

Recent Trends in the Organisation of Vocational Education and Training

An international comparative review with special emphasis on issues of decentralisation, deconcentration and privatisation

Prepared by Dr. James Bennett

Cologne, December 2003 (version 2)

Table of Contents

Executive Summary	2
1 Introduction	5
2 Basic Definitions and Concepts	6
3 Planning and Implementation Structures for VET	9
3.1 Stakeholders Roles	9
3.2 Potential Links between DDP and VET	10
3.2.1 Decentralisation	10
3.2.2 Deconcentration	12
3.2.3 Privatisation	12
4 Country Studies	12
4.1 United States	14
4.2 Germany	18
4.3 Australia	23
4.4 France	26
4.5 Sweden	28
4.6 South Africa	30
4.7 Mexico	33
4.8 Russia	35
4.9 Indonesia	36
5 Comparative Analysis	38
6 Preliminary Conclusions and Recommendations	40
7 Bibliography	44
Annex 1	List of Abbreviations
Annex 2	Decentralisation in VET (Winkler model)
Annex 3	School Organisation
Annex 4	Curriculum and Teaching Methods
Annex 5	Examinations and Supervision
Annex 6	Teacher Recruitment and Compensation
Annex 7	Finance of Recurrent Expenditure
Annex 8	School Construction and Finance

Executive Summary

The present working paper provides a general overview and comparative analysis of recent trends and experiences in the organisation of VET systems in selected high and medium-income countries. The study focuses in particular on issues of decentralisation, deconcentration and privatisation (DDP) in the organisation of VET systems.

The term “organisation” is used here in a broad sense. It encompasses the development and implementation of legal and institutional frameworks, the establishment of formal and informal decision-making procedures, the mobilisation and allocation of human, material and financial resources, as well as the introduction and administration of systemic instruments. After an initial clarification of definitions, stakeholder roles and the potential significance of DDP in the context of VET reform, the author investigates the relevant experiences of nine high and medium-income countries: The United States, Germany, Australia, France, Sweden, South Africa, Mexico, Russia and Indonesia.

For the comparative analysis of decentralisation processes in VET, six key VET policy areas are examined in detail: School organisation, curriculum and teaching methods, examinations and supervision, teacher recruitment and compensation, finance of recurrent expenditures, and school construction and finance. Due to the limitations of available information, this approach is applied to five of the nine case studies only: United States, Germany, France, Sweden and Russia.

The comparative analysis reveals the following similarities and differences between the case studies:

- In most cases, central governments set framework policies for VET **school organisation**, the implementation of which is the responsibility of regional or local authorities. The USA, Sweden and Russia already have highly decentralised systems, while decentralisation processes in highly centralised France appear to have slowed in recent years. Decentralisation of VET is an ongoing process in South Africa and Indonesia.
- Central governments apply compulsory VET **curricula** in Sweden and France, the latter for private schools only. Elsewhere, central or regional governments develop core (“skeleton”) curricula, which are then enforced at the decentralised level. Teachers are most free to choose curricula in France, Russia and USA. In order to take local interests and needs better into account, Indonesia allots 20% of total curriculum content to local curriculum subjects (LCS), which are developed at the school district level.
- Important roles in the area of **examinations and supervision** accrue to the intermediate (regional, or State) level in Germany and France. In Germany, non-governmental bodies (chambers of industry etc.) are strongly involved in the administration of examinations and supervision - an area in which local non-governmental bodies also play an important role. Only in one case (Sweden) are examinations and supervision centrally organised.
- The role of the intermediate (regional or State) level in VET **teacher recruitment and compensation** is strongest in Germany. In the US, the role of State government is limited to setting pay scales and accreditation standards, and certification of specialised school staff. France has the most centralised system of teacher recruitment and compensation, while the Russia system may be best described as hybrid: The federal government pays teachers, but school directors recruit them.
- **Financing of current expenditure** is the responsibility of central government in the French system only. In all other case study countries, it is assigned mainly to the regional

level. In the USA, financing of VET is highly decentralised: The bulk of VET school current expenditure funding stems from local taxes. There, private funding for VET also plays an important role.

- With regard to the organisation of **school construction and finance**, available information tends to reflect overall tendencies: In France, most decisions on school construction and financing of construction are taken at the central level, with some sharing of responsibility with the regional authorities. Germany's decision makers in this area are mostly at the State level, while in Sweden the local municipalities are traditionally responsible for building expenses and equipment. In the USA, local authorities initiate construction, but the States can exercise strong influence over implementation.

Whereas most of the case studies can be readily classified with respect to the level of decentralisation attained in specific VET policy areas, the same cannot be said for matters of deconcentration and privatisation. With regard to **deconcentration**, explicit references in the available literature are quite rare. There are two possible explanations for this gap: Either deconcentration has not been happening; or it has been happening, but without scrutiny from members of the education research community and other interested authors. In any case, its absence as a subject of research and publications seems to indicate that it is generally not viewed as an important issue. Some clarification of this view could be attained with assistance from "insiders" who are well acquainted with the internal organisation of VET institutions and policy-making bodies in various countries.

As for **privatisation** in VET, the situation is similar to that of deconcentration: The limited volume of literature on this topic seems to indicate that it is not generally considered to be an important issue. It must be emphasised, however, that the present study looks at privatisation in the strict sense only i.e. the transfer of previously government-run VET capacities to private institutions. There seems to be no general trend towards VET privatisation in this sense (with the possible exception of "charterization" in the USA, which is not yet established as an overall trend). Nevertheless, in all of the cases examined here, it is evident that the role of the private sector in VET is increasing rapidly, not only in the provision of VET opportunities, but also in the organisation of VET systems.

The present study identified a number of **innovative approaches** to the organisation of VET, which merit further scrutiny, in particular the linking of VET in France to further education opportunities, the charter school movement in the USA, and Indonesia's promotion of curricula with local subject content (LSC).

With regard to "**lessons learnt**" for low-income countries, the case of Indonesia appears most instructive. The main lessons drawn by the World Bank from this experience may be summarised as follows:

- Sizeable and effective private VET is viable even in poor countries,
- Government efforts to reform VET can easily shift from being equity-driven,
- VET dependence on donor funds has been both an asset and a liability, and
- Unplanned public sector-based VET may lead to an over-supply of some types of VET and/or crowding out of the private sector.

A more general lesson that may be drawn from the Indonesian experience is that the decentralisation processes in VET require not only tremendous human, technical and financial efforts, but also long periods of time, in order to become truly effective. Time is an essential factor, given the complex and long-term nature of reform in the organisation of VET systems.

With regards to the need for further research, the present study recommends that the Winkler model should be used for further comparative analyses, in particular to support the South-South exchange of experiences with reforms in the organisation of VET systems.

Based on the results of the international comparison of trends in the organisation of VET, the author suggests that further VET policy discussion and research should focus on the following aspects and questions:

- For many years, general public-sector decentralisation has been going on in many low-income countries. What is its current status, what are the underlying factors, and how does it affect DDP in VET systems?
- In some countries, adaptation of VET to rapid changes in the economic, social and political environment has been slow, or has even stagnated. How can orderly change and adaptation be best promoted, in particular with regard to DDP in VET?
- The role of central government in the planning, implementation and organisation of VET is changing everywhere. How can DDP in VET help resolve problems of inefficiency, performance and system rigidity, without provoking new problems, such as deterioration of training standards and mismanagement of resources?
- In many countries, there is considerable potential for broader and deeper DDP in VET, in areas such as the organisation of examinations and teacher supervision. What are the available options, and how might they be realised without detrimental impacts on e.g. national standards or quality control?
- In some countries, VET suffers from a negative image, and possibilities to de-link VET from equity-oriented programmes, in order to improve the overall image of VET, are being looking into. What are the needs and the strategic options in this area, and how might social policy be affected?

1 Introduction

Faced with increasingly rapid economic, social and technological changes, people everywhere are looking for education as a source of knowledge and skills to help them cope with their many challenges. One area of education is particularly affected by the quest for problem-solving knowledge and skills: vocational education and training (VET). As one author put it: There is “a close intuitive link between [vocational education and training] and technological development. If technology is seen as a panacea for modernising a country’s economy and achieving higher levels of per capita income, the next logical step is to instil into the labour force the ‘necessary skills’ for such higher technology to be applied and further developed” (Psacharopoulos 1997, p. 385).

In recent years, the most significant response of VET policymakers to the above-mentioned challenge has been to enhance stakeholder involvement in the development and implementation of VET systems. “*Enhanced stakeholder involvement*” implies in this context both a diversification of the actively involved parties as well as a new distribution of authority and resources between these parties. In line with recommendations put forward by international bodies for VET policy, planning and administration (see e.g. UNESCO / ILO, 2001, p. 13f), new partnerships have been established between government, employers, professional associations, industry, employees and their representatives, local communities and non-governmental organisations (NGOs). It is felt that VET is best served by a diversity of public and private providers, and that funding of VET should be shared between government, industry, the community and the learner. Still, government is expected to play a key role in the provision of VET, ensuring among other things a coherent legislative, legal and institutional framework and the respect of national and international education standards. In this context, many governments have been severely challenged in the fulfilment of their VET-related functions, due among other things to the complex nature of the new partnerships. The present working paper will describe and analyse some exemplary responses to the challenges of VET organisation, draw some preliminary conclusions and formulate recommendations based on the observed outcomes.

In government reform programmes throughout the world, decentralisation, deconcentration and privatisation (DDP) have long played privileged roles. In the context of VET, such reforms are not aims in themselves, rather instruments for improving the organisation of VET. However, there are limits to which each instrument may be applied. In general, it is agreed that certain functions, such as the establishment and enforcement of general standards for curriculum development, accreditation of public and private VET institutions, as well as research and development in the field of VET should accrue mainly to central public bodies. Nevertheless, there is a broad scope of possibilities for enhanced DDP in the provision VET. In particular, it appears that individual VET institutions may be given more autonomy in the design of programmes that best suit local needs, with stronger involvement from local enterprises and community-based interest groups. The extent to which this is feasible and justified, however, depends upon many factors. Often, the historically rooted administrative culture is the most important change-inhibiting factor, whereas the potential for change depends not only on the perceived existence of transferable and viable alternative models, but also on the felt need for change.

Methodological Approach

The present working paper aims to provide a general overview and preliminary analysis of recent trends and experience in the organisation of VET in selected high and medium-income countries. In particular, the paper will focus on the role of DDP in the organisation of VET systems. With this in mind, some examples of innovative strategies and successfully employed VET policy and implementation instruments relating to DDP shall be identified and described.

The term “organisation” is used here in a broad sense: It will be used to encompass the development and implementation of legal and institutional frameworks, the establishment of formal and informal decision-making procedures, the mobilisation and allocation of human, material and financial resources, as well as the introduction and administration of systemic instruments, such as VET curricula, teacher supervision, student certification and school accreditation.

For the purpose of the present study, an important volume of literature has been accessed through libraries and the Internet, and information relating to the organisation of VET has been gleaned and analysed. To a limited extent, expert interviews were conducted to fill specific information gaps.¹

The basic structure of the present paper is the following:

- Introduction and clarification of basic definitions and concepts;
- Introduction to decentralisation, deconcentration and privatisation (DDP) in the context of VET;
- Review of recent experiences with DDP in the VET systems of nine representative high and medium-income countries;
- Comparative analysis of these experiences; and
- Preliminary conclusions and recommendations for further research on the organisation of VET.

Let us note here, that initiation to technology and the world of work - core functions of VET - can take place in various institutional environments, including primary and secondary schools. Hence, a clear distinction between general education on the one hand, and VET on the other, is not always easy or possible. For practical purposes, therefore, the present study will limit itself to the review and analysis of institutions and policies, whose primary focus is on VET.

2 Basic Definitions and Concepts

Vocational education and training (VET)

Various terms are currently in use to describe more or less the same subject area, for which the present paper prefers the term “vocational education and training” (VET)²

The definition of “vocational education” provided by the UNESCO is the following: “Formal education designed to prepare for skilled occupations in industry, agriculture and commerce, generally at secondary level”.³ The supplementary term “training” refers, in this context, to mid-career vocational education, as opposed to initial vocational education.

In their recent joint message and recommendations, UNESCO / ILO (2001, p. 7) define “technical and vocational education (TVE)” as a term closely related to that of VET, applying to “all forms and aspects of education that are technical and vocational in nature, provided either in educational institutions or under their authority, by public authorities, the private

¹ Special thanks are due to Elizabeth Bähr and Edda Grunwald (GTZ) for many useful comments and suggestions based on earlier versions of this paper; to Julia Baraniak and Kathrin Rothhaas (International Policy Advising, Cologne) for their valuable assistance in gathering and processing information for the country case studies; and to David Stieglitz, school architect (Education Transformation Group, Buffalo, NY) for some valuable insight into school financing and construction practices, and the charter school movement in the USA.

² Psacharopoulos (1997) applies the abbreviation VOCED to the same term.

³ Source: www.ibe.unesco.org/international/docservices/thesaurus/00000488.htm (22.12.03).

sector or through other forms of organised education, formal or non-formal, aiming to ensure that all members of the community have access to the pathways of lifelong learning.”

The latter definition (TVE) has a strong technical connotation, whereas the former (vocational education according to the UNESCO) places a strong accent on skills in specific economic sectors. Alternative definitions of VET may emphasize either the expected benefits to the target group (e.g. “provision of opportunities for individuals or groups to gain directly and broadly applicable, long-term relevant options or alternatives for improving the quality of their life”) or the expected impacts of VET on labour markets (e.g. “provision of skills and opportunities which determine the quality and productivity of labour as a factor of production”).⁴

Further distinctions in VET set-ups may be made with regard to:

- Level of work-site experience integrated into the curriculum (classroom - workplace integration),
- Organisation of school-to-work transition,
- Persons and groups (actors) involved in implementation, and
- Coordinating entities and their specific tasks.

VET systems can be described from various viewpoints. In recent research, the most commonly applied perspectives (reflecting without a doubt widespread perceptions of salient issues) may be summarised as follows:

- Institutional and organisational forms in the VET system,
- Systemic links with labour, technological and educational structures,
- Relevance for direct improvement in living conditions of target groups (key words: inclusiveness, access and outreach), and
- Processes of decentralisation and increased participation of diverse actors, with consequential innovations in the design, negotiation and implementation of VET.

It should be underlined that changes in the organisation, management and conception of VET are directly related to the transformations that have taken place in their respective contexts. In many ways, VET systems have been adapting to the new concept of lifelong education, to the ways and the speed at which processes of innovation, development and transfer of technology are occurring, and to the emergence of different and complex labour relations systems. Increasingly, such systems are being exposed to more varied and heterogeneous casts of actors, which in turn has influenced the organisational arrangements that have been or are being adopted.

Obviously, educational, technological and occupational transformations as well as those relating to the roles of historic actors in VET, and the advent of new actors, stem from changes of a more global kind: globalisation; new development strategies (e.g. poverty reduction strategies), the growth of information, knowledge and technology flows, etc. Also, there has been a trend in most societies to place greater emphasis on the competency of decentralised levels in the management of programmes and institutions. As a consequence, the potential for participation of greater numbers of more diverse actors in policy formulation and implementation has increased.

With these general tendencies in mind, some further definitions will be presented below.

⁴ Source: Bähr, Elisabeth – personal communication on December 22, 2003.

Decentralisation

In the context of the present paper, “decentralisation” is defined as the transfer of tasks, resources and political (i.e. decision-making power) power to intermediate (e.g. regional) and lower (e.g. communal) levels. The emphasis here is on the transfer in the geographical sense from a centre towards a periphery. Cooperative relations between centre and periphery may be strong, despite decentralisation, and the involved organisations at each level may be quite independent of one another. A full or partial transfer of access to resources from the centre to the periphery may accompany the transfer of tasks.⁵

Deconcentration

Deconcentration is the transfer of tasks to lower levels within a given organisation. The emphasis here is on the transfer in the sense of an internal (re)organisation of competencies. It may also refer to the full or partial transfer of access to resources to a lower level within a given organisation.

Obviously, decentralisation and deconcentration may go hand-in-hand, when the location of a given organisation is geographically distributed and deconcentration leads to a new geographic distribution of competency from the centre to the periphery, which is - per definition - decentralisation. Hence, these two terms are often used interchangeably, leading sometimes to confusion.⁶

Privatisation

“Privatisation” is, per definition, the execution of a previously public-sector task by a private entity. A corresponding full or partial transfer of access to resources from the public to the private sector may accompany it. Privatisation involves the sale of assets, and/or the granting of concessions. In a broader sense, it aims to establish public-private alliances to increase involvement of the private sector and to introduce the profit motive as an influence on behaviour in the delivery of education. (The present study will apply the term in the stricter sense.)

Although there is a trend in many countries towards enhanced involvement of the private sector in VET, this does not necessarily imply a process of privatisation, in the above-defined sense. In many cases, private-sector agencies are involved in the implementation of new VET programmes (as e.g. in the School-to-Work programmes of the USA). If equivalent programmes did not exist before, and if the previous programmes were not implemented by public sector agencies, then this is not a case of privatisation in the above sense. Along the same line of reasoning, it would be wrong to refer to an increase in the supply of private-sector based non formal VET relative to the supply of public-sector based formal VET as privatisation, inasmuch as the public sector was not previously involved in non-formal VET. Obviously, it is not always easy to draw a clear line between privatisation in the strict sense, and increased involvement of the private sector in VET. Nevertheless, an attempt will be made in the present paper to respect the definition of the term “privatisation” in the strict sense.

⁵ Decentralisation goes necessarily hand-in-hand with the process of regionalisation, i.e. the division of national territory into different regions, taking into account geographic, demographic, economic, social and infrastructure-related factors.

⁶ The terms “horizontal” and “vertical” are often used to describe the transfer of tasks and access to resources from centre to periphery, and from top to bottom in an organisational hierarchy, respectively. Other related terms are **delegation**, which is the transfer of tasks and responsibilities to semi-independent authorities; and **devolution**, the transfer of power to sub-national political entities that are, via local or regional parliaments or councils, answerable to electorates.

In the following section, the potential relevance of DDP for VET will be scrutinized, followed by an empirical investigation of this relationship in nine selected country cases.

3 Planning and Implementation Structures for VET

3.1 Stakeholders Roles

Beginning with the beneficiary side, the most important stakeholders in VET systems are the learners. Of course, conveyers of knowledge and skills i.e. teachers and trainers are also major stakeholders, as are heads of enterprises and involved trainers and workers in part-time, alternating systems. Beyond these, many other potential stakeholders may be pointed out, such as the parents of the learners, administrators and service providers (e.g. school maintenance personnel), public sector policymakers and VET administrators at various levels of government, representatives of the “social partners” (chambers of industry and commerce, labour unions etc.), school supervision and guidance personnel, and educational researchers. In many cases, members of underprivileged groups (e.g. unemployed youth, handicapped persons, members of ethnic minorities) may be given special consideration in the design and implementation of VET systems.

Distinctions may be made between VET stakeholders according to their real or perceived decision making powers. The most common criteria for this sort of distinction are:

- **Level of geographic aggregation:**
 - The inter- or supranational level (e.g. United Nations, European Union);
 - The national (country or macro) level;
 - The sub-national level, including various intermediate levels, typically referred to as regional, State, departmental, or communal;
 - The micro level of schools, enterprises, and local organisations within which some sub-units (classes, teaching teams, production units etc.) may also possess specific VET-relevant decision-making competence; and
 - The individual level: The learner is the centre of attention, but the teachers, trainers, parents and community leaders may also make important individual decisions.
- **Affiliation to government:** government bodies, private enterprises and non-profit organisations.
- **Type of VET provided:** Distinctions may be made between (a) initial and continuing (mid-career) VET (as major components of lifelong learning) and (b) formal and non formal VET, the latter referring to VET outside the formal VET system (e.g. special training through Labour Offices, private training institutes or grass-roots institutions e.g. informal rural communities without official accreditation). Initial VET tends to be geared towards youth, while continuing VET responds mainly to adult needs.

For each of the above criteria, further distinctions may be made between VET-relevant *decision-making* bodies, and *consultative or advisory* bodies.

The role of enterprises as stakeholders will be enhanced, if VET is work place-based, and representatives of ethnic minorities will tend to have a specific role to play, if special provisions are made for their members to have privileged access to VET (e.g. native Americans in the VET system of the USA).

Ultimately, stakeholder involvement in VET systems will tend to be constrained by numerous social norms and conventions, specific to the countries and the societies in which these systems are established. This does not imply that the systems or their components are inherently non transferable between countries. But it does imply that such transfers may lead

to unexpected social frictions. Ultimately, policymakers must decide whether eventual social friction is acceptable or not, and well-qualified advisors may help to anticipate potential transfer problems at an early stage, adjusting VET systems to local conditions and thereby reducing eventual risks.

3.2 Potential Links between DDP and VET

3.2.1 Decentralisation

Degrees of decentralisation

Institutional and organisational arrangements for VET planning and implementation differ according to their degree of decentralisation (cf. ILO 2000). Typical VET categories, according to the ILO, are:

- VET systems that are included among the structures of regular education, especially secondary technical education.
- VET systems that are centrally designed, planned and implemented by a public body, formally dependent on the Ministry of Labour, with tripartite management, financed by a specific levy on payrolls, of national coverage and with varying degrees of administrative and functional decentralisation.
- Systems in which VET is dispensed by one or several entities with the same characteristics of the above, but managed by the country's main corporate organisations.

ILO's categories refer to systems of public financing only. In many of the country case studies presented below, private financing will also play a role, albeit not always a major one.

Another, more general model was developed by the World Bank in the early 90s (Winkler 1991). The model distinguishes between three system types, according to the degree of centralisation, and six main areas which may be characterised by their specific degrees of centralisation (see **Annex 2**).

In VET, decentralisation processes may also be characterised by at least one of the following two approaches:

- Delegation of administrative, financial or operational tasks to territorially disperse units;
- Sector-wise focalisation of efforts, personnel, resources and infrastructure (e.g. introduction of "magnet schools" in the USA for vocational education in given professional fields).

In some countries, such as Germany, which has traditionally allocated many competencies to the federal States (Länder), responsibilities for VET policymaking and implementation are already decentralised. In other countries, such as France, efforts have been made in recent years to hand over responsibility for VET to regional, state or local authorities.

Likewise, policy guidelines may be laid down by the specialised bodies of Labour Ministries and interpreted and adapted in accordance with active employment policies that include VET components at regional and/or federal state levels. This may be referred to as a decentralised approach, but it is not necessarily the result of an officially proclaimed policy of decentralisation.

Decentralisation allows VET bodies to get closer to locally specific cultural, social and economic characteristics, thereby facilitating the involvement and participation of a whole range of actors: local authorities, neighbourly associations, chambers, trade and labour unions, NGOs and others. In addition, examples of sector-wise decentralisation are increasingly frequent. As opposed to traditional VET centres that house a wide diversity of specialisations, there

are now centres and institutions in many countries focusing on specific sectors like construction, textiles, automobile industry, graphic arts, health services and hotel management.

Of course, decentralisation is not without risk. In particular the risk of fragmentation and scattering of efforts and resources threaten decentralised VET systems. There are dangers inherent in any system that attracts more and increasingly diverse actors. Conflicts may arise in decision-making and management, between actors such as Education and Labour Ministries, local and sector bodies (both public and private), chambers of industry and regional bodies. In addition, the organisational costs induced by decision-making processes with broad stakeholder participation can be significant, eventually surpassing government capacities and leading, in the outcome, to wide-spread dissatisfaction.

DDP in VET financing systems

Various factors are inciting stakeholders to cast doubts about the capacity, relevance and importance of traditional public VET structures, favouring the emergence of other decentralised, deconcentrated and/or privatised sources of financing. Some of these already exist in a small scale; others are quite novel and the result of economic, technical and social evolution. Different models have been derived to deal with VET financing in the more systemic context of national opportunities for work-based occupational training. For example, ILO (2000) has developed the following basic models:

- Public financing of training at enterprises, with resources obtained through levies or parafiscal contributions with specific allocation. Allocation is not always direct and exclusively for VET; sometimes it covers areas like the re-adaptation of workers laid off as a result of industrial restructuring or state modernisation. This may include occupational retraining, managed by new actors, such as Labour Ministries.
- Public financing of training at enterprises through formal technical secondary education systems. The new aspect of this is the growing importance of decentralised administration (federal states, provinces, departments, municipalities) in the financing of this service, either with their own resources or with transfers from the national budget, pursuant to decentralisation policies.
- Systems of tax incentives, whereby enterprises recover their expenditures when they file tax returns.

In the country cases to be described below, various permutations of the above are being practiced, particularly in VET systems that are using or introducing mechanisms to make financing procedures more open and flexible.

Non formal VET

With regard to non-formal VET, there is increasing recognition of the emergence of a market for labour competencies with a variety of suppliers – some of them public, but mostly private. The latter tend to provide decentralised VET opportunities: grass-roots initiatives at community level (concentrating on directly and locally applicable skills), non-formal private bodies, with expanding training services in firms and enterprises or at institutions financed by them, as well as technological development centres combining innovation and transfer of technology through training. Today, many NGOs are also providing training. As a consequence, while a great amount of public resources continues to be poured into traditional systems in many countries, private investments in VET have grown considerably in volume and diversity.

3.2.2 Deconcentration

Information relating to the role of deconcentration in VET is quite limited. This may be due to two factors:

- Deconcentration, in the strict sense, takes place most commonly in the context of decentralisation. Where the emphasis is on decentralisation, deconcentration is an implicit result.
- Deconcentration tends to take place in the context of internal restructuring and reorganisation and is treated as a more or less confidential internal matter, with little transparency vis-à-vis public media and researchers.

ILO (2000) concluded in its study of VET systems in Latin America and the Caribbean that, with regards to types and levels of deconcentration, the following categorisation of existing VET systems could be made:

- (1) Systems in which responsibility both for defining policies and strategies and implementing direct actions is concentrated in a single body, usually a national or sector institution.
- (2) Systems in which the definition of strategies and policies is concentrated in a single body, which also plays a predominant role in execution of actions, where it has the complement of shared management and collaborating centres.
- (3) Co-existence and interrelation of two predominant systems with different rationales. One of them is normally associated with Labour Ministries, which through specialised bodies define policies and strategies without ever implementing actions. VET is then carried out by a multiplicity of agents. The other system is associated with national or sector institutions that may fall into the descriptions for systems (1) or (2).
- (4) Systems wherein definition of policies and strategies is wholly in the hands of Labour Ministries through specialised bodies, which do not carry out any actions. Implementation is assumed by a large number of agencies and actors.

It should be underlined here that the above categorisation of VET systems according to types and levels of deconcentration does not necessarily imply that a process or processes of deconcentration have actually taken place. Instead, the above categories describe situations at given points in time. The proper identification of deconcentration processes would require a systemic historical approach, comparing situations at different points in time and the nature and causes of observed changes. (The same principle applies to decentralisation and privatisation, as processes of institutional change, in the terminology of the present study.)

3.2.3 Privatisation

References to privatisation of VET systems are also very limited. In the literature reviewed for the purposes of this study, few such references were identified. More investigations are required in order to ascertain the nature of privatisation and the extent to which it has actually taken place in the VET systems of the case study countries.

4 Country Studies

For comparative analytical purposes, a general classification of VET systems, based on the system developed and applied by Winkler (see **Annex 2**) will be applied. The Winkler model has the advantage that its general approach, applying three basic categories (centralised, mixed, decentralised) can be applied to both the VET system as a whole, as well as to its constituent components, and that the latter can be defined according to the analytical needs.

Information on deconcentration and privatisation in individual case studies will be included in the general description of country-specific VET systems, according to information available and the pertinence to the aims of the present study.

The analysis and comparison of the organisation of VET systems in the case-study countries will differentiate (in line with Winkler) between the following basic systemic components:

- School organization,
- Curriculum and teaching methods,
- Examinations and supervision,
- Teacher recruitment and compensation,
- Finance of recurrent expenditures and
- School construction and finance.

In each of these areas, special attention will be paid to risk-related aspects, i.e. to institutions and instruments that serve to reduce the risks of VET system failure. Such failure may arise when, for example, there are not enough enterprises willing to participate in alternating (dual) VET, or when decentralised structures are given new tasks, but not the means to fulfil them. Under the assumption that systemic reforms in low-income countries will be more prone to risk than similar reforms in high and medium-income countries, the analysis of experience with reform-related risks should yield some fundamental insight with regard to the transferability of “lessons learnt” from higher and medium to lower-income countries.

The case-study country presentations will highlight the organisation of VET, in nine selected countries, with special emphasis on DDP and innovative approaches. **Table 1** (below) provides some basic data on each country investigated. The nine countries are presented in the order of their levels of income (gross national income in dollars, 2001 at purchasing power parity). The table illustrates the fact that a large range of income levels is represented in the study, and that levels of population and population density are also highly variable – demographic factors, which may, in certain manners, influence the type and development of VET systems and their organisation.

Table 1 Basic country data

Country	Area (km ²)	Population (millions, mid 2003)	Population density (persons/ km ²)	GNI per capita (\$PPP, 2001)
USA	9629054	291,5	30	34280
Germany	356979	82,6	231	25240
Australia	7741190	19,9	3	24630
France	551498	59,8	108	24080
Sweden	449958	9,0	20	23800
South Africa	1221035	44,0	36	10910
Mexico	1958192	104,9	54	8240
Russia	17075334	145,5	9	6880
Indonesia	1904563	220,5	116	2830

Source: Population Reference Bureau, September 2003.

For the moment, due to lack of sufficiently complete and recent information, the Winkler approach to the description of the organisation of VET systems will not be applied to the cases of South Africa, Mexico, Australia and Indonesia. More investigations are required, before the same approach can be applied to these countries.

4.1 *United States*

American education is a complex topic because a single school can draw upon resources from several different federal, state and local public institutions, as well as private institutions and individuals. For example, a student may attend a private high school whose curriculum is required to meet standards set by the State (regional level), with vocational courses financed by federal programmes, and sports teams that play on local, publicly owned grounds.

Decentralisation policies over the past decades have resulted in a substantial delegation of authority from federal government to State and local governments. As a consequence, the present-day organisation of the American VET system is highly decentralised. As local agencies became increasingly involved in the implementation of VET programmes, federal government tended, for a while, to bypass the State level. In general, three trends in the development of VET administration may be identified (cf. L'Hoest 1998, p. 99):

- The expanding role for the private sector,
- The diffusion of administrative capacity, and
- Ongoing concern with interagency coordination.

With regard to the current degree of DDP in the education system of the USA, the following observations pertain to the education system in general as well as to the VET system in particular:

- **School Organization:** The Department of Education (DOE) is responsible for federal education programmes of all types and levels. The Constitution and federal statutes strictly limit the federal role in education. The DOE does not function as a governing body but operates in cooperation with State and local authorities.⁷ The main responsibility for education in the USA lies with the 50 States, each of which has a department of education, responsible for enforcing State statutes, and delegating operations in a variety of ways to local school districts. About 90% of students attend public secondary schools, the rest private ones. In most cases, VET options are integrated into secondary education. There is a strong USA tradition that the local community should have significant powers, through the local school board, in controlling education, including VET.
- **Curriculum and Teaching Methods:** Although there is no national curriculum in the USA, certain subjects are taught in virtually all elementary and secondary schools throughout the country. In the past, the federal government has limited itself to the formulation of core curricula for all students. All laws and policies on curriculum are set and enforced by the States and the over 14,000 local school districts. The State board outlines study courses and lists of textbooks. Some States play a strong role in selection of teaching material. Local school boards use State guidelines to work out their curricula. Private VET institutions design their own curricula. Adult vocational education and training is provided part-time by a variety of public and private organizations, often using facilities of the regular system.

⁷ The federal Department of Education (DOE) is restricted in its authority and competence to the following functions: (1) collecting and providing information and statistics about US education; (2) providing leadership and influence in behalf of national education policies and initiatives; (3) administering programs of financial assistance to students, institutions, and local and State governments; (4) conducting programs of research and technical assistance; and (5) administering and enforcing the federal laws governing equal educational access and opportunity for all citizens. The DOE also administers certain educational subsidies often allied to welfare and provides education in areas where the federal government has introduced families, for example, military bases, NASA installations or overseas personnel.

- **Examinations and Supervision:** Six regional accreditation associations set minimum standards for institutions chartered in the regions of their jurisdiction. Other recognized accrediting associations set and regulate minimum standards for individual subjects or related subjects, particularly in professional fields and specialized institutions. For teacher certification, 5 States require no examinations, 8 require only minimal skills assessment, and the rest require an undergraduate degree and a supervised practicum. All States certify secondary teachers (including those in VET) according to specialisation.
- **Teacher Recruitment and Compensation:** The federal government has no jurisdiction or authority over the recognition of educational institutions, members of the academic professions, programmes, degrees or other qualifications. State governments typically prescribe pay scales and set accreditation standards. Specialized non-instructional personnel (administrators, counsellors, nurses etc) must also be certified in most States. Teachers (including those in the VET system) are selected, and sometimes pay scales as well are set by local government. State governments typically set accreditation standards. Private schools are more flexible in hiring teachers.
- **Finance of Recurrent Expenditures:** Federal funds are used to finance projects regarded by Congress as essential for common welfare e.g. for deprived children and vocational education. For the latter, federal aid, allotted in relation to population, must be matched by State and local funds, and is used mainly for salaries. States supplement local taxes to equalize opportunities and to introduce or encourage specific programmes locally. The bulk of the VET funding stems from local taxes. Fees plus private donations are used to finance private schools.
- **School Construction and Finance:** The bulk of school construction is financed by State education agencies, but it is usually done with considerable local contributions from individual school districts, financed through local taxes and public bonds. However, in poorer school districts the local share is often relatively small, i.e. lower than 25%. This is especially true in some poorer rural districts, which cannot afford any additional taxes beyond their share of their schools' operating budgets. The actual construction of schools, whether new or reconstruction of existing building, is undertaken completely at and by the local school districts. They usually initiate the projects and are responsible for the tendering process and overseeing the construction work. The State tends to follow a "hands off" policy towards the actual construction process, but it retains virtual absolute control over construction standards and the approval process, which sets the pace and quality of construction - as well as all the issues of size of classroom, types of equipment and ancillary support facilities in school buildings.⁸

Most States allow private financing and ownership of public schools, based on a regulation that permits leaseback of almost any public building from private developers. In the case of public schools, construction standards and other constraints pose major disincentives to private developers. Hence, government has developed some compensatory incentives (tax credits etc.) to incite the private sector to develop, own and/or operate schools. In general, there is a growing acceptance of private school ownership and management in the public school sector. Of course, private owners and operators draw resources from the same public budgets, as do public owners and operators. But the former are often considered to be more efficient and less prone to red tape (hence quicker and more flexible), than the latter.

⁸ Source: Stieglitz, David – personal communication, Dec 29, 2003.

Apprenticeships are not common in the USA. They are done in the USA by only about 2% of all high school leavers. This is at least in part due to their negative image, i.e. as instruments to support social hardship cases.⁹

According to L'Hoest (1998), the proliferation of categorical VET programmes in the USA has led to confusion and mismanagement. Against this background, L'Hoest points out four aspects in the ongoing policy debate that, in his view, are in need of greater consensus:

- Academic / vocational integration,
- Post-secondary links,
- Learning on the job, and
- Broader involvement in policymaking and implementation.

With regard to the latter point, it is interesting to note that L'Hoest also claims that no study of training programmes to date has found that increased private sector involvement results in improved programme performance. Still, the perception persists that gains in placement rates and programme efficiency will follow as private sector input increases.

Some recent innovations in the American VET system merit special attention here, especially in relation to matters of DDP:

The Charter School Movement

The "charter" which establishes a charter school is a performance contract detailing the school's mission, program, goals, students served, methods of assessment, and ways to measure success. The schools are accountable for both academic results and fiscal practices to the sponsor (the state or local school board) that grants them, the parents who choose them, and the public. The basic concept of charter schools is that they are allowed to exercise increased autonomy in return for their accountability.

In 1991 Minnesota passed the first charter school law, with California following suit in 1992. By 1995, 19 states had signed laws allowing for the creation of charter schools, and by 2003 that number increased to 40 states, Puerto Rico, and the District of Columbia. Charter schools are one of the fastest growing innovations in American education policy, enjoying broad bipartisan support from governors, state legislators, and past and present secretaries of education. In his 1997 State of the Union Address, former President Clinton called for the creation of 3,000 charter schools by the year 2002. In 2002, President Bush called for \$200 million to support charter schools. His proposed budget called for another \$100 million for a new Credit Enhancement for Charter Schools Facilities Program. Since 1994, the U.S. Department of Education (DOE) has provided grants to support states' charter school efforts, starting with \$6 million in fiscal year 1995. As a result, nearly 3,000 new charter schools have been launched since state legislatures began passing charter legislation in the 1990s.

Chartering allows schools to run independently of the traditional public school system and to tailor their programs to community needs. While not every new school is extraordinarily innovative and some school operations may mirror that of traditional public schools, policymakers, parents, and educators view chartering as a way to increase educational choice and innovation within the public school system.

⁹ Similar prejudices against vocational education appear to exist in England as well: "The Department for Education and Skills in England has published proposals to overhaul education and training for 14-19 year olds. The plan is to encourage more students to continue learning beyond age 16 by offering a more flexible curriculum that has both academic and vocational subjects. The word 'vocational', however, will be dropped from qualifications in an effort to get rid of the perceived notion that vocational is equal to second-rate." (www.britishcouncil-usa.org/policy/edup/UKedup/edupuk2.shtml).

The desire to create charter schools is catching on for many reasons, particularly in poor urban areas, which are extremely constrained by tight public budgets and rigid labour union environments. When opening new schools, the charter process permits school authorities to bypass of many standard procedures and rules. Charter schools either own and run the newly created facilities on their own, or they go into partnerships with local churches and/or other civil society groups. A third way, which is still in its test phase, is the so-called "conversion charter", whereby public school districts charter existing public schools. This allows them to bypass rules and procedures within the existing public school system, as well. Networks of formerly public schools are thereby "charterized", each with its own board and budget. One possibility, which is currently being considered, is the charterization of complete school districts. If the "conversion charter" becomes a widespread model, it will have profound implications not only for the ownership and management of public schools in the USA.¹⁰

Although many charter schools are reported to place special emphasis on VET, there is very little information available on this aspect, and it appears that no comprehensive study has been carried to date relating to VET in American charter schools.¹¹

School-to-work (STW) programmes

These programmes aim to facilitate the "time interval during which a cohort of young people moves from near full enrolment in school to negligible enrolment in school; and from negligible labour market activity to high levels of labour market activity" (Blanchflower and Freeman 1996, p. 2).

The Clinton administration initiated the School-to-Work Opportunities Act (STWOA) in the early 90s, as one step towards revitalizing the US economy and helping US firms regain a competitive edge on world markets. The act provides a national framework for the use of federal funds as seed money for States and local communities to develop comprehensive, state-wide STW systems. These systems intend to help young people acquire the knowledge, skills, and labour market information they need to make a smooth and effective transition from high school to career-oriented employment or to further education as well as respond to changes in local labour markets and economies (L'Hoest 1998, p. 113).

Local partnerships are key instruments for the implementation of the Act. These are defined as "a local entity that is responsible for local STW Opportunities programs". They may be any of the following entities:

- Employers,
- Representatives of local educational agencies and local post-secondary educational institutions (including representatives of area vocational education schools, where applicable),
- Local educators (such as teachers, counsellors, or administrators),
- Representatives of labour organisations or non-managerial employee representatives,
- Students,
- Employer organisations,
- Community-based organisations,
- National trade associations working at the local levels,
- Industrial extension centres,
- Rehabilitation agencies and organisations,
- Registered apprenticeship agencies,
- Local vocational education entities,

¹⁰ Source: Stieglitz, David – see above.

¹¹ See www.uscharterschools.org for more information.

- Proprietary institutions of higher education,
- Local government agencies,
- Parent organisations,
- Teacher organisations,
- Vocational student organisations,
- Private industry councils (PICs),
- Federally recognised Indian tribes,
- Indian organisations,
- Alaska Native villages, and
- Native Hawaiian entities.

Obviously, broad participation is a major characteristic of STWOA policy. The initial phase of STWOA implementation profited from a number of highly innovative structures and instruments: A joint labour-education national STW office, a STW hotline, technical assistance to programme partners, marketing activities and a thorough analysis of the first 8 grantees. Preliminary experience with the practical application of the STWOA was reviewed in a survey-based study carried out by L'Hoest (1998, p. 199). According to the results of this study, interactions between States and programmes have been primarily affected by different local conditions, leading to highly varying outcomes. As a general conclusion, there appears to be considerable need for clear and mutually accepted VET standards and norms.

L'Hoest's surveys were carried out in October 1996 and March 1997, i.e. during early STWOA implementation. The 1997 progress report of the school-to-work legislation reported, however, that only 2% of high school students indicated that they had actually participated in comprehensive school-to-work activities. More recent assessments of the achievements of the STWOA programme tend to underline some of the weaknesses in its implementation: Brown (1998), for example, reports that teacher practices that have had a significant effect on students and classrooms have been identified, and that the negative attitudes of employers, parents, postsecondary institutions and teachers toward school-to-work initiatives are among the biggest barriers to successful initiatives. Recommendations for improving school-to-work efforts include the following: Recruit enough employers who are willing to provide work-based learning opportunities; give teachers the time, resources, and support required to connect school- and work-based learning; inform parents about the objectives of school-to-work initiatives; and foster high school students' vocational maturity.

4.2 Germany

The education system in Germany has two main features that distinguish it from the education systems of most other industrialised nations:

- There are up to four parallel but separate types of school at the lower secondary level, preceded by a common primary school;
- The "dual" form of vocational training plays an important role, supplying skilled workers through in-company training.

German schools - both general and vocational - as well as universities and institutes of higher education are usually institutions of the State (German: *Länder*) government. There are special State laws governing licensing, recognition and financial support of private educational institutions, which play a subordinate role in terms of the number of pupils and students.

Compulsory schooling starts at age six and usually ends after nine years of full-time compulsory education. In all States, general education is followed by vocational school - usually three years - for young people who do not go on to full-time higher general education (e.g. grammar school).

All schools - both general and vocational - as well as institutes of higher education and universities, are free of charge.

In order to allow all young people to choose an education and training path that is in keeping with their interests and aptitudes, regardless of their family's financial situation, financial support is made available under the Federal Law on Education and Training Promotion.

Initial Vocational Training

Vocational training in Germany has two main aims:

- To provide young people with a basis for a successful career and thus contribute to their personal development, and
- To satisfy the demands of businesses for various skills and thus serve economic policy interests.

With regard to the first aim, it may first be noted that the German education system attaches equal importance to general education and VET. Basic knowledge and key skills are already taught in schools of general education with the aim of providing preliminary vocational guidance. It is widely accepted that practical training encourages readiness to learn, and that professional training is essential for anyone who, faced with the fast pace of technological change and worldwide restructuring, wants to maintain their level of job performance or engage in a skilled occupation. Learning in a work environment is seen to promote personal development, in particular independence, self-esteem, teamwork and general work ethics and motivation.

As for the second aim, the VET system is expected to respond to the labour market's increasing demand for higher qualifications. In recent years, the demand for semi-skilled and unskilled labour has been falling steadily. Among other things, VET is expected to promote career development and give suitable candidates the chance to acquire qualifications up to a university entrance certificate.

The Dual System of Vocational Training

Two thirds of all school leavers in Germany who enter VET system aim for a State-recognised occupation in the dual system (see **Table 2**, below). Access to the dual system is not linked to a specific school certificate: It is, in principle, open to all.

Table 2 Vocational schools and numbers of students, by type of school: Germany 2001 (absolute and in % of total)

Type of school	Schools	% of total	Students	% of total
Vocational schools in the dual system (Berufsschulen im dualen System)	1.755	18,0%	1784303	66,3%
Vocational (basic) preparatory year * (Berufsvorbereitungsjahr)	1.509	15,5%	114947	4,3%
Vocational technical schools (Berufsfachschulen)	3.351	34,3%	425420	15,8%
Technical higher schools (Fachoberschulen)	817	8,4%	99488	3,7%
Technical high schools (Berufliche Gymnasien / Fachgymnasien)	514	5,3%	102596	3,8%
Vocational and technical higher schools Berufsoberschule / Technische Oberschule	84	0,9%	10813	0,4%
Technical schools (Fachschulen)	1.611	16,5%	147404	5,0%
Others	116	1,2%	7818	0,3%
Total	9.757	100%	2692789	100%

* includes both full and part-time vocational (basic) preparation year

Source: Statistische Veröffentlichungen der Kultusministerkonferenz Nr. 164, 2002¹², own calculations

The German dual system has two main characteristics:

- *Two different learning venues: the enterprise and the vocational school:* Most learning time in the dual system is spent in a business enterprise. The learner, as a trainee in a liberal profession or the public sector, works most of the time in the enterprise and is given regular leave to attend vocational school. In-company VET concentrates on specialised practical skills and occupational experience, while the vocational school focuses on specialised theoretical knowledge required for the relevant occupation and on consolidating and improving the level of general education.
- *Division of responsibility for each of the two learning venues:* The federal government has competence for in-company vocational training, while the Ministries of Education and Culture of the States have competence for VET in educational establishments.

The term “dual system” refers to the allocation of competence for the different learning venues, as laid down in the federal constitution. Neither vocational schools nor enterprises are uniform learning venues. Various types of vocational school exist, as do widely differing forms of learning in enterprises. Besides training workshops in large enterprises and workplace learning, there are also inter-company training centres, particularly in the trades and construction sectors. Small and medium-sized enterprises in this sector – which train about two-thirds of all young people in the dual system – utilise these inter-company training centres to provide trainees with the knowledge and skills prescribed in the training regulations. At present there are capacities for around 100,000 trainees in inter-company training centres. Some centres are also used for continuing training schemes.

Recognised Occupations and Training Regulations in the Dual System

The dual system provides training in State-recognised occupations. These are developed and adapted to meet the demands of the world of work through close co-operation between federal and State governments and the social partners. The total number of recognised occupations stood at 606 in 1971 and at 357 around the end of 1998, indicating a substantial

¹² Source: <http://www.eurydice.org/Eurybase/Application/frameset.asp?country=DE&language=VO>

reduction in the number of recognised occupations. This does not mean, however, that fewer occupations require training today. Instead, reclassification has bundled recognised occupations to cover a wider range of activities. This facilitates greater mobility and flexibility for employees in their subsequent occupations. At the same time, a series of new recognised occupations, such as in information and communication technology (ICT), has been created.

Training regulations set out minimum standards for the content and scope of training. However, they leave enough leeway in practice to react to new technological and economic demands. Training regulations are issued by the minister responsible for the respective sector, in conjunction with the Federal Ministry of Education and Research, according to a procedure established in agreement with the social partners. They set out the legally binding terms for in-company training. All training regulations contain details on the title of the recognised occupation and the duration of training, as well as the skills and knowledge to be acquired (occupational profile). They also contain instructions on the material and chronological order in which skills and knowledge should be taught (overall training plan), as well as examination requirements.

For general policymaking purposes, the States have special committees for vocational training, with equal representation of employers, employees and the highest State authorities. They advise the State governments on issues of VET in schools.

Decentralisation in the VET in Germany

With regard to the current degree of decentralisation in the German VET system, the following observations may be made:

- **School Organization:** The main responsibility for education, in general, lies with the sixteen States. Each State has a ministry of education and culture, which takes decisions inter alia in matters of form and length of the vocational training in the different professional fields. The federal government, however, is responsible for in-company VET. The Vocational Training Act of 1969 regulates the implementation of in-company VET for the whole of Germany. The Trades Code (issued by the Federal Economics Ministry) and the Promotion of Vocational Training Act are also relevant for the sector. The main relevant organ at the federal level is the Federal Institute for Vocational Training (BIBB), which plays an important role as a think-tank for VET policy and regulative frameworks, albeit without decision-making competency.¹³ In general, co-operation between federal government, States, regions and enterprises levels, based on mutual responsibility for planning, implementing and developing the VET system, has proved quite successful in the past.¹⁴

¹³ BIBB's main committee has 53 members, 16 representing employers, 16 for employees and 16 for the States. Another 5 represent the federal government. The BIBB conducts research and development in the sphere of in-company vocational training and fulfils mandated service and consultancy functions to the federal government and VET providers. The main committee advises the federal government on fundamental issues of in-company vocational training. Under paragraph 9 of the Promotion of Vocational Training Act, a BIBB subcommittee is responsible for harmonising the national training regulations and the school skeleton curricula of the individual States.

¹⁴ The regions referred to here are administrative subdivisions of the States. Considerable powers have been given to the "competent bodies", which are autonomous regional organisations of industry. The competent bodies include about 83 chambers of trade and industry, about 56 chambers of trades, and the corresponding professional boards for liberal professions. The tasks of the competent bodies are to ensure the suitability of training centres, monitor training in enterprises, support VET with advice to training enterprises, instructors and trainees, to establish and maintain a list of training contracts, to institute the system of examinations and to hold final examinations. The competent bodies have VET committees, which are made up of 6 employer representatives, 6 employee representatives, and 6 representatives of VET school teachers. These committees have to be notified of and consulted on important matters of VET. They are mandated to establish legal requirements for the implementation of VET in their respective fields.

- **Curriculum and Teaching Methods:** Skeleton curricula for VET are worked out jointly by federal and State authorities with the agreement of the employers and unions (social partners) based on training regulations for on-the-job training. They contain statements of objectives as well as references to the time frame and the number of lessons. In accordance with the skeleton curricula, the States and regional chambers elaborate regional and business-specific curricula. The State and social partners support the concerned federal ministry to set up training regulations, which define the knowledge and skills to be imparted through on-the-job training for professional qualification for all recognised occupations that require formal training.
- **Examinations and Supervision:** Intermediate and final examinations are based on the contents of the framework and skeleton curricula. The chambers of industry and trades usually administer intermediate examinations, taken before the end of the second year of training. Final examinations are administered by regional and sector organisations from the various branches of industry and commerce, e.g. chambers of industry and commerce, trades, liberal professions and agriculture that perform governmental functions in VET. Autonomous industrial “competent bodies” ensure the suitability of training centres, monitor training in enterprises, provide advice to training enterprises, instructors and trainees, establish and maintain a list of training contracts, set up the system of examinations and hold final examinations.
- **Teacher Recruitment and Compensation:** Teacher recruitment and compensation lies in the responsibility of the State ministries of education and cultural affairs. VET school teachers are employed and paid by the States, which are responsible for financing the educational sector. Enterprises participating in the dual VET System have to assign and pay an on-the-job trainer. Large enterprises maintain in-house on-the-job training centres, and the chambers of industry and trades monitor the on-the-job trainers.
- **Finance of Recurrent Expenditures:** Financing of the public-sector school system is based on a sharing of financial burden between States and local authorities (communes).¹⁵ The States reimburse local authorities for certain expenses (e.g. transport of pupils), and sometimes they support the local authorities through one-off grants for running costs. The local authorities (communes) bear the costs of non-teaching staff and material.¹⁶ Industrial and specialised training institutions bear the costs of in-company training. Spending on VET by enterprises includes trainee remuneration. Since the costs of VET reduce taxable profits in enterprises liable for taxation, the government may be said to indirectly share these expenses.
- **School Constructions and Finance:** Decisions and budgets for school construction lie in the responsibility of the States and the local authorities (communes), whereas the States support the local authorities through one-off grants for school construction. The local authorities (communes) decide whether to construct schools and they assume the construction costs.

¹⁵ At the federal level, there are comparatively minor contributions from the Federal Labour Office for continuing training, retraining and related measures.

¹⁶ Recently there has been a reform process to remove the heavily regulated use of resources by extending the financial autonomy of the schools. The possibility of schools managing their own budgetary funds has increased in recent years as a result of school-specific regulations. These reforms of school financing are currently being put into practice in many States. In some States, schools are already able to determine their own use of resources for materials within the budget allocated by the maintaining body. Initial approaches are also in place for the autonomous use of the allocated personnel resources.

Cooperation across States is ensured by the Standing Conference of the State Ministers of Education and Cultural Affairs, which aims to ensure a certain measure of uniformity and comparability, especially in school and higher education policies of national significance. The decisions of the Standing Conference are recommendations, which become legally binding when passed by the individual State parliaments.

4.3 Australia

Historical Background

Australia's VET system goes back to the 1800's, when the English VET system was simply copied and applied in the new colonial environment. A system of apprenticeships gradually developed and spread across the continent, but in a different manner in each of regions. Various institutions, such as mechanics institutes, technical colleges, and technical secondary schools were set up in a decentralised fashion, which little national government involvement or funding (cf. Robinson 2000, p. 1)

National-level coordination of VET began in the 1970s, with the introduction of a national system of publicly funded Technical and Further Education (TAFE) institutes and significant financial support for TAFE from national government, which also began to provide subsidies for apprenticeships. A national trainee system was established in the 80s. Further milestones in the development of national-level VET policy were the establishment of the Australian National Training Authority (ANTA) in 1992, the introduction of the Australian Qualifications Framework (AQF) in 1995, and establishment of the Australian Recognition Framework (ARF) in 1998. The AQF brought all post compulsory education and training qualifications into a single national system of qualifications.

In 1990, the number of apprentices was around 160,000, and the number of trainees about 12,000. Today, about 1.5 million students participate in Australian VET.

Organisation of VET¹⁷

In Australia, national (Commonwealth) government and the eight States and Territory (provincial) governments share responsibility for VET. The key national-level decision-making body is the Ministerial Council (or MINCO) of the Australian National Training Authority (ANTA). This council sets national VET policy, thereby taking account of the decisions of a larger national ministerial council, known as the Ministerial Council for Employment, Education, Training and Youth Affairs (MCEETYA). The latter frames national policy across the wider policy sphere of employment, education, training and youth affairs issues.

ANTA is the key national agency responsible for advising on national planning, funding and strategic objectives to achieve a national focus for VET in Australia. ANTA is a Commonwealth statutory authority that is governed by an industry board.

The national government, through the Commonwealth Department of Education, Training and Youth Affairs (DETYA), and the State and Territory training authorities share responsibility at both policy-making and operational levels for the implementation of agreed national VET decisions in their respective jurisdictions. DETYA is responsible for provision of national policy advice, funding, and strategic planning related to education, training and youth affairs. The eight State and Territory training boards and training authorities are charged with regional VET policy, planning and system management.

In each State and Territory, the training authorities are responsible for:

¹⁷ Most information in this section is taken from Robinson (2000).

- On-going management of government providers and registration of non-government providers in VET;
- Implementation of the national recognition framework, which is progressively replacing the former national curriculum arrangements;
- Management of the State or Territory training profile;
- Allocation of funds to VET providers to meet targets specified in the State or Territory training profile and ANTA targets;
- Collecting and reporting information under agreed national reporting arrangements.

Recently, State and Territory departments for VET have been combined with State and Territory education departments, as part of the program to promote closer links between secondary education and VET, and to deliver programs which combine education and VET to students who are still at school.

Australia has a highly developed set of industry training advisory bodies (ITABs) operating at both the national and State/Territory levels. ITABs provide advice on key training issues within a particular industry, and their boards are comprised of industry, business and labour union representatives. National ITABs receive financial support from ANTA, for example to participate in national planning of the VET system and to develop national industry standards for training.

The National Centre for Vocational Education Research (NCVER) is responsible for developing and implementing VET research and evaluation at the national level, including collection and reporting of national VET statistics. NCVER Limited is a non-profit company owned by Australian Ministers for Training.

Australia's governments have established a non-profit company, called Australian Training Products Limited (ATP), to develop and publish national training products and materials.

The Australian Qualifications Framework Advisory Board (AQFAB) maintains and reviews the Australian Qualifications Framework (AQF).

A wide range of providers in both government and private sectors delivers VET in Australia. Most VET programs in Australia are undertaken in TAFE institutes. Private training organisations and adult community education providers are growing in importance. Also, some enterprises, schools and universities are registered VET providers. Australia does not have a widespread system of specialist vocational secondary schools or technical high schools.

Focus on School-Based New Apprenticeships (SBNA)¹⁸

In school-based new apprenticeships (SBNA), students are employed part-time as apprentices or trainees, while at the same time counting as full-time school students. As with other apprentices and trainees, a contract of training is established and registered with the appropriate state registration authority. The student, as part of the contract of training, gains a VET qualification (most commonly at AQF level 2). In addition, the training generally counts towards the student's senior secondary school certificate and in some cases for tertiary entrance ranking. Policies on these issues vary from state to state and sometimes between areas of industry. Schools are not funded in all states for their students' involvement in SBNAs.

The student is paid for the time spent at work and in formal off-the-job training. Off-the-job training is conducted at a registered training organisation, which may be a TAFE institution or another provider, although in some cases some of the training may be sub-contracted to the

¹⁸ Most information in this section is taken from Smith / Wilson 2002.

student's school, and in other cases may be conducted entirely on the job. Ideally, the student works half-time, completing his or her traineeship during years 11 and 12 of high school. In many cases, however, the student works for only around one day a week. Extra hours may be fitted in at weekends and on school holidays. Since apprenticeships normally last four years, they can never be completed while at school. Most SBNAs are, therefore, trainees rather than apprentices.

SBNAs were introduced in 1997, through arrangements established by the MCEETYA. Entries into SBNAs increased rapidly from 1591 in 1998, to 4288 in 2000. In 2000 there were 5957 in training, greater than the number of enrolments, because most SBNAs extend over more than one calendar year. 15% of school-industry programs now comprise SBNAs. SBNAs can only be introduced where industrial awards or other arrangements allow for part-time apprenticeships and traineeships. In some cases, however, school students undertake part-time traineeships that have no connection to school. (These are not included in SBNA figures.)

Compared to other school-industry programs, Australia's SBNAs were more likely to:

- Have nominated supervisors in the workplace;
- Use structured learning principles for both industry specific skills and key competencies;
- Use formal reporting and assessment techniques;
- Include assessment by workplace supervisors;
- Have management committees that include employers.

The following points summarise research findings about students and employers involved in SBNAs that may impact upon learning and training:

- Employers see SBNAs as a useful recruitment tool, especially in industries with a high labour turnover and those with recruitment difficulties;
- SBNAs can be seen as a career "try-out" activity;
- Students are introduced to the TAFE learning environment;
- SNBA students have better contracted post-school training outcomes than the average;
- Employers are favourably disposed towards SBNAs as very young learners;
- An SBNA may grow out of a previous vocational placement and possibly an earlier period of work experience;
- Payment for SBNAs means some students can continue with school rather than leave to earn an income;
- Some students plan to use their AQF qualification to link to further education;
- Some school-based apprentices like the security of knowing their employment will continue after they leave school, removing "year 12 anxiety";
- Most students work too few hours, e.g. eight or nine hours per week, instead of half-time;
- Although half-time employment is often considered to be ideal, working long hours as an SBNA may put undesirable excess pressure on students.

Australia's institutional set-up is a good example of how the transversal nature of VET can be taken into account. No individual ministry determines national VET policy. Instead, inter-ministerial bodies such as MCEETYA, ANTA and MINCO establish the policy framework, define VET policy and set targets, respectively. At the operational level, coordination is ensured through the ministry in charge of education, coordinating with the regional (State and Territory) training boards and authorities. Introduction of new forms of VET, such as the SBNA, is facilitated by this relatively simple, albeit highly integrative organisation of the VET system.

4.4 France

In reaction to youth unemployment during the 1980s, the French government and its social partners developed various VET measures. These were in addition to the existing streams in the school and apprenticeship system. In particular, the regions took on a greater role, and the apprenticeship system was modernised.¹⁹

In France today, there are three methods of organising VET for young people:

- **Initial VET**, which is full-time and school-based.
- **Apprenticeship**, a contract of employment restricted to the 16-25 age group, is alternating, provided both in the workplace and in an apprentice-training centre (*centre de formation d'apprentis* - CFA). Funding for apprenticeships comes from private-sector employers (with the exception of the liberal professions and farmers), Government and regional councils.
- **Jobseekers in the 16-25 age group** who have left school without a vocational qualification benefit from specific measures (assisted contracts, work placements), with the aim of giving them initial skills and helping them to enter the working world. These measures come under the continuing training system.

In addition to the apprenticeship contract, there are three types of contracts combining work and training specifically targeted at the 16-25 age group: The *contrat de qualification*, (qualification contract), the *contrat d'orientation* (guidance contract) and the *contrat d'adaptation* (adaptation contract). They must all include VET.

VET is organised and funded mainly by central government, regions and employers. Their respective responsibilities are laid down by law:

- The central government intervenes in support of groups with particular difficulties, certain branches of the economy and enterprises.
- Regions have general responsibility for continuing vocational training. They are also responsible for continuing vocational training for young people in the 16-25 age group.
- Funding by employers is derived from their statutory obligation to take part in the funding of training.

As for the status and job profiles of VET teachers, these differ widely, depending upon the type of establishment in which they work:

- Teachers in secondary initial training establishments (in vocational *lycées*, technical *lycées* and agricultural schools) are mostly permanent State employees recruited by competitive examination. A small number are auxiliary teachers.
- Teachers in higher initial training establishments (post-baccalaureate) have the same profile as above.
- Teachers in apprentice training centres (CFAs) are often former practitioners in the field in which they teach who have switched to training, or practitioners still working but on a sabbatical. They are not required to take specific training, although they may take advantage of regional training programmes funded by the regional councils, lasting from a few days to a few weeks. Shop-floor apprentice masters receive three days' training to make them more aware of their tasks.

¹⁹ Metropolitan France is divided into twenty-two regions, each containing between two and eight departments (*départements*). There are 96 metropolitan departments and 5 overseas departments. At the lowest administrative level, there are school districts comprised of several school sectors. Each district offers students a choice between *Lycées* of general and technical education, and vocational *Lycées* when they leave their third class (lower secondary school), except when specialisation requires moving to a more distant institution.

- Trainers in continuing training are not covered by any regulations or obligation to train. Public, quasi-public or private sector bodies may employ them. As a group, they are quite heterogeneous, and their needs are accordingly varied.

The French educational system has by historical tradition always been highly centralised. By deciding to shift some powers and responsibilities hitherto held by the central government over to territorial authorities, France has since 1982 undertaken considerable decentralisation, which has radically changed the respective powers of the government departments and the territorial authorities.

However, the central government still has a considerable role. It continues to ensure the proper running of public services and the coherence of education. Thus, it continues to define the educational choices and curricula and, just as before, it is responsible for recruiting, training and managing staff. It also decides the status and operating rules for teaching establishments, and allocates the necessary teaching and administrative posts.

The territorial authorities have been vested with new powers in three essential areas:

- Each authority is now responsible for a particular level of education: The commune is responsible for primary schools; the *département* for *collèges*; and the region, for *lycées* and for specialised establishments.
- School planning is now organised to include the territorial authorities in decisions about the levels for which they are responsible, drawing up projected training and investment programmes. In other words, every building, rebuilding, or extension of schools deemed advisable depends upon decisions by the territorial authorities.
- Local authorities have been given a more decisive role in the daily running of schools.

The overall distribution of VET-related authority between the various levels of the French governmental system may be summarised as follows:

- **School Organization:** The Vocational Advisory Commissions (CPC) in the Ministry of Education's Directorate of *Lycées* and *Collèges* deal with issues of VET. The Ministry of Agriculture is in charge of agricultural VET, while the Ministry of Labour also influences VET.²⁰ The regions are responsible for administration of the *Lycées*, the departments for that of the *collèges*, and the communes for primary schools. Since 1982, the regions have been given considerable powers regarding VET. Secondary schools develop their own strategies and school plans for attaining national education goals.
- **Curriculum and Teaching Methods:** The CPC and National Curriculum Council (CNP) provide opinions and suggestions for curriculum in VET courses. The central government defines curricula. Private schools under contract with the State are required to apply national curricula. Insofar as official curricula are respected, teachers are free to choose the means most adapted to their objectives.
- **Examinations and Supervision:** The CPC give opinions and suggestions for regulations governing VET examinations. At department level, *inspecteurs d'académies* play a role in the organisation of examinations, but mostly in the lower secondary schools. In vocational university institutes, the university president nominates the examination board.

²⁰ The CPC, of which there are presently twenty, comprise representatives from the public authorities, employers and representatives of various trades, employees, and persons who are chosen for their particular talents. Their activities are coordinated by the Inter-professional Advisory Committee (CIC), which is chaired by the Minister of Education. Its members are the chairmen and vice-chairmen of the twenty CPC.

- **Teacher Recruitment and Compensation:** The central government is responsible for recruiting, training and managing school staff, and for creating and allocating teaching and administrative posts. The central government is responsible for teacher remuneration, also in contracted private ones.
- **Finance of Recurrent Expenditures:** The central government is responsible for pedagogical expenditure (initial equipment and material, specialised material for the renewal of courses, school textbooks, and maintenance of equipment purchased by the central government). The regions are responsible for maintaining vocational *Lycées*, while the departments maintain their *collèges*.²¹
- **School Construction and Finance:** The central government provides surety for building or equipment for contracted private schools. It also finances the building, the extensions and the equipment of vocational university institutes. Since 1989, it has shared financing with the territorial authorities. The regional heads (*préfets*) decide to build vocational *Lycées*, while the *préfets* of the departments decide to build *collèges*.

Summarising, it may be said that regions and departments in France have no significant influence on matters of VET curriculum, teaching methods, teacher recruitment or teacher compensation. At the local level, there is little or no influence in the areas of examinations, supervision, teacher recruitment, compensation, recurrent expenditure and school construction and finance. Note that this applies to the organisation of VET only: Communal administration in France is, for example, responsible for the construction and maintenance of primary schools.

4.5 Sweden

In principle, technical and vocational education in Sweden is totally integrated into the national school system. Practically all vocational and technical education is provided within the framework of upper secondary schools.

At the end of the 1980s, an upper secondary school reform was initiated, which led to major modifications of the School Act in 1991. A new system of upper secondary education was introduced in the school year 1992/1993, with full implementation by school year 1995/1996.

The main strategies of the Upper Secondary School Reform of 1992 were (see UNESCO / UNEVOC 1999, p. 1):

- Decentralisation of authority and decision-making power in education,
- Increased autonomy of local authorities in the allocation of funds for education,
- Smoother transition from upper secondary education to (municipal) adult education,
- A more course-oriented structure in upper secondary education; and
- An increase in the status of VET to the same level as general and theoretical upper secondary education.

Since this reform, all education has been organized in study programmes lasting three years. In upper secondary education, there are 16 national programmes, 14 primarily vocationally oriented ones and two that serve as preparation for university studies (cf. UNEVOC 1998,

²¹ At the department level, Committees for Professional Education and Social Promotion comprise representatives from the department administrative services, teaching staff, heads of teaching and training establishments, industry, commerce, tradesmen, agriculture, and professional employment and training institutions and organisations. Their purpose is to ensure the allocation of the resources for VET, to give opinions on the creation or closing of VET institutions and departments, and to advice on the recognition of the VET courses offered by private schools.

p. 69). This reform has tended to render VET in the framework of upper secondary education more course-structured and less practice-oriented. As a consequence, traditional vocational education in crafts (*hantverksutbildning*) as well as new forms of apprenticeship (*kvaalificerad yrkesutbildning*) have regained importance. While the latter follows the same structures and principles as, for example, the so-called *modern apprenticeship* in the UK or Scotland, vocational training in the crafts is company-based. Related instruction is provided in the upper secondary school (*gymnasie skolan*) at either municipal or central schools.²²

With regard to its degree of decentralisation, the Swedish VET system has the following main characteristics:

- **School organisation:** The parliament and government control educational activities by defining national goals and guidelines for education. The national and municipal education authorities are responsible for ensuring that the education system is organized in accordance with national goals. The municipal authorities have the overall responsibility for the implementation and development of educational activities in the school system. Municipalities have the option to design their own organizational structures.
- **Curriculum and teaching methods:** The curricula for compulsory and upper secondary education (which includes VET) have nation-wide validity. Vocational curriculum development is supervised by the National Agency for Education (*Skolverket*) and carried out in cooperation with professional associations and trade unions, whereby the professional associations and in particular the relevant sections of the national employers' association typically provide the drafts. The Skolverket gives final approval to all new curricula.²³
- **Examinations and supervision:** The main national authority for supervision in the education system is the *Skolverket*. Its main tasks include national follow-ups, evaluation and supervision of all school activities, and development activities at the national level within the school sector. The agency is also responsible for ensuring that pedagogical research is undertaken, that teachers receive the required basic university training and that in-service training is available for teachers. The transition to goal and results-oriented steering of the education system requires the national and the municipal authorities as well as administrators of individual schools to follow up systematically and to evaluate educational activities in relation to the goals and guidelines that apply to them.
- **Teacher recruitment and compensation:** Full mandate for recruitment and compensation of teaching staff has been transferred to the municipal authorities.
- **Finance of recurrent expenditures:** Each municipality receives a subsidy from the state for financing its school activities. It is then up to the municipality to decide how much will be allocated to different municipal activities, e.g. for VET. The municipalities must fulfil the educational goals that are set by the state. Each municipality is responsible for provision of upper secondary education for all youths in the municipality between the ages of 16 and 19. The subsidy from the state is not intended to cover all expenses for education. The municipality is expected to be responsible for approximately 50% of recurrent expenditure.
- **School construction and finance:** The municipality is traditionally responsible for expenditure on buildings, equipment and teaching material.

²² Source: Karow, Willi - personal communication received on December 23, 2003.

²³ Source: *ibid*.

According to the above analysis, the Swedish VET system has characteristics of both centralised and decentralised systems, and in many ways it may also be described as mixed: It is clearly centralised with regard to the determination of curricula and teaching materials, and it is clearly decentralised in the areas of teacher recruitment and compensation, and school construction. School organisation is partly decentralised, while examinations and supervision are partly centralised, and finance of current expenditure may be described as truly mixed. In sum, it may be said that the Swedish VET system is neither centralised, decentralised nor thoroughly mixed, but that it is a combination of all three.

4.6 South Africa

Historical background

In the decades preceding 1981, education and training legislation was strictly demarcated along racial lines. The Apprenticeship Act of 1944 and the Training of Artisans Act of 1951 were for whites, although "Coloureds" and "Asians" were not explicitly excluded. The Black Building Workers Act of 1951 was for Black Africans. It granted to Black Africans the opportunity of qualifying as skilled building workers with a view to rendering service to their own communities, but it also prohibited them from undertaking skilled building work in White urban areas. Other separate acts regulated the training schemes and private training centres for the different racial groups.

Initially the craft unions controlled the apprenticeship system, but control slowly shifted, first to employers, then to the state. Employers secured control by inducing unions to sacrifice more and more of their control in exchange for wage increases. As a consequence, employers were able to increase the proportion of semi-skilled black workers to lower the overall wage bill. The Apprenticeship Act of 1944 regularised this system and brought it under state control.

The 1944 Apprenticeship Act provided for an industry training committee to request the Minister of Manpower to declare binding conditions of apprenticeship in their industry. In order to assist industry in this context, the state established and subsidised the Central Organisation of Trade Testing to oversee all testing in the country. Industries established their own technical colleges to provide the theory component of trade training. These later fell under the control of the National Department of Education.

During the social upheavals of the 80s, the government introduced a new set of laws and sought to de-racialise in areas where this was possible, without completely dismantling the apartheid system as a whole. One of these efforts was the introduction of the Manpower Training Act of 1981, which for the first time brought all previous training legislation under a single, non-racially defined act. The Technical Colleges Act (No. 104 of 1981) provided for previously advantaged white colleges and previously disadvantaged black colleges to come under a single piece of legislation.

Current situation

In today's post-Apartheid South Africa, the administration of VET is principally divided between the Department of Education (DOE) and the Department of Labour (DOL), although in practice a number of other government departments are also involved:

- The **Department of Education (DOE)** is responsible for the provision of education and training - both directly through public service delivery and through the regulation of private sector provision. Its work is divided into three broad bands: General education, further education and training, and higher education and training. Under the South African Constitution, the DOE is a "Schedule 6" competency, meaning that the national department is responsible for setting norms and standards, but the nine provincial departments of education are responsible for actual delivery. This applies to general and

further education, whilst higher education is deemed to be a national competency, meaning that the 36 higher education institutions in the country report directly to the national department and also receive their funding from the national government. DOE's responsibility for setting VET norms and standards for the provinces is clearly reflected in recent policy papers i.e. the Green and White Papers on further education and training (cf. Republic of South Africa, 1998a and 1998b).

- The **Department of Labour (DOL)** is responsible for stimulating and regulating the demand side of VET. It has national competency under the constitution and hence no political representation at provincial level, but merely administrative offices instead. No VET providers report directly to the DOL - residual training centres were transferred to the DOE during the first term of post-apartheid government. The DOL is essentially responsible for funding of training of the unemployed, regulating the apprenticeship ("learnership") system, managing the national skills development levy and grant system, and overseeing (together with the Department of Public Service and Administration) the participation of the public sector (i.e. all national, provincial and local government departments) in the skills development strategy.
- The **Department of Public Service and Administration** is responsible for what is referred to as "transversal" training in the public sector, i.e. that training that has wide applicability to public administration, in particular public management and financial control. Each line department is formally responsible for its own functional training, e.g. training welfare officers in the work of welfare payment disbursement and the like. Given that the government is still the largest employer in the country, its activities in the training arena are significant. The South African Management and Development Institute (SAMDI) is the state-owned provider for this transversal training, although much training is outsourced to a growing number of schools of public management and administration, run mainly by universities.
- The **Department of Trade and Industry** is responsible for trade and industry policy and promotion, and it has special responsibility for the establishment and promotion of the small business sector. Although it is a secondary actor in the organisation of VET, its key role in relation to small business has led it to establish a number of learning initiatives for entrepreneurs, in particular under the umbrella of the Ntsika Enterprise Promotion Agency, which was established under the National Small Business Act of 1996. Its "technopreneur" programme is one of its most innovative programmes.
- The **Department of Arts, Culture, Science and Technology** is responsible for the management of science and research councils. These agencies disburse inter alia research grants and manage industry-education partnerships for technology development and diffusion.
- The **National Board for Further Education and Training (NBFET)** is a consultative body, which assists the DOE to determine measures by which VET²⁴ can be made progressively available and accessible. Amongst other things, the NBFET will advise on specific funding methods as well as norms and standards that promote national policy. In framing its recommendations, it is expected that the NBFET will consult widely with stakeholders and providers.
- According to recent policy framework papers, the **Provincial Departments of Education** will be responsible for implementing the funding methods as well as norms and standards for VET as determined by the MOE. They will establish provincial targets for VET, reach

²⁴ The relevant South African policy papers use the term "further education and training" (FET).

agreement with individual providers regarding their annual targets and budgets and hold providers accountable for the achievement of their targets and for their control and use of public funds. Provinces will determine the point at which institutions have developed sufficient management capacity - including reliable data-collection systems and adequate financial and internal control systems - to be given a delegated budget and sufficient autonomy to manage it effectively. Provinces will implement the standard national information system and provide reports to the national DOE.

In the longer run, it is foreseen that public colleges that provide VET will be responsible for the management of their own affairs and the delivery of their VET programmes. They will appoint their own staff, paid in accordance with national salary scales, be responsible for maintaining and developing their buildings, and assume full responsibility for their finances. They will have to develop the full array of internal controls necessary to ensure that public funds are adequately safeguarded and used only for the purposes for which they are provided. However, given the fact that these capacities will have to be developed from scratch by most of the involved institutions, the effective establishment of these capacities will require considerable additional funding and time. An important step in this direction was the recent merger of 152 existing technical colleges into 50 multi-campus FET colleges, which took place in 2002. In view of the 29% increase on FET enrolment rates, which was registered in that same year, it seems that VET in South Africa is slowly but surely emerging from its role as the “Cinderella” of the education sector.²⁵

The Ongoing Policy Debate²⁶

In certain areas, it appears that the government of South Africa is withdrawing its direct involvement in VET, thereby promoting – at least indirectly – more private sector involvement in VET. One example is the fusion of colleges into single institutions and limitation of government (DOE) contributions to staff salaries. This development marks a clear tendency towards more market-orientation in the provision of VET, although the extent to which privatisation in the strict sense of the term is taking place in this context is not fully clear. Delegation of budgets to colleges and - in a later phase - to schools which are providers of further education and training is a proclaimed objective of the DOE (cf. Republic of South Africa 1998a, chapter 2.2.5), but the extent to which this policy (an implicit form of financial deconcentration) has been put into practice so far is not yet documented.

At the same time, there seems to be a tendency towards more government involvement in some areas. As an example, quality control may be cited: In the current policy debate, there is some discussion about restoring government control over Education and Training Quality Assurance (ETQA), which is currently managed by non-government Sector Education and Training Associations (SETA).²⁷ The outcome of this policy debate remains to be seen.

Through the publication of its Green and White Papers on further education and training (FET) in 1998, and subsequent passing of the FET Act in the same year, the government of South Africa has made an important contribution to the ongoing VET policy debate. In particular, the policy papers made explicit references to systemic weaknesses in the institutional framework for VET and to the limited organisational capacities of involved institutions. More than in other policy statements examined here, the South African documents refer to cultural obstacles to the governance of VET systems: “The transformation of education and training is under way, but far from complete, and the irrationalities, waste

²⁵ Cf. speech by the Minister of Education, June 2, 2003, in <http://education.pwv.gov.za/index.asp?src=mvie&xsrc=42>.

²⁶ Information in this section is based on a personal communication from a German technical advisor who is currently on long-term assignment in South Africa. The message is dated Nov. 28, 2003.

²⁷ For more information see <http://wced.wcape.gov.za/home/home.html> and www.labour.gov.za.

and injustices of apartheid remain everywhere visible. The effects of past policies endure in the authoritarian management cultures, poor institutional ethos, lack of commitment to teaching and learning, and negative individual values and attitudes that are in evidence in many of our FET schools and colleges and in parts of our training system” (South Africa 1998a, chapter 5.1.1). Against this background, South African VET policy makers conclude appropriately, that there is need for change not only within the involved institutions, but also in the people who live and work there.²⁸

4.7 Mexico

Context

In 1993, the Mexican Government extended compulsory education from six years of primary education, to nine years of basic education. The latter consists of six years of primary and three years of lower secondary education. This is followed by non-compulsory upper secondary and higher education in either formal in-class instruction or non-traditional extension programs.

Public Vocational Education and Training

The Education Secretariat (SEP) and the Labour Secretariat (STPS) offer formal as well as non-formal vocational education and training. SEP is responsible for managing the National System of Technical Education (SNET), which offers formal VET at four levels:

- Job skills training with no formal academic requirement,
- Upper-secondary training for middle school completers,
- Undergraduate university courses, and
- Graduate level.

The formal training program prepares students for entry-level technical positions. At the upper secondary level, two types of training are offered: a technical specialization, which is a prerequisite for higher education; and a technical vocational track, which is terminal and does not lead to higher education. In addition to these formal programs, the government provides non-formal and short courses to upgrade skills of employed and unemployed adults. Non-formal training is provided both in training institutions and at the work place. About 230,000 trainees went through these programmes in 1993.

Employers who are required by federal labour law to provide in-service training often contract SNET institutions to provide short courses for their employees. STPS finances the *Programa de Becas de Capacitacion para los Desempleados* (PROBECAT) programme to retrain unemployed workers, either at existing training institutions, or in enterprises that are obligated to employ at least 70% of participants upon completion of the programme. Since 1984, the SNET system has participated in this programme, training over 50,000 unemployed workers annually in its training institutions.

In recent years the Total Quality and Modernization Programme (CIMO), which provides technical and financial assistance to medium-size and small enterprises, has been implemented. It has been providing technical and financial assistance to about 4,000 medium-size and small enterprises annually in designing and implementing training courses for their workers. In addition to the training provided by employers in the private sector, about 500 privately managed training institutions are currently listed in SEP’s registry. These private institutions specialize in training for non-manufacturing areas that do not require large capital outlays.

²⁸ See the DOE website: <http://education.pwv.gov.za>.

In the 1980s, the Mexican Constitution and the Mexican labour law (*Lei Federal de Trabajo*, or LFT) were amended to guarantee training as a right to all workers. Firms are required to provide proof of workers' skills and to register with training providers. More than 1,800 training institutions - 60% of them in the public sector - with about 28,000 instructors are registered with STPS as external training providers. The LFT stipulates that a bipartite training commission must be established in each enterprise to oversee training plans and programmes and to authenticate labour competency certificates. In 1989, about 108,000 firms - 20% of those registered - had established such commissions, representing 62% of all workers. The share of firms with registered training programmes tends to increase by firm size, from about 25% for firms with less than 5 workers to 40% for firms with more than 250 workers.

The main public training institutions are *Colegio Nacional de Educacion Profesional Tecnica* (CONALEP), *Centro de Estudios Tecnologicos Industriales y de Servicios* (CETIS), *Centro de Bachillerato Tecnologico Industrial y de Servicios* (CBTIS) and *Centro de Capacitacion para el Trabajo Industrial* (CECATI). Evaluations have been carried out recently for the CONALEP, PROBECAT and CIMO programmes to study their effectiveness. The main results appear to be that government-run training initiatives have raised the re-employment probability of some groups more than others, and initiatives to help firms increase their productivity tend to have been successful. Unfortunately, these evaluations were not based on random sampling, and the control groups that were used differed in important ways from the participating firms and workers.

Current challenges to VET in Mexico

On the average, the existing labour force has about 6 years of schooling, while new entrants to the labour market (amounting to about 1 million annually) have typically completed 8 years of education. While the average worker is not easily trained due to his or her low education level, the trainability of new entrants is not necessarily better, given the poor quality of education in primary and secondary schools.

Although some training programs have strengthened their ties to firms and now involve them in curriculum design, many programmes still follow an academic approach to VET. Even when employers demand specific courses, the curriculum tends to be overly burdened with academic content relating to occupational classifications with little relevance for current work-place conditions. Many degree-oriented courses tend to be long and rigid, and hence not easily accessible to employed workers.

Given weak traditions of training in Mexico, there has been very little standardization in the output of training institutions. As a result, the quality of training varies substantially across institutions and courses. Even within the public subsystems, the quality of training provided varies substantially.

There have been too few policy measures and strategic incentives to induce more active participation of employers in worker training programmes. Financing of skills formation is perceived as the responsibility of either individuals or the government, or both, but not as an area where employers should also be given responsibility. Fortunately, in recent years, some major efforts have been made to encourage the involvement of firms in VET programme design, on example being the establishment of industrial advisory committees in the CONALEP system. Whether these efforts will give rise to more enterprise involvement in the Mexican VET system remains to be seen.

Although non-formal VET is known to play an important role in Mexico, the available information is too fragmentary and/or outdated to permit an adequate treatment in the context of the present study.

4.8 Russia

Context

The Russian economy experienced a 47% decline in real GDP between 1991 and 1994, which included a 17% decline in electrical power, a 31% decline in fuel, 62% decline in petrochemicals and a 74% decline in light industry. By 1994, 80% of the enterprises, employing 60% of the industrial labour force, had been privatised.

These are the ingredients that many observers predicted would lead to large-scale layoffs and open unemployment, but this is not what happened. While output declined by over 40%, official net employment declined by only 4%. Of course, hidden unemployment was high during this period, due to many enterprises' willingness to retain employees for social reasons. Hence, registered unemployment in 1995 was only 2.7%. Of this fraction, only 8% were attributable to mass layoffs. Despite low unemployment, however, employee turnover was significant. In 1995, 21% of employees resigned from their jobs and 18% applied for new jobs. New hiring was higher than anticipated, hence open unemployment remained low (Kuddo, 1996, p. 46).

The Russian VET system

Inherited from the Soviet era, today's Russian VET system is well known for its wide coverage of specializations and its relevance to employment. This relevance, however, must be described as "artificial", given the fact that it was established within a tradition of central economic planning and centralized job placement. It was assumed that everyone should be equipped with job-specific skills before entering the labour force. This resulted in the development of a very popular and highly specialised VET system. In 1995, VET accounted for up to 60% of enrolments in secondary education, with over 6,900 VET institutions and some 3.7 million VET students.

Traditionally, national VET course decisions allowed little leeway for local preferences. Central authorities determined standards, methodology, teacher training, remuneration, equipment and supplies. Courses were designed on the assumption that graduates would enter relatively predictable careers in specific enterprises using specific technologies.

Surprisingly, despite its centralistic tradition, the current Russian VET system displays quite a few decentralised characteristics:

- **School organisation:** VET is delivered in secondary technical institutions and higher education institutions.
- **Curriculum and Teaching Methods:** The development of new curricula and new programmes for local or federal approval is in the responsibility of the school directors.
- **Examinations and Supervision:** The school directors supervise the teaching process.
- **Teacher Recruitment and Compensation:** The teachers are recruited by the school directors and paid by the federal government. School directors now assume considerable managerial responsibility and raise about 40% of their resources locally.
- **Finance of Recurrent Expenditures:** The federal government still tries to finance the VET system, but can only cover school meals and teacher salaries. Mobilisation of funds for teaching materials, maintenance and utilities are the responsibility of the VET institution itself or the local authority.
- **School Construction and Finance:** (no information available)

Despite the above-described decentralised functions, a clear policy on VET that is sufficiently in tune with the new realities of the Russian Federation still seems to be lacking. There has been no official policy to enable regional decision-making, privatisation, or free choice of profession and place of residence. The new roles and functions of federal government have yet to be adequately defined, taking into account regional and local obligations and responsibilities. In any case, it is evident that individual institutions and professionals have been adjusting to the demands of fiscal austerity much more rapidly than the official policy framework.

4.9 Indonesia²⁹

Context

With the fourth largest population in the world and a major part of its natural resource base located on widely dispersed islands, Indonesia has nevertheless been described as a country with one of the most centralised governments in the so-called Third World (Schreiner 2000). The power relationships between the central government, nearly 30 provinces and more than 300 districts and municipalities are, however, gradually evolving towards more autonomy for the decentralised administration. In addition, high economic growth rates over the past three decades, accompanied by a major decrease in fertility rates, have contributed to the emergence of a powerful private sector, with significant implications for the education system, in particular for vocational education and training.

In 1994, Indonesia began implementing its policy of 9 years compulsory basic education. Although considerable progress has been made in this area, it is unlikely that the overall objective of universal junior secondary schooling for all 13 to 15-year-old children will be attained by 2003-2004. Enrolment rates for elementary and junior secondary education increased in the mid-90s but dipped in the second half of the decade due to the prolonged Asian economic crisis. The Government budget for education also contracted, and construction of school buildings was suspended in order to re-channel funds into social safety net programmes.³⁰

The Indonesian VET system

Vocational education in Indonesia begins in the context of secondary school education, which is divided into junior, senior and vocational and technical education. Junior secondary school covers three years and is part of the basic general education programme, which includes six years of primary education. Junior secondary vocational education has been phased out. Senior secondary school, which is not compulsory, covers another three years. There are several types of senior secondary schools: About two-thirds of senior secondary students are enrolled in general education courses. The remaining third is distributed among fourteen different types of vocational, technical and specialised schools, whereby over 80% are in commercial or technical schools.³¹

Higher technical and vocational education is offered through single-faculty academies, conferring diploma level qualifications (up to three years of study), and in polytechnics, which also confer diplomas.

In terms of the number of graduates, private senior secondary and post-secondary schools dominate over the public ones, which are under the auspices of the Ministry of National Edu-

²⁹ Source: <http://www.usc.edu/dept/education/globaled/wcu/background/Indonesia.htm>

³⁰ Source: "Economic Crisis Keeps Children Out of School in Indonesia (April 4, 2001)" in http://www.unesco.org/education/efa/know_sharing/grassroots_stories/indonesia.shtml

³¹ Source: "Vocational Education and Training in Indonesia - Country Study Summary" in [http://wbIn0018.worldbank.org/HDNet/HDdocs.nsf/globalView/Indones.pdf/\\$File/indones.pdf](http://wbIn0018.worldbank.org/HDNet/HDdocs.nsf/globalView/Indones.pdf/$File/indones.pdf)

cation (MONE). Also, the Ministry of Manpower (MOM) provides training through vocational centres, but their enrolment is only a fraction of that of private training centres.

According to one report by the World Bank, the status of vocational education in Indonesia is low in the views of students and parents. This, together with high unit costs, the poor quality of enterprise-based training and the tendency of high performers to abandon their host enterprises in favour of higher technical education, has hampered, among other things, the introduction of the dual system (System Ganda) of vocational education, which was started in Indonesia in 1994.³²

DDP in the organization of the Indonesian VET system

The Ministry of Manpower (MOM) is the main supplier of public training and is also responsible for overall coordination. Public training is provided through a decentralised system of training centres. There are about 50 public training centres in urban areas, and more than 100 smaller ones in rural districts (kandep). Student selection and trainee placement into local firms are officially the responsibility of the district offices, and plans have been made to extend these functions to urban training centres as well. The extent to which this planned deconcentration of student selection and placement functions has actually been implemented, however, is difficult to estimate, given the paucity of relevant information.

The annual capacity utilization rates of the above-mentioned public training centres have been about 35-70%. This situation may be considered indicative of the general over-supply of some types of training, and the public sector's tendency to crowd out private sector training capacities.

With regard to curriculum development, an important reform was implemented in 1994 to include local curriculum subjects (LCS) as an independent school subject encompassing more than 20% of total curriculum. This reform foresees core curricula, as a minimum standard, to be implemented at national level, and local curriculum content that can be modified by each district according to felt needs. The extent to which this distinction has affected VET curricula, however, is not clear.

Decentralisation in Indonesia is an ongoing process, albeit a slow one. Decree (undang-undang) no. 22 of the year 1999 established the general framework for the reform of the distribution of powers between provinces, urban areas and rural districts. In particular, it states that all policy areas that are not explicitly allocated to national or provincial government are to be assigned to the municipalities and districts. Already, through previous legislation, the latter had been given exclusive responsibility for nine policy areas, including education and culture. At the same time, municipalities and districts without the technical or financial means to exercise these powers were given an option to delegate their functions to the provincial level. The practical results of the implementation of decree no. 22 still remain to be seen. In view of subsequent legislation (especially decree no. 25, which regulates the mobilisation of financial resources for decentralised administration), there is good reason to believe that provinces with relatively abundant natural resources will have a significant comparative advantage in the financing of their operations and infrastructure, including those in the field of education. As a consequence, existing regional disparities in these policy areas may well increase. Weak central resource mobilisation and budget administration, as well as lack of effective financial control mechanisms to prevent corruption in decentralised administration, could lead to further resource bottlenecks and complications in the implementation of decentralised policies. Without a doubt, considerable time and effort is still required to effectively implement existing decentralisation policies.

³² *ibid.*

5 Comparative Analysis

The comparative analysis of the information presented in the above chapters will be carried out in three steps:

- Firstly, for purposes of comparative analyse, information on the organisation of VET will be presented according to the Winkler model (cf. **Annex 2**) for the USA, Germany, France, Sweden and Russia. The Winkler model applies to decentralisation in six areas of VET organisation. The results, presented in table form in **Annexes 3 – 8**, will be discussed below.³³
- Secondly, information gathered on deconcentration and privatisation will be treated in summary and assessed.
- Finally, some reflections on innovative approaches, which have been identified in the course of the study, will be formulated.

Decentralisation

In general, overall **school organisation** in the VET systems of the five countries considered here tends to be either decentralised or mixed (cf. **Annex 3**). The role of central governments in this area is limited in most cases to the establishment of framework policies. The most decentralised approaches to VET school organisation are found in the USA, Sweden and Russia.

Core (or “skeleton”) **curricula** are established at central government level in the USA and Germany (cf. **Annex 4**). Only in Sweden and France, the latter with regards to private schools, do central governments apply compulsory curricula. Curricula development is the responsibility of the State (*Länder*) level in Germany, while in the USA some States play a strong role in curricula development. Teachers are most free to choose curricula in France, Russia and the USA. (As for the organisation of teaching methods, available information is still too fragmentary for a comparative assessment.)

Responsibilities for **examinations and supervision** are centrally organised in Sweden (cf. **Annex 5**). In Germany and France, central bodies play framework-related and/or advisory roles. In the USA, a hybrid system exists, in which six multi-State regional associations set minimum standards. Important roles in this area accrue to the State level in Germany and France, whereas non-governmental bodies (chambers of industry etc.) in Germany are strongly involved in the administration of examinations and supervision. In Germany, local non-governmental bodies also play an important role in this area. In the system of the USA, there is strong private sector involvement in the design and implementation of entrance examinations, with a trend towards replacement of State and local inspection by autonomous advisory services. Local autonomy in the area of examinations and supervision appears to be strong in Russia as well, but available information is too sparse for drawing general conclusions.

As for **teacher recruitment and compensation**, the French system is the most centralistic, with central government responsible for recruiting, training and managing school staff, for creating and allocating teaching and administrative posts, and for teacher remuneration in public and contracted private schools (cf. **Annex 6**). In Russia, the federal government pays teachers, but school directors recruit them. The role of the intermediate State level in VET teacher recruitment and compensation is strongest in Germany. In the USA, the role of State government is limited to setting pay scales and accreditation standards, and certification of specialised school staff. Local involvement in teacher recruitment and compensation is strong in all countries considered here, with the exception of France. The important role of

³³ In fact, the Winkler model has been transposed here, in order to facilitate the country-by-country comparison in specific functional areas of decentralisation.

on-the-job training in the German VET system goes hand in hand with the strong influence of local enterprise and local and/or regional associations (chambers of industry etc.) on recruitment and compensation of trainers.

Financing of current expenditure is the responsibility of central government in the French VET system, in other countries it is assigned mainly to the regional level (cf. **Annex 7**). In the USA, financing of VET is highly decentralised: The bulk of VET school funding stems from local taxes. There, private funding for VET also plays an important role. In Russia, the intermediate level plays no visible role in financing: This responsibility is shared between central (federal) and decentralised (local) levels.

Information on the organisation of **school construction and finance** (cf. **Annex 8**) tends to reflect overall tendencies: In the USA, decisions regarding school construction are taken at the local level, albeit with strong potential influence from the regional (State) level. Financing is done mainly through State, local public and local private contributions, whereby local taxes and bonds can play an important role. In some cases, the authorities lease school buildings from private owners. In France, most decisions on school construction and financing of construction are taken at the central level, with some sharing of responsibility with the regional authorities. Germany's decision makers in the area are mostly at the State (*Länder*) level, while in Sweden the local municipalities are traditionally responsible for building expenses and equipment.

Deconcentration and Privatisation

Only three explicit references to **deconcentration** in the organisation of educational systems were identified in the course of the present study:

- Paqueo and Lammert (2000) point out that, during the period from 1978 to 1982, management of the education system in Mexico was *deconcentrated* from the Ministry of Education to thirty-one state delegations, one for each of the states of the Republic.
- On adult education in Turkey, Duman (2002) writes: "In general speaking, public administration system is based upon centralisation and *deconcentration* rather than decentralisation through the highly centralised decision making in capital city with a division of responsibility among a number of ministries. So, education system in Turkey is over-centralised. Almost all decisions are taken by the Ministry of National Education located at the capital city, Ankara."
- The Asian Development Bank (ADB) Education Sector Development project in Cambodia (Loan No. CAM 33396-02) supplements education policy initiatives by supporting, among other things, *deconcentrated* and decentralized planning, management, and monitoring. "The Project will provide construction of facilities in remote and underserved areas, promote greater *deconcentration* of the planning of facilities programs to provincial authorities and institutions, and pilot budget management of facilities development in four provinces."³⁴

Implicit reference to deconcentration in the context of VET is made in two of the nine case studies only, those of the USA and South Africa. In the former case, this has been taking place mainly in the context of charterization. In the South Africa case, this relates to the transfer of management functions to public colleges that provide VET. (The term "delegation" might be more appropriate in this case.)

³⁴ Source: www.adb.org.

The possible explanations for this general lack of explicit references to the deconcentration of VET systems in the available literature may be summarised as two-fold: Either deconcentration has not been happening; or it has been happening, but without scrutiny from members of the education research community and other interested authors. In any case, it is generally not viewed as an important issue. Whether this view is appropriate or not, certainly merits some further discussion.

As for **privatisation** in VET, the situation is similar to that of deconcentration: The volume of available literature on this does not seem to indicate that this is a pertinent issue.³⁵ As mentioned previously, a clear distinction should be made between privatisation in the strict sense i.e. transfer of previously government-run VET capacities to private institutions, and growth in the private provision of VET opportunities, which were not previously under the control of the public sector. In sum, it may be said that - based on the results of the present study - there seems to be no general trend towards privatisation in VET, in the strict sense. But without a doubt, the role of the private sector not only in the provision of VET opportunities, but also in the organisation of VET (see e.g. privately-run entrance examinations and the charter school movement in the USA) appears to be growing, and can be expected to grow even further.

Innovative Approaches

Innovation in VET is a gradual process of change. In the context of general public sector decentralisation, for example, France has been quite successful in linking VET to further education opportunities. This has contributed to reducing VET's image as an educational pathway for underachievers and disadvantaged social groups. The American VET system is still struggling with this negative image, despite some notable progress in the provision of transitional and post-vocational learning opportunities.

Another innovative approach, with uncertain consequences for gradual change in the organisation of VET, is the charter school movement in the USA. Although such schools often claim to place special emphasis on VET, investigations carried out in the course of the present study yielded no evidence by which to verify this. Nevertheless, given the innovative nature of charter schools, further investigations should be carried out in this area.

A final innovative approach, examined here in the case of Indonesia, is the allocation of 20% of total curriculum content to local curriculum subjects (LCS), which are developed at the local (school district) level.

6 Preliminary Conclusions and Recommendations

It seems that supposed changes in the organisation and provision of VET do not always reflect real changes that are happening "on the ground". A good case in point is the widely discussed shift from school-based towards work-based VET. In fact, there is very little visible evidence of fundamental change in this area: In the USA and France, VET is still mainly school-based, and the German system is traditionally strongly rooted in work-based environments. Existing levels of decentralisation are mainly the result of tradition and culture, which tend to change very slowly, in manners that are often unperceivable to the involved actors. Even in France, where decentralisation has been a major policy objective in education since the early 80s, the organisation of VET is still highly centralised. Among the nine countries examined here, only South Africa and Indonesia appear to have taken significant steps towards more decentralised planning and implementation of VET in recent years.

³⁵ Of course, privatisation of public enterprises after the collapse of the Soviet system has greatly impacted on the Russian VET system, but process is not equated here with privatisation in VET.

This is not to suggest a general lack of change in the organisation of VET. The number and diversity of non-formal and non-traditional VET opportunities (technical training courses for unemployed persons, distant learning etc.) are increasing fast, especially through the private sector. With that, opportunities for lifelong learning are also increasing. But observed changes in this sense are not necessarily the result of officially proclaimed VET policy changes. In many cases, change is the combined effect of a public-sector failure to satisfy VET seekers, and the enhanced capacities of private sector and/or non-profit providers to respond to unsatisfied VET demand, in particular through new technologies. Of course, the public sector is still expected to ensure an appropriate legal and institutional framework for private actors to fully realise their potential. But this does not require direct involvement in the organisation or provision of VET. In fact, it seems that none of the six areas of VET decentralisation, which were examined using the Winkler model, are immune to increasing domination by the private sector.

Few references are made to the impact of DDP on access for underprivileged groups to VET. In the case of Indonesia, it is claimed that the emergence of a strong private sector-based VET system has tended to make VET more accessible to affluent groups, rather than to underprivileged ones. Considerable efforts have been made in the USA to make VET more accessible to underprivileged groups, but this appears to have also had a negative repercussion on the general image of VET there. (The negative image of VET was also addressed in the context of the Indonesia case study, and in a footnote relating to VET in the UK.).

With regards to this paper's focus on the role of decentralisation, deconcentration and privatisation (DDP) in the organisation of VET, the preliminary general conclusion is that none of these types of systemic change is playing a major perceptible role in the VET systems of the high-income countries examined here:

- Decentralised VET systems tend to exist, where there is a tradition of decentralised organisation and control, but there is no clear evidence of a general shift of responsibilities (in the sense of an ongoing process) from central to non-central VET bodies;
- Deconcentration in VET is hardly perceptible, and there is no clear evidence that it has been taking place at all;
- Privatisation, in the strict sense of the definition, is playing no significant role in the VET policies of the countries examined here. Nevertheless, there is clear evidence that the private sector is playing an increasingly important role in the organisation and provision of VET.

On the other hand, some of the medium-income countries examined here, in particular Indonesia and South Africa, have made some important advances in the recent past, in particular with regard to the implementation of decentralisation policies in education.

Due mainly to lack of information, not all of the case studies presented here could be translated into the terms of the Winkler model. Obviously, there is room for improvement in this area, and potential for a broader and deeper comparative analysis of VET systems and the nature of their organisation. At the same time, the five countries, which were the foci of the international comparative analysis, have many intriguing aspects which merit further investigation. Here are the main issues and key questions that might be addressed in the course of further investigations:

- **USA:** The de-linkage of VET from socially oriented programmes for unsuccessful learners and/or underprivileged groups could lead to an important improvement in the overall image of VET. Attempts to promote this sort of de-linkage between education and social policies merit more empirical investigation. What are the strategic options, and how might social policy be affected?

- **Germany:** The role of the central government in the implementation of the dual VET system is being questioned. Could decentralisation of responsibility for apprentice work-placement help resolve the problem of the insufficient number of workplace training opportunities and the overall rigidity of the current system?
- **Sweden:** There is a potential for decentralisation of VET competencies, e.g. in the area of examinations and supervision. What are the available options, and how might they be realised without a detrimental impact on national standards or quality control?
- **France:** Decentralisation of VET has been going on since the early 80s but seems to be stagnating. What is the current status, what are the underlying factors, and how might decentralisation in VET be reinforced?
- **Russia:** VET policy has not been clearly adapted to the changing economic, social and political environment of the past two decades. What options are available for the practical division of responsibilities for VET between central, intermediate and decentralised levels?

Last but not least, the question remains, how experiences in the organisation of VET in high and medium-income countries might be appropriately translated into viable concepts, strategies, policies and programmes for the improved organisation of VET in low-income countries. In this sense, medium-income Indonesia appears to be the most instructive case study. The World Bank has drawn four main lessons from this experience.³⁶

- Sizeable and effective private VET is viable even in poor countries. Private training centres, as dynamic market driven institutions, aim to match the growth of firms and occupations by offering cost-effective training. Private centres have evolved and successfully responded to a shifting demand - by adding or expanding programs - without any centralized planning or large-scale government subsidies.
- Government efforts can easily shift from being equity-driven. Originally recruitment into public training centres was designed to provide opportunities to those who, due to socio-economic reasons, could not proceed to higher education. But these students often lacked basic literacy and numeracy skills and were thus "untrainable". In trying to remedy this, the centres began using entrance exams. Today, 90% of the trainees are senior secondary school graduates, who are generally from more affluent sections of society.
- Dependence on donor funds has been both an asset and a liability. A foreign fund helped to develop a system of public vocational training that is now too large to be locally sustainable and requires continuous injection of foreign money. The stop-go nature of foreign funding implies that long-term planning is impossible. As a consequence, the operations of public vocational centres are guided by short-term considerations.
- Unplanned public sector-based VET may lead to an over-supply of some types of VET and/or crowding out of the private sector. When budget allocations for VET are reduced, governments tend to switch to areas that are cheaper and possibly already well catered to by the private sector.

A more general lesson that may be drawn from the Indonesian experience is that decentralisation processes in VET require not only tremendous human, technical and financial efforts, but also long periods of time, in order to become truly effective. Time is an essential factor, given the complex and long-term nature of reform in VET systems.

³⁶ See [http://wbln0018.worldbank.org/HDNet/HDdocs.nsf/globalView/Indones.pdf/\\$File/indones.pdf](http://wbln0018.worldbank.org/HDNet/HDdocs.nsf/globalView/Indones.pdf/$File/indones.pdf).

With regards to the methodology of the present study, two preliminary conclusions may be drawn: (a) that the Winkler model is a useful analytical instrument, which could also be applied on a broader scale, for example in a comparative analysis of DDP in the VET systems of low-income countries; and (b) that the experiences of high-income countries appear to be less instructive than those of medium-income countries, when considering potential orientation for DDP in the VET systems of developing (low-income) countries. The latter conclusion implies that future research in this area might be well advised to concentrate on South-South comparisons, i.e. the potential exchange of information and experience between medium and low-income countries.

Finally, based on the above-described results of the international comparison of trends in the organisation of VET systems, it is recommended that further VET policy discussion and research should focus on the following aspects and questions:

- For many years, general public-sector decentralisation has been going on in many low-income countries. What is its current status, what are the underlying factors, and how does it affect DDP in VET systems?
- In some countries, adaptation of VET to rapid changes in the economic, social and political environment has been slow, or has even stagnated. How can orderly change and adaptation be best promoted, in particular with regard to DDP in VET?
- The role of central government in the planning, implementation and organisation of VET is changing everywhere. How can DDP in VET help resolve problems of inefficiency, performance and system rigidity, without provoking new problems, such as deterioration of training standards and mismanagement of resources?
- In many countries, there is considerable potential for broader and deeper DDP in VET, in areas such as the organisation of examinations and teacher supervision. What are the available options, and how might they be realised without detrimental impacts on e.g. national standards or quality control?
- In some countries, VET suffers from a negative image, and possibilities to de-link VET from equity-oriented programmes, in order to improve the overall image of VET, are being looking into. What are the needs and the strategic options in this area, and how might social policy be affected?

Dr. James G. Bennett³⁷

Cologne, December 2003

³⁷ The author is an independent advisor and trainer for economic and social development policy and international project management, and lecturer at the Universities of Cologne and Potsdam, Germany. Contact: bennett@ipa-cologne.de and www.ipa-cologne.de.

7 Bibliography

Asia - Pacific Center of Educational Innovation for Development (1996): "Australia" in: *Case Studies on Technical and Vocational Training in Asia and the Pacific*. UNESCO: Bangkok.

Asia - Pacific Center of Educational Innovation for Development (1996): *Case Studies on Technical and Vocational Education in Asia and the Pacific. An overview*. Bangkok: UNESCO.

Asia - Pacific Center of Educational Innovation for Development (1996): "Indonesia" in: *Case Studies on Technical and Vocational Training in Asia and the Pacific*. UNESCO: Bangkok.

Atchoarena, David (1996): "Financing vocational education: Concepts, examples and tendencies" in UNEVOC (1996): *Financing technical and vocational education: Modalities and experiences*. UNESCO, pp. 27-50.

Bhola, H.S. (1995): *Functional literacy, workplace literacy and technical and vocational education: Interfaces and policy perspectives*. Paris: UNESCO / UNEVOC (June).

Blanchflower, David and Freeman, Richard (1996): *Growing into work*. Centre for Economic Performance, Discussion Paper No. 296, London (June).

Bird, Adrienne: *National Monograph on Technical and Vocational Training in South Africa*. May 2001.

Bolina, Pradeep (1996): "Financing vocational education and training in developing countries" in UNEVOC (1996): *Financing technical and vocational education: Modalities and experiences*. UNESCO, pp. 5-26.

Brown, Bettina Lankard (1998): *What's Happening in School-to-Work Programs?* ERIC Digest No. 190. Ohio.

Brown, Bettina Lankard (2002): *School to Work After the School to Work Opportunities Act: Myths and Realities*. No. 24. Ohio: ERIC Clearinghouse on Adult, Career and Vocational Education.

Carnstam, B.; Friberg, N.; Henry, L. (1999): *The Role of Technical and Educational Training in the Swedish Education System. The Role of Technical and Educational Training in the Swedish Education System*. Berlin: UNEVOC.

CEDEFOP (1998): *Vocational education and training – the European research field. Background report. Volume I*. Thessaloniki: European Centre for the Development of Vocational Training (CEDEFOP).

Cockrill, Antje and Scott, Peter (1997): "Vocational education and training in Germany: Trends and issues" in *Journal of vocational education and training*, Vol. 49, No. 3, pp. 337-350.

Dar, Amit and Gill, Indermit (no date): *Vocational Education and Training Reform in Mexico*. World Bank / ILO.

Duman, Dr. Ahmet (2002): *An overview on adult education research in Turkey*. Paper prepared for the ESREA Conference on European Perspectives on Life History Research:

Theory and Practice of Biographical Narratives. Université de Genève, Geneva, Switzerland, March 7th - 10th. Ankara University, Faculty of Educational Studies. Ankara.

European Training Foundation (1999): The Role of Vocational Education and Training in Transition Countries – The Case of Central and Eastern Europe and the New Independent States. Working document for the Second International Congress on Technical and Vocational Education. Seoul (Korea), 26-30 April 1999.³⁸

Grubb, W. Norton and Ryan, Paul (1999): The roles of evaluation for vocational education and training. Plain talk on the field of dreams. Geneva: ILO.

Heyneman, Stephen P. (no date): Russian Vocational and Technical Education in the Transition: Tradition, Adaptation, Unresolved Problems.³⁹

ILO (no date): National Monograph on Technical and Vocational Training in South Africa.⁴⁰

ILO (no date): Vocational Training System – France.⁴¹

ILO (1999): Training, Labour and Knowledge. The Latin American and Caribbean Experience. Montevideo.

ILO (2000): (ed.) Modernization in Vocational Education and Training in the Latin American and the Caribbean Region.⁴²

Johnes, Geraint; Tzannatos, Zafiris (1997): "Training and Skills Development in the East Asian Newly Industrialised Countries: A Comparison and Lessons for Developing Countries" in: *Journal of Vocational and Education Training*, Vol. 49, No. 3, pp. 431–453.

Koch, Richard; Reuling, Jochen (1998): „Institutional framework conditions and regulation of initial vocational training using Germany, France and Great Britain as examples" in CEDE-FOP (1998), pp. 1-32.

Kuddo, Arvo (1996): Employment Services in Russia and Estonia: A Comparative Analysis, World Bank, Technical Department, Europe and Central Asia Region. August.⁴³

Lauglo, Jon (1993): Vocational training: analysis of policy ad modes. Case studies of Sweden, Germany and Japan. Paris: UNESCO.

L'Hoest, Raphael (1998): Vocational Education and Job Training in the US Labour Market. Regensburg. Transfer Verlag.

Lundahl, Lisbeth and Sander, Theodor (1998): Vocational Education and Training in Germany and Sweden. Umeå: TNTEE Publications. 01.08.1998.

McGinn, N. and Welsh, T. (1998): Decentralisation of education: why, when, what and how? Paris: UNESCO.

³⁸ Source: <http://unevoc.unesco.org/congress/pdf/ref-efv-e.pdf> (31.07.03)

³⁹ Source: www.indiana.edu/~isre/NEWSLETTER/vol6no1/heyne.htm

⁴⁰ Source: www.ilo.org/public/english/employment/skills/recomm/publ/006.htm#z (11.09.2003)

⁴¹ Source: www.logos-net.net/ilo/150_base/en/init/fra_1.htm (11.09.2003)

⁴² Source: www.ilo.org/public/english/region/ampro/cinterfor/publ/sala/moder_in/i_a.htm (11.09.2003)

⁴³ Source: <http://www.indiana.edu/~isre/NEWSLETTER/vol6no1/heyne.htm> (11.09.2003)

OECD (1994): Vocational education and training for youth: Towards coherent policy and practice. Paris.

Paqueo, Vic; Lammert, Jill (2000): Decentralization in Education. The Decentralization & School-Based Management Resource Kit. Coordinated by Karen Edge, Education Reform & Management Thematic Group, HDNED, World Bank, August 2000.⁴⁴

Perker, Henriette (2000): The Vocational Training System in France. Centre INFFO, June.⁴⁵

Pothuma, Anne Caroline (no date): "Recent Transformation in Training and Social Dialog in Latin America".⁴⁶

Psacharopoulos, George (1997): "Vocational education and training today: Challenges and responses" in *Journal of Vocational Education and Training*, Vol. 49, No. 3, pp 385-393. Washington: The World Bank.

Republic of South Africa (1998a): Green Paper on Further Education and Training. Preparing for the Twenty-First Century Through Education, Training and Work. Ministry of Education. April 15, 1998.

Republic of South Africa (1998b): The Education White Paper 4 - A Programme for the Transformation of Further Education and Training. Ministry of Education. Preparing for the Twenty-First Century Through Education, Training and Work. Government Gazette Vol. 399, No. 1 9281, 25 September 1998, General Notice, Notice 2188 of 1998.

Robinson, Chris (2000): Developments in Australia's vocational education and training system. Adelaide (Australia): National Centre for Vocational Education Research (NCVER).

Schreiner, Klaus H.: Regionale Autonomie und Dezentralisierung in Indonesien. Brüssel 2000.

Smirnov, I.; Solomakhin, D. (1999): The Role of Technical and Educational Training in the Education System of the Russian Federation. Berlin: UNEVOC.

Seddon, Terri; Malley, Jeff (1999): "Emerging Patterns of Enterprise-based Research and Organisational Development in Vocational Education and Training Providers" in: *Journal of Vocational Education and Training*, Vol. 51, No. 4, 1999, pp. 477-491.

Smith, Erica; Wilson, Lou: Learning and training in school-based new apprenticeships. Leabrook (Australia): ANTA, 2002.

UNESCO / UNEVOC (1999): Cooperation with the World of Work in Technical and Vocational Education. Part B: The Institution Level. A Study from the Russian Federation Berlin: UNESCO.

UNESCO / ILO (2001): Technical and vocational education and training for the twenty-first century. UNESCO and ILO recommendations. Paris.

⁴⁴ Source: www.oise.utoronto.ca/depts/tps/TPS1017/ (05/12/2003)

⁴⁵ Source: www2.trainingvillage.gr/etv/vetsystems/report/fr0600_en.asp#top (11.09.2003)

⁴⁶ Source: www.logos-net.net/ilo/150_base/en/publ/033.htm#Vocational (11.09.2003).

UNEVOC (1995): The challenge of the future. Future trends in adult and continuing technical and vocational education. An international symposium. Berlin, Germany, 16-20 October. Berlin: UNESCO.

UNEVOC (1995): The role of technical and vocational education in the education system of the Russian Federation. Reprint in 1999. UNESCO.

UNEVOC (1996): Financing technical and vocational education: Modalities and experiences. UNESCO.

UNEVOC (1997a): Promotion of linkage between technical and vocational education and the world of work. Final report on the international expert meeting. Tokyo, Japan, 3-6 February.

UNEVOC (1997b): The role of Technical and Vocational Education in the Swedish Education System. Berlin: UNESCO.

UNEVOC (1997c): Under the sun or in the shade? Jua Kali in African Countries. National policy definition in technical and vocational education: Beyond the formal sector. A sub-regional seminar for Eastern and Southern African countries. Nairobi, Kenya, 15-19 September 1997.

UNEVOC (1998): Cooperation with the World of Work in Technical and Vocational Education. The Policy Level – Studies from Hungary, Romania and Sweden. Berlin.

UNEVOC (1999a): Cooperation with the World of Work in Technical and Vocational Education. Part A: The Policy Level. Studies from Hungary, Romania and Sweden. Berlin: UNESCO.

UNEVOC (1999b) (ed.): Vocational Education and Training in Europe at the Threshold of the 21. Century. Berlin: UNESCO.

UNEVOC (1999c): The Role of Technical and Vocational Education in the Swedish Education System. Berlin: UNESCO.

UNEVOC (2000): Learning for life, work and the future. Stimulating reform in Southern Africa through sub regional co-operation. Initial workshop. Gaborone, Botswana, 5 - 8 December.

Winkler, Donald R. (1991): Decentralization in Education: An Economic Perspective. Education and Employment Division, Population and Human Resources Department. Washington, DC: The World Bank, November.

World Bank (no date): Vocational Education and Training Reform in Mexico. A Country Study Summary.⁴⁷

Ziderman, Adrian (1997): "National Programmes in Technical and Vocational Education: Economic and Education Relationships" in: *Journal of Vocational and Education Training*, Vol. 49, No. 3, pp. 351-366.

Zimmermann, Andrea (2001): "Handwerksförderung durch Berufsbildung in Russland. Ein Modellprojekt verändert das Moskauer Ausbildungssystem" in *Berufliche Bildung im internationalen Kontext*, Zeitschrift des Bundesinstituts für Berufsbildung, Sonderdruck aus 4/2001, pp. 31-35.

⁴⁷ Source: [wbln0018.worldbank.org/HDNet/HDdocs.nsf/globalView/Mexico.pdf/\\$File/Mexico.pdf](http://wbln0018.worldbank.org/HDNet/HDdocs.nsf/globalView/Mexico.pdf/$File/Mexico.pdf) (11.08.2003).

Annex 1 List of Abbreviations

AFT	American Federation of Teachers
ANTA	Australian National Training Authority
AQF	Australian Qualifications Framework
AQFAB	Australian Qualifications Framework Advisory Board
ARF	Australian Recognition Framework
ATP	Australian Training Products (Limited)
BIBB	Bundesinstitut für berufliche Bildung
CBTIS	<i>Centro de Bachillerato Tecnológico Industrial y de Servicios</i>
CECATI	<i>Centro de Capacitación para el Trabajo Industrial</i>
CETIS	<i>Centro de Estudios Tecnológicos Industriales y de Servicios</i>
CFA	<i>Centre de formation d'apprentis</i>
CIC	<i>Comité interprofessionnel de conseil</i>
CIMO	Total Quality and Modernization Programme (Mexico)
CNP	National Curriculum Council (France)
CONELEP	<i>Colegio Nacional de Educación Profesional Técnica</i>
CPC	Vocational Advisory Commissions (France)
DDP	Decentralisation, deconcentration and privatisation
DETYA	Department of Education, Training and Youth Affairs
DOE	Department of Education
DOL	Department of Labour
ETG	Education Transformation Group
ETQA	Education and Training Quality Assurance
FET	Further education and training
GDP	Gross domestic product
GTZ	<i>Deutsche Gesellschaft für technische Zusammenarbeit</i>
ICT	Information and communication technology
ILO	International Labour Organisation
IPA	International Policy Advising
ITAB	Industry training advisory body
IUFM	<i>Institut universitaire de formation des maîtres</i>
LCS	Local subject content
LFT	<i>Lei Federal de Trabajo</i>
MCEETYA	Ministerial Council for Employment, Education, Training and Youth Affairs
MINCO	Ministerial Council
MOM	Ministry of Manpower
MONE	Ministry of National Education
NBFET	National Board for Further Education and Training
NCVER	National Centre for Vocational Education Research
NGO	Non governmental organisation
OJT	On-the-job
PIC	Private industry councils
PROBECAT	<i>Programa de Becas de Capacitación para los Desempleados</i>
SAMDI	South African Management and Development Institute
SBNA	School-based new apprenticeships
SEP	Education Secretariat
SETA	Sector Education and Training Associations
SNET	System of Technical Education
STPS	Labour Secretariat
STW	School-to-work
STWOA	School-to-Work Opportunities Act
TAFE	Technical and Further Education
TVE	Technical and vocational education
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNEVOC	UNESCO's International Centre for Technical and Vocational Education and Training
VE	Vocational education
VET	Vocational education and training

Annex 2 Decentralisation in VET (Winkler model)

	School Organization	Curriculum and Teaching Methods	Examinations and Supervision	Teacher Recruitment and Compensation	Finance of Recurrent Expenditures	School Construction and Finance
Centralized Model	Minimum schooling requirements and school organization (preschool, secondary, vocational, higher education) set by the central government.	Curriculum, teaching materials, pre-service and in-service instruction provided by the central ministry of education	Examinations set and evaluated, as well as teaching performance evaluated by central ministry of education; responsibility for direct supervision often lies with regional administrative offices.	Central government sets accreditation standards, provides teacher education, sets teacher pay scales, and directly pays the teachers; in some cases (Franco-phone Africa) teacher recruitment, pay, and promotion may be under control of the civil service ministry rather than the ministry of education.	All recurrent expenditures fully funded by central government excepting minor user fees; non teacher resources distributed to schools.	Central government sets construction standards, which may be uniform for the entire country, and covers all construction costs, although the local community may be required to provide labour and/or some construction materials.
Mixed Model	The central government determines the organization of the schooling system, but the local community helps determine how many years of education are provided, often through at least temporary self-finance of years beyond those funded or authorized by the central government	Curriculum, teaching materials, and in-service instruction established and provided by the central government or through its regional delegations.	Examinations are set centrally but usually administered and evaluated regionally; the instruction, often through regional or district offices.	Teachers may be selected by the local school authority, but the central or regional government typically prescribes pay scales; accreditation standards are also set centrally.	The central or regional government provide most funding of local schools in the form of block grants or project grants, but some portion of educational expenditures are funded by local revenue sources, and the local community has some influence on total expenditure levels.	Construction standards are set by the central or regional government and matching funds are often provided for school construction; in some cases the matching funds take the form of a promise by the central government to cover some portions of recurrent expenditures, often teacher salaries.
Decentralised Model	Organization of schooling is almost always set by the central ministry of education; the local community decides how many years and levels of education will be provided.	The basic contents of the curriculum are set centrally, but textbooks may be selected and purchased locally, and in-service instruction may be provided locally or regionally depending on the size of the local.	No national examination system exists; all examinations are set and evaluated locally; the central or regional governments usually provide limited supervision of teachers and schools.	Teachers are selected and pay scales are set by local government; accreditation standards are typically set by the central government but they may not be enforced.	Local government funds elementary and sometimes secondary education from local revenue source; user fees or "voluntary" contributions to the parents-teachers associations may be required; block grants or project grants may be provided by the central government.	Land and materials for school construction are provided by the local community; labour may be voluntary; local construction standards used.

Source: Winker, 1991

Annex 3 School Organisation

	United States	Germany	France	Sweden	Russia
Centralized Model	The Department of Education (DOE) is responsible for federal education programmes of all types and levels. The Constitution and federal statutes strictly limit the federal role in education. The DOE does not function as a governing body but operates in cooperation with state and local authorities.	Federal government is responsible for in-company VET. The Vocational Training Act of 1969 regulates the implementation of in-company VET for the whole of Germany. The Crafts Code issued by the Federal Economics Ministry also covers this sector. The main relevant organ at this level is the Federal Institute for Vocational Training (BIBB).	The Vocational Advisory Commissions (CPC) in the Ministry of Education's Directorate of Lycées and collèges deal with issues of VET. The Ministry of Agriculture is in charge of agricultural VET, while the Ministry of Labour also influences VET.	-	-
Mixed Model	The main responsibility for education in the USA lies with the 50 states, each of which has a department of education, responsible for enforcing state statutes, and delegating operations in a variety of ways to local school districts.	The main responsibility for education lies with the sixteen States. Each State has a ministry of education and culture, which takes decisions in matters of form and length of the vocational training in the different professional fields.	The regions are responsible for administration of the <i>Lycées</i> , the departments for that of the <i>collèges</i> , and the communes for primary schools. Since 1982, the regions have been given considerable powers regarding VET.	Parliament and government control educational activities by defining national goals and guidelines for education. National and municipal education authorities are responsible for ensuring that the education system is organized in accordance with national goals.	-
Decentralised Model	About 90% of students attend public secondary schools, the rest private ones. There is a strong USA tradition that the local community should have significant powers, through the local school board, in controlling education.	-	Secondary schools develop their own strategies and school plans for attaining national education goals	The municipal authorities have the overall responsibility for the implementation and development of educational activities in the school system. Municipalities have the option to design their own organizational structures.	Vocational education may be delivered in secondary technical institutions, and may also be delivered in some higher education institutions.

Annex 4 Curriculum and Teaching Methods

	United States	Germany	France	Sweden	Russia
Centralized Model	Although there is no national curriculum in the US, certain subjects are taught in virtually all elementary and secondary schools throughout the country. In the past, the federal government has limited itself to the formulation of core curricula for all students.	Skeleton curricula for vocational instruction are worked out jointly by federal and State authorities with the agreement of the employers and unions (social partners) based on training regulations for on-the-job training. They contain statements of objectives as well as references to the time frame and the number of lessons.	The CPC and National Curriculum Council (CNP) provide opinions and suggestions for curriculum in VET courses. The central government defines curricula. Private schools under contract with the State are required to apply national curricula.	The curricula for compulsory and upper secondary education (which includes technical and vocational training) have nation-wide validity.	-
Mixed Model	All laws and policies on curriculum are set and enforced by the states and the over 14,000 local school districts. The state board outlines study courses and lists of textbook. Some states play a strong role in selection of teaching material.	In accordance with the skeleton curricula, the States and regional chambers elaborate regional and business specific curricula. The State and social partners support the concerned federal ministry to set up training regulations, which define the knowledge and skills to be imparted through on-the-job training for professional qualification for all recognised occupations that require formal training.	.-	-	-
Decentralised Model	Local school boards use state guidelines to work out their curricula. Private schools design their own curricula. Adult education is provided part-time by a variety of public and private organizations, often using facilities of the regular system.	-	Insofar as official curricula are respected, teachers are free to choose the means most adapted to their objectives.	-	The development of new curricula and new programmes for local or federal approval is in the responsibility of the school directors.

Annex 5 Examinations and Supervision

	United States	Germany	France	Sweden	Russia
Centralized Model	Six (6) regional accreditation associations set minimum standards for institutions chartered in the regions of their jurisdiction. Other recognized accrediting associations set and regulate minimum standards for individual subjects or related subjects, particularly in professional fields and specialized institutions.	The intermediate and final examinations are based on the contents of the framework and skeleton curricula.	The CPC give opinions and suggestions for regulations governing VET examinations.	Main national authority for supervision of the education system is the National Agency for Education (Skolverket): its main tasks include the responsibility for national follow-ups, evaluation, and supervision of all school activities, and for development work on the national level within the school sector. The Agency is also responsible for ensuring that pedagogical research is undertaken, that teachers receive the required basic university training and the in-service training is available for teachers	
Mixed Model	For teacher certification, 5 states require no examinations, 8 require only minimal skills assessment, and the rest require of an undergraduate degree and a supervised practicum. All states certify secondary teachers according to specialisation.	The chambers of industry and crafts usually administer intermediate examinations, taken before the end of the second year of training. Final examinations are administered by regional and sector organisations from the various branches of industry and commerce, e.g. chambers of industry and commerce, crafts, liberal professions and agriculture that perform government VET functions.	At department level, <i>inspecteurs d'académies</i> play a role in the organisation of examinations, but mostly in the lower secondary schools. In vocational university institutes, the university president nominates the examination board.	The transition to goal and results-oriented steering of the education system requires the national and the municipal authorities as well as administrators to individual schools to follow up systematically and to evaluate educational activities in relation to the goals and guidelines that apply to them.	
Decentralised Model	Private corporations score entrance examinations, required by some states for entrance to higher education. State and local inspection has been replaced by advisory services.	Autonomous industrial "competent bodies" ensure the suitability of training centres, monitor training in enterprises, provide advice to training enterprises, instructors and trainees, establish and maintain a list of training contracts, set up the system of examinations and hold final examinations.	-	-	The school directors supervise the teaching process

Annex 6 Teacher Recruitment and Compensation

	United States	Germany	France	Sweden	Russia
Centralized Model	The federal government has no jurisdiction or authority over the recognition of educational institutions, members of the academic professions, programmes, degrees or other qualifications.	The teacher recruitment and compensation lies in the responsibility of the State ministries of education and cultural affairs.	The central government is responsible for recruiting, training and managing school staff, and for creating and allocating teaching and administrative posts. The central government is responsible for teacher remuneration, also in contracted private ones.		
Mixed Model	State governments typically prescribe pay scales and set accreditation standards. Specialized non-instructional personnel (administrators, counsellors, nurses etc) must also be certified in most US.	Vocational training schools teachers are employed and paid by the States, which are responsible for financing the educational sector.	-		The teachers are recruited by the school directors and paid by the federal government.
Decentralised Model	Teachers are selected and local government sets pay scales. State governments typically set accreditation standards. Private schools are more flexible in hiring teachers.	Enterprises participating in the dual VET System have to assign and pay an on-the-job trainer. Large enterprises maintain in-house on-the-job training centres, and the chambers of industry and crafts monitor the on-the-job trainers.	-	Full mandates for teaching staff have been transferred to municipal authorities.	School directors now assume considerable managerial responsibility and raise about 40% of the resources.

Annex 7 Finance of Recurrent Expenditures

	United States	Germany	France	Sweden	Russia
Centralized Model	Federal funds aid projects regarded by Congress as essential for common welfare e.g. for deprived children and vocational education. For the latter, federal aid, allotted in relation to population, must be matched by state and local funds, and is used mainly for salaries.		The State (central government) is responsible for pedagogical expenditure (initial equipment and material, specialised material for the renewal of courses, school textbooks, and maintenance of equipment purchased by the State)	-	The federal government continues to try and finance the system, but can only cover food and teacher salaries.
Mixed Model	States supplement local taxes to equalize opportunities and to introduce or encourage specific programmes locally.	Financing of the public-sector school system is based on a division of responsibilities between States and local authorities (communes). The States reimburse local authorities for certain expenses (e.g. transport of pupils), and sometimes they support the local authorities through one-off grants for running costs.	The regions are responsible for maintaining vocational <i>Lycées</i> , while the departments maintain <i>collèges</i> .	Each municipality receives a subsidy from the State for use in financing its school activities. It is then up to the Municipality to decide how much will be allocated to different municipal activities, e.g. for technical / vocational education. The State demands that the Municipality fulfil the educational goals set by the State. Every Municipality is responsible for offering upper secondary education for all youths in the Municipality aged 16-19. The subsidy from the State is not intended to cover all expenses for education. The municipality is expected to be responsible for approximately 50% of these expenses.	
Decentralised Model	The bulk of the funding stems from local taxes. Fees plus private donations support private schools for the compulsory age group.	The local authorities (communes) bear the costs of non-teaching staff and material.		-	Costs of teaching materials, maintenance, and utilities are the responsibility of the institution or the local authority

Annex 8 School Construction and Finance

	United States	Germany	France	Sweden	Russia
Centralized Model			The State provides surety for building or equipment for contracted private schools. The State also finances the building, the extensions and the equipment of vocational university institutes. Since 1989, it has shared financing with the territorial authorities.		
Mixed Model	Through standards and rules, the States can exercise considerable influence over VET school construction and its implementation, but most often their stance is "hands-off".	The decisions and budgets for school constructions lie in the responsibility of the States and the local authorities (communes). The States support the local authorities through one-off grants for school construction.	The regional heads (préfets) decide to build vocational <i>Lycées</i> , while the préfets of the departments decide to build <i>collèges</i> .		
Decentralised Model	School construction is initiated locally. Local authorities (using school taxes and issuing bonds), States and private donors provide "basket" funding.	The local authorities (communes) decide whether to construct schools and they assume the costs of constructions.		The municipality is traditionally responsible for expenses for buildings, equipment and teaching materials.	