of tax rebates for employers who train.

The Chilean National Council for Vocational Education and Training, however, is a tripartite body representing government, employers and unions and it seeks to take Chile into the next phase of economic development – towards the knowledge economy. It is too early to determine what its exact role and impact will be. Chilecalifica is a thematic intervention by the state to influence and promote the development of skills formation, especially the recognition of non-formal and informal learning. None of the above-mentioned institutes do research on TVET and no national research body exists to perform this role on a large-scale. The defining feature of Chile's SENCE is its location within a highly marketised and privatised TVET system dominated by the needs of employers and the private market for training. This stands in sharp contrast to the social market principles underpinning the German and Swiss TVET systems.



## ***ANNEXURE B: SAIVCET INTERVIEW SCHEDULE***

### **Section A**

- Biographical information on respondent
- Role in vocational sector, number of years, type of activities in this sector
- Constituency represented

### **Section B**

1. Comment generally on the vision for VCET set out in the Green Paper (2012)
2. What do you think of the idea that a national institute for VCET be created?
3. What role do you think a national support institute could/should play?
4. Who should be the primary target of such an institute (i.e. its main clients)?
5. What specific functions do you think are not necessary for a national institute to perform? Who else should perform these functions?
6. If you were asked to plan such an institute, what kind of structure would you suggest?
7. How should the institute be funded?
8. To whom should the national institute be accountable?
9. How should the proposed national institute relate to other players in the field of FET/TVET and skills development e.g. universities, quality assurance bodies, examination bodies, private training providers, other research entities, consultants, university research units?
10. How should the proposed national institute work with FET colleges and other public/private TVET institutions that are provincially located?