Building Better Skills Systems for Productivity and Growth

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Abstract

To sustain growth, Latin America and the Caribbean will need to increase productivity through the more intelligent use of its workforce. Countries need efficient and effective education and training systems that produce the skills that employers need and that lead to better and more transparent learning-labor paths across individuals' lifetimes. This document first presents a brief review of several of the most highly regarded education and training systems across the world and identifies the key elements of successful system. Second, it presents a framework and methodology to help countries in LAC diagnose their own challenges against a set of benchmarks, gauge their own progress, determine the most pressing gaps and build a roadmap to strengthen their own systems.

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I. The Challenge of Building Stronger and More Responsive Skills Systems

In the current economic context, Latin America and the Caribbean (LAC) needs new sources of growth to sustain the economic and social gains of the last two decades. In fact, the Region will need to more than double the increases in productivity it achieved over the last decade just to maintain present levels of growth. In the world of work, however, many jobs remain informal and highly unstable, and productivity has fallen relative to the rest of the world (Alaimo et al, 2016).

While improvements in productivity will depend on several factors, the skills mismatch represents one of the greatest bottlenecks productivity growth in LAC. In LAC and in more advanced economies evidence suggests that there is an imbalance between the skills of the workforce and the skills demanded by the productive sector (e.g., Bassi et al 2012, Cappelli, 2014, Busso et al 2017). LAC needs new solutions to catalyze growth and maintain positive trends in the reduction of poverty and inequality. This will necessarily involve a more effective and intelligent use of its workforce and ensuring that they have the skills that employers need. Thus, countries need to have an efficient and effective education and training system that offers high quality services that lead to better and more transparent learning-labor paths across individuals' lifetimes.

Existing education and training systems in LAC, however, show clear signs of deficiencies, inefficiencies and, in some cases, low coverage. The suboptimal performance of these systems is demonstrated by both educational outcomes from the formal education system and evidence collected through employer surveys, among other methods, that show that many persons in the labor market emerge from education and training without the skills that employers are seeking. Moreover, most them are not able to catch up with supplementary training once in the workforce[1]. Overall, the lack of well-functioning, strong and responsive skills systems affects individuals, firms and countries as a whole.

Creating or improving a skills system presents several challenges and questions: How to know which skills are in demand now and in a rapidly evolving future? How to identify them? What are the best ways to develop these skills across a lifetime--in both students and in workers who are already in the labor market? How to ensure that both public and private investments in education and training are sufficient, effective, and efficient? And how to create effective collaboration and communication among the multitude of actors and stakeholders—ranging from universities, training institutes, public ministries, private companies, employer associations, among others—that must work together for a skills system to work?

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[1] In basic education, though several countries in the region improved their results in international tests such as PISA, many are still decades behind OECD averages in math, science and reading, and all must accelerate their rate of improvement to achieve higher performance levels (Bos et al 2016). Employers surveys also indicate that, post-educational trainings rates are low (Huneeus et al 2012), indicating that individuals are not able to catchup with supplementary training once in the workforce.

Countries in LAC, as well as around the world, look to international examples and benchmarks to help guide improvements in their own systems and build solutions that answer these critical questions. Drawing on evidence about from international examples of "what works" for skills development, though, can be tricky.

First, examining systems that have been developed in different historical, social and economic contexts may present its own set of challenges; in a best-case scenario, countries can draw on lessons learned and adapt certain elements for their own context. In the worst, they may replicate individual programs, institutional arrangements, or even legal frameworks without a clear sense of what these arrangements were designed to do or how they are integrated into a larger system.

Second, it can be challenging to discern which of a myriad of features are the most critical for success.

To address this challenge, over the last two years we studied several of the most highly regarded skills systems across the world—through interviews, study tours, desk reviews of existing literature and consultations with experts—to understand what common elements make them successful.

The objective of this document is twofold: First, it presents a brief review of several of the most highly regarded skills systems across the world and identifies the essential elements for a successful system. Second, it presents a framework and methodology to help countries in LAC diagnose their own challenges against a set of benchmarks for success, gauge their own progress, determine the most pressing gaps and build a roadmap to strengthen their own systems.

The "Skills System Assessment" framework presented in this document follows a "functional approach"; it identifies the *functions* executed by each system, isolating these from the who and the how. This approach helps countries learn from skills systems that differ in many dimensions and to draw on lessons learned and good practices independent of the historical, political, social and/or economic contexts in which they are found. The framework's power lies in helping refocus countries first and foremost on the different functions that *any* system should be executing before determining how a country should execute these and whether existing programs, incentives, mechanisms are aligned with and achieving their functional objectives.

This approach can help countries lay solid foundations towards developing the dynamism and responsiveness their systems need to contribute to a more productivity workforce and smoother and more rewarding educational and labor trajectories for individuals.

The subsequent sections of this paper are structured as follows: Section II will discuss the countries examined and the methodology used to develop the Skills System Assessment conceptual framework. Section III will provide more detail on the framework's content and design. Section IV concludes with reflections on the application of the tool and lessons learned for future use.

II.   Identifying Critical Success Factors: Reference Countries

Over the last two years, the IDB studied several of the most highly regarded skills systems across the world—through interviews, study tours, desk reviews of existing literature and consultations with experts. The exercise identified the elements that characterize highly regarded and well-functioning skills systems with the aim to distill these key elements into an extensive aide memoire for policy makers in Latin American and Caribbean countries seeking to strengthen their own education and training systems based on concrete evidence of 1) what is needed for a successful skills system; and 2) what is working well around the world.

To this end, we examined the skills systems of five countries—Australia, United Kingdom, New Zealand, South Korea and Germany. Each of the countries were chosen because they exemplify a particular/different approach of substantial interest to countries with less established systems:

- **Australia**

    The Australian education and training system is a good example of how to organize at both a federal and state level with a balance of responsibility (and resources) between the two. It has been particularly successful in generating a high level of apprenticeship training. Learning pathways are clarified through the Australian Qualifications Framework which is comprehensive and non-hierarchical and embraces the overwhelming majority of qualifications awarded.

- **Germany**

    Germany is the template for policy makers seeking to learn from the successes of the 'dual system'. Apart from the high quality of their training, special features include the consensus-based model – between stakeholders from industry, trade unions and government in running the system. Both funding and quality are underpinned by a significant employer contribution with the state acting as a regulator and guarantor.

- **New Zealand**

    New Zealand has a particularly successful form of competence-based 'industry training' which encompasses NZ apprenticeships but also provides government funding through Industry Training Organizations. As a relatively small country, it has little organizational 'clutter' and maintains clear and separate organizational competences for the quality of qualifications and their funding.

- **Republic of Korea (South Korea)**

    South Korea provides the best example of a country 'starting from scratch' by learning from others and assembling a system based on best practice from other countries. It draws much from the United Kingdom's system of competence-based learning but is now developing an approach which also

borrows heavily for the dual system. It illustrates what can be achieved with strong state leadership and a national culture which prizes learning.

- **United Kingdom (England)**

The UK system of competence based learning and vocational qualifications has influenced many around the world. It is highly innovative and is currently trialing radically new approaches to apprenticeships and employer engagement: especially in relation to high level policy development. Its labor market intelligence is comprehensive, systematic and detailed. The UK system is devolved across England, Wales, Scotland and Northern Ireland. The report therefore concentrates solely on the English system as this is the largest of the four countries.

In each of these countries, the analysis focused on four critical functions that are found across these systems, and that are generally accepted in the literature as the foundations of an effective skills system (OECD 2012):

1. *Identify present and future skills needs:* Labor market intelligence, especially regarding the skills needs of the private sector, is collected systematically and acted upon.
2. *Develop skills that respond to the needs of employers and individual learners:* There is an 'unbroken thread' between the skills that employers need and the curriculum content of the education and training that is designed to meet those needs. In turn, qualifications and curriculums are organized with the goal of providing flexible learning-labor paths across a lifetime
3. *Assure Quality and Continuous Improvement:* The quality of all training provision can be relied upon and consistently meets the highest standards.
4. *Allocate resources per desired results:* Public funding is prioritized to ensure the maximum benefit as well as being a contribution to a wider investment by society, including both employers and individuals.

For each of these critical functions, we looked more specifically at how each country operationalized the function, asking the following questions:

- How the critical function is carried out – which organizations are leading? What do they do? What is distinctive about their approach?
- Why is this critical function carried out in this way? What are the intended or expected benefits?
- What seems to work and not work in this approach? What changes are being made? What might the effects be?

We observed that in all the referenced countries, there is an installed capacity for--or important reforms are being made to advance in the direction of—each of the four critical functions. Moreover, there are number of shared characteristics and critical success factors that can be identified, as well as unique strengths in each country. Annex 1 provides the complete results of the comparative analysis for each country, which is summarized below:

1. Ability to identify present and future skills needs

The five countries analyzed have a variety of tools for obtaining information on the supply and demand of skills. These instruments include: business surveys, learner surveys, information on educational and labor market outcomes, big data (e.g. online vacancy data) and focus group results, among others. These sources of labor market information and intelligence provide countries with some knowledge about a) which occupations and/or skills are most in demand in the market, and b) which occupations are more difficult to fill. These data also allow countries to identify occupations with excess supply. In Australia, for example, data on occupational supply shortages and surpluses also serve to define migration policy. Moreover, using different methodologies and survey instruments (e.g., a combination of business surveys, general equilibrium models, statistical prediction models, and focus groups) countries can anticipate future demands of the system, which helps orient students' and workers' education and career decisions, as well adapt curricula and qualifications to rapidly-changing needs of the market.

The countries described have also developed the capacity to channel the voice and input of employers, as well as other experts (workers, researchers, human resource experts) through collective bodies or organizations that collect, channel and disseminate the skills needs of the productive sector to the system. Depending on the country, these collective bodies can have different combinations of functions: to generate information on skills needs (either for the economy in general or for one or several industries or sectors), to define exit profiles for students based on strong private sector involvement in the identification of such needs, and/or coordinate with companies to identify appropriate training packages for their employees.

 Collective employer bodies may also take on different configurations. In the case of Australia, England and New Zealand, these take the form of sectoral councils (sector councils) which produce occupational and qualifications profiles for a specific industry or set of industries, among other functions. South Korea, on the other hand, does not have a consolidated sectoral council model, but it is moving in that direction. In Germany, the Chambers of Commerce are heavily involved in training provision; however, it is a public institution, the Federal Institute for Education and Technical Training (BIBB), which retains the mandate to convene employers to develop and update profiles for each occupation or qualification.

The common characteristic—or function—amongst the reference countries, however, is that irrespective of the institutional ecosystem of each country, there are collective bodies or institutions that have a specific mandate to 1) periodically update information on skills needs; and 2) produce relevant information on skills demand for the technical-vocational training system. This information must, in turn, be used by technical and vocational schools and training centers as a basis for their qualifications and/or curriculum development.

It's important to note that while these efforts are a common characteristic amongst the reference countries, there are cautionary tales and lessons learned, as well. In the United Kingdom and

Australia, sectoral councils have been under recent review for not being sufficiently demand oriented, and are currently undergoing changes in their structure and funding to provide greater guidance to employers.

2. Develop skills that respond to the needs of the productive sector and order them in flexible learning paths, allowing portability of certifications and permeability between levels and subsystems.

The reference countries have developed, or are moving in the direction of developing, qualifications and curricula with a dual objective: 1) that learners attain knowledge and skills that respond to the standards identified by the productive sector for each sector or occupation; and 2) that the portability of workers' skills is ensured through certifications that are recognized nationally by all industries and training centers.

To this end, an important element is the development of a qualifications framework, particularly a National Qualifications Framework (NQF). An NQF allows the establishment of equivalencies and pathways—between scientific-humanist and vocational, intermediate and higher-education, between education and training, and between formal learning and informal learning in the workplace—ensuring that regardless of the path followed, or of the training provider, comparable and universally recognized results are achieved.

Australia developed the Australian Qualifications Framework (AQF) in 1995. In New Zealand, the Qualifications Framework (NZQF) was established in 1989 and became a single framework in 2010. Both AQF and NZQF cover all levels of both education and training (continuous training), and facilitate the recognition of prior learning. Germany completed a qualifications framework in 2012, which has led to the creation of bridges between vocational training at the intermediate level and university. England launched its Qualifications Framework (RQF) in 2015. This is an evolution of an earlier framework, the QCF, with the purpose of simplifying it and making it more agile. Finally, South Korea is in the process of unifying two competency frameworks currently under the Ministry of Education (for initial education) and the Ministry of Labor (for continuing training) in a single framework under the NCF. The final stage of implementation of this unique framework is planned for this year, with the objective of establishing a respected vocational route in a system traditionally oriented towards academic credentials.

Another important element is the development of assessments specific to technical and vocational training to evaluate whether the required technical, cognitive and social skills have been attained. These assessments are characterized by having an observational or practical demonstration component - the person performs a project or activity in which she demonstrates her competence - and another one of oral or written demonstration of the mastery of relevant knowledge. Another relevant feature is the incorporation of employers' inputs into the design of the assessment itself. For example, in Australia, the profiles produced by sectoral councils incorporate the requirements for the assessment of learning. In the case of Germany, the chambers of commerce design assessments and

organize external evaluation courts made up of representatives of the training center and relevant industry.

A final critical element to consider as part of the skills and curriculum development function is the design of on-the-job training to ensure that desired learning outcomes are achieved. A trend in all the reference countries is the increasing prevalence of apprenticeship models and/or practical training in the workplace. Although apprenticeships tend to be associated with the German dual model, the other four countries studied are strongly expanding the number of practical trainees and apprentices as a percentage of the total number of learners in the system, both in secondary (South Korea) and in post-secondary education (Australia, England, New Zealand). Apprenticeship programs in these three countries depart from the traditional dual model. They are open to all workers already employed in companies from a certain age, and include state support for employers participating in these initiatives under specific conditions set by the government. A key feature of apprenticeship/trainee programs is that they help develop, evaluate and certify practical skills that are more difficult to attain and/or evaluate in a classroom setting.

3. Ensure the quality of the system and promote its continuous improvement

An essential aspect of the countries analyzed is a strong emphasis on quality assurance at all levels, defined both by ensuring that the objectives imposed by the system (vision) are met, and by ensuring the quality of inputs (institutions of teaching and teaching in the workplace, teachers and instructors), and verifying the quality and validity of certifications. Complementary to systems of quality assurance is the ability of skills systems to evaluate their performance as whole and to implement continuous improvement.

Assuring the quality of training institutions is a strong characteristic of the countries analyzed. For example, the Australian Quality Agency (ASQA) regulates and oversees the standards that institutions must meet to be accredited as training institutions. Quality control is based on risk, with greater supervision of institutions with demonstrated deficits in quality. The agency has the power to impose sanctions and to close training providers, but the focus is on supporting training providers to improve their quality. As of 2015, stricter quality standards have been introduced.

As in Australia, the UK quality agency (Ofsted) uses a risk-based approach to supervision and has strong authority to act on deficiencies, including the closure of providers that don't meet minimum quality standards. Similarly, in New Zealand, all technical and vocational training institutions must be registered with the quality agency (NZQA) and accredited to provide specific courses. Standards are enforced universally across all providers, independent of the type of institution (training center, polytechnic college, etc.)

Ensuring the quality of teaching is another important element in quality assurance. To this end, some countries emphasize ensuring the qualifications of teachers and trainers (Australia) and/or ensuring that they have practical experience in industry (South Korea, Germany). Others, such as New Zealand

and recently England (UK), are moving in the direction of ensuring that results are achieved, leaving training providers the autonomy to define teaching standards and minimum qualifications, and have complemented this approach with periodic external evaluations of teaching quality.

Another key element in achieving high quality is ensuring that the instruction that occurs the workplace (on-the job learning) meets high standards. This form of training is becoming increasingly important in countries beyond Germany, where it has been an integral part of the traditional system of vocational and technical education for several decades. In New Zealand, training centers are responsible for the quality of workplace learning. Moreover, in-company trainers (or mentors/meisters) must also demonstrate that they have relevant qualifications. In England, the quality agency (Ofsted) is responsible for ensuring the quality of on-the-job training. In Australia, companies providing on-the-job training must be accredited for the same.

Finally, assuring the quality of learning assessments is another critical to promote and achieve the confidence of users (learners, companies) in the system. Some mechanisms and practices used to assure the quality of learning assessments are the use of evaluators external to the training center (England) or the creation of evaluation courts made up of representatives of industry and training centers external to the company and training provider (Germany).

5. Allocate resources per desired results

Funding is a powerful tool for guiding a skills system towards desired results. The referenced countries have sought to tie at least a portion of financing to the achievement of results. For example, in New Zealand, the agency that evaluates and monitors the quality of institutions is the agency that also allocates public resources. In Australia, the system has been geared towards supporting training in certain priority sectors or areas where skill shortages exist, including directing resources towards these priorities. The UK aimed to reduce the number of people with qualifications below a certain level, and its funding was heavily focused on providing resources to the most vulnerable populations. To this end, funding must be based on clear performance indicators that enables decision making.

Another important aspect is the degree to which financing is designed to cover market failures; i.e., to provide financing where the contribution of employers or individuals is demonstrably insufficient. For example, in Australia, the government provides more funding to cover areas where there is a shortage of resources and limits funding in areas where there is an oversupply of people with certain skills. To address these shortcomings, governments, in addition to directing resources to public training institutions, allocate resources to finance companies, for example, with tax exemptions or competitive funds and to workers through scholarships or loans. In England, funding criteria are established such that the state channels financing via subsidies or scholarships to the youngest or the low-skilled workers, and via loans for the most advanced qualifications. In Australia, small firms receive a subsidy to finance a larger portion of training than do larger firms which generally have the resources and capacity to do so themselves.

An important takeaway from the analysis of these five countries is that there is no single route to success; to execute each of these four main functions, there are multiple solutions and configurations of programs, institutions and mechanisms that can result in a successful system. Moreover, all systems are developed within a specific context, which requires adaptations and / or modifications to suit the requirements and the political, economic and cultural realities of each.

III. The Skills System Assessment Framework

To operationalize the lessons learned from the comparative exercise of these five reference countries, the common characteristics—or functions— just described were distilled into the Skills System Assessment Framework, a reference tool to help countries in LAC build on the lessons learned from other skills systems in a way that meets their own reality.

A. Key Functions

The Skills System Assessment Framework is presented as easy to read, 'at a glance' tables: one set for each function. The crux of the framework is its focus on the *functional categories and functions* of skills systems. Drawing on the country comparison analysis, it outlines the main objectives a skills system should achieve, irrespective of its specific design or the institutions and programs within it. These critical functions are outlined in Table 1. The complete Skills System Assessment framework can be found in Annex 2.

Table 1. Key Functions of a Skills System

Functional Categories	Functions
1. Identification of Skills Needs	- Drawing upon evidence and intelligence to shape decision making - Providing an organisational basis for employers to engage collectively with the skills system - Facilitating employer influence on policy and provision - Identifying employer skills requirements to inform curriculum and qualification development - Measures taken to encourage employer demand for and utilisation of skills - Evaluation including gathering feedback on employer satisfaction
2. Curriculum and Qualifications Development based on Identified Needs	- Development of qualifications content - Assessment of candidates - Overall curriculum design - Qualifications Frameworks (articulation and learning pathways) - Provision of work based learning - Promoting the usage of competence based learning by employers
3. Quality Assurance and	- Assuring the quality of the overall system - Assuring the quality of teaching institutions - Assuring the quality of workplace training

Continuous Improvement	• Assuring the quality of assessment, accreditation and certification • Assuring the quality of teaching and training • Improving the quality of all aspects of the system
4. Budget Planning and Resource Assignment	• Effective management of public resources • Aligning resources to policy priorities and strategic objectives • Providing incentives and encouraging contributions from individuals and employers

B. Content of the Framework

The framework is designed to be simple reference tool, enabling policy makers to draw upon the best practice of other countries, 'picking and mixing' the approaches that suit them best given their own circumstances and having regard to which approach seem to be meeting with the greatest apparent success.

As a tool, the framework's power lies in helping refocus countries first and foremost on,

- **the *what*** (the different functions that any system should be executing)

before determining

- ***how*** *(programs, incentives, mechanisms)* a country should execute those functions and ***who*** should be responsible for doing it *(institutions and key actors).*

Each table is broken down into four types of information: 1) Functions; 2) Critical Components; 3) Characteristic Features and Examples of Best Practices; and 4) Exemplar Countries. Each of these is described in in Table 2.

Table 2: Content of the Skills System Assessment Framework

"What"	*Functions:* Each of the four critical functions is broken down into a series of sub-functions. The sub-functions are the central focus of each table and represent a specific aim or purpose the system must meet
	Critical Components: The critical components can be characterized as activities that must be carried out to successfully execute each sub-function.
"How" and "by Whom"	*Characteristics Features and Examples of Best Practice:* Provide examples of concrete ways in which countries have carried out each of the activities outlined in the critical components. These include different kinds of tools and design features, such as incentive structures, financing mechanisms, legal arrangements, specific institutional responsibilities, among others.
	Exemplars: Indicates a country which has been particularly successful in implementing a characteristic feature or example of good practice.

This approach acknowledges that there are multiple solutions and configurations that can result in an effective system. It also acknowledges that all systems are developed within a specific context, which requires adapted and/or customized approaches that suit the political, economic and cultural realities of the country in question.

The Skills System Assessment framework provides a stepping off point where interested readers can more easily evaluate which functions are most critical, whether their own country is addressing these, and more quickly decide which approaches may be of value to them with a view to considering them in more detail. This approach also acknowledges the need to prioritize issues, and identify the resources (both monetary, time and human) to develop and/or strengthen one or more functions.

C. Caveats and Practical Limitations

There are some caveats and limitations to the Skills System Assessment that are important to consider for countries in LAC:

First, the functional analysis is only one (albeit the first and most important) of a several complementary analyses that should be conducted when examining a country's skills system. These may include institutional analyses; legal framework analyses; governance and management capacity analysis, and the analysis of national or subnational skills strategies, amongst others. While the functional analysis provided by the Skills System Assessment Framework can help identify what a skills system needs to do, these functions must then be supported by strategic, legal and institutional frameworks to be properly executed.

Second, the framework rests on several underlying assumptions and practical considerations:

Human capital Strategies: First, the five countries examined, and on which the framework is based, have established human capital strategies that are aligned with an overall economic and productive development strategy for the country. These strategies provide overall direction and the objectives the skills system should accomplish. In many cases, these strategies are not present in countries in LAC. This is particularly salient in Category 4, in which the framework establishes the need to assess the adequate funding and allocation of resources within the skills system based on the objectives it must achieve.

Governance: The five countries examined have stronger and more established governance structures than those typically found in LAC, which extend to their skills systems. These governance structures may provide additional mechanisms for coordination and for management of the skills system as one of many interconnected systems that contribute to social and economic development.

Country Context: While the strength of the functional analysis is its ability to isolate the key functions, any system executing these functions must nonetheless operate within a larger context.

For example, the identification of private sector needs requires there be mechanisms in place so that individual companies may be able to express these needs. These may through established collective business forums (such as Skills Councils or Chambers of Commerce) or simply through the widespread possession of technology including universal Wi-Fi access and a national telephone network. In countries,

which are less developed, and an informal economy predominates and persists, the first requirement may be to establish the foundations of a modern economy before substantial progress can be made to build a strong skills system on these foundations.

Another example of the need to consider the wider context would be the readiness of the working population to acquire relevant workplace skills. This may be hindered because the formal educational attainment of much of the population is relatively limited, and any potential skills acquisition must first be preceded by a large-scale program of functional literacy and numeracy or IT skills. The demographics of the five countries studied is largely weighted towards adults and older people. However, for many LAC countries a significantly younger demographic may prompt government and policy makers to prioritize childhood schooling rather than post compulsory education skills development.

Finally, the political environment may also act as a constraint on developing a functions skill system. This is less an issue of the ideological orientation of a government and more of the need for relative political stability. A cross party consensus of both the diagnosis of where action needs to be taken as well as a common approach to a long-term skill reform program is critical in enabling a strategy to be established and continued to fruition so that the intended results are realized and sustained.

For all these reasons and others, such contextual pre-conditions need to be explicitly articulated alongside the application of the framework. In addition, a program of 'enabling actions' may be developed to accompany any policies designed to respond to the findings of the framework assessment.

Scope: The framework was developed with ease of use uppermost in mind. It is not possible to cover every aspect of an education and training system so this has not been the intention. Rather, the tables focus on the best or most representative examples in relation to the function in question. Specifically, the interest is on those aspects of education and training that are most geared to ensuring the right skills are available in the workforce.

This means that more attention has been paid to apprenticeships and other work based learning than college classroom training but, where this plays a major part in the vocational education system, this is also covered. Many systems—but not all—provide subsidies for company training (excluding apprenticeships) accredited to national standards and this is another area examined.

Given the constraints on space, university education and compulsory schooling - even where overtly vocational - have tended not to be covered given the difficulty in explaining what are, quite often, separate systems. Also not covered is training which is organized directly by employers without any form of government approved funding or accreditation.

IV.   The Skills System Assessment Framework in Action

This section provides a summary of the lessons learned and general reflections on the framework's application, based on a first round of pilots completed in three countries in LAC. The pilots tested the usefulness of the framework as a diagnostic tool, as well as for generating dialogue among key stakeholders within the skills system.

These reflections are organized around the following topics:

A. Developing a set of evaluative criteria
B. Application of the framework
C. Identifying and segmenting key actors
D. Dealing with sectoral and/or regional diversity

A. Developing a Set of Evaluative Criteria

To pilot the Skills System Assessment Framework, we developed a set of evaluative criteria. These criteria were not intended to provide a definitive scoring of a country's skills system. Rather, in line with a simple gap-analysis approach, they were intended to function as a guide to help provide dimension to the analysis, and eventually, indicate priority areas of work by differentiating between kinds of issues.

The criteria focused on three key dimensions to evaluate each function outlined in the Skills System Assessment Framework:

1. Presence – are there mechanisms in place to execute the function in question?
2. Efficacy – How well is the function being executed? Is it producing optimal results?
3. Systematization – Is the function being carried out in a reliable, consistent and sustainable manner across the system, incorporating continuous improvement?

These dimensions acknowledge that the success of a system is not only in the presence and execution of its key elements and functions (the building blocks), but how well these functions are integrated through the feedback loops and accountability mechanisms. Table 3 presents the final criteria.

Table 3. Evaluative Criteria for Gap-Analysis

White	Not present
Light	Present, but incipient and/or rudimentary. Produces suboptimal results.
Medium	Instances of success and good practice can be identified, but are not systematized. Room for improvement.
Dark	Systematized and high-impact. Incorporates continuous improvement.

B. Use of the Framework

We identified and tested two different ways in which the Skills System Assessment framework could be used as a tool by countries in the Region seeking to improve their skills systems: as a diagnostic tool and as a tool for generating dialogue. Both pieces would constitute the baseline to shape a "road map" to strength skills system of a country. This paper focuses on its use as a diagnostic tool. It also considers the pros and cons of methodologies than can be used to gather the necessary data and information:

Gap Analysis Diagnostic Tool

The framework can be used to help identify gaps and strengths, based on a concrete set of reference functions. The execution of this gap analysis can act as guide for policy makers that may not be considering the full range of functions that need to be carried out in their countries. Moreover, it provides an implicit "good practice" to aim for—thus also providing a roadmap to improvement, rather than just a list of problems. The framework can also be modularized – countries can target the analysis to a specific category of functions, or conduct a full analysis of the system using the complete list of functions.

Table 4 provides an example of a score-card for one of the pilot countries, illustrating the country's progress on each of the functions examined

Table 4. Results from the application of the SSAF in a pilot country

Functional Category	Functions	Status
Identification of Skills Needs	Drawing upon evidence and intelligence to shape decision making	
	Providing an organizational basis for employers to engage collectively with the skills system	
	Facilitating employer influence on policy and provision	
	Identifying employer skills requirements to inform curriculum and qualification development	
	Measures taken to encourage employer demand for and utilization of skills	
	Evaluation including gathering feedback on employer satisfaction	
Curriculum and Qualifications Development based on Identified Needs	Development of qualifications content	
	Assessment of candidates	
	Overall curriculum design	
	Qualifications Frameworks (articulation and learning pathways)	
	Provision of work based learning	
	Promoting the usage of competence based learning by employers	
Quality Assurance and Continuous Improvement	Assuring the quality of the overall system	
	Assuring the quality of teaching institutions	
	Assuring the quality of workplace training	
	Assuring the quality of assessment, accreditation and certification	
	Assuring the quality of teaching and training	
	Improving the quality of all aspects of the system	
Budget Planning and Resource Assign-ment	Effective management of public resources	
	Aligning resources to policy priorities and strategic objectives	
	Providing incentives and encouraging contributions from individuals and employers	

Methodologies

To complete the gap analysis, we found that incorporating a mix of sources and methods of gathering information provides the most complete "snapshot" of given skills system. Table 4 summarizes important considerations regarding each source and/or method:

Table 5. Information Sources and Methods: Strengths and Weaknesses

Methods	Strengths	Weaknesses
Desk Review	-Takes advantage of existing analyses and information, acknowledging the work done by other stakeholders -Can help save time by providing indications of where main problems may lie, which can be examined further through more focused investigation	- Other studies rarely take a systemic or functional approach. Generally, focus on problems in individual programs or institutions. -Many focus on *results* of dysfunctional systems (skills mismatches or poor education outcomes), rather than the underlying functional causes of these. -May be out of date. Skills systems rapidly evolve rapidly.
Interviews	-Allows for distinction between how functions are designed to work, versus how they are being executed (e.g., de jure vs de facto) -May uncover sensitive, but critical, challenges to the skills system that may be omitted from written analyses for political or other reasons. -Provides the real-time information regarding the status of different functions. -May reveal existing efforts in the works to remedy specific challenges, as well as examples of success cases and good practices. These will be important to consider for later phases of building a critical path forward	Highly subjective. Highly work intensive and local. Depending on time and resource constraints, may be difficult to schedule and conduct sufficient interviews to capture the range of actors and potential responses (reducing bias)
Focus Groups	-Can help validate preliminary conclusions from desk reviews and individual interviews -Conversation amongst key stakeholders may uncover challenges that are difficult to identify in desk reviews and individual interviews—such as coordination and communication challenges -May also uncover existing efforts to remedy specific challenges, as well as examples of success cases and good practices	-Requires careful consideration of group mix (multiple actors from different institutions versus from same) depending -May reduce transparency of responses, depending on the background of the participants and potential competing interests and reputational risks

C. Identifying and segmenting key actors

A key element of successful application of the framework is a careful identification and segmentation of key actors and institutions, as the principal subjects of either a desk review, interviews and/or focus groups. The functions must be mapped onto the most likely "owners" of each in the country in question.

Annex 3 illustrates how the same functions may map out differently—i.e., to different actors/institution--in the countries used to develop the SSAF.

In applying the framework, segmentation of actors should be done considering the four key functions of a skills system. Although each country will present different sets of actors, there are four types of actors that should be considered at minimum:

Table 5 provides a framework for segmenting the keys actors in a cross-cutting manner.

Table 6. Framework for Segmentation of Key Actors and Institutions

	Function 1	Function 2	Function 3	Function 4
Public Sector				
Employers/Associations				
Training Providers				
NGOs				

Figure 2 provides a sample of this mapping applied to the first functional category, drilling down from functional category to critical component and exemplar practice (specific mechanisms or instruments).

Figure 2. Identification of Key Actor and Institutions

Functional Category	• IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS
	• Responsible Body: Ministry of Labour
	• Key Support Partners: Skills Intelligence Agency; Sector Skills Councils

Function	• DRAWING UPON EVIDENCE AND INTELLIGENCE TO SHAPE DECISION MAKING
	• Responsible Body: Ministry of Labour
	• Key Support Partners: Skills Intelligence Agency; Sector Skills Councils; Employers

Critical Component	• COLLECTING LABOUR MARKET INTELLIGENCE IN A CONSISTENT, FORWARD LOOKING, COMPARABLE AND RELIABLE FASHION
	• Responsible Body: Skills Intelligence Agency;
	• Key Support Partners: Sector Skills Councils; Employers

Exemplar Practice	• EMPLOYER SURVEYS
	• Responsible Body: Skills Intelligence Agency;
	• Key Support Partners: Sector Skills Councils; Municipal Authorities; Chambers of Commerce; Employers

D. Addressing Sectoral Diversity and/or Sub-national systems

In principle, the framework is designed to analyze a complete vocational education and training system, which in many cases means a national system that covers all four of the functional categories. However, the framework may also be used to examine sub-systems which function below national level, for example where they cover a semi-autonomous region, or less commonly where they apply to an industry sector with established roles and responsibilities ascribed to specific institutions. In these cases, the sub-systems may be comprehensive - with extensive functional coverage across all the functional categories - or they may operate as a sub-routine covering a limited number of functions nested within a wider system.

An example of the first, a virtually comprehensive sub-system, may be found in one of the five countries, the United Kingdom (England). The UK is a nation state comprising four individual territories with their own self-governing parliaments: England, Northern Ireland, Scotland and Wales. Some policy matters, such as employment, defense and crime and security are known as 'reserved' powers as they are the responsibility of the UK parliament. Others, including vocational education and skills are 'devolved' powers, meaning the policies are the sole responsibility of the four country level parliaments. The UK skills system which we examine in terms of best practice is that of England which is the largest of the four individual nations of the country known as the United Kingdom. In practice, many functions are voluntarily shared between the four countries of the UK for reasons of economies of scale: an example being the collection of labor market intelligence.

 An example of the second, where certain aspects of the skills system are held nationally and others regionally is found in another of the five countries, Australia. Here the federal and state structure leads to a balance of responsibility at different geographical levels. In certain cases, for example regarding the deployment of resources, the function is in fact a shared responsibility between the federal and state levels. Whilst this may prove complex to explain, the principle of whether the function is carried out at all

and the extent to which it is carried out effectively, remains the focus of the framework irrespective of how the responsibilities are divided or shared between different levels of governance.

In larger countries, we may expect such arrangements to be commonly found. The examples of the UK (England) and Australia will therefore provide some assistance in indicating how such complexities may be analyzed and represented.

V.   Conclusions

In the context of constantly and rapidly evolving skills needs, countries need to develop dynamic and responsive systems that allow them to detect these needs, respond adequately, and be continually monitoring the quality, efficiency and effectiveness with which it meets the needs and performance of both employers and individual students and workers.

The objective of Skills System Assessment Framework is to provide a set of benchmarks against which countries can gauge their own progress, determine the most pressing gaps, and construct a roadmap toward improving the critical functions of their own systems based on evidence about what is working internationally.

This note has provided the motivations and background for the framework, the most important elements of its content, as well as to document some of its potential uses, strengths and weaknesses. As a tool, the framework's power lies in helping refocus countries first and foremost on the different functions that any system should be executing before determining how a country should execute these and whether existing programs, incentives, mechanisms are aligned with and achieving their functional objectives.

It allows a country to draw on lessons learned and good practices, independent of historical, political social and/or economic contexts in which they are found. This approach can help countries lay solid foundations towards developing the dynamism and responsiveness their systems need to contribute to a more productivity workforce and smoother and more rewarding educational and labor trajectories for individuals.

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"Understanding and Comparing Successful Education and Training Systems around the World"

Country Tables

Australia, United Kingdom, New Zealand, Korea and Germany

Note: The information compiled in this reference document is accurate as of December 2015

Country Tables

AUSTRALIA	FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS		
Function	**Description**	**Benefits**	**Commentary**
Labour Market Intelligence (LMI): • **Collection** • **Analysis** • **Dissemin-ation** • **Utilisation**	A wide range of data are collected and analysed by different bodies providing intelligence on the labour market (Australian Bureau of Statistics), the performance of the training system (National Centre for Vocational Education and Research) and the needs and demands of employers (Industry Skills Councils).	LMI is used to clarify where there might be an oversupply of trainees; to inform funders and providers about skills gaps; to draw up a skilled occupations list which informs immigration visas and priorities for government funding. Employer views are represented in the detailed design of curriculum.	The LMI system is complex involving many partners. Labour Force Survey (LFS) data are complemented by NCVER surveys. Providers submit management information on their performance via the NCVER's 'AVETMISS' database. Skills needs are published on the government apprenticeships website.
Employers collaborate articulating sectoral, occupational or geographically shared needs	Industry Skills Councils (ISCs) - currently largely state funded - have a brief to educate employers about skills, provide careers guidance, manage training subsidiaries and help develop curricula. Various independent business councils lobby government for action on skills.	The purpose of ISCs has been to play a dual role representing employers to government on skills issues whilst managing industry led input into the development of competency standards. However, Government believes employer satisfaction and involvement with VET is decreasing.	The future of ISCs is uncertain as their funding for developing training packages is to be subject to open tendering. Apart from cost considerations, the changes reflect business concerns that some ISCs have become dominated by a small self-appointed group of employers.
Evaluation including gathering feedback on employer satisfaction	NCVER carry out a biannual survey of employers to understand why employers make the training decisions they do (including the amount of training provided) and whether they use and are satisfied with nationally accredited training eg apprenticeships and traineeships.	Government sees the main purpose of VET evaluation as a test whether industry is being provided with the skilled and productive workers needed to capitalise on business opportunities of the future and to give young people opportunities to get a job.	NCVER found that between 2011 and 2013, employer satisfaction with the accredited VET system decreased from 84% to 78% and use of the VET system fell from 56% to 52%. These findings underpin government decisions to overhaul their VET system.
Identifying employer needs to inform qualifications development	Currently, businesses identify a training need which the relevant ISC project manages culminating in the development of 'training packages' (see curriculum development below) with the support of a steering group of employers, training providers, trade unions and regulators.	The training package system hinges on the ability of an ISC to be close to their employer base. In principle, this should result in training valued by employers as it is designed to meet their needs.. Reduced satisfaction levels have cast doubt on this fundamental condition.	In 2008, the OECD noted the strength of the Australian system of employer engagement. Nonetheless, government now questions whether ISCs are able to represent employer views and the diversity of training required because employers are reporting recruitment difficulties. .

AUSTRALIA	FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS		
Function	**Description**	**Benefits**	**Commentary**
Facilitating employer influence on policy and provision	In relation to the recent reform announcements, a wide-ranging consultation of 5,000 businesses and stakeholders was held to canvass employer views. Also announced was the formation of a VET advisory board to shape further reform comprising five industrialists.	Following business consultation, government has pledged action to deal with industry concerns about bureaucracy, strengthening business involvement in shaping training packages and ensuring business views are better represented and diverse training needs are met.	ISCs employer representatives have had little traction at a strategic level. Independent bodies such as Business Council of Australia, Australian Chamber of Commerce and Industry, Australia Industry have been more influential in shifting government policy.
Measures taken to encourage employer demand and utilisation of skills	The emphasis is on supply side reform rather than demand side intervention. However, occupational licensing applies to many jobs and increases demand for qualified staff. Many employers act as Registered Training Organisations.	More niche based qualifications are to be developed to meet the increased specialisation of business markets. Target sectors with a competitive edge include agribusiness, energy, mining technology, medical technology and advanced manufacturing.	The Australian system is flexible and responsive designed to meet employer need for soft skills as well as unit sized modules of training. Plans are also underway to increase the availability of shorter on the job training rather than full qualifications.

AUSTRALIA	FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS: MAIN PUBLIC INSTITUTIONS INVOLVED
The National Centre for Vocational Education and Research (NCVER)	
Australian Bureau of Statistics	
Industry Skills Councils (ISCs)	
Registered Training Organisations (RTOs)	
Business Council of Australia	
Australian Chamber of Commerce and Industry	
Australia Industry	

AUSTRALIA	FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES		
Function	**Description**	**Benefits**	**Commentary**
Development of qualifications content	Proposals for new content are made to the ISC then ratified by an employer committee which may seek further evidence of need. A reference group with employer representation oversees the writing of units of competence which are subjected to extensive, web based consultation.	The current process is designed to result in a high level of employer buy in to the content of 'training packages' (collections of competency standards). Regulated occupations require industry-endorsed qualifications in order to boost consumer confidence.	The process varies in quality and depends upon involving employer representatives with first-hand knowledge of the role. The consultation can reach a range of employers but government now believes tendering would result in broader business support.
Assessment methods	Assessment is carried out by a Registered Training Organisation on a modular basis through observation or the collection of evidence of a trainee demonstrating the competences required in a qualification usually 'on the job'. There is no moderation process or end term examination.	The assessment system aims to be responsive to the ongoing attainment of skills in the workplace. It is also designed to minimise bureaucracy. The AQF and AZQA aim to ensure consistency across Australia rather than being handled differently by each state authority.	Recent consultations with businesses have highlighted the consistency of assessment as a major concern. The registration of training organisations with ASQA is the important factor rather than the quality of assessment of individual courses which makes it difficult to maintain confidence.
Overall curriculum design	Vocational qualifications in the AQF are based on learning outcomes related to job functions. Behaviours and attitudes do not feature but soft skills (e.g. teamwork) are integrated and increasingly demanded by employers, as are short courses and units of training.	The Australian Qualifications Framework is inclusive of most accredited training programmes. This enables a wide range of training to be recognised nationally helping workers move company more easily and employers to identify relevant courses.	The OECD found that VET graduates did well in relation to employment compared to other countries and to 'academic' graduates. Australia's comprehensive framework and system has been successful in downgrading the notion of academic courses being 'superior'.
Articulation and development of learning pathways (e.g. via NQF)	The AQF is comprehensive including VET, HE and general qualifications. It is set out as a 'wheel' rather than hierarchically. It is a characteristic of the Australian system that many university graduates undertake lower level vocational courses to help their job prospects.	The main benefit of the AQF is that it helps the movement of labour especially for companies that are nationwide. Employers are guaranteed that wherever qualification is taken the learning outcomes are the same regardless of state or provider. Downgrades the notion of status and separate ladders. Gives confidence to employers	The Australian system is flexible and values a combination of skills rather than setting out two distinct pathways (academic and vocational), rigidly set from an early age. Recognition of Prior Learning is common especially for immigrant workers and international students.

AUSTRALIA	FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES		
Function	**Description**	**Benefits**	**Commentary**
Provision of work based learning (eg apprenticeship training)	There is a strong focus on applied learning in the VET system: training packages exist across all sectors. Apprenticeships (combining on and off the job training) have different skills levels (they include lower level traineeships) and durations but all are employed on national terms.	Apprenticeships provide occupational skills for industry, help young people gain employment and provide a framework for systematised training in companies. Some occupations require a completed apprenticeship to be 'licensed to practise' that role.	Group Training Organisations employ apprentices and then place them with SMEs for a fee; Apprenticeships Centres undertake promotion and handle employer contracting. Both are successful innovations. Participation is high but raising low completion rates is a challenge.
Promoting the usage of skills and qualifications by employers	The current system integrates the role of Industry Skills Councils which produce competencies and assessment guidelines mapped to the qualifications framework often with occupational licensing arrangements. This has led to strong engagement of employers across the economy.	For the workforce, employer usage of qualifications enables greater job mobility. For employers, qualifications provide confidence in on the job expertise. But concerns about consistent quality of training and assessment have resulted in proposed changes to the role of ISCs.	Apprenticeships in traditional trades have higher status and are more likely to be subject to licensing requirements. Where these exist employer qualifications take up is high. Many employers are RTOs whilst others provide non-accredited training.

AUSTRALIA	FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES: MAIN PUBLIC INSTITUTIONS INVOLVED
Australian Skills and Qualifications Authority (ASQA)	
Registered Training Organisations (RTOs)	
Industry Skills Councils (ISCs)	

AUSTRALIA	FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE		
Function	**Description**	**Benefits**	**Commentary**
Assuring the quality of the overall system (i.e. policy, strategy)	Overall responsibility rests with the new Department of Education and Training. A major overhaul has been announced with decisions based on consultation with industry and other stakeholders and statistical data (employer usage; apprenticeships completions; employer satisfaction).	The new reforms are designed to focus the system less on training for its own sake and more with the 'fundamental purpose' of connecting skilled workers with a job. Also, the reforms aim to reduce bureaucracy although there is often a tension between this and regulation/quality.	There is little cross party consensus on the best strategic approach to skills. The advantage is that root and branch reforms are made when they are needed. The disadvantage is that they may also be made when they are not and this can lead to an unstable and confusing system.
Assuring the quality of teaching institutions	The Australian Skills Quality Authority (ASQA) regulates training providers who must attain the nationally approved quality standards to become an RTO. The approach is risk based and focused on meeting industry needs. Providers submit performance data to NCVER. Considering moving to risk banding	Through strong compliance auditing and sanctions, ASQA aims to meet the requirements of industry defined training packages so graduates have the required skills and competencies for employment. ASQA is now moving to a lighter risk based approach as part of recent reforms.	NCVER make public transparent information of provider performance and success of training programmes. New tougher standards for RTOs and their regulators are being introduced in 2015. These have been endorsed by a body representing the interests at federal and state level.
Assuring the quality of workplace training	Workers can be trained on-site and assessed at their workplace, reducing downtime and disruption. The RTO is responsible for the quality answering to the state regulator that is tasked with upholding federal standards set by ASQA. These are now being strengthened.	New quality standards for RTOs are being introduced in 2015 to make training more responsive to industry with employers having active involvement in the training of their apprentices and trainees. Assessment in the workplace requires trainers to be qualified.	Australia has introduced accelerated apprenticeships in response to employer preferences for attainment of competency when the apprentice is ready thereby removing the time serving element. This is expected to provide greater quality at less cost.
Assuring the quality of assessment and certification	There is no routine external moderation of accredited courses. However, ASQA periodically undertakes strategic reviews that conduct in-depth analysis of a particular issue, sector, qualification or method of delivery when a risk has been identified.	Certification is intended to give confidence that nationally agreed standards conforming to AQF requirements have been met through assessment by a recognised establishment. Quality assurance is overseen federally but reinforced at state level.	Several tensions in the Australian system – between federal and state governments, between ISCs and other employer voices and between the main political parties - have led to some inconsistency and discontinuity. Standards are now being strengthened at federal level.

AUSTRALIA	FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE		
Function	**Description**	**Benefits**	**Commentary**
Assuring the quality of teaching and training	Trainers delivering nationally recognised qualifications are themselves expected to hold the relevant teaching qualification. Across all territories, there are government funded initiatives aimed at developing a skilled teaching workforce.	In principle, teaching quality is assured by the RTO recognition process. This requires qualified and competent trainers to be in place; for training delivery to be continuously reviewed and improved; and for courses to conform with the requirements of training packages.	An initial audit of RTOs carried out in 2013 found that only 54% of RTOs complied with the requirement for qualified trainers. Given assessment requirements are being weakened, it may be some time before there is clarity about, or confidence in, the overall standard of teaching quality.
Improving the quality of all aspects of the system	Whilst incremental improvement is embedded in the ASQA run regulatory system, it is evident that more systemic quality improvement is being driven top down by the government resulting in sweeping changes to the training infrastructure as well as its systems and processes.	The major government reform package recently announced is intended to improve the quality of VET in respect of cutting back bureaucracy, better reflect the needs of industry, and introduce market competition in the development of competency standards.	The reforms being introduced are root and branch and top down albeit following consultation with employers and stakeholders. Time will tell whether the considerable disruption they will inevitably cause will result in improvements to completions and employer take up.

AUSTRALIA	FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE: MAIN PUBLIC INSTITUTIONS INVOLVED
Australian Skills and Qualifications Authority (ASQA)	
Registered Training Organisations (RTOs)	
Industry Skills Councils (ISCs)	
The National Centre for Vocational Education and Research (NCVER)	
Department of Education and Training	

AUSTRALIA	FUNCTIONAL CATEGORY 4: BUDGET PLANNING AND FUND ASSIGNMENT		
Function	**Description**	**Benefits**	**Commentary**
Deployment of public resources to fund system	RTO funding is split between the federal government (40%) and state (60%). States have some flexibility in allocating resources and may incentivise certain provision or adopt an approach based primarily on learner preference rather than labour market need. Workforce agreements exist with trade unions in certain industries which place constrains on curriculum offer.	The funding regime seeks to enable the publicly resourced system to compete on a level footing with the many private training providers. Co-funded 'partnership agreements' between the commonwealth and the states/territories create a mutual interest in the success of the system.	A tension exists between the 'free market' where providers put on whatever students want and the 'partnership agreement' with the federal government which seeks to avoid oversupply of qualifications and to respond to skills shortages and labour market priorities.
Budget planning at state/regional level	Federal spending on the VET sector currently divides four ways into: Industry Competitiveness (3.6%); Skills Development (60.7%); Access to Training (27.9%) and support for the National Training System (7.8%). This is matched one and a half times by state and territory spending.	Industry Competitiveness enhances global business competitiveness; Skills Development increases participation and completion of apprenticeships; Access to Training provides clear training pathways; and support for the National Training System helps new industries.	National VET Expenditure is set to decline about 13% in 2014-15 (from$1.67 billion to $1.45 billion) and then by 8% over the next four years. The new Trade Support Loans Program will provide apprentices with up to $20K over four years through a student loan scheme.
Design and implementation of financial incentives	The allocation criteria for funding RTOs is applied differently in each state where each jurisdiction determines whether a training programme is funded and to what extent. In some cases, employers may fund the full cost of off the job training.	National policy governs the flow of public funds to States and RTOs. Its purpose is to make the VET sector more responsive to the needs of industry and to promote choice in how training services are provided to employers and Australian Apprentices.	Based on national LMI, the federal government offers States a higher funding rate for areas of skill shortage (eg 'para professional roles' in HE) and caps funding where there is oversupply. The system therefore allows for an element of both national and regional prioritisation.
Measures attracting employer contribution	VET is largely publicly funded but companies can contribute by purchasing training for employees. Recently incentives for employers of non-priority Apprentices have been removed. States have their own schemes such as tax incentives for employers to take on an apprentice.	The government encourages employers to offer genuine opportunities for skills based training and development. It provided $544.9 million in 2014 for employer incentives and $276.4 million for training through an Australian Apprenticeship.	A new Industry Skills Fund is being set up to support training needs that cannot be met by the national training system providing around 50,000 training places a year. The fund will prioritise SMEs and aims to reduce red tape and improve value for money.

AUSTRALIA	FUNCTIONAL CATEGORY 4: BUDGET PLANNING AND FUND ASSIGNMENT		
Function	**Description**	**Benefits**	**Commentary**
Measures attracting individual contributions	Students contribute to VET through the payment of course and administrative fees. Some students pay all their fees without receiving any government subsidies. The government now also provides some apprentices with assistance through a student loan repayment scheme.	The new Trade Support Loans (TSL) – part of the Australian Apprenticeships Incentives Program – are intended to aid the development of a highly skilled and relevant workforce, encouraging individuals to enter skills training by providing personal benefits.	The government intends to use the TSL to incentivise training in higher level, skill shortage occupations on the National Skills Needs List. The loan will only need to be repaid when a minimum income threshold is reached to help overcome any reluctance on the part of students.

AUSTRALIA	FUNCTIONAL CATEGORY 4: BUDGET PLANNING AND FUND ASSIGNMENT: MAIN PUBLIC INSTITUTIONS INVOLVED
Australian Skills and Qualifications Authority (ASQA)	
Registered Training Organisations (RTOs)	

Country Table

ENGLAND	FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS		
Function	**Description**	**Benefits**	**Commentary**
Labour Market Intelligence (LMI): • **Collection** • **Analysis** • **Dissemination** • **Utilisation**	Internationally comparable statistics are collected by the Office for National Statistics (ONS) on unemployment, economic inactivity, average earnings, labour productivity and vacancies. Qualitative information is collected by the UK Commission for Employment and Skills (UKCES) on a wide range of issues including skills shortages.	The UK benefits from many rich sources of LMI based on large surveys comparable over time and across regions and sectors. The aim of LMI is to provide a basis on which to develop policy and practice and to ensure that skills investment is effective. In addition, a number of reports are used to help provide better careers advice.	The purpose of LMI is no longer aimed solely at government but is shifting towards providing advice to businesses and people on the labour market so they can make informed decisions. More detailed research on emerging skills needs is also undertaken by Local Enterprise Partnerships (LEPs) to inform action at regional level.
Employers collaborate articulating sectoral, occupational or geographically shared needs	Professional bodies including Sector Skills Councils (SSCs) represent employer interests in VET as do the geographically organised Chambers of Commerce and national Confederation of British Industry (CBI). LEPs are government sponsored joint employer and municipality bodies.	Industrial Skills Partnerships is the new term used to describe employer led groups involved in, for example, the development of apprenticeships standards. The key change is that employers are leading the work with the support of specialist professionals rather than the other way around.	The UK no longer publicly funds SSCs on a routine basis but these bodies are able to compete alongside others to support employer-based initiatives including developing new standards for apprenticeships. The long-term impact of this substantive change to the infrastructure remains to be seen.
Evaluation including gathering feedback on employer satisfaction	The Skills Funding Agency (SFA) collects employer satisfaction data annually to help compare information about the quality of college training. The UKCES Employer Perspectives Survey (EPS) enables comparisons to be made over time about the overall effectiveness of the VET system.	Employers and learners use data on employer satisfaction, the numbers attaining qualifications and learner success in finding jobs to guide their choice of provider and course. The EPS helps government make decisions about how to maximise its return on public investment in training.	National intelligence is gathered on a biannual basis on how employers are meeting their skills needs, their awareness and use of skills support services, their satisfaction with external training providers and their use of vocational qualifications and apprenticeships.
Identifying employer need for qualification development	Qualifications are developed by private sector awarding organisations (AOs) recognised by Ofqual, the state regulator. Most are based on National Occupational Standards (NOS) set by an SSC or standard setting body. NOS are developed where employers identify a new or changing skills need.	The system is market based with AOs competing to offer qualifications that most closely meet employer needs. However, the connection between employer needs and qualifications has been an area of debate given long standing complaints about the responsiveness of the VET system.	Apprenticeships will no longer need to be based on qualifications under a new system being progressively introduced. The new system involves groups of ten or more employers defining a simplified set of performance standards with assessment based on an integrated final examination.

Country Table

ENGLAND	FUNCTIONAL CATEGORY 1 IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS		
Function	**Description**	**Benefits**	**Commentary**
Facilitating employer influence on policy and provision	The UKCES is a 'social partnership' consisting of large and small employers from the public, private and voluntary sectors as well as Trade Unionist and further and higher education leaders. Together, they oversee research and provide expert opinion and advice to government.	Government subscribes to the view that achieving an evidence-based consensus across the spectrum of business opinion and wider stakeholders provides a compelling case for shaping policy. However, commissioned reports by high profile experts have arguably had as much influence on policy of late.	Different governments have tended to unpick their opponents' skills reforms. A UKCES report co-signed by the CBI (for employers) and the TUC (for trade unions) complained of a lack of long-term stability in VET policy and called for a 20-year plan and stable policy environment.
Measures taken to encourage employer demand and utilisation of skills	In 2011, the UKCES supported co-funded pilot programmes aimed at incentivising employers to take ownership of the skills agenda for their industry. These have led to emerging policy changes including giving employers direct control over the purchasing of training from providers.	The pilot programmes, collectively known as Employer Ownership of Skills, aimed to explore whether employer utilisation and demand for skills might be increased through a stronger role in the system. This has led to a more direct role for employers in designing and commissioning training.	The original pilots have been replaced by much smaller scale joint investments. However, the main impact has been decisions to remove core funding from SSCs and in a new 'trailblazer' apprenticeship model which has attracted high levels of employer involvement.

ENGLAND	FUNCTIONAL CATEGORY 1 IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS: MAIN PUBLIC INSTITUTIONS INVOLVED
UK Commission for Employment and Skills (UKCES)	
Office for National Statistics (ONS)	
Federation of Industry Sector Skills and Standards (FISSS)	
British Chambers of Commerce (BCC)	
Confederation of British Industry (CBI)	
Skills Funding Agency (SFA)	
Ofqual	
Trades Union Congress (TUC)	

ENGLAND	FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES		
Function	**Description**	**Benefits**	**Commentary**
Development of qualifications content	AOs develop VET qualifications that are either solely competency based or have a higher written component. All of them have to adhere to the rules of the Qualifications and Credit Framework (QCF). This is to be scrapped because they are too prescriptive and do not meet all employers' needs.	The QCF was designed to recognise smaller steps of learning (units) enabling students to build up qualifications bit by bit. The main problems were that each unit had to be written to a tight specification and, to work effectively, AOs needed to be prepared to 'share' units.	In colleges, the AOs will continue to offer those qualifications with the highest employer take up or where universities endorse them. They will be identified as either 'tech level' or 'applied general' qualifications. A new system is being introduced for apprenticeships.
Assessment of candidates	The AOs develop appropriate assessment strategies. A key aspect is the moderation of providers to ensure the consistency of their 'branded' qualifications. However, the (soon to be defunct) QCF rules sought to reduce the significance of AO branding.	Awarding Organisations have built intellectual property over time and this is a central aspect of their expertise and business models. It aims to ensure consistency of attainment across all providers. The QCF promoted unit assessment to aid credit accumulation	Stricter 'synoptic' assessment rules, devised with direct employer involvement, and requiring external assessment and grading, are being introduced in apprenticeships. This is likely to lead to either a diminished or significantly changed role for AOs.
Overall curriculum design	Publicly funded VET in England spans all age apprenticeships; traineeships (a pre-apprenticeships programme); and full time post-secondary courses in colleges and tertiary education (including occupationally specific 'technical level' qualifications).	The colleges and training providers that teach vocational qualifications and skills are expected to guarantee students high quality teaching and courses to help students into jobs or university and create the skilled workforce employers need.	Subsidised training to employers for lower level vocational qualifications was abolished by the current government in favour of efforts to increase apprenticeships numbers. Funding for classroom based courses in colleges has also been cut back.
Articulation and development of learning pathways (e.g. via NQF)	Regulated qualifications in England, Wales and Northern Ireland are in one of the following frameworks: The National Qualifications Framework (NQF); the Qualifications and Credit Framework (QCF) which was launched in 2008 but is now substantively revised; and the Framework for Higher Education Qualifications (FHEQ).	The QCF created a uniform 'building brick 'approach to aid credit transfer, support progression and enhance mobility. To make the QCF possible a detailed set of rules, including how qualifications should be designed and structured, was required. However, they did not deliver on their intended outcomes.	The QCF proved to be controversial as they undermined the 'market' base system. The advantages of a unit based framework which enabled the transfer and accumulation of units were seen by many to be outweighed by the bureaucracy required by a prescriptive set of rules and "one-size-fits-all" regulations.

ENGLAND	FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES		
Function	**Description**	**Benefits**	**Commentary**
Provision of work based learning (e.g. apprenticeship training)	Apprenticeships are all age training programmes at various skills levels including degree equivalent. They combine practical training in a job with study towards a related qualification (usually for one day a week). They take 1 to 4 years to complete depending on their level.	The purpose of an Apprenticeship, as defined by the government, is to train those aged 16 and above to achieve the standard set by employers to enable them to perform a skilled job role effectively. It is only considered appropriate where substantial training including transferable skills are required.	The current apprenticeships programmes are 'frameworks' containing separate qualifications in a competence based area, English and Maths and a knowledge based qualification. The new system will involve a single standard covering all the separate components.
Promoting the usage of skills and qualifications by employers	Several reforms are being made to increase the take up by employers. These include asking employers and universities to endorse the best vocational levels so that young people know which courses have the best job prospects; and putting employer panels in charge of apprenticeships standards.	The government is promoting vocational education as valuable partly because it provides the basis for building an advanced economy founded on high-level technical skills. It is involving employers in 'decluttering' the system so they know the qualifications to invest in and the returns they can expect.	The Wolf report (2011) on qualifications for young people and the Whitehead review (2013) for adults have resulted in major changes to the qualifications system. The aim is to scrap any qualifications not valued by employers and involve them directly (not through intermediaries). in their future design.

ENGLAND	FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES : MAIN PUBLIC INSTITUTIONS
Ofqual	

ENGLAND	FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE		
Function	**Description**	**Benefits**	**Commentary**
Assuring the quality of the overall system (i.e. policy, strategy)	Overall responsibility rests jointly with the Department of Business Innovation and Skills (BIS) and the Department of Education (DE). They manage via policy proposals (e.g. White Papers), funding and legislation. Regulatory bodies such as Ofqual and Ofsted, however, report directly to Parliament. .	The current reforms intend to make the system more responsive to employer and individual needs and to ensure qualifications lead to work or further training. Targets have been scrapped, qualifications streamlined and training funded only where it otherwise would not have occurred.	Quality assurance is arguably the most consistent policy dimension of the English system. The regulatory environment is highly centralised and reasonable 'light touch' unless and until problems are identified. At this point, sanctions and recovery actions are often severe and far reaching.
Assuring the quality of teaching institutions	Ofsted judge providers on how well they meet the needs of learners through a 'three pillar' approach: the outcomes for learners; the quality of teaching, learning and assessment; and the effectiveness of leadership and management. Providers are graded on a four-point scale.	Ofsted adopts a risk-based approach to monitoring to identify quickly underperforming providers. Those judged 'outstanding' are exempted unless performance drops. Where action is needed the FE Commissioner has the power to take rapid and decisive intervention including closure.	The grading system no longer includes 'satisfactory' having been replaced by 'requires improvement'. This is intended to signal that 'satisfactory' is no longer good enough. The overall approach is light touch where performance is good but can be drastic when problems are identified.
Assuring the quality of workplace training	The Specification of Apprenticeship Standards for England (SASE) sets out the existing quality criteria for apprenticeships but is being replaced by arrangements intended to be more rigorous and responsive to employer needs. Off the job training provision continues to be regulated by Ofsted.	Apprenticeships are being reformed and will in future be based on standards designed by groups of employers to meet their needs. These standards will be simpler documents that describe the skills that employers deem necessary required to achieve mastery of a specific occupation. occupation.	Whilst the SASE set down core requirements for the amount of off the job training, the new Trailblazer requirements place greater emphasis on direct employer ownership of the design and content. Apprenticeships must also last at least one year with a a final 'synoptic' assessment.
Assuring the quality of assessment and certification	Regulated qualifications are issued by private sector awarding bodies that meet strict criteria set down by Ofqual. These bodies have a direct interest in ensuring certificates issued under their name are of a consistent quality. Assessment is therefore closely monitored and moderated.	The quality of assessment is the responsibility of awarding bodies that verify assessments at approved training centres. The frequency is determined by Ofqual's risk banding of the awarding body. This ensures consistency, independence and shared good practice in provider assessment.	The highly-centralised system allied to the role of independent awarding bodies leads to a high degree of consistency of across qualifications and institutions. Expectations are now being raised further with the planned removal of qualifications that provide weak progression opportunities.

ENGLAND	FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE		
Function	**Description**	**Benefits**	**Commentary**
Assuring the quality of teaching and training	Recent revisions to Ofsted guidelines have made the inspection system more responsive to the quality of the learning outcome rather than the teaching process. Inspections are carried out with minimal notice. The 'satisfactory' grade has been replaced by 'requires improvement'.	Ofsted inspectors judge the quality of teaching by evaluating, inter alia, how teachers plan and deliver teaching; how they monitor learners' progress; how learners benefit from care, support and high expectations; and whether they understand how to improve as a result of feedback.	The Education and Training Foundation – comprising leading figures from the world of vocational training – has been tasked with raising the professionalism of teachers and trainers across the training sector. A new set of professional standards has been produced as a result.
Improving the quality of all aspects of the system (see above)	The government drives improvements in the VET system via commissioning reports (often chaired by leading employers and academics); through advice provided by the UKCES; and through issuing consultation documents, policy proposals (white papers) and legislation.	Successive governments have taken a strongly interventionist stance in VET to support economic growth. Attention has recently been paid to meeting employer requirements for improved literacy and numeracy and investing in apprenticeships and new 'tech level' qualifications.	Despite many years of radical reform, improving the quality of training is set to be a key election issue in 2015. That said, many of the distinctive quality assurance features of the system such as regulation, inspection and independent awarding bodies are likely to remain in place.

ENGLAND	FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE
Department of Business Innovation and Skills (BIS)	
Department of Education (DE)	
Ofqual	
Ofsted	
The Education and Training Foundation	
UK Commission for Employment and Skills (UKCES)	

ENGLAND	FUNCTIONAL CATEGORY 4: BUDGET PLANNING AND FUND ASSIGNMENT		
Function	**Description**	**Benefits**	**Commentary**
Deployment of public resources to fund system	Responsibility for funding is shared between DfE (for 16-19year olds) and BIS (for over 19s) with the contract management of providers handled by the Education Funding Agency (EFA) and Skills Funding Agency (SFA) respectively. The overall public budget is in the region of £10bn per annum.	The Government describes its funding of the skills system as an investment aimed at guaranteeing students high quality teaching and help them into jobs or university thereby creating the skilled workforce employers need. The bulk of post-16 education funding is therefore economically focused.	Funding has decreased since 2010 except for apprenticeships where there is no cap on meeting demand. In 2013, changes were made to introduce co-funding and loan finance for older age groups. The policy was soon abandoned for apprenticeships when numbers fell.
Budget planning at state/regional level	Funding is primarily determined by national priorities with only limited additional resources available to cities and regions. Public provision is available at no cost to young people under 19 (with very limited help available for living costs to the poorest) and for adults lacking basic skills.	The rationale is to deploy resources to complement employer and individual investment rather than duplicate them thereby avoiding 'deadweight'. The system is also moving to a funding allocation 'per student' for 16-19 rather than for qualifications attained to increase accountability to learners.	Recent reforms have attempted to replace 'micro-management' with a system providing better value for public money. However, the complexity of the new system risks creating anomalies and undermining key policy objectives such as increasing apprenticeships.
Design and implementation of financial incentives	Financial support is available to those students least able to afford to train and to SMEs taking on apprentices through the Apprenticeships Grant for Employers (AGE). It is also now cheaper for employers to take on an apprentice as National Insurance contributions for under 25s have been abolished.	Public funds have been deployed to stimulate apprenticeship training by employers given recent difficult economic conditions. However, eligibility for this and for young people seeking financial help when they train has been substantially reduced in the context of austerity measures.	Until 2014, employers with fewer than 1000 employees were eligible for a $2,300 AGE grant. This has now been substantially reduced to employers with fewer than 50 staff despite evaluation suggesting the benefits substantially surpass the costs.
Measures to attract employer contributions	For 19-23 year olds, 50 per cent of the estimated cost above intermediate level skills is assumed to be provided by employers or learners. However, this is often not collected. Consultation is underway proposing employers to pay one third of the training fees for all apprentices in addition to wage costs.	The policy rationale for co-funding is that a financial contribution towards the cost of training means, in addition to reducing the burden on the public purse and sharing the costs as well as the benefits, employers have a greater incentive to demand relevant, high quality training and good value.	In some sectors of the economy (eg construction and the media) a compulsory levy system funds training grants. But the expectation that employers overall would assist adults taking out apprenticeship loans did not materialise and the policy was quickly abandoned.

ENGLAND	FUNCTIONAL CATEGORY 4: BUDGET PLANNING AND FUND ASSIGNMENT		
Function	**Description**	**Benefits**	**Commentary**
Measures to attract individual contributions	Income contingent loans for higher skills were introduced in 2013 for trainees over 24s to make savings on public funding. Repayment is contingent on Interest is incurred on the loan. Between the ages of 19 and 24 grants are paid but half must come from the student or employer.	The introduction of loans was designed to reduce public funding bringing training into line with HE. Loans begin to be repaid at a rate of 9%on earning $31,500 pa. Provider investment in new courses is expected once it becomes clear what training is most in demand.	Whilst the numbers have held up better than many feared, grants had to be reinstated very soon after they were introduced for apprenticeships because demand began to dip. For some vocational areas income expectations are lower than $31,500 so the loans become a de facto grant.

ENGLAND	FUNCTIONAL CATEGORY 4: BUDGET PLANNING AND FUND ASSIGNMENT
Department of Business Innovation and Skills (BIS)	
Department of Education (DE)	
Education Funding Agency (EFA)	
Skills Funding Agency (SFA)	

Country Table

GERMANY	FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS		
Function	**Description and purpose**	**Intended benefits**	**Commentary**
Labour Market Intelligence (LMI): • **Collection** • **Analysis** • **Dissemination** • **Utilisation**	Germany collects detailed 'real time' information on both unemployment and vacancies disaggregated by region (Länder). The Federal Government provides funding to BiBB for research projects and to the Institute for Employment Research (IAB) to analyze data and develop skills projections.	Analysing where skills shortages exist help decide where apprenticeships need to be promoted or developed. The Länder also consider where initiatives complementary to the dual system are required eg for vocational schools to provide transitional measures to help disadvantaged groups.	Intelligence collected on vacancies and unemployment provides useful guidance on government priorities for VET development. A projection tool (QuBe) assesses long term labour demand and supply development by qualifications and occupational fields.
Employers collaborate articulating sectoral, occupational or geographically shared needs	Employer membership of Chambers is legally compulsory and involves the payment of a levy. They have a statutory role regarding curriculum development, training delivery and quality assurance. The system is strengthened by a presence of VET boards at local and regional levels.	Employers have more confidence in a system they own and largely control. It is also cheaper for government as employers fund the Chambers. They are at the centre of the dual VET system which harnesses a national tradition of valuing skills and applies this in a modern setting.	Chambers occupy a leadership role by statute underpinned by stable funding from members: training is one of their services. Consensus building and collaboration includes other social partners more generally (including trade unions) which make changes more sustainable.
Evaluation including gathering feedback on employer satisfaction	Chambers represent their employers through membership arrangements and monitor the take up of places on apprenticeships. Various ad hoc surveys eg by BiBB and the BDA (the Chambers' umbrella body) are carried out to assess employers' view of the dual system.	Employer ownership of the Chambers ensures policies and activities are carried out in their interests. Extensive research is carried out to assess the benefits of training to all beneficiaries. The Confederation of German Trade Unions (DGB) collect feedback on their experiences from apprentices.	BiBB research activity provides intelligence on the views of employers which both do and don't use the dual VET system. Close monitoring of why employers don't use dual VET helps shape other training interventions targeted at low achievers.
Identifying employer need for qualification development	Early identification of emerging skills needs comes from a range of sources including BiBB research, professional bodies responsible for specific occupations and the monitoring of vacancies by Länder. BiBB then coordinates the social partners to develop or amend job profiles.	Forecasting and identifying changing skills needs is essential given the demands of the world economy: especially because the process of developing occupational profile and qualifications can be lengthy due to the need for broad social partner consensus.	Consensus is required from all the social partners before the development or amendment of an occupational profile is embarked upon. Under the guidance of BiBB, social partners and government negotiate new in-company training standards (training regulation).

Country Table

GERMANY	FUNCTIONAL CATEGORY 1 IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS		
Function	**Description and purpose**	**Benefits**	**Commentary**
Facilitating employer influence on policy and provision	The dual VET system involves a close working relationship between employers and government at federal and Länder level. Employers or Trade Unions may escalate issues or disagreements to a government and legislative level and have the power to alter the training regulations.	Companies can be sure that the next generation of skilled workers is assured and recruitment costs are kept low because their Chambers have control over training content. However, recent challenges in certain sectors have resulted in the development of other approaches.	Fewer employers are offering places and increasing numbers of young people are failing to secure entry. Also, some employers prefer the HE route. The four partners (government, trade unions, BiBB and employers) have now developed new transitional training and part time apprenticeships for less able candidates.
Measures taken to encourage employer demand and utilisation of skills	Demand has traditionally been maintained because companies are obliged by law to fund the Chambers which support the training. However, the government has introduced a 'Training Pact' to supplement the dual system with more in-company and public sector training.	The VET system is designed to secure high levels of employer investment in training for young people. Many companies use the system because 'time serving' ensures trainees generate profit towards the end of their training period and will remain with them for several years.	Only 21.7% of companies are offering VET and this is declining. The pressures of globalisation mean large companies have their own schemes while SMEs are failing to see a return on their investment as training is more intensive. Demand for craft and blue collar occupations is also declining.

GERMANY	FUNCTIONAL CATEGORY 1 IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS: MAIN PUBLIC INSTITUTIONS INVOLVED
Federal Institute for Vocational Training (BIBB)	
Institute for Employment Research	
BDA (Employer DIHK ZDH crafts DGB unions IGM	
BMBF (Federal Ministry of Education and Research)	
Confederation of German Trade Unions (DGB)	
Chambers of Commerce and Trade (Employer associations)	
Institute for Employment Research	

GERMANY	FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES		
Function	**Description**	**Benefits**	**Commentary**
Development of qualifications content	Dual VET involves a synthesis of theory and practice. Curriculum comprises two co-ordinated parts: employers and social partners develop the curriculum for the company training standard ("training regulations") whilst the Länder are responsible for the school-based "framework curriculum".	The fusion of 'in-company training standards' and 'vocational education standards' instils widespread confidence in the breadth and depth of the learning process. This confers social status on successful graduates through the broad-based acceptance of their skills.	The dual VET curriculum spans occupational competence, personal and social competence eg team working, motivation and methodological competence eg problem solving. Combined with time serving this results in breadth of both content and work experience.
Assessment of candidates	Chambers organise external examination boards (comprising schools, unions, employers) to assess and grade candidates usually at mid and end term for both practical and theoretical competence. The Chambers issue graduates a certificate recognised by government.	Dual VET requires apprentices to prove themselves both in the workplace and in school. The consensus of government, educationalists, unions and employers attracts support from all strands of society. But standards are high and numbers are reducing.	The examination process reflects the broad nature of the curriculum with practical tasks, written and oral examinations all geared towards occupational requirements. There is no modular component and much of its strength derives from the holistic assessment process.
Overall curriculum design	Over 40% of young people complete apprenticeships but a minority attend full time vocational school and increasing numbers now follow general courses seeking university entrance. 350 vocational profiles are available across occupations spanning industry, crafts and trades.	The dual system has prevented youth unemployment reaching the levels of other developed countries. It has also been successful in engaging all industrial sectors resulting in good value for public funding. But maintaining its pre-eminence will be difficult.	The breadth of the German apprenticeships system and the numbers entering it are still impressive despite fewer employers offering places and young people taking them. This reflects its roots in the success of the German economy and social consensus model.
Articulation and development of learning pathways (e.g. via NQF)	Germany adopted an NQF in January 2012 with one objective being to introduce more transparency of level of attainment. In the past, the lower skilled found it difficult to progress further whilst no scope existed to credit vocational qualifications towards university study.	Links to the EQF and mutual recognition of qualifications aid mobility of labour across the EU. In principle, the NQF should create ladders between apprenticeship and HE by showing the hierarchy and suggesting the need to develop progression routes.	Despite the NQF, Chambers have resisted a shift to a learning outcomes approach. Progression from VET to HE is a real challenge (less than 1% without academic qualifications enter HE). Recognition of informal learning or of qualifications from abroad has not fully entered VET practice.

GERMANY	FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES		
Function	**Description**	**Benefits**	**Commentary**
Provision of work based learning (e.g. apprentice-ship training)	The historic tradition of apprenticeships is legally enforced with all school leavers offered the dual VET route or 'gymnasium' (academic). The apprentice is an employee with contractual rights to a negotiated wage and comprehensive training both on and off the job.	Benefits accrue to trainees, employers, government and the wider economy and society thereby securing sustained consensus. The desired long term impact is for improved economic competitiveness, better labour market matching and social/economic inclusion.	The dual Vet system is facing mounting challenges. There are increasing numbers of unplaced trainees whilst there are also increasing numbers of unfilled palaces. The attraction of university degrees is also increasing for both large companies and young people.
Measures taken to encourage employer demand and utilisation of skills	In addition to apprenticeships, limited provision exists for support from Chambers to be given to SMEs for continued training (although large companies and often individuals usually pay the full amount). Qualifications for workers are the norm across a wide range of sectors.	The cultural perception that an occupation ("beruf") has an intrinsic societal value/status and is more than a 'job' is more pronounced in Germany than elsewhere (although this varies by sector). A further year's training through the Chamber is required to attain the status of Meister.	Apprenticeships – and the qualifications attained through them - function as a required entry gateway into a profession enabling graduates to work in their occupational specialism anywhere in the country. Thus, vocational qualifications have high value associated with social esteem.

GERMANY	FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES
Chambers of Commerce and Trade (Employer associations)	

GERMANY	FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE		
Function	**Description**	**Benefits**	**Commentary**
Assuring the quality of the overall system (i.e., policy, strategy)	The Vocational Training Act (1969) enshrines in law the principles of the German VET system and sets out the requirements to maintain its quality. These have subsequently been amended when deemed necessary often at the behest of employers and the trade unions (social partners).	The approach to quality rests upon a philosophy of mutual benefits for all (i.e. trainees, employers, trade unions, government). This contributes to wider societal benefits such as an inclusive society with globally competitive SMEs and comparatively low youth unemployment.	Although both the vocational school system and dual VET apprenticeships face challenges, the German approach is characterised by a disinclination towards change. The preference is for evolution rather than revolution with modifications by consensus preferred to wholesale systemic reform.
Assuring the quality of teaching institutions	Vocational schools which provide full time courses and off the job training for apprentices are obliged to have an internal quality management system (often based on international standard such as ISO) and be externally assessed against a number of quality criteria by a recognised body at Lander level.	Amendments to the Vocational Training Act have been made to achieve greater competition between providers and more transparency of training outcomes. Better value for money is sought through requiring providers to demonstrate their financial efficiency and educational capacity.	The responsibility for both part time and full time vocational schools rests with the Länder. However, school performance is less important in the final dual system exam. This may weaken the quality of schooling where students do not take off the job training as seriously.
Assuring the quality of workplace training	Each company that takes on an apprentice must be certified by the chambers as competent to deliver the relevant training experience. They must check the trainers are suitably qualified and the job role covers the main parts of the Vocational Profile and offer support where needed.	Combining work-based and school-based learning helps apprentices prepare for transition to permanent employment. The Social Partnership system secures a high degree of ownership from employers whilst avoiding individual employer interests superseding wider societal goals.	On the job training is highly regulated under the Vocational Training Act. However, concerns have been expressed (by the ILO) that the on the job training curriculum is insufficiently well integrated with the on off the job training at the vocational schools. school and the company
Assuring the quality of assessment and accreditation/ certification	Assessment is usually at the end of the apprenticeship and at a midterm point. It consists of performing several agreed tasks and takes place in a workplace environment with an examination board led by a certification agency (usually a chamber) and employers, teachers and experts.	The system seeks to attain the universal acceptance of consistently applied national standards. The assessment process is state regulated with the authority of the Chamber – acting as the representative of industry - underpinned by their accreditation every three years as the examining authority.	The assessment of apprentices was until recently dominated by the Chamber workplace exam This was effective for progression into permanent employment but less so for university. A new dual diploma is being constructed to address this potential weakness.

GERMANY	FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE		
Function	**Description**	**Benefits**	**Commentary**
Assuring the quality of teaching and training	The state is responsible for the quality assurance of the acquisition of knowledge and understanding in vocational schools. As part of the accreditation process, providers have to ensure their teachers are qualified with professional experience and that they participate in further training.	Chambers with the support of the social partners are responsible for the quality assurance of practical training by employers. Their role is to quality assure and offer support where needed. This helps ensure employers have confidence in the training delivered in the workplace.	The government cites qualified staff (competent trainers and VET teachers) as one of its five key reasons for success. Workplace training requirements are detailed and well developed but depend on the size of the company. The quality of on and off the job training is mutually reinforcing.
Improving the quality of all aspects of the system (see above)	Under the Vocational Training Act, the social partners responsible for each apprenticeship must be informed and consulted about all important matters connected with vocational education and training (VET). Furthermore, continuous improvement is part of their remit.	Reforms to the German system are carried out gradually and often following extensive pilots which are evaluated. The overarching legal framework for training is designed to ensure continuity so that changes are introduced to improve outcomes rather than for their own sake.	Recently, BMBF (the Federal Ministry of Education and Research) has tasked BIBB with setting up a National Reference Point for Quality Assurance in Vocational Education and Training which will provide a forum to compare the approaches taken with other EU states.

GERMANY	FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE
Federal Institute for Vocational Education and Training	
DEQA-VET	
Federal Ministry for Education and Research	

GERMANY	FUNCTIONAL CATEGORY 4: BUDGET PLANNING AND FUND ASSIGNMENT		
Function	**Description**	**Benefits**	**Commentary**
Deployment of public resources to fund system	Dual VET is funded equally between public funds (€5.9bn including €3.2bn for 1,600 public vocational schools) and employer investment in apprenticeship allowances and/or training (€ 5.6bn contribution) However, apprentice salaries are an additional business cost.	There is a recognition that the investment in apprentices ultimately works to the benefits of all. Public funding, whilst limited, assists in ensuring the quality of training. Employers save recruitment and retraining costs and realise a high return of investment in the long run.	The system is well resourced with strong and shared financial responsibility being maintained even during the economic crisis. Employer investment represents confidence that their investment will be in their collective long term interest as well as that of the German economy.
Budget planning at state/regional level	Dual VET is a demand led system based on employer need. The state underwrites it contribution via administrative support and vocational schools funded by Länder. Full time vocational courses run alongside training under the dual system.	The funding philosophy is one of 'who pays?' mirroring 'who benefits?' Public subsidy of apprenticeships is a net gain to the state as if the places were not provided full time education would be required. The costs of youth unemployment are also reduced.	The funding of dual VET rests on collective stakeholder interests in both the investment and the outcome. The public costs are split between the federal government and the Länder as training is a federal responsibility whilst education is devolved.
Design and implementation of financial incentives	The federal government provides support to help disabled, jobless or disadvantaged people to start apprenticeships. At the Länder level, incentives are sometimes provided to companies to create additional places, help insolvent firms or provide intercompany training.	The long-established tradition of employer responsibility provides a framework for contributions from employers without incentives except in limited circumstances. The main advantage of this is the avoidance of a 'dependency culture' amongst employers.	Pressure is growing for incentives to tackle the number of unfilled places which has doubled since 2009 whilst the numbers of unplaced applicants is declining as are participating companies. Universities increasingly offer a competitive alternative for both employers and young people.
Measures to attract employer contributions	Employers are required to join and pay a levy to the Chambers. If they are to benefit from this investment they must take on apprentices. The employer invests around €15.000 per apprentice per year during the training period of which the allowance is 46%. This reduced wage acts as an incentive.	Employers benefit from their investment in apprentices because the training allowance is artificially low compared to their productivity towards the end of the time served; they save recruitment and training costs; and the training is partly to company defined standards.	Joint funding is integral to the German apprenticeships system. To maximise the benefit of the investment by employers, the government provides statutory recognition of apprenticeships and the Chambers provide training expertise and logistical support.

GERMANY	FUNCTIONAL CATEGORY 4: BUDGET PLANNING AND FUND ASSIGNMENT		
Function	**Description**	**Benefits**	**Commentary**
Measures to attract individual contributions	Apprentices are expected to work for considerably less than the minimum wage (regardless of age) averaging around €650 per month. Considering the length of their training and their increasing productivity over time this represents a substantial 'in kind' contribution to their training.	Apprentices gain more than a set of skills from their commitment to the experience of an apprenticeship. Other more intangible benefits include the development of 'soft skills', the status of being an occupational specialist and a sense of citizenship and social esteem.	Training post apprenticeship to reach Meister level tends to be the responsibility of the individual. However, prior attainment of an apprenticeship makes a worthwhile investment in continued training. Government student loans are available based on parental income.

GERMANY	FUNCTIONAL CATEGORY 4: BUDGET PLANNING AND FUND ASSIGNMENT
Federal Institute for Vocational Education and Training	
DEQA-VET	
Federal Ministry for Education and Research	

Country Table

KOREA	FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS		
Function	**Description**	**Benefits**	**Commentary**
Labour Market Intelligence (LMI): • **Collection** • **Analysis** • **Dissemination** • **Utilisation**	A dedicated research body, the Korean Employment Information Service (KEIS) covers the whole spectrum of labour market analysis, making it available to those seeking new jobs and careers. KRIVET (the Korean Research Institute for Vocational Education and Training) also conducts a wide range of studies.	KEIS aims to reduce job mismatches by maintaining three integrated information databases: Employment Insurance about benefits; WorkNet about vacancies and HRD-Net about training. Together these enable jobseekers to plan their careers. KEIS also supports employment policy by evaluating projects and services.	Korea has a good research base providing useful information to government, employers and jobseekers. However, the OECD has criticised the weak links with policy measures. For example, it challenges Korea to strengthen careers guidance by balancing student choice with employer needs.
Employers collaborate articulating sectoral, occupational or geographically shared needs	Employer signals of skills needs to the largely government controlled VET system are managed through the collection of LMI, the lobbying of large companies and business consortia and invitees to NCS panels. These are complemented by training subsidies to individual employers.	A state led system with employers benefiting individually rather than collectively appears to be seen as more cost effective and responsive than collective arrangements. Attempts to organise a collective voice through Sector Skills Councils have apparently been unsuccessful.	There is an absence currently of effective forums where employers can collectively set out their skills requirements or contribute to curricula. Although Sector Skills Councils still exist they do not appear to have a formal role in National Competency Standards (NCS).
Evaluation including gathering feedback on employer satisfaction	KEIS evaluates government employment projects to assess whether they are achieving their job creation goals and provides improvement plans. However, employer satisfaction surveys are not routinely conducted.	Feedback from employers on the quality of training, relevance of qualifications and preparedness of job entrants are not the subject of systematic research. However, a market system exists where employers can exercise choice of the best providers.	The system is focused mainly on individual employer needs operating in a market environment of competing training suppliers subsidised by the state. Feedback is therefore not required systemically but based on individual providers and customer choice.

Identifying employer need for qualification development	Employers receive subsides for their own bespoke training whilst the qualifications system is more aligned with training for young people and the unemployed. In these cases, qualifications will be based on the new NCS which is a new centralised system of job based qualifications.	The new National Competency Standards aim to reflect the Knowledge, Skills and Attitudes required for around 800 job roles as defined by the Korean Occupational Classification System (KECO). The exceptions are roles that fall under the ambit of government ministries.	Whilst the NCS will provide a comprehensive system of broadly based qualifications for whole occupations (rather than responding ad hoc to employer needs) employers will continue to be able to access accredited skills training in the market.

Country Table

KOREA	FUNCTIONAL CATEGORY 1 IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS		
Function	**Description**	**Benefits**	**Commentary**
Facilitating employer influence on policy and provision	There are no standing channels for dialogue with policy makers although large blue-chip companies wield huge influence both individually and through business associations. Ad hoc policy committees involving employers have been set up and Sector Skills Councils are in place.	The government is aware of the challenge and potential benefits of involving employers in the policy development process. However, traditionally, leadership rests with the government and, whilst this has proved successful economically, it is less the case for skills.	The OECD in 2013 commented on the weakness of engagement by employers in policy making with employers expressing low levels of confidence in Vocational Education. SSCs also have a limited role and it was suggested that Trade Unions should also be more involved.
Measures taken to encourage employer demand and utilisation of skills	High performance in world skills competitions is used to set an example for employers. Companies meeting government standards are designated 'Good HRD Organisations'. Training subsidised though employment insurance also raises the demand for skills.	The government promulgates a powerful and consistent narrative that, as Korea has no natural assets, its economic success is down to the skills and attitudes of its people. However, this success can perhaps be ascribed as much to high educational aspiration as skills.	A positive attitude to the potential of skills development is attained through advocacy from the top levels of government, high profile marketing and world skills competitions. Whether the NCS provides the skills employers require remains to be seen.

KOREA	FUNCTIONAL CATEGORY 1 IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS: MAIN PUBLIC INSTITUTIONS INVOLVED
Korean Employment Information Service (KEIS)	
Korean Research Institute for Vocational Education and Training (KRIVET)	

KOREA	FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES		
Function	**Description**	**Benefits**	**Commentary**
Development of qualifications content	The new National Competency System (NCS) is made up of detailed standards for around 800 occupations. A committee of experts Including seven skilled workers, three educationalists and one qualifications specialist draw up the standards and develop modular courses using them.	The NCS will eventually provide a platform for a 'dual VET ' approach and apprenticeships training. The aim is to provide practical skills development pathways as an alternative to university degrees. It may be used in the workplace for job descriptions or induction processes.	The intention of the NCS is to enable qualifications to include what a student can do as well as what they know and to act as a challenge to traditional tertiary education methods. There is some debate however whether employers will use NCS based qualifications.
Assessment of candidates	Assessment is through practical and written tests on completion of training as developed by HRD Korea and carried out by the provider. Qualifications are awarded against proof of occupational competence and knowledge. Government Ministries issue national certificates.	Final theoretical and practical examinations aim to create a rigorous, balanced and comprehensive testing environment. Employers benefit from clear signals of potential employee competence thereby reducing recruitment and other HR costs.	Competency units contain modules for common skills (eg generic skills such as work planning); key competency (eg problem solving and personal relationships); and work competency (eg technical skills). The assessment system is centralised to provide confidence in the consistency of assessment across Korea.
Overall curriculum design	Korea distinguishes its system of Vocational Education (for young people) based on the NCS from Vocational Training for the employed workforce and unemployed. In the case of employed workers, businesses have flexibility about what can be offered.	The NCS heralds a major emphasis on training and qualifications led by the President and based on 'the best of' the German and Anglophone systems. The aim is to win over the population from University professors to young people making choices about training.	Korea is strengthening vocational education radically and speedily. 'Meister high schools' are a successful flagship development leading to 94% employment outcomes whilst giving high school students the option to study academic subjects is improving their prospects of entering university.
Articulation and development of learning pathways (eg via NQF)	(KRIVET) established the Korean Qualification Framework (KQF), an integrated system of eight levels for all qualifications. The Ministry of Employment has reformed the KQF through the NCS supported by HRD Korea, introducing qualifications grounded in learning outcomes.	The KQF has been reformed to strengthen links between industry and the vocational education system raising its status and significance. It will translate across the Asia-Pacific Economic Cooperation Forum (APEC) to enhance labour mobility and the mutual recognition of qualifications.	The KQF seeks to redress the balance between vocational and academic attainment. Whilst the enrolment rate in HE is one of the highest in the world, vocational training is perceived second class. A part common curriculum will provide pathways to university for vocational graduates.

KOREA	FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES		
Function	**Description**	**Benefits**	**Commentary**
Provision of work based learning (eg apprenticeship training)	A dual VET apprenticeship system (modelled on the German approach) is under development. Apprenticeships came to an end in the 1980s when jobseekers were able to attain better paid employment. Employment insurance funds workplace training by employers.	The significant investment being made aims to increase employment levels amongst young people and improve workforce productivity. The reforms seek to build confidence that vocational qualifications are meaningful and appropriate to employers.	Engaging employers is a policy priority but there is some scepticism that a dual system will work with concerns that off the job training will take place in addition to contracted hours. Only 8% of employers provide training for their employees. For SMEs, the figure is even lower.
Usage of qualifications by employers	Companies are provided with financial subsidies for training but are not required to use the NCS and often the training is very specialised. These subsidies are funded by employment insurance paid by both employers and employees replacing an earlier levy based system in 1993.	Subsidies are available through the Job Skills Development Programme (which includes Vocational Training Assistance) encouraging employers to train their workforce, improving labour productivity, employment stability, the competitiveness of firms and marketability of workers.	Only 8.9% of eligible companies make us of employment insurance for training. There is an aspiration is for companies to use the NCS and the emerging dual VET system but some uncertainty about whether this will happen given their voluntary nature.

KOREA	FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS ANDCERTIFICATION OF COMPETENCES MAIN PUBLIC INSTITUTIONS INVOLVED
HRD Korea	
Korean Research Institute for Vocational Education and Training (KRIVET)	

KOREA	FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE		
Function	**Description**	**Benefits**	**Commentary**
Assuring the quality of the overall system (ie policy, strategy)	The quality of the VET system is under continuous review and adjustment. Government funded employment projects are evaluated by KEIS; the quality assurance of training is carried out by HRD Korea whilst the Jobcentre monitors training for the unemployed.	The Korean VET system is led, even dominated, by the state and is a cornerstone in maintaining the exceptional economic progress made over the last few decades. Attention is increasingly focusing on a more competence-based approach more relevant to meeting employer needs.	Korea has an outward looking approach to policy development seeking to mimic the best approaches from around the world, borrowing heavily from Australia, Germany, the UK and New Zealand. Leadership at presidential level sets the conditions for consensus.
Assuring the quality of teaching institutions	The government is introducing policy changes to address what the OECD describes as 'variable and sometimes weak quality in junior colleges'. In the future, government funding will be contingent upon attaining accreditation through multi agency evaluation commissioned by MOEL.	Government quality initiatives include the recently introduced "Meister Schools" which aim to provide the highest quality training combining work place training and top class off the job facilities with the involvement of highly skilled workers as visiting teachers.	Reputation in the market (given students and their parents pay fees) has traditionally been the main factor signalling the value of training at specific institutions. However private funding can also undermine the willingness to fail students who fail to attain the required standards.
Assuring the quality of workplace training	Under Employment Insurance, a wide range of training programmes are available to SMEs, workers and the unemployed. Where a private provider is used, accreditation is compulsory for both the institution and the course. Similar requirements will apply to the 'dual VET' system.	The quality assurance of employer delivered training on the job is minimal so as not to discourage employer investment in training their staff. This involves a high degree of trust that employers who recoup their employment insurance outlay are providing quality training to staff.	In company training and employer qualifications are encouraged and part funded by government. Only a minority of training takes place in the workplace - usually undertaken without quality assurance. Under dual VET companies will receive funding for on the job training.
Assuring the quality of assessment and certification	The NCS system is overseen by HRD Korea and requires assessment by final examination involving both a written and a practical test. Certificates are issued by the relevant government department. Each competency area has consistent assessment requirements.	The objective of accreditation under the NCS is to prove graduates are "able to do" as well as to "know". Korea aspires to a trusted public education system which avoids costs falling on employers to retrain their employees thereby creating a competency based society.	Competency based assessment is integral to the NCS involving self-assessment and the successful completion of a final project. The OECD recommended strengthening the assessments of learning outcomes in programmes run by junior colleges.

KOREA	FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE		
Function	**Description**	**Benefits**	**Commentary**
Assuring the quality of teaching and training	The screening of Vocational Training is required by KRIVET and assesses the experience and qualifications of instructors. Supporting Skills Technicians to teach students and workers is a part of HRD Korea's latest phase of a competency based approach to skills promotion.	Utilising craftsmen and engineers as teachers is aimed both at improving the relevance of training and more broadly contributes to a culture where the most skilled are celebrated by society providing an example to others to emulate their achievements.	The OECD in 2012 recommended that teachers should have work experience relevant to their subject and spend time in workplaces to update their skills. Steps have also been taken subsequently to ensure teachers have greater workplace experience through Meister schools. including
Improving the quality of all aspects of the system	The Korean system has been shaped through a state led approach requiring companies to ensure the skills of the workforce met the needs of each phase of planned economic development. This has necessitated a number of major policy shifts aimed at strengthening quality overall.	A government led vocational training strategy has been in place to assure the supply of a skilled industrial workforce in support of a succession of Economic Development Plans. Each phase of this evolving approach has been tailored to the situation of the economy at the time.	Korea has a persistent, systematic and persevering approach to improving quality in its VET system. This has been based on an outward looking approach, borrowing from best practice around the globe and a willingness to learn from mistakes and rectify weaknesses.

KOREA	FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE: MAIN PUBLIC INSTITUTIONS INVOLVED
Korean Research Institute for Vocational Education and Training (KRIVET)	

KOREA	FUNCTIONAL CATEGORY 4: BUDGET PLANNING AND FUND ASSIGNMENT		
Function	**Description**	**Benefits**	**Commentary**
Deployment of public resources to fund system	Funding comes from the Ministry of Education for *Vocational Education* and Employment Insurance (EIS) with both employer and employee contributions) for *Vocational Training*. Increasingly, individuals over 18 take out government loans for tuition fees and living expenses.	The introduction of EIS followed a national debate on how to establish a welfare system which actively encouraged and enabled unemployed people to re-enter the workforce. The EIS also supports those in work to prevent job loss and support skills and lifelong learning.	Employment Insurance has proved to be effective mechanism in reaching low skilled workers and SMEs as well as the unemployed. However less than half the workforce is covered. Considerable resources have recently been made to improve the relevance and image of Vocational Education.
Budget planning at state/regional level	Labour market interventions are mainly funded through the EIS but supplemented by central state funding. For Vocational Education, a performance based, formula-funding arrangement for Junior Colleges helps steer provision to meet government objectives and to improve quality.	Colleges are largely private institutions therefore state funding aims to provide incentives to align their provision with labour market priorities and improvements in quality. Funding is increasingly being diverted to fund the new Meister high school model for this reason.	Budget planning decisions are taken in the context of an acute appreciation of the evolution of policy in recent decades. Substantive changes to education funding and the EIS have been the subject of widespread stakeholder consultation and considered debate.
Design and implement-ation of financial incentives	The high value placed on learning enables the VET system to attract financial contributions from all beneficiaries: the state, employers and individuals. Employer training is subsidised by the state and is usually very company specific. There is no separate regional funding. Subsidies of the training cost for businesses paid by	The EIS is used to provide workers with the skills to remain in job and for the unemployed to regain them. Most colleges are privately owned and charge student fees but the state provides funding for infrastructure and learning materials to reward good performance.	Korea pursues an employment rate of 70% as its main economic goal rather than a GDP growth rate as do most countries. Workforce skills programmes mainly depend upon Employment Insurance paid by employers although some government funding is provided.
Measures to attract employer contributions	Employers contribute between 0.25% and 0.85% of each worker's wage - depending upon the size of company - to the EIS. This can be used to subsidise training costs or to fund paid leave. Loans are also available for employers (including consortia) to purchase facilities or equipment.	Government policy is aimed at using the EIS both to prevent job loss occurring through economic change and to help unemployed people back into work quickly. Considerable flexibility is available to employers to use the EIS for their own training priorities and to encourage take up.	Although the EIS provides large employers with a 17.3% subsidy and SMEs with a 25.4% subsidy training subsidies take up is disappointing at only 8.5%. The subsidies do not require workers to take NCS based qualifications nor are there rigorous quality assurance requirements.

KOREA	FUNCTIONAL CATEGORY 4: BUDGET PLANNING AND FUND ASSIGNMENT		
Function	**Description**	**Benefits**	**Commentary**
Measures to attract individual contributions	Individuals pay for their continuing education at private colleges often receiving government support in the form of loans. They also contribute to the EIS and benefit from a training account system when unemployed or from tuition subsidies and low interest loans as employees.	Aligning the curriculum of Junior Colleges to the NCP aims to ensure students gain skills that are relevant to the labour market. Funded by EIS, the Job Skill Development Program (JSDP) fosters lifelong vocational training and skill development for the entire workforce.	For school leavers, the vocational education route is still perceived as being inferior. Nonetheless, there is a long-standing willingness of individuals to invest a large amount of resources in their education. Thus, subsidies and loan based approaches are the norm.

KOREA	FUNCTIONAL CATEGORY 4: BUDGET PLANNING AND FUND ASSIGNMENT: MAIN PUBLIC INSTITUTIONS INVOLVED
Korean Research Institute for Vocational Education and Training (KRIVET)	
Ministry of Education (MOE)	
Ministry of Employment and Labour (MOEL)	

Country Table

NEW ZEALAND	FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS		
Function	**Description and purpose**	**Intended benefits**	**Commentary**
Labour Market Intelligence (LMI): • **Collection** • **Analysis** • **Dissemin-ation** • **Utilisation**	National data collected on Labour Force Survey statistics complemented by government research on skills shortages and data on training provider performance. Industry Training Organisations (ITOs) often conduct skills forecasting for their own industrial footprints.	Statistics NZ sees employment as central to meeting needs, life choices and social well-being. ITOs are increasingly using skills forecasting tools to help define priorities for developing competence standards and raise awareness of changes taking place in business sectors.	Skills forecasts are used as a starting point for discussion between industry groups (ITOs), government and providers to determine the number of people who might be necessary in different industries in the future as well as the types of skills those workers might need.
Employers collaborate articulating sectoral, occupational or geographically shared needs	12 Industrial Training Organisations (ITOs) arrange the training, set the standards for qualifications, and work with industry to determine skill development needs. Many of these bodies are owned by employer trade associations and work with employer advisory boards.	ITOs aspire to be the leaders on behalf of their industries, developing solutions to meet their future needs; as well as organising both apprenticeship training and 'industry training' – for existing members of the workforce - with the intention of improving skills and productivity.	Based on performance in securing industry training, ITOs have to re-apply for accreditation by government every five years which also affects their industry coverage. ITOs have been reduced from over 40 to 12 in recent years improving economies of scale.
Evaluation including gathering feedback on employer satisfaction	No systematic surveys or feedback mechanisms operate at national level. However, many (but not all) ITOs consult their industry sectors through industry advisory groups about the quality of training and evaluate the training that they organise with individual businesses. operate	Ensuring employer satisfaction with the quality of training is critical to maintaining a high level of demand. This is central to the ITO remit. Some ITOs maintain detailed and sophisticated approaches to employer feedback to ensure they are meeting their Key Performance Indicators.	ITOs are paid on the amount of industry training they organise for employers therefore they have an interest in the training in being of high quality. However, many ITOs have failed recently to generate the level of training stipulated in their contracts.
Identifying employer need for qualification development	ITO led process which combines the identification of competencies with the development of qualifications (see below). Tends to consider skills needs across a sector with a governance committee comprising employers, trade groups including unions and subject matter experts.	Secures industry buy in to broad based reviews of the overall suitability of qualifications through a simple process (although one that is prone to bureaucratic interference). Facilitates the translation of employer identified skills needs into unit standards which form the basis of VET qualifications.	Approach is 'high level' and strategic, ITOs submit case to NZQA that their market research with employers provides sufficient evidence of the needs for qualifications review. Occupational standards must embed broader requirements for soft skills, knowledge and understanding.

Country Table

NEW ZEALAND	FUNCTIONAL CATEGORY 1 IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS		
Function	**Description**	**Benefits**	**Commentary**
Facilitating employer influence on policy and provision	The small and relatively intimate nature of New Zealand's government enables the ITOs via their umbrella body the Industry Training Federation to lobby government to influence policy direction. A professional lobbyist and the chief executive have a close relationship with government.	Employers are able to influence provision through accessing the Industry Training Fund directly although the vast majority still use the ITOs as intermediaries. Although ITOs no longer have a formal employer leadership role their position has not changed markedly.	No formal mechanism exists for employers to provide evidence of their engagement and satisfaction with the skills system. Notably the ITO remit previously included 'industry skills leadership' but this was removed risking policy decisions being made on an anecdotal basis.
Measures taken to encourage employer demand and utilisation of skills	Alongside New Zealand Apprenticeships, 'Industry Training' is a central component of the skills system involving state subsidies for business to incentivise the training of the workforce. This intervention is reinforced by 'license to practice' arrangements in many occupations.	Industry training addresses skills shortages by training workers to standards set by business organisations (ITOs). Employees benefit through learning skills on the job without losing wages. Government sees the shared cost as a worthwhile use of public funding.	Direct support for businesses to train their workforce outside of full apprenticeships programmes tends to be unusual due to fear of 'deadweight or displacement' effects. However, the costs appear to be outweighed by the benefits.

NEW ZEALAND	FUNCTIONAL CATEGORY 1 IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS: MAIN PUBLIC INSTITUTIONS INVOLVED
Industry Training Organisations	
New Zealand Qualifications Authority (NZQA)	

NEW ZEALAND	FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES		
Function	**Description**	**Benefits**	**Commentary**
Development of qualifications content	ITOs develop qualifications made up of unit standards working with industry and providers. The standards are checked and approved by NZQA to ensure they meet the requirements for NZQF inclusion. The process requires qualifications to fit with broader industry sector aims.	New Zealand aims for its qualifications to be valued as credible and robust nationally and internationally. It aims for high levels of participation, a wide coverage of different industries and responsiveness to industry need and to be both coherent and relevant.	New Zealand has a relatively simple, flexible, industry led, training system although there are tensions between the role of NZQA and the ITOs. NZQA has recently shifted the emphasis away from unit standards to a 'learning outcomes' based approach which is being resisted by ITOs.
Assessment of candidates	Assessment is by evidence or observation on a modular and continuing basis. ITOs arrange training provision and train workplace assessors as part of this function. Moderation is statutory and ITOs are often contracted to moderate assessment on behalf of NZQA.	NZQA assessment standards are established nationally ensuring that clear outcomes are recognised; consistent standards apply to the outcomes that are recognised; and existing knowledge and skills are recognised and credited on the candidate's 'Record of Achievement'.	Assessment is normally aligned closely with the operational demands of employers, often being conducted on the job and closely integrated with workplace training and in line with industry practices. Trainees receive feedback as part of the assessment process.
Overall curriculum design	Technical and Vocational Education and Training (TVET) begins at school and continues at upper secondary level (students may begin to specialise in vocational learning or may integrate some vocational courses into a more general learning programme) and in the workplace.	Students benefit from a Youth Guarantee of further learning enabling them to progress to further education and training, so employers can see their abilities, interests and achievements. In the workplace, Industry Training develops skills as part of the qualifications system.	TVET linked to national industry skills needs is available to young people at both public Institutes of Technology and Polytechnics (ITPs) and private training establishments. A strong focus on literacy and numeracy requires the embedding of literacy and numeracy in all qualifications.
Articulation and development of learning pathways (e.g. via NQF)	The NZQF provides information on all quality assured qualifications. It is based on common learning outcomes describing skills and knowledge and it doesn't matter how, when or where the learning was achieved. It also makes clear the relationships between different skills levels.	The NZQF seeks to provide a clear education pathway from secondary school to vocational training, to enable the acquisition over time of integrated and coherent qualifications and give confidence in the quality and international comparability of qualifications.	A distinctive credit based approach - comprehensive of all secondary and tertiary qualifications - enables the accumulation of credit to be built up over time and transferred. The NZQF assists in international qualifications comparison by being easy to articulate with other NQFs.

NEW ZEALAND	FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES		
Function	**Description**	**Benefits**	**Commentary**
Provision of work based learning (eg apprenticeship training)	Work based learning (known as Industry Training) comprises New Zealand Apprenticeships which provides NZQF level 4 training and a minimum of 120 credits (1200 learning hours) and shorter qualifications (often in industries without an apprenticeships tradition).	Industry Training is part of a business growth agenda to lift productivity, deliver higher wages and build a faster-growing and more competitive economy. The number of qualifications has been streamlined to make the system easier to navigate for students and employers	Industry training has expanded the reach of skills development into a wide range of sectors and the number of trainees has increased steadily. It is also flexible with many short courses being accredited with the scope for them to be aggregated into full qualifications later.
Promoting the usage of skills and qualifications by employers	The main lever to increase the level of skills development and usage in the workplace is through Industry Training which subsidises employer training. All training must be NZQF accredited but may be 'bite sized' and comprise credits towards (rather than a full) qualification.	ITOs are agencies dedicated to driving up employer skills development through brokering training to meet employee needs, linking individual learning to national skills needs. Ensuring the training is accredited to the NZQF provides portability of skills for employees.	The biggest challenge is engaging SMEs unable to offer their own workplace training but who can't release staff even for bite sized training off the job. Having steadily increased for many years Industry Training has now 'plateaued' despite contractual incentives for ITOs. Large employer use their own training

NEW ZEALAND	FUNCTIONAL CATEGORY 1 IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS: MAIN PUBLIC INSTITUTIONS INVOLVED
Institutes of Technology and Polytechnics (ITPs)	
New Zealand Qualifications Authority (NZQA)	

NEW ZEALAND	FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE		
Function	**Description**	Benefits	Commentary
Assuring the quality of the overall system (ie policy, strategy)	Policy is led by the Ministry for Tertiary Education, Skills and Employment whose current strategy features 'developing skills for industry' as a priority. This focuses on the need for both transferable skills and specific qualifications to match labour market demand.	The industry training system established in 1992 aimed to make the training more responsive to employer needs (via ITOs) with government taking a more limited role. However, a stronger public regulatory remit has recently been established through enhancing the powers of the NZQA.	The system has evolved over decades based on qualifications devised though employer skills standards and state subsidised work based training. Quality assurance has become more centralised and the role of ITOs more a technical one of setting unit standards rather than employer leadership.
Assuring the quality of teaching institutions	Tertiary Education Organisations (TEOs) must be registered by NZQA before being able to deliver training programmes and then accredited to deliver specific courses. The detailed quality assurance requirements of the NZQA include the external evaluation and review of training providers.	NZQA seeks to ensure that the quality of all training institutions is to a consistent standard irrespective of whether they are ITOs, polytechnics or PTEs. The focus is on an up-front capability test and periodic external evaluations providing an independent judgement of TEO performance.	The NZQA is a single national body which hosts the NZQF and is responsible for standards for quality assurance and industry based 'unit standards' leading to tight overall control over all of the system. However, funding falls under the TEC to prevent conflicts of interest.
Assuring the quality of workplace training	Under the Industry Training system, ITOs are responsible for purchasing and arranging assessment based on national skills standards responsive to industry needs. Employers provide on the job training based on these standards set by ITOs. NZQA has a strengthened role overseeing quality.	Both Industry Training and New Zealand Apprenticeships are competency based training and assessment programmes delivered substantially 'on the job'. The unit standards on which they are based are industry owned but conform to a clear and specific common format.	On the job training plays a significant role in Industry Training with ITOs providing distance and self-directed learning materials and assessment services. This keeps costs low and most employers support the role of ITOs. However, concerns exist about the amount of actual training undertaken.
Assuring the quality of assessment and certification	Providers and ITOs must be accredited by NZQA before they can offer assessment against unit standards. They are then required to carry out internal moderation by NZQA and also submit to the relevant national external moderation system for those standards.	Unit standards are documents that specify learning and performance and provide the basis for assessment. The standards need to meet the requirements of NZQA which are based on whether they are fit for purpose, assessable, and capable of consistent interpretation.	Checks and balances are in place with both internal and external moderation being required. NZQA assumes overall responsibility for quality and requires ITOs - which also play a quality assurance role working with providers - to report annually on their systems and processes.

NEW ZEALAND	FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE		
Function	Description	Benefits	Commentary
Assuring the quality of teaching and training	NZQA is responsible for ensuring that tertiary education organisations continue to meet quality standards after initial course approval and accreditation and/or registration is granted. Periodic external evaluation provides an independent judgement of the quality of teaching.	The focus on outcomes - rather than specific activities such as the teaching process – works on the assumption that quality is the responsibility of each TEO. In return for greater autonomy, periodic satisfactory external reviews are required to maintain public trust and confidence.	Traditional quality assurance focuses mainly on inputs, systems and activities. However, the NZQA focus on outcomes is consistent with international trends toward a shift from quality control (meeting input standards) to quality enhancement and striving for excellence.
Improving the quality of all aspects of the system (see above)	Overall responsibility for skills rests with the Ministry of Education which develops new strategies when required following widespread stakeholder consultation. A new strategy has been produced which has strengthened the role of NZQA and reduced the number of ITOs.	A new strategy for 2014-19 was deemed necessary to guide both tertiary education providers and users (learners and businesses) to make a more prominent contribution to productivity and competitiveness. The strategy received written submissions from 167 stakeholders.	The new strategy was welcomed by both business bodies and training providers especially with regard to improving quality. The chief concern - expressed by many - was the need to provide more clarity about how relationships between the VET system and industry would be facilitated.

NEW ZEALAND	FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE: MAIN PUBLIC INSTITUTIONS INVOLVED
Ministry for Tertiary Education, Skills and Employment	
Industry Training Organisations	
New Zealand Qualifications Authority (NZQA)	
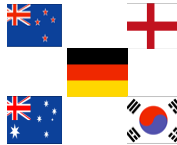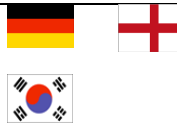
NEW ZEALAND	FUNCTIONAL CATEGORY 4: BUDGET PLANNING AND FUND ASSIGNMENT		
Function	**Description**	**Benefits**	**Commentary**
Deployment of public resources to fund system	As a small country, New Zealand funds VET through a nationwide system run by the TEC which is jointly monitored by the Ministry of Education and the Ministry of Business, Innovation and Employment. The joint arrangement reflects the importance of VET to the labour market.	The VET system is comprehensively publicly funded with an annual budget of just over NZ $200m including practical training subsidised for employers and a significant proportion for over 25s. The system is flexible and demand led with the primary goal of addressing mounting skills shortages.	The TEC published a 'Statement of Intent' in 2014 signalling a new investment approach to funding with clearer expectations of performance including utilising Information on skills supply and demand to make better investment decisions and build stronger links with industry.
Budget planning at state/regional level	The TEC is responsible for funding apprenticeships and industry training through ITO Investment Plans that set out the number of Standard Training Measures (STMs) to be delivered. An STM is the amount of training required to achieve 120 credits in an approved structured programme.	Industry training and apprenticeships help overcome the growing problem of skills shortages. These occur in technical areas such as science and engineering as well as in certain transferable skills (such as critical thinking and communication) that are important in all workplaces.	The government has increased apprenticeship funding to provide the same level of support, and the same level of subsidy regardless of age. All Industry Training including apprenticeships is linked to the NZQF to ensure national recognition and quality assured by the NZQA.
Design and implement-ation of financial incentives	To incentivise employer engagement, ITOs are funded on the basis of the number of companies signed up subject to an agreed limit in their investment plan which can be varied in year. Funding for an apprenticeship STM is NZ$5,200 and, for an Industry Training STM, NZ$3,200.	The New Zealand Apprenticeships system (which was reformed in 2013) incentivises ITOs to improve the quality of education for apprentices (through requiring a new minimum of 1,200 learning hours), whilst lowering employer fees and boosting numbers. The budget is also set to increase.	Alongside providing incentives for ITOs and other TEOs to sign up employers, the government is also introducing measures to shift funding over time to those organisations that can make the best contribution to the labour market outcomes sought by the Government.
Measures to attract employer contributions	The minimum contribution from the employer to Industry Training is 30% in cash (not in kind) and the subsidised training must lead to a recognised full qualification. A new 'direct funding' scheme for employers, designed to increase take up, is also now being gradually introduced. .	The attempt to increase employer take up through 'direct funding' will start on a small scale with only NZ$10m available in the first year to test whether this will tap latent demand. (However, ITOs believe this may confuse employers who are used to the ITOs organising training for them.)	Industry Training Organisations (ITOs) were developed by industries themselves to generate greater employer investment. Their role has shifted to become government contractors over time with incentives to drive up employer investment through the funding regime.

NEW ZEALAND	FUNCTIONAL CATEGORY 4: BUDGET PLANNING AND FUND ASSIGNMENT		
Function	**Description**	**Benefits**	**Commentary**
Measures to attract individual contributions	Subsidised government loans of up to $5,000 are available for all training and tertiary education including apprenticeships. There are also many scholarships, grants and awards. Some ITOs provide funding from industry to train in a specific industry area or offer scholarships.	Loan finance is already a significant public funding cost but savings have been found recently by reducing eligibility of those unlikely to repay. In a constrained fiscal environment, new loan finance will need to deliver a greater return on investment by focusing on areas of undersupply.	Costs are generally low due to a limited amount of off the job training but, in some sectors, Industry Training and apprenticeships can be expensive and the ITO and employer may not cover the full cost. To lift participation, grants of up to $2,000 are temporarily available to new apprentices.

NEW ZEALAND	FUNCTIONAL CATEGORY 4: BUDGET PLANNING AND FUND ASSIGNMENT: MAIN PUBLIC INSTITUTIONS INVOLVED
Ministry of Business, Innovation and Employment	
Industry Training Organisations	
New Zealand Qualifications Authority (NZQA)	
Tertiary Education Commission	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS			
Function A	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Drawing upon evidence and intelligence to shape decision making	*1. Collecting Labour Market Intelligence in a consistent, forward looking, comparable and reliable fashion*	• **Employer surveys:** Longitudinal time series of employer skills needs are updated on a frequent and regular basis (at least every three years) and are comparable over time (through the use of consistent core questions in telephone surveys), geographically across regions and between industry sectors. Booster samples are used to explore specific issues as required.	[England]
		• **LFS data:** Internationally comparable statistics on unemployment, economic activity rates, average earnings, labour productivity and vacancies are collected centrally to enable comparisons to be made with other countries. These include core data collected through the International Labour Organisation (ILO) Labour Force Survey (LFS).	[Australia] [England] [Germany] [Australia] [Korea]
		• **Training system:** Supply side data on the performance of the training system in terms of qualification success rates and progression into jobs and higher levels of training or education is an integral part of labour market intelligence and complements core 'demand side' data and government research on skills shortages, employer skills needs and occupational forecasting	[Australia]
		• **Forecasting panels:** Skills forecasting is aided by the contributions of employer bodies (such as skills councils and industry associations) which conduct focus group discussions and scenario building exercises with employers in their own industrial footprints	[New Zealand]
		• **Use of IT:** Sophisticated skills forecasting computer modelling drawing upon multiple databases and projection tool (eg QuBe in Germany) is used to assess long term labour demand and required supply side skills development analysed by qualifications and occupational fields.	[Germany]
		• **Stakeholder involvement:** A wide range of stakeholders – employers, training providers and government agencies - provides detailed qualitative information to support, shape and elucidate LMI often at regional or local level.	[England]
	2. Analysing Labour Market Intelligence to capture a wide range of interpretations and perspectives	• **Dedicated responsibility:** A single dedicated and independent research and intelligence agency possessing strong links with the responsible Government Ministry (and its responsible Minister) provides intelligence and analysis of the labour market (covering a wide spectrum of data spanning skill shortage occupations to trends in employment) to shape VET policy and the funding of provision.	[Germany] [England] [Korea]
		• **Social partners:** Close collaboration of the social partners (employers, trade unions) working with training providers and government authorities is central to the interpretation of LMI and is carried out through a process of systematic and structured consultation	[England] [Germany]
		• **Collaboration:** Multiple agencies collect and analyse data from different perspectives complementing and enriching the overall appreciation and understanding of the dynamics of the labour market. This includes detailed analysis at a regional and local level to ensure sensitivity to labour markets and travel to work/learn areas.	[Australia] [England]

		• **Futures analysis:** LMI trends and potential scenarios are used to provide forecasts to inform discussions between industry groups (ITOs), government and providers to determine the number of people who might be necessary in different industries in the future as well as the types of skills those workers might need.

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

	FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS		
Function A	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Drawing upon evidence and intelligence to shape decision making	*3. Disseminating Labour Market intelligence to a wide range of stakeholders*	• **Web based communications:** Data on skills needs is published on Government websites to ensure labour market information is freely available for the benefit all potential users including young people (eg to inform apprenticeships choices) and employers	
		• **Careers databases:** LMI is made available online via integrated information databases enabling prospective learners and jobseekers to plan their careers and decide upon appropriate training courses	
		• **'Real time' information**: Current online information on vacancies and unemployment is available with sufficient geographical detail to inform and enable local employment services and training institutions to adjust provision, introduce additional training initiatives and provide up to date guidance	
	4. Using Labour Market intelligence to shape policy and decision making	• **Competence development:** Skills forecasting tools are employed to help define priorities for developing competence standards and to raise awareness of changes taking place in business sectors	
		• **Labour force gaps:** LMI is used to clarify where there might be an oversupply of trainees to enable the authorities to draw up a skilled occupations list. This may in turn be used to inform migration policy and the issuing of visas to tackle skills deficiencies.	
		• **New provision:** LMI including skill shortage data and employment projections informs the development of new provision – including new apprenticeship occupations - and initiatives complementary to the existing system to tackle unmet needs	
		• **Career planning**: Databases with information about the labour market enables prospective students to use LMI to shape their longer term career choices	
		• **Prioritising funding:** LMI is used to clarify where there might be an oversupply of trainees so that funders and providers can draw up priorities for deploying the public funding of training provision (eg which courses should be expanded and which reduced or terminated).	
		• **Multiple users:** LMI is used by a range of audiences – employers, government, jobseekers, parents, careers advisers, training providers etc – to shape investment decisions in skills and choices of training programme or provider.	

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TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS			
Function B	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Providing an organisational basis for employers to engage collectively with the skills system	1. *Systematising employer needs and skills solutions through collective bodies*	• **Chambers of Commerce and Trade:** Employer membership of Chambers is compulsory and requires the payment of a payroll levy to support the their work. Chambers are responsible for a range of serves to their members including the negotiation (with social partners) and management of apprenticeships standards, assessment and training programmes.	🇩🇪
		• **Skills committees:** Employers lead the overall system through a national industry and skills committee. Reporting to this body are business groups responsible for specific areas of the economy. These 'reference committees' act as steering groups to oversee and approve competitively tendered work on the development of new and amended training standards.	🇦🇺
		• **Industry skills partnerships:** Employers come together to design clear and concise apprenticeships standards and assessment processes calling upon external expertise as required. There are no sectoral requirements but proposed apprenticeship programmes must not duplicate others already developed.	🏴󠁧󠁢󠁥󠁮󠁧󠁿
		• **Skills councils:** Leading employers in loose sectoral groupings act as non executive directors at Board level. They run organisations with executive responsibilities (for example for qualifications standards; promoting and securing training and apprenticeships for companies; research into skills gaps; licence practice schemes etc.).	🇳🇿
		• **Industry Training Boards:** Organisations funded through an employer levy based system in a specific sector. Employers lead initiatives designed to increase skills levels through incentives, approving or 'kitemarking' specific training programmes, and through licence to practise schemes.	🏴󠁧󠁢󠁥󠁮󠁧󠁿
	2. *Funding the collective voice of employers in the skills system efficiently*	• **Co-funding**: State funding part supports skills councils and similar bodies through an annual funding contribution. Such bodies have the role of representing employers and developing a range of solutions to their identified skills needs. Employer co-funding is required to ensure there is the direct ownership and to prevent such bodies being perceived as vehicles for government policy rather than reflecting employer priorities.	🇳🇿
		• **Training levies:** The payment of a statutory (or occasionally voluntary) training levy is required of all employers to minimise public expenditure whilst ensuring employers collectively manage the activities of their representative bodies and manage costs. This leads to a greater confidence in system employers own and largely control.	🇩🇪
		• **Contestable contracting:** A division is created between the role of employers (commissioning, oversight and approval of training standards and other skills products) and the executive responsibility for researching and developing such products which is the subject of a competitive tendering exercise. This approach is designed to prevent employer bodies becoming self serving entities and to secure the maximum value for money for public expenditure.	🇦🇺
		• **Maximising economies of scale:** Skills bodies are required to merge or rationalise in order to minimise overheads and achieve economies. This needs to be balanced against the inclination for employers to want to group together in often quite specific areas of industry where skills needs, occupations and job functions are shared in common.	🇦🇺

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS			
Function B	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Providing an organisational basis for employers to engage collectively with the skills system	3. *Conferring an appropriate status on employer bodies which enable them to ensure employer requirements are clearly articulated and acted upon*	• **Political consensus:** As a result of cross party consensus, the arrangements for collaborative employer involvement in vocational education and training are long standing, readily understood and command the confidence of employers and the wider community	
		• **Legal status:** Membership of employer associations is legally compulsory and involves the payment of a levy. They have a statutory role regarding curriculum development, training delivery and quality assurance.	
		• **Employer influence:** Employer bodies are not confined to articulating skills needs for public training providers. Mechanisms also exist to enable employer bodies to support and incentivise employers to increase their investment in their workforce with the aim of benefiting the economy as a whole.	
		• **Employer ownership:** Whilst avoiding an unmanageable proliferation of bodies, associations are primarily aligned to the collective needs of a range of businesses which share a common market for skills and employment. Their primary purpose is to serve the needs of their employers rather than the state.	
		• **Independent of government but not for profit:** The organisational status of employer bodies requires them to be appropriately constituted: they should avoid being wholly publicly run or diverted into profit making activities at the expense of the common good.	
	4. *Ensuring engagement is representative of the full spectrum of businesses and of the labour force as a whole.*	• **Social partnership:** Decisions on all aspects of policy, curriculum and assessment are made through reaching consensus across all stakeholders (including representatives of both employers and the workforce) thereby making change more sustainable.	
		• **Small and Medium Enterprises (SMEs):** Employer influence is representative of the balance and range of businesses in the sector or region with the voice of small and medium enterprises not 'crowded out' by larger employers.	
		• **Regional and local presence:** Employer association presence at various geographical levels help sustain the system from policy through to delivery	
		• **Employer responsiveness:** Where evidence is uncovered that employer bodies have lost the confidence of their constituent business community as representative of their skills requirements, action is taken to adjust or reconstitute them.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

	FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS		
Function C	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Facilitating employer influence on policy and provision	1. *Ensuring the skills needs of employers are articulated and considered at the most senior levels of government policy making*	• **Dialogue at the top levels of government:** Employers are provided with access to the top levels of government policy making at national level and this is systematised through sustainable arrangements which are substantively independent of political change	⊕
		• **Evidence and resources:** Employer input into policy is based upon robust evidence of economic and structural change as well as a strategic understanding of their industry sectors. Labour Market Intelligence is interpreted by employers with a close appreciation of their industries and the technological causes behind shifts in skills requirements.	⊕
		• **Expertise and resources:** Government is advised by an authoritative, top level board representing a wide range of business interests and supported by other stakeholders including educationalists and social partners to ensure their messages are able to be translated into credible programmes of reform. Employer advice draws upon a team of highly qualified staff able to research key areas of concern and interest on their behalf.	⊕
	2. *Ensuring employers with influence are perceived as independent and representative avoiding being perceived as either motivated by self interest or absorbed into the government machine*	• **Accountability and rotation:** The membership of influential national employer committees requires the frequent rotation of employer representation to refresh perspectives and engender innovation. Nominations for these positions also need to be made through a transparent and fair process with lines of clear accountability through state and/or regional elected governments as well as widely respected employer bodies.	🇦🇺
		• **Breadth of representation:** Employer bodies with influence over policy must comprise leading figures seen to be successful in their own business sectors. But they should also span all types of company and especially avoid being dominated by large companies that may have specific needs or requirements which are not shared by SMEs or entrepreneurs.	🇩🇪
		• **Independence from government:** Employer advice needs to be drawn from authoritative figures - individually and collectively - that are seen to be speaking solely from the perspective of their industry and not as part of the policy making mechanisms associated with the government of the day.	🇩🇪

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS			
Function C	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Facilitating employer influence on policy and provision	3. *Ensuring employer influence impacts materially on public policy making*	• **Multi-level influence:** Top level employer advice on policy and the encouragement of employer investment in skills benefits from a geographical and sectoral infrastructure supportive of the overall direction and with the capacity and capability of implementing such policy on the ground.	🇩🇪
		• **Statutory authority:** The responsibilities of employer bodies at regional, sectoral and/or national level are defined in law providing additional authority to their decision making. Where more voluntarist arrangements exist short of legal status conventions need to operate which ensure the advice of social partners is followed in practice.	🇩🇪
		• **Legislative change:** A close working relationship for social partners at every geographical tier of government is strengthened by a mechanism for escalating issues of concern. This may result ultimately in legislative change to underpin fundamental change where this is called for and where consensus is attained.	🇩🇪
		• **Systemic change:** Periodic evaluation confirms the positive impact of employer influence on skills policy operating within the framework of overall strategic leadership from government.	🏴󠁧󠁢󠁥󠁮󠁧󠁿
	4. *Monitoring closely the levels of support of employer bodies to ensure they retain full employer confidence*	• **Evaluation by peer survey:** Independent evaluations are periodically carried out to test whether employers believe the top level influencing bodies set up on their behalf are operating effectively in their interests and represent faithfully the skills issues they face and support the policies and practices they require. Where deficiencies are identified action is taken and changes made.	🇦🇺 🏴󠁧󠁢󠁥󠁮󠁧󠁿

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS			
Function D	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Identifying employer skills requirements to inform curriculum and qualification development	1. *Ensuring the arrangements for defining and compiling occupational competences[1] are rigorous and representative of a broad range of workplace environments and perspectives*	• **Occupational knowledge:** The identification of competences and the design of occupational profiles is the responsibility of experts drawn from a range of disciplines including those with direct experience of the job role in question (eg highly skilled workers or *Meisters*), curriculum development experts, Human Resources Development (HRD) specialists and labour market researchers and workforce representatives.	
		• **Broad consensus:** The approval of competence standards is a consensual process overseen by a steering group of senior stakeholders with authority and credibility in the eyes of employers. It is likely to include current business leaders, senior public servants, training providers, trade unions and quality assurance agencies amongst others.	
		• **Representative employer infrastructure:** Sustainability and consistency are secured through investing in the long term maintenance of an infrastructure of representative employer bodies – such as Chambers of Commerce or Skills Councils - tasked with carrying out the role of consulting a broad range of employers	
		• **Involving Small and Medium sized Enterprises (SMEs):** The processes for developing and approving occupational profiles and competence standards explicitly requires full consultation with, and involvement of, all sizes of business. This is also reinforced by an approval process which is inclusive of all types and size of business.	
	2. *Resourcing skills identification appropriately and cost effectively utilising an effective range of media and consultation tools*	• **Occupational typology:** The translation of employer skills requirements into occupational profiles which are used to underpin apprenticeships and other training programmes is carried out within a structured typology of occupations agreed by employers and other participating stakeholders as being broadly representative of the main job roles found in the workplace.	
		• **Online consultation:** The active participation of a wide range of employers and other stakeholders is sought and attained through a range of marketing media including conferences, events and newsletters. Targeted marketing is undertaken where the participation from certain types of company is insufficient. Approval also requires evidence that the consulation has been both thorough and has successfully engaged all stakeholders.	
		• **Competitive tendering:** The commissioning and approval of occupational standards development is separated from the design and consultation process which is competitively tendered to maximise cost effectiveness.	

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[1] The terminology and structural presentation of employer skills requirements come in many forms and are described differently from country to country. Whilst their name and form varies, their role in shaping curriculum and the standards of skill required by employers in the workplace are consistently found in all developed systems. The terms used include national occupational standards, occupational profiles, training packages, competency standards and many more.

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS			
Function D	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Identifying employer skills requirements to inform curriculum and qualification development	*3. Ensuring competence standards are comprehensive of the full range of skills, knowledge, attitudes, behaviours and understanding in the workplace*	• **Breadth of scope:** Skills span the technical competences related to the specific job role or function as well as more generic competences (especially relevant ICT user skills and functional literacy and numeracy) and the knowledge and understanding that underpins them.	
		• **Soft skills:** Certain observable characteristics are difficult to teach or assess as part of a set curriculum but are essential to a job function. They are often better described as values, attitudes and behaviours than competences and may be acquired through extensive work experience. Often described as 'soft skills' these need to be recorded as employer requirements and are especially important in programmes for young people unfamiliar with the world of work.	
		• **Flexibility:** The precise mix of competences relevant to a particular job function or role varies between sub sectors, size of company and sometimes different part of a country. The standards need to reflect this variation allowing for customisation of training (for example through incorporating elective training units) to reflect particular needs.	
	4. Providing timely adjustment of skill standards to reflect the changing needs of employers brought about by technological, legal and other developments	• **Review processes:** A combination of regular review processes and trigger mechanisms (for example where technology requires a new skillset) ensures skills requirements keep up to date with employer need. Early identification of emerging skills needs is secured through systematic research, collaboration with professional bodies and the monitoring of vacancies.	
		• **Timely revision:** Occupational standards development is responsive to change and translates employer need into new competences and qualifications in an efficient fashion completing the whole process including securing consensus in no more than twelve months	
		• **Future proofing:** Early identification of emerging skills needs requires a close link between continuous collection of labour market intelligence – through monitoring job vacancies, research studies into industry sectors, and forecasting emerging skills needs so that curricula are developed which take account of changing requirements rather than lagging behind developments.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS			
Function E	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Measures taken to encourage employer demand for and utilisation of skills	1. *Using 'collective measure's such as license to practice to drive up skills thresholds across industry sectors*	• **Occupational licensing:** The cost of licensing employees largely falls to employers and offers the potential to increase skill levels and improve the quality of training. It informs consumers where there are concerns about professional competence and where consumer demand requires a 'badge' of trust with skills sufficiently observable for competence to be verified.	
		• **Statutory contributions:** The payment of a statutory (or occasionally voluntary) training levy is required of all employers to minimise public expenditure whilst ensuring employers collectively manage the activities of their representative bodies and manage costs. This leads to a greater confidence in system employers own and largely control.	
		• **Training Pacts:** Given that apprenticeships and other work based learning are susceptible to ups and downs in the economy it is necessary to encourage companies to keep taking on trainees when times are difficult. In Germany, a national 'pact' sponsored by government –as an alternative to a mandatory levy – was offered by employers to all young people to undertake vocational training the opportunity to do so. In England, a similar 'skills pledge' was launched.	
		• **Employer insurance:** Insurance programmes can play a similar role to training levies but often also require contributions from employees to cover the cost of retraining when unemployed. Employers can recoup their contributions by reskilling workers at risk of losing their jobs because of technological change.	
	2. *Public funding is used to incentivise employer training through incentives, co-financing and the joint commissioning of customised training*	• **Co-financing:** Direct subsidies to employers to train their current workforce can have a major impact on raising skills levels (although the risk of 'deadweight' needs to be evaluated). This approach – known as Industry Training - works well in New Zealand where business organisations determine the skills standards and any training leads to recognised qualifications in whole or in part.	
		• **Employer Ownership:** Providing employers with co-funding from public resources but locating the decisions on sourcing and commissioning training with the employers themselves rather than through a government agency puts the employer in the position of customer rather than beneficiary. In England, this may be extended so that the employer subsidy is via a tax break.	
		• **Wage subsidy programmes:** Flexible wage subsidies that invest in a disadvantaged job seeker by making a temporary contribution to their wages and training can both aid them in accessing and maintaining employment as well as reinforcing good practice in induction training in employers. The aim is that they retain the job when the subsidy ends.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS			
Function E	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Measures taken to encourage employer demand for and utilisation of skills	3. *Supporting work based learning programmes ensures employers are directly engaged in the skills system*	• **Continuous workforce training:** Training courses tailored to the needs of industry provide employers with trained employees and enable people to move towards sustainable employment. The public employment service contracts either directly with an employer or via a training provider to deliver employment training programmes within a particular sector. Once participants have gained employment, they will continue to receive job specific training as required.	
		• **Apprenticeships**: A proven way of directly engaging employers (including SMEs) in the skills system is through the apprenticeships model. This works best where the employer provides coaching and mentoring thereby embedding a learning culture in the company. The off the job training should follow a common curriculum based on industry led standards.	
		• **Employers as Training Providers:** Providing they meet the same quality criteria as other providers, registering and/or employers themselves as training providers – supplemented by public resources - is an effective way of building capacity into the system whilst at the same time ensuring a close fit with business requirements.	
	4. *Promoting the benefits of developing and using skills in the workplace*	• **Kitemarking:** Employers are incentivised to train their workforces through attaining a kitemark which endorses their support of good practice. Such approaches, for example the international standard 'Investors in People' link employees' development and skills with an organisation's overall strategies providing the potential to result in gains in overall organisational performance.	
		• **Promotional campaigns:** The status and image of vocational education and training can be enhanced by concerted and systemic promotional campaigns which explain the benefits to companies in terms of the impact on productivity and competitiveness. In Korea, the importance of training the workforce is from the highest levels of government.	
		• **Skills competitions:** The profile of training can be raised by preparation, participation (and success) in international and transnational skill competitions with benefits to the workforce and employers alike. Such competitions are usually categorised by sector and occupation. High performance in world skills competitions can be used to set an example for employers to encourage them to invest in those categories where the country is seen to excel.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS			
Function F	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Evaluation including gathering feedback on employer satisfaction	1. *Collecting evaluation data from a range of sources on a regular and comparable basis*	• **Feedback from employers not using the system:** Even in countries with developed training systems. The majority of employers tend not to use the publically funded system. Specific targeted evaluation - using a range of techniques – is needed to reach such employers (often they are SMEs with low managerial capacity) to monitor their reasons.	
		• **Collection of training provider data:** Intelligence drawn from aggregating data on individual learners – covering for example participation rates, destination data, completion of training, qualifications attained and success in finding jobs- are all essential features. Longitudinal studies of earnings and employability are also helpful although expensive.	
		• **Employers' perceptions and attitudes surveys:** Biannual surveys are carried out which seek to ascertain how employers are meeting their skills needs, their awareness and use of skills support services, their satisfaction with training providers and their use of, and satisfaction with, nationally accredited training, vocational qualifications and apprenticeships.	
		• **Feedback from other users:** The effectiveness of the skills system required all parties to satisfied for any one constituency to benefit fully. This is especially true for those who work in the system and the individuals who receive the training. Regular and representative gathering of customer satisfaction from apprentices, for example, is an important feature.	
	2. *Analysing evaluation data drawing upon a range of perspectives to understand attitudes and trends*	• **Disaggregating data:** The sample sizes of surveys ideally enable data to be aggregated by sector, size of company, region/locality and combinations of all of these. However, the costs of very large surveys can be prohibitive therefore additional evaluation techniques can be drawn upon to gain insights to generate more finely graduated findings.	
		• **Evaluating trends and supporting projections:** Consistent methodologies and core questions/content in surveys collected over time can build up a picture of developing trends in relation to the quality and relevance of the training system in the eyes of employers.	
		• **Focus groups and qualitative intelligence:** In order to supplement the data from research surveys with an understanding of the reasons behind certain findings, additional ad hoc or systematised approaches need to be adopted. This includes an understanding of emerging technological change, drawing upon employers understanding of their industry, and its implications for the skills system	
		• **International comparisons:** The evaluation of some dimensions of training systems, and especially certain types of training programme (eg apprenticeships) when compared across different countries can shed light on success factors and trends in the labour market especially the impact of technological change. Such meta-evaluations are usually undertaken by academic institutions, Cedefop (for EU countries), the OECD and the ILO.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

		FUNCTIONAL CATEGORY 1: IDENTIFICATION OF PRIVATE SECTOR SKILLS NEEDS	
Function F	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Evaluation including gathering feedback on employer satisfaction	3. *Disseminating evaluation data and key messages to a wide range of audiences and users*	• **Use of a wide range of media:** In order to ensure the key messages from evaluation to reach a wider audience beyond those already involved in the skills system, it is essential to use a range of media including the press and TV and a range of web based and social media applications.	
		• **Policy makers:** Sound policy decisions require those in government and others with the responsibility for the overall system to have the message from evaluation brought to their attention, This is especially important where employers have identified weaknesses n the skills system which need to be addressed.	
		• **Employers and social partners:** In some countries, the skills system itself is largely the responsibility of a partnership of interests including representatives of employers but also those of the workforce including trade unions.	
		• **Training providers:** The effectiveness of training programmes in the eyes of employers is essential information for colleges, universities and other training providers to adjust their provision to meet employer needs. Data on destinations in particular enables providers to adjust provision to maximise the likelihood of positive outcomes for their learners.	
	4. *Using evaluation data to shape policy, priorities and decision making*	• **Policy decisions:** Feedback from employers on the effectiveness of the skills system is essential in order to make fundamental changes to ensure the effectiveness of the system in meeting employer skills needs. In Australia, a major consultation with a wide range of employers led to fundamental changes in the way training packages were designed and in the functions and role of Industry Skills Councils.	
		• **Marketing messages:** Where the evaluation data demonstrates this is the case, the promotion of certain types of training provision, especially apprenticeships, can be assisted by promoting the messages of their popularity with employers as compared to other less relevant options.	
		• **Careers advice:** Information from the destinations of learners, their wage levels over time and which courses or training programmes are most popular with employers is essential information for young people and job changers to make informed decision on their careers. Such information is useful to careers services but is frequently most useful when made available online.	
		• **Funding priorities:** Decisions on which provision to fund, and on where public resources are required (for example as opposed to being funded by employers alone) is assisted through robust evaluation data on their popularity with employers. This may be made available at both national and, where appropriate, at regional or state level, as the message might differ across a country.	

Functional Category 2

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES			
Function G	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Development of qualifications content	*1. Ensuring the effective translation of the needs of employers (expressed as performance standards) into training programmes leading to corresponding learning outcomes*	• **Expert panels:** The curriculum development process involves the close collaboration of a representative group of skilled workers ("meisters") working alongside education experts able to capture the process of knowledge and skills acquisition and shape these into coherent programmes of learning	
		• **Occupational profiling/functional analysis:** Appropriate use is made of established systems and processes tailored and refined for the needs of a specific country or industry sector. Examples include DACUM (Developing A Curriculum), occupational mapping (analysis of a group of linked occupations) occupational profiling (analysis of a job role), functional analysis (analysis of a job function or group of functions) and determining workplace performance standards.	
		• **Facilitation:** The use of these curriculum development techniques is overseen by a skilled and experienced facilitator with an understanding of both the relevant industry sector and the curriculum development process.	
		• **Training design:** The learning outcomes and competence standards required in the curriculum mirror the performance outcomes and standards required by employers in the workforce assembled into coherent programmes of learning containing appropriate progression opportunities, a blend of learning styles and an appropriate mix of practice and theory.	
	2. Maintaining a high standard of rigour in the development process ensuring it is responsive to the needs of the workplace representative of the full range of employers	• **Employer representation:** Occupational experts are drawn from a range of employers in the industry of different sizes and sectoral specialisms. Input should, where appropriate, be provided by employers operating in overseas markets where the skills requirements might differ. Usually between eight and twelve experts are directly involved.	
		• **Using technology:** Web based consultation is employed effectively to ensure the widest consensus for employer designed and owned occupational standards. This should be backed up by telephone surveys and other cold calling approaches to ensure representative samples of employers are secured. Professional organisations, training providers and trade unions also need to be consulted.	
		• **Future proofing:** The updating of curriculum to reflect technological and other changes on the skills associated with job functions requires the incorporation of continuous review and updating of job profiles and performance standards. An assessment of how job roles are changing (and likely to change) also needs to be built into the curriculum design process with the development of additional units of training which workers can access to update their skills as required.	

	and future proofed against changing trends	• **High level sign off:** In addition to an expert committee comprising a skilled facilitator, occupational experts ("meisters") and educationalists, the curriculum development process requires a high level board to 'sign off' the recommendations of such experts. This should reflect the main stakeholders and also include senior employers representatives, representatives of the work force (eg trade unions) and civil servants.	🇦🇺

FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES			
Function G	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Development of qualifications content	3. *Designing vocational qualifications which span the full breadth of required skills, knowledge, attitudes and behaviours*	• **Attitudes and behaviours:** The design of qualifications and training programmes takes into account what an effective worker needs to know, understand and be able to do to perform effectively in a job function. In addition, most job functions require a wider set of required values, attitudes and behaviours which may be acquired through experience or form part of the curriculum.	🇩🇪
		• **Portability:** The curriculum development process utlilises prior analysis of job functions which are relevant to a particular job function – for example in a different sectoral context or even a different country --- before carrying our primary research. Such an approach to generic learning outcomes may assist workers wishing to transfer competence from one organisation or sector to another.	🏴󠁧󠁢󠁥󠁮󠁧󠁿
		• **Generic skills:** Many skills are common across job functions, occupations and different sectors such as management and leadership or customer service. In most cases, performance standards in these areas should be the same in all sectors and that adaptation to meet specific sector needs should minimal or unnecessary.	🏴󠁧󠁢󠁥󠁮󠁧󠁿
		• **Core skills:** Core skills including literacy and numeracy content is 'built---in' to all Training Packages and accredited course content and has become an integral part of all vocational qualifications within the Australian Qualifications Framework (AQF)	🇦🇺
	4. *Maintaining qualifications that are recognised by wider society as meaningful signifiers of competence*	• **Endorsement:** Qualifications are only approved for public funding and endorsement where there is high employer take up or where they enable further study and progression and/or entry into employment	🏴󠁧󠁢󠁥󠁮󠁧󠁿
		• **Social status**: A sustained combination of clear, employer led requirements and high standards of training and education instils widespread confidence in the vocational qualifications system thereby conferring social status on successful graduates as they are regarded as providing evidence and broad based acceptance of appropriate skills	🇩🇪

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

	FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES		
Function H	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Assessment of candidates	1. *Ensuring assessment strategies are an appropriate blend of both theoretical understanding and practical application in the workplace*	**Occupational focus:** Occupational competence may be assessed through a wide ranging examination process following the completion of wide ranging training involving theoretical and practical tests including a work related project supported by both oral and written assessments. This approach is particularly effective for apprenticeships where the process is overseen by external employer representatives and educationalists.	
		Competence based approaches: Assessment is carried out by quality assured training providers on a modular basis through observation or collection of evidence of a trainee demonstrating the competences required in a qualification usually 'on the job'. There is no moderation process or end term examination.	
		Integrated assessment: An assessment combining two or more modules of study is known as integrated or synoptic: it aims to help trainees make connections between discrete modules and facilitate learning methods which involve a holistic approach to delivering interrelated sets of competence.	
		Generic skills: Competency units contain modules for common skills (eg generic skills such as work planning); key competency (eg problem solving and personal relationships); and work competency (eg technical skills). The assessment system is centralised to provide confidence and consistency .	
	2. *Capturing employer performance requirements as a central part of the assessment process*	**Employer associations:** Representative employer bodies (eg Chambers or Skills Councils) design external assessments and organise examination boards (comprising schools, unions, employers) to assess and grade candidates for both practical and theoretical competence. Employer bodies may also issue graduates a certificate recognised by government.	
		Workplace relevance: Assessment is aligned closely with the operational demands of employers: it is often conducted on the job, is closely integrated with workplace training (which enables continuous feedback to be provided to learners) and is in line with industry practices.	
		Employer ownership: Training standards are developed which show what a trainee or apprentice will be doing and the skills required of them by job role. Each standard has a corresponding assessment plan produced by the same employer---led groups that develop the training standards.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES			
Function H	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Assessment of candidates	3. *Maintaining confidence in qualifications through independent and objective assessment*	• **External employer oversight:** Where independent employer associations are responsible for leading a wholly external assessment, the credibility of qualifications may be significantly enhanced. This is because such assessments are entirely independent of both the training organisation and the employer of the trainee.	
		• **Branded qualifications:** Private companies responsible for issuing qualifications often have the strictest moderation regimes to ensure rigour and consistency. The reason for this is that their business model is contingent upon maintaining the credibility and authority of their brand.	
		• **Moderation:** Usually a competence based assessment process requires a sampling of assessments to ensure consistency across different providers and assessment agencies. This may be managed centrally by a public authority (such as a national qualifications agency) that contracts the statutory duty of moderation to third parties including, for example, sector skills councils or employer associations.	
		• **Provider assessment:** Where it is the training provider that carries out the assessment with minimal moderation, it is essential to have a strict quality assurance regime for registering and monitoring training organisations overall performance and to apply strict sanctions on those that fail to maintain exceptional levels of rigour and consistency	
	4. *Integrating the assessment of previous experience and informal or non formal learning into the wider assessment process*	• **Recognition of Prior Learning (RPL):** Formal recognition of skills gained on the job or through other learning experiences can count in some VET systems towards completion of recognised vocational qualifications. This is also known as Accreditation of Prior Learning (APL) or Accreditation of Prior Experiential Learning (APEL).	
		• **Informal and non-formal learning:** European countries have adopted common principles to value learning that takes place outside formal training institutions both informally (through everyday experiences) and through non formal learning (through planned activities where learning is not the main aim). Methods of assessing such experiential learning are in the process of being developed.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES			
Function I	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Overall curriculum design	*1. Managing and governing the vocational education and training curriculum in a stable but flexible manner as part of an overall curriculum which commands widespread support*	• **Unified curriculum:** The curriculum operates within a single national qualifications framework with a unified system of assessment, accreditation and certification irrespective of whether the training is carried out by public bodies or private employers or whether it is funded by the state, employer, individuals or on a cost sharing basis.	
		• **Policy review:** Continuous review and evaluation mechanisms are in place to ensure qualifications are used and up to date. Experts are called on periodically to ensure the curriculum is fit for purpose and that the qualifications people are taking are meeting the needs of employer and the labour market.	
		• **Parity of esteem:** As part of the curriculum as a whole, vocational education and training commands sufficient support to ensure a broad social consensus spanning the main political parties, employers and trade unions as well as learners, parents and workers generally and providing continuous and sustainable support. Broadly equal outcomes are secured across both vocational and academic routes.	
	2. Ensuring the qualifications system as a whole maintains clear and consistent standards, is easily understood by users and has career pathways leading to clearly defined outcomes	• **Governance:** A national and effective system of governance exists to ensure all qualifications meet required standards in terms of employer relevance, quality assurance and robust assessment.	
		• **Qualifications pathways**: Clearly defined access routes and vocational pathways exist to enable learners to progress to further education and training. These may be flexible also enabling horizontal movement across qualifications at the same level as well as vertical between qualifications at different levels. Credit enables entry into, as well as credit towards, higher qualifications.	
		• **Streamlined Qualifications**: The proliferation of overlapping and duplicated qualifications is avoided through a continuous review process. This ensures teachers, learners and employers are aware of the most valued and appropriate programmes for their chosen field of study and training.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES			
Function I	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Overall curriculum design	3. *Providing a comprehensive range of opportunities for individuals of all ages, circumstances, abilities and levels of previous attainment*	• **Flexible learning:** A breadth of vocational options is available to all at a time, place and pace suited to their needs including apprenticeships, pre--apprenticeships, full time courses and modular short courses. All options are accredited to a national qualifications framework.	
		• **Basic skills:** Recognising that functional competence in literacy, numeracy and increasingly ICT are among the most valued attributes by employers for many occupations, there is a strong focus on basic skills including the embedding of literacy and numeracy in all qualifications including apprenticeships programmes.	
		• **Comprehensive curriculum:** A comprehensive (and normally co--funded) national system is in place that spans appropriate provision for a diverse range of learners including young people, labour market entrants, returners to the labour market, current workers, the unemployed and members of disadvantaged groups.	
	4. *Establishing a range of qualifications across sectors and occupations which are sufficiently flexible to meet the needs of all employers*	• **Occupational classifications system:** A clear and transparent system is maintained through a structured classification system of occupations. This is sufficiently flexible to incorporate changes in job function which occur though technological adaptation and progress. This occupational structure also helps define apprenticeships avoiding unnecessary and unhelpful proliferation and overlap.	
		• **Employer responsiveness:** Whilst ensuring qualifications are widely recognised and fully portable through the inclusion of core competences required in all employment contexts to perform job roles and functions effectively, individual employers are also able to introduce some flexibility to adapt national provision to meet their own particular business needs.	
		• **Comprehensive coverage:** Employers recognise the full range of vocational profiles are available across all the main sectors and occupational including industry, crafts and trades. Whilst generic competences such as management and customer care are 'shared' between sectors, more specific niche competences and functions are also recognised in the curriculum offer.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES			
Function J	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Qualifications Frameworks (Articulation and learning pathways)	1. *Mapping all qualifications onto a national (or transnational) Qualifications Framework to enable learners and employers to understand the value of individual qualifications and the inter-relationships that exist between them.*	• **National Qualification Frameworks:** Learning outcomes are classified and recognised by level in an integrated and comprehensive framework (academic, generic, vocational) enabling the comparability of different qualifications and clarity on progression within and across occupations or sectors.	
		• **Non bureaucratic:** Minimal bureaucracy is involved in designing qualifications to 'fit' the Qualifications Framework enabling course designers to concentrate on quality content rather than designing qualifications to fit a complex set of rules. This is especially important when the framework contains both vocational and academic qualifications which are often taught and assessed very differently.	
		• **Consistency and confidence:** Underpinning the Qualifications Framework are rigorous quality assurance measures which ensure qualifications are equal regardless of institution; assessment criteria are transparent and consistent; and all qualifications are indicative of learning outcomes attained rather than teaching method or length of course	1
	2. *Ensuring articulation between qualifications at different levels especially enabling progression to higher education and between vocational and general education*	• **HE Progression:** Progression from vocational education and training (eg apprenticeships) to Higher Education (HE) is an integral part of the system and commonly occurs. The attainment of VET qualifications is routinely accepted acceptable as entry requirements to degree courses. The Qualifications Framework supports part common curricula offers which provide pathways to university for vocational graduates.	
		• **Comprehensive:** All types of qualification are included in the framework. A 'blend' of learning experiences (vocational and academic; modules and full length courses; initial education and continuing professional development) is valued. The ability to move across from general and academic routes to vocational ones and vice versa is both facilitated by the system and frequently occurs in practice.	
		• **Non-hierarchical:** The qualifications system – and its representation in the qualifications framework - is non-hierarchical promoting horizontal as well as vertical progression. For example, as a result, many university graduates undertake lower level vocational courses after university to help their job prospects.	

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TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES			
Function J	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Qualifications Frameworks (Articulation and learning pathways)	3. Enabling learners to accrue qualifications to suit their needs and circumstances	• **Credit Accumulation and Transfer:** A Credit Accumulation and Transfer (CAT) system is in place across all institutions enabling learners to accumulate modules and credits from different institutions at different times. The qualifications framework helps enable this to happen by requiring qualifications to be unitised modular with the potential for smaller modules to be combined into qualifications.	
		• **Recognition of Prior Learning:** The accreditation of previous learning experiences – both non-formal and informal --- is widespread; employers and training providers accept qualifications attained through this route as evidence of competence.	
		• **Modular training:** Training programmes are developed by employer led bodies and lead to qualifications listed on the Qualifications Framework. They provide a wide range of flexible, structured learning arrangements at any skills level for employees.	
	4. Facilitating geographical mobility through the mutual recognition of qualifications via Qualifications Frameworks	• **Portability within countries:** Qualifications are portable – commanding the confidence of employers --- and recognised across intra---state geographical boundaries with equivalences accepted across territories and states. The qualifications system is integrated across all qualifications, grounded in learning outcomes regardless of how, when or where the learning was acquired.	
		• **Meta---Frameworks:** National Qualifications Frameworks articulate through a referencing process with "meta---frameworks' which enable learners and employers to understand the equivalences between qualifications across different countries thereby aiding the mobility of labour. An example of a meta---framework is the European Qualifications Framework (EQF).	
		• **Referencing:** In the absence of a meta framework, bipartisan arrangements may be made to enable the movement of workers between countries. Referencing explains the broad compatibility of different levels in two qualifications frameworks, without adjustments to either of the qualifications frameworks being made.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES			
Function K	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Provision of work based learning (including apprenticeship training)	*1. Providing high quality apprenticeships across a range of occupations and sectors for the entire workforce*	• **Apprenticeships:** Companies, with the support of government (including a contribution to the cost), provide employment with training (usually both on and off the job). The training conforms to nationally determined standards set by employers. Graduates of apprenticeships programmes are expected to achieve sufficient expertise and capability to perform a specific, skilled occupational role effectively.	🇰🇷
		• **Occupational range:** Apprenticeships cover all the main recognised occupational areas including 'traditional trades' such as automotive, hairdressing or plumbing, as well as newer industries such as information technology, child care and communications. Apprenticeship programmes are defined following the advice of employers and other stakeholders.	🇦🇺 🇩🇪 🇰🇷
		• **Timeserving:** The apprenticeship is for between 2 and 3.5 years as stipulated legally. Social partners on both sides of industry support longer contracts to ensure sufficient time is available to develop the range of skills (including appropriate attitudes, behaviours and values) to become a skilled worker**.**	🇩🇪
		• **Breadth of scope:** Apprenticeships are at various skills levels including degree equivalent. They are open to current employees seeking a change of job role as well as new recruits. They are available regardless of age.	🏴󠁧󠁢󠁥󠁮󠁧󠁿
		• **Employment contract:** The apprentice is an employee with contractual rights to a negotiated wage and comprehensive training both on and off the job. The employment contract reflects standards – and mutual rights and responsibilities --- between government, employers and trade unions. It is underpinned by statute.	🇩🇪
	2. Utilising employer and stakeholder engagement in apprenticeships as a way of ensuring a high quality and up to date curriculum	• **Social Partnership:** Labour unions and employer associations are integral to the design and delivery of each apprenticeship programme. They negotiate the training allowance to be paid to trainees, contribute to the in---company training standards, monitor the in---company training and sit on the examination board.	🇩🇪
		• **Dual system:** In company training and the education and training provided in colleges is closely co---ordinated and is structured around a common curriculum with competence based training on the workplace and theoretical instruction off the job.	🇩🇪
		• **Coaching and mentoring:** Close instruction and support form an experienced and skilled worker ("Meister") enables an apprentice to appreciate the full gamut of technical and broader skills an knowledge required to be fully competent n a given job role.	🇩🇪

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES			
Function K	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Provision of work based learning (including apprenticeship training)	*3. Providing suitable models, arrangements and incentives to encourage the participation of employers (especially SMEs) in the provision of work based learning.*	• **Group Training Organisations:** Group Training Organisations (GTOs) employ apprentices and then place them with SMEs for a fee. The GTO undertakes the employer responsibilities for the quality and continuity of employment and training including payment of Australian wages. The GTO also manages	
		• **Insurance schemes:** Employment insurance funds workplace training by employers with the content of the training determined by the employers themselves. Funds are made available particularly for workers at risk of redundancy.	
		• **Learning organisations:** Enabling employers to operate as 'learning organisations' that support and benefit from those training in their companies. The apprenticeships model delivers benefits to the company due to the requirements placed on skilled workers to pass on their knowledge and expertise to others in a structured way. Trainers in the workplace often receive training themselves.	
	4. Supporting a wide range of work based learning including the Integration of a substantial and structured work based learning element into all VET provision	• **Traineeships:** In some countries, apprenticeships type programmes at lower skills levels (fro example on the service sector) are known as traineeships. These programmes conform to the same principles as apprenticeships – although in some circumstances the level of commitment from both sides may not be to a full employment contract --- but are often of shorter duration.	
		• **Pre---apprenticeships:** Pre---apprenticeships (sometimes also called 'traineeships') help young people who don't yet have the appropriate skills or experience to secure an apprenticeship or employment. They provide work preparation training, literacy, maths and work experience in a structured programme thereby helping them to become 'work ready'.	
		• **Industry Training:** Employer associations are tasked with promoting work based learning to companies (including both apprenticeships and training for existing members of the workforce who need to reskill or upskill) and can provide substantial state subsidies to incentivise the training of the workforce. The employer associations source (and often quality assure) appropriate training support from providers.	
		• **Work placements:** Given that previous work experience is one of the most critical factors in the recruitment of young people for employers, all school students are offered the opportunity to undertake high quality and meaningful work experience as part of their post 16 education. This applies to academic, vocational and mixed pathways.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES			
Function L	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Promoting the usage of competence based learning by employers	1. Integrating skills and training as part of a wider economic development strategy with the active involvement of employers and their representatives	• **Business leadership:** Membership of an appropriate employer associations (Chamber of Commerce, Trade or Industry) is compulsory for all employers. In addition to supporting their members with vocational training and apprenticeships, Chambers provide services in foreign trade promotion and regional economic development giving them greater status and authority. They must also be consulted whenever a new law related to industry or commerce is proposed.	
		• **Economic planning:** The economic development of the country is part of a concerted strategy led by the government and fully supported by employers. The strategy is delivered through a series of economic plans for growth. Training plays a major role in this alongside targeted support for key sectors of strategic importance often requiring substantial public: private investment in infrastructure and technology.	
		• **Industrial strategy:** Government works across all departments with industry to secure jobs and growth. This involves delivering the skills that employers need and giving businesses more say over how government funding for skills is spent. The other themes are sector partnerships with industry to increase exports and international competitiveness; technological development; access to finance for business; and transparent public procurement and effective supply chains.	
		• **Governance:** The national vocational and education system is governed effectively with clear roles and responsibilities --- at both national level as well for constituent states and territories --- for both industry and government in the promoting the benefits of investment in workforce skills.	
	2. Mobilising intermediaries to reach employers to increase their investment and use of competence based training	• **Trade Unions:** Skills and Training is part of the terms and conditions negotiated with employers alongside hours, leave and pay. Trade Unions facilitate the delivery of learning opportunities for their members and have access to public funds to support accredited training opportunities.	
		• **Industry Training Organisations (ITOs):** The responsibility for setting occupational standards is given to employer bodies which are also tasked with promoting and arranging the delivery of training for the sector they represents. Whilst ITOs are not training providers, their support to employers is often extended to the quality assurance of assessment	
		• **Chambers:** Employer bodies play a key role in encouraging the investment of companies in training through organising events, providing advice, training mentors, assessing in company provision (instructors, equipment, facilities) and finding suitable trainees and mediating disputes between trainees and the company	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 2: CURRICULUM DEVELOPMENT BASED ON QUALIFICATIONS AND CERTIFICATION OF COMPETENCES			
Function L	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Promoting the usage of competence based learning by employers	3. *Promoting the use of competence based qualifications based on the needs of industry to define human resource requirements and associated training programmes*	• **Employer Training Providers:** To increase the scale and level of engagement with employer based training standards, providers of nationally recognised courses and qualifications may be industry organisations or individual businesses.	
		• **Publicly available information:** Employers are regarded as needing to be informed consumers of public vocational education and training services and therefore are provided with easy online access to the information they need to make choices about providers and to training that meets their needs. Information is also provided to learners of the wage returns to specific courses.	
		• **Scholarships and awards:** Practical financial help is provided by employer associations to promote quafications which meet the requirements of industry. Scholarships can enable apprentices to study subjects such as engineering at university; grants are provided for training and industrial placements abroad.	
		• **Market making:** The policy trajectory is towards a situation where there exists a single market for skills development, with training providers responding to the demand of learners and employers rather than state funding incentives, thereby delivering more economically valuable skills. This is tested by the willingness of both people and businesses to make a financial contribution.	
	4. *Ensuring competence based standards (in addition to the qualifications that flow from them) are fully utilised by employers*	• **National Occupational Standards (NOS):** The performance standards and occupational profiles developed by employers (known as NOS) which form the basis of qualifications are also used by employers for a range of purposes including staff appraisals, evaluating training, benchmarking workforce skills against competitors and developing non formal in house learning programmes.	
		• **Recognition of Prior Learning:** Employers recognise that important non---formal and informal learning takes place at work. They have a direct involvement in devising the standards used in the recognition process especially – but not exclusively – where this leads to certified qualifications. The accreditation of previous learning experiences – both non formal and informal --- is widespread with employers accepting qualifications attained through this route as evidence of competence.	

Functional Category 3

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE			
Function M	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
ASSURING THE QUALITY OF THE OVERALL SYSTEM (IE POLICY, STRATEGY)	1. *Providing leadership at the highest levels of government with dedicated capacity focused on upholding standards*	• **Top level commitment:** The skills strategy is led at the highest level with a visible commitment in evidence from the Prime Minister and Treasury Minister. Protection is given to the high priority placed on skills in comparison with other competing demands for resources (eg from general education or welfare) as well as time for debate, discussion and policy formation.	
		• **Dedicated focus:** Vocational Education and Training (VET) is not contested between different ministries (eg labour, education, business etc); rather it is the sole and enduring focus of a single department or a lead department with a dedicated Minister of State for skills and the active and co-operative engagement of other interested sections of government.	
		• **Executive regulatory powers:** Ministers are directly and personally accountable for skills policy and direction. They provide oversight and regulation through a dedicated agency or a small number of agencies with clearly designed and discrete briefs in order to ensure consistency of standards in teaching, learning and assessment and overall quality assurance.	
		• **Parliamentary oversight:** Arms length public bodies are established with responsibility for the quality assurance of qualifications and assessment and for the inspection and regulation of providers. Such bodies report to an elected parliament rather than government thereby ensuring independence from ministerial interference and accountability through elected representatives to society as a whole.	
	2. *Adopting a learning culture based on evidence based policy, reviewing progress and embedding best practice.*	• **Evidence based policy:** Systematic research, feedback and longitudinal evaluation guides policy making which is characterised by evidence based decision making. Government interprets the evidence with the support of employers, trade unionists, educationalists, and regional authorities.	
		• **Learning culture:** An outward looking approach to policy development is adopted which seeks to mimic the best approaches from around the world. Exchange visits are held between countries with a view to learning from best practice and form mistakes and sharing ideas.	
		• **Consensus building:** The objectives for the vocational education and training system are clearly stated and the roles and responsibilities of each actor in achieving them are understood. Changes are made gradually and with the support of all the main players. Recognising that meaningful and long lasting reform takes time, there is a broad cross party consensus not to make sudden and disruptive changes	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE			
Function M	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
ASSURING THE QUALITY OF THE OVERALL SYSTEM (IE POLICY, STRATEGY)	3. *Enabling all partners and stakeholders to contribute actively and constructively to the quality of the skills system*	• **Social capital:** The approach to ensuring the quality of the vocational education and training system rests upon a long standing philosophy of the creation and sharing of mutual benefits for all (ie trainees, employers, trade unions, government) and is embedded and sustained culturally and inter-generationally. .	
		• **Informed consumers:** A modern and responsive regulatory system supports a competitive and well-functioning market. Consumers – both learners and employers –have access to the information they need to make choices about providers and training that meets their needs.	
		• **Clarity of roles and responsibilities:** Partnership working is characterised by co-operation and avoids contested governance arrangements especially between different geographical levels. In larger countries, the distinction between the responsibilities of central government and region or local government is clear and they work together harmoniously.	
	4. *Placing sustained skills improvement at the heart of government economic strategy*	• **Overarching Strategy:** Policy is guided by an overall government strategy that includes all education (including learning taking place in schools and universities), regards developing skills for industry as a priority and integrates a range of quality assured interventions including apprenticeships, adult learning, higher education and both core and 'soft' skills.	
		• **Legal underpinning:** The principles of the system are underpinned by statute and set out the requirements to maintain its quality. Rather than piecemeal legislation being added continually, amendments to existing acts are introduced following extensive consultation and consensus building. This may follow rigorously evaluated new approaches prior to legislative change.	
		• **Economic development:** Skills and training should not be seen in isolation from the development of the economy. Priorities for investment need to be driven as part of a wider plan recognising the importance of sectoral diversification, technological development, exporting and fostering small and medium sized businesses.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

<table>
<tr><td colspan="4">FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE</td></tr>
<tr><th>Function N</th><th>Critical Components</th><th>Characteristic features and examples of good practice</th><th>Exemplars</th></tr>
<tr>
<td rowspan="6">Assuring the quality of teaching institutions</td>
<td rowspan="3">1. Establishing a clear range of criteria for performance management with measurable indicators</td>
<td>• Breadth of criteria: Providers are assessed against discrete sets of performance criteria assessing how well they meet the needs of learners through the outcomes attained; the quality of teaching, learning and assessment; value for money; and the effectiveness of leadership and management.</td>
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<tr>
<td>• Effective management : Providers are assessed and regulated against a range of management criteria: these include responsiveness to both employer and learner needs; faithfully delivering the content of accredited courses; effective governance and record keeping; handling complaints and appeals fairly and efficiently; and demonstrating financial efficiency.</td>
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<tr>
<td>• Accreditation: All providers, regardless of type, must be registered up front to deliver specific courses having demonstrated their capacity to deliver consistently to national standards and be continuously assessed thereafter through external review.</td>
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<tr>
<td rowspan="3">2. Providing clear and comparable information on performance to those who use training institutions</td>
<td>• Transparent information: Information of the performance of providers and success rates for individual training programmes is freely available to prospective learners and employers enabling better choices to be made and for a market to develop to drive up quality. .</td>
<td></td>
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<tr>
<td>• Kitemarking: A quality accreditation process is in place which provides a 'badge' of quality or 'kitemark' to providers therefore enabling students to choose the best institutions. Often these kitmarks are provided by respected employer associations which have monitored the quality for provision to ensure it reaches the required industry standards. In the UK Sector Skills Councils branded quality providers as National Skills Academies.</td>
<td></td>
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<tr>
<td>• Market signals: Reputation in the market (given students and their parents pay fees) has traditionally been the main factor signalling the value of training at specific institutions. However private funding can also undermine the willingness to fail students who fail to attain the required standards.</td>
<td></td>
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</table>

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	FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE		
Function N	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Assuring the quality of teaching institutions	*3. Encouraging progress and positive action through a range of incentives and support mechanisms*	• **Risk banding:** A risk based approach to regulation recognises the variable risks faced by providers depending, for example, upon their size or type of provision. Higher quality providers delivering to a higher standard therefore also benefit by reduced red tape and operating in a more trust based environment.	
		• **New provider entry:** In order to introduce fresh approaches and maintain high standards, government works with industry to put in place specialist institutions such as Academies or "Meister Schools" with top class facilities with the involvement of highly skilled workers as visiting teachers.	
		• **Accreditation:** Public funding is contingent upon attaining accreditation through a multi agency evaluation commissioned by the Government	
		• **Performance related funding:** Training providers are incentivised to deliver the training places and projected outputs contracted to them through a funding regime which provides part payment by results.	
		• **Peer assessment:** Providers share best practice and work collaboratively to provide a range of excellent quality provision to communities. Many providers are directly accountable to their employer communities (often being set up to provide specialist facilities) rather than solely to government funding authorities.	
	4. Taking action to address poor performance to restore quality provision	• **Regulatory powers:** Powers exist to act decisively and speedily where underperforming providers are identified. A range of interventions is available up to and including closure.	
		• **Compliance auditing:** Regulators operate a strong compliance auditing and sanctions regime based on a risk-banded approach to minimise bureaucracy and cost to the public purse.	

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FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE			
Function O	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Assuring the quality of workplace training (including apprenticeships)	1. *Adopting appropriate teaching and learning methodologies for workplace delivery*	• **Appropriate mentoring:** Best practice is adopted in mentoring practice. This is likely to involve: only selecting mentors who volunteer for the role; are empathetic; have the right skills; are adept at using their judgement and discretion when dealing with issues; take a proactive approach; and appreciate that if things aren't working, both sides should be able to move on without assigning any blame.	
		• **Flexible delivery:** Employers are able to customise the management of the learning of their apprentices and trainees through adjusting their release for off the job training and customising modules, courses and programmes to suit the skill and knowledge requirements of the company or industry.	
		• **Report books:** Report books are kept by trainees and signed by their trainers at regular intervals. These contain detailed descriptions of the work performed in the company, areas of learning, outcomes demonstrated and progress made.	
	2. *Ensuring access to effective teaching resources and facilities to meet the wider needs of industry, occupational competences and business sectors*	• **Blended learning:** Work-based curriculum design utilises developing methodologies which blend and combine information and communications technologies creating 'virtual learning environments' with problem-based learning with the focus on solving real and concrete workplace problems, issues or concerns.	
		• **Use of technology:** Technology is effectively deployed and includes, where appropriate, industry standard technologies. Innovative practice is shared and replicated through peer support generating communities of practice.	
		• **Bespoke facilities:** Where required to supplement their own facilities, employers - often supported by employer associations such as Chambers – install special training workshops providing a simulation of work practice and learning. This is especially useful for SMEs. However, such facilities are not seen as a substitute for on-the-job training as they cannot provide the advantages of in company training.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE			
Function O	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Assuring the quality of workplace training (including apprenticeships)	3. *Ensuring appropriate support mechanisms are available to provide high quality training and pastoral support for work based learning programmes*	• **SME collaboration:** Small and medium-sized enterprises unable to provide all the facets of training required (whether due to the division of labour in production processes, increasing specialisation, financial problems or accelerated technological change) are supported via external training measures such as inter-company vocational training centres or Group Training arrangements.	
		• **Company training:** Companies are advised by expert employer associations (eg Chambers) on the best methods of training their apprentices; and coaches, mentors and trainers are assessed to ensure they have the requisite technical and pedagogical skills (aligned to national standards agreed by government and social partners) before the company may be certified to provide in-company training.	
		• **Business support:** Industry led organisations provide support for business by setting national skill standards for their industry, providing information and advice to trainees and their employers, arranging for the delivery of on and off-job training (including developing training packages for employers) and monitoring the quality of training.	
	4. *Maintaining overall consistency and high standards through appropriate external quality assurance checks and processes*	• **National training standards:** For each apprenticeship, there exists a framework of vocational and educational training standards, based on state recognised occupations, which comprise defined learning outcomes, occupational characteristics, a training plan of up to three and a half years and an assessment strategy common to both on and off the job training.	
		• **Contractual rights:** An apprentice must be employed in the occupation for which they are training throughout their apprenticeship, be supported by a training plan agreed by the apprentice, the employer and the organisation and result (at least) in a craft or technician level qualification thereby being deemed 'work competent' for the occupation in which they have been training with industry will determining the standard of competency to be met.	
		• **Employers as providers:** Businesses are free to operate as government authorised training bodies in their own right but are regulated to a common standard with other providers. Accredited workplace training needs to be general rather than employer specific.	
		• **Regulation:** On the job training is highly regulated under legislation to ensure widespread confidence amongst all stakeholders including workers and employers. The range of workplace training conditions are negotiated and agreed between employers and representatives of the workforce through a social partnership.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE			
Function P	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Assuring the quality of assessment, accreditation and certification	1. *Providing confidence to employers of the ability of successful students to function effectively in the workplace by basing assessment on 'real life' situations and*	• **Employer led:** Respected employer associations (eg Chambers) develop the assessment tasks for all apprentices of a given qualification. These real work tasks comprise a range of integrated skill requirements which test the full spectrum of competence. They are the same across the country with national quality control exercised by the employer body.	Germany flag
		• **Standards based:** Assessment can use a variety of methods and approaches (appropriate to the learner and the context) that give the learner the opportunity to show evidence of achievement/competence. This can be demonstrated by task or by evidence but is designed to ensure the required standards are achieved which specify what a candidate needs to know, do, and understand.	New Zealand flag
		• **Time serving:** Assessment for qualifications is not the only method of ensuring trained people function well in the workplace. The time serving arrangements applicable in some countries' apprenticeships programmes ensure people have sufficient time to acquire softer skills which are hard to assess and come from experience and work practice rather than from pedagogy alone.	Germany flag
	2. *Ensuring all assessment and resulting certification adheres to transparent standards which are independently monitored through a third party*	• **Independent assessment:** Awarding bodies have a direct interest in ensuring certificates issued under their name are of a consistent quality. Provider assessment is therefore closely monitored and moderated and the moderation is entirely independent of the training provider. This ensures consistency, independence and facilitates shared good practice in provider assessment. Assessment is against standards specifying learning and performance meet national rules (viz fit for purpose, assessable, and capable of consistent interpretation).	England flag
		• **Risk banding:** There is no routine external moderation of accredited courses. Rather the system depends upon the risk banding of providers and periodic strategic reviews of a particular issue, sector, qualification or method of delivery when a risk has been identified. This has the advantage of reducing bureaucracy.	Australia flag
		• **Flexibility:** A standardised national assessment framework provides a systematic means of ensuring that all those seeking the same qualification are assessed against the same standards and criteria. Competences may be acquired in diverse ways and there is a clear basis for – and high take up of - the recognition of prior learning.	Australia flag

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FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE			
Function P	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Assuring the quality of assessment, accreditation and certification	3. *Enabling the transferability of certified learning through articulation across the skills system extending*	• **Qualifications Frameworks**: All publicly certified learning is accredited to a comprehensive National Qualifications Framework which enables confidence to be maintained in the quality of qualification as well as ensuring comparability of the levels of difficulty and clarity of progression routes.	
		• **International mobility:** Overarching quality assurance of respective national qualifications frameworks (through internationally quality assured referencing processes) is in place to enable the mutual recognition of the levels of qualifications across national borders to facilitate the free movement of workers. Employers are assisted in their recruitment by being able to appreciate the qualifications of workers from other countries whose systems may be unfamiliar.	
	4. *Guaranteeing the fairness and consistency of all accredited learning and certified skills through effective governance and regulation.*	• **Legal requirements:** The responsibilities for assessment and quality assurance are regulated legally. There must be a final examination, it must be free of charge for the candidate and he/she may repeat it twice. The competent institutions for the assessment are the employer associations which develop the assessment tasks, supervise the process and guarantee the quality standards. The social partners agree the members of the examination board (minimum 3 persons): one expert from the employers, one from the unions, and one teacher).	
		• **Government responsibility:** The Government oversees a National Competency System with consistent assessment requirements resulting in all certificates being issued by the relevant government department. This has the effect of ensuring accountability for the reliability for the system is seen by employers to rest with the highest authorities.	
		• **Tiered system:** A system involving both internal and external moderation is in place. The national regulator assumes overall responsibility for quality and issues all certificates and qualifications. Providers and industry bodies must both be accredited before they can offer assessment against unit standards. They are then required to carry out internal moderation and also submit to a national external moderation system.	
		• **Integrated governance:** The national VET system delivers workplace specific skills and knowledge based competencies under a tight and interconnected governance system. It functions within a strict National Skills Framework of qualifications defined by training packages devised by industry and explicit quality delivery standards. Quality assurance is overseen at the national level but is reinforced at state level.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE			
Function Q	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Assuring the quality of teaching and training	1. *Establishing and maintaining an effective evaluation and inspection regime*	• **Employer leadership:** Employer associations are responsible for the quality of teaching and training in the workplace on an end-to-end basis. They advise the companies providing training, monitor the training, determine the suitability of companies and instructors, register training contracts and conduct nationwide examinations.	🇩🇪
		• **Breadth of criteria:** Independent inspectors from a government sponsored agency judge the quality of teaching by evaluating a broad range of criteria including how teachers plan and deliver teaching; how they monitor learners' progress; how learners benefit from care, support and high expectations; and whether they understand how to improve as a result of feedback.	🏴󠁧󠁢󠁥󠁮󠁧󠁿
		• **Continuous improvement:** Inspections of teaching and training are carried out with minimal noticed to ensure the judgement is made without special preparations being out in place. The minimum standard to continue operating is 'requires improvement'. There is no 'satisfactory' grade notice.	🏴󠁧󠁢󠁥󠁮󠁧󠁿
	2. *Complementing inspection measures with setting objective quality standards and assessing longer term outcomes*	• **Qualified trainers:** Trainers delivering nationally recognised qualifications are themselves expected to hold the relevant teaching qualification or demonstrate equivalent competency. They are also required to have relevant vocational competencies, at least to the level being delivered or assessed.	🇦🇺
		• **Outcomes focus:** Traditional quality assurance focuses mainly on inputs, systems and activities. However, international trends are shifting towards away from quality control (meeting input standards) and towards a greater focus on quality enhancement and excellence in learning outcomes, in particular using mixed methods and participatory approaches to arrive at a robust process for reaching more consistent and comparable judgements	🇳🇿 🏴󠁧󠁢󠁥󠁮󠁧󠁿
		• **Professional Development:** Legal requirements are laid down for in-company trainers. As part of the accreditation process, providers have to ensure their teachers are qualified with professional experience and that they participate in further training. This involves having a vocational background as a supervisor, skilled worker or a qualified craftsperson as well as being a certified educator/trainer in both their trade and in professional education. An independent test is required. Standards are also in place to ensure trainers display sufficient evidence of trainer aptitude. 'Refresher' training is available to update skills.	🇩🇪

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

Function Q	Critical Components	Characteristic features and examples of good practice	Exemplars
FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE			
Assuring the quality of teaching and training	3. *Contextualising the quality of teaching and training both in a wider institutional context and against*	• **Communities of practice:** A 'quality assurance culture' is established through mutual peer learning amongst teachers and trainers. To this end, leading figures from the world of vocational training are tasked with raising the professionalism of teachers and trainers across the training sector with the development of a new set of professional standards as a result.	
		• **Teacher exchange:** Transnational bodies (eg the European Commission) support VET staff (including in-company 'on-the-job' trainers) to teach at partner VET institutions abroad. The activity also supports the professional development of VET staff in the form of a work placement or a job shadowing/observation period abroad in an enterprise or any other VET organisation	
		• **Integral to accreditation:** Vocational Education and Training Institutions must meet quality standards for teaching/training before recognition/accreditation to operate as a publicly funded provider is granted and before specific courses are approved. Periodic external evaluation provides an additional and continuous independent judgement of the quality of teaching.	
	4. *Facilitating a close relationship between the skills and knowledge required for teaching and training both 'on*	• **'Meister trainers':** Utilising craftspeople and engineers as teachers both improvise the relevance of training and more broadly contributes to a culture where the most skilled are celebrated by society providing an example to others to emulate their achievements and to update their skills. Supporting such 'skills technicians' to teach students and workers is also integral to a competency based approach to skills promotion.	
		• **Workplace experience:** The OECD recommends that teachers should have work experience relevant to their subject and spend time in workplaces. Some countries have taken steps to ensure teachers have greater workplace experience through, inter alia, Meister schools.	
		• **Employer engagement:** Businesses influence and improve the quality of the teaching and learning that students receive by providing leadership in the structure of the curriculum – giving students the hard and soft skills they need in the workplace - and endorsing the qualifications offered. They work with teachers to create employer projects that focus on real-life challenges and are relevant to industry, providing additional support and mentoring for students as well as guiding them on career routes and options.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE			
Function R	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Improving the quality of all aspects of the system	1. *Formulating a strategy supported across the political spectrum which meets the needs of the economy of which skills and training form an*	• **Consensus:** There is a widely shared consensus that quality is defined as both meeting the skills needs of business with a view to improving their productivity as well as increasing the employability of the young and the unemployed. A separate government agency is responsible for building consensus around policy developments across the social partners (employer and trade unions) and wider stakeholders.	🇩🇪
		• **Political priority:** The quality of training is a high profile political issue which is perceived across the political spectrum as central to the overall social and economic progress of the nation. Explicit policy statements are issued by the main parties seeking to form a government.	🏴󠁧󠁢󠁥󠁮󠁧󠁿
		• **Planning:** Skills development is an integral part of a broader employment and development strategy aimed overall productivity and employment growth. To this end, a government led vocational training strategy assures the supply of a skilled industrial workforce in support of a succession of economic development plans subscribed to by all stakeholders.	🇰🇷
	2. *Adopting a long term sustainable and effectively managed approach to meet the requirements of business to meet technological change in a globally competitive environment.*	• **Standards not structures:** The focus of systemic improvement is on the relevance and quality of training rather than on the institutions that are responsible. Inventing and re-inventing public agencies is avoided in favour of utilising existing organisations with a strong track record and credibility in the eyes of the public and employers.	🇩🇪
		• **Governance:** Clear roles and responsibilities in the governance of the skills system are in place which include a central role for industry. Where different geographical tiers of government exist, the responsibilities at each level (federal, state, community etc.) are distinct but collaborative.	🇦🇺
		• **Stability:** Skills strategies are formulated over time horizons of seven years or more enabling fundamental improvements to be allowed to bed in and be assessed. They are couched in an overall approach which highlights the need to build international relationships to improve competitiveness, support business and innovation and improve the overall outcomes for communities, learners and the economy.	🇳🇿
		• **Information:** Quality improvement involves a long term strategic investment in providing transparent, high quality information to support the labour market and inform learners' decisions on careers and training. This is backed up by explicit co-operation between industry and training providers about the types of skills that are most needed, and how best to develop them.	🇳🇿

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 3: QUALITY ASSURANCE			
Function R	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Improving the quality of all aspects of the system	3. *Developing a skills strategy in a transparent way supported by expert advice, consultation and consensus building with all stakeholders*	• **Expert advice:** Improvements are frequently driven by government commissioning independent reports from internationally renowned experts. These are often chaired by leading employers and academics. Advice is also sought from leading employers, academics and trade unionists supported by executive policy and research capacity.	✚
		• **Transparency:** Consultation on changes to the skills systems are systematically carried out with progress readily accessible on government websites. Information on the detailed proposals, the responses themselves, who has responded (by type of organisation) and the final outcome are all freely available.	✚
		• **Consultation:** There is a legal requirement that social partners (employers and trade unions) are informed and consulted about all important matters connected with vocational education and training (VET). Continuous improvement is also part of their remit.	🇩🇪
	4. *Learning from best practice through robust evaluation as well as being open to international best practice and innovation*	• **Benchmarking:** Quality is benchmarked against comparable countries with a national reference point tasked with reporting on where improvements are required. Many adjustment processes take place at different levels of the system including adopting a 'learning outcomes' approach, reshaping the curriculum and improving the institutions, and updating the curriculum content and the teaching process.	🇩🇪
		• **International best practice:** A persistent, systematic and persevering approach to improving quality is adopted to improve the vocational education and training system. This is based on an outward looking approach, borrowing from best practice around the globe and a willingness to learn from mistakes and rectify weaknesses.	🇰🇷
		• **Evaluation:** A dedicated agency has a statutory mandate to support pilot projects including their scientific supervision. These develop and test innovations in the field of vocational education and training and prepare them for implementation. This continuity ensures change is introduced to improve outcomes not for change sake.	🇩🇪
		• **International exchanges**: Increased movement of people and ideas between countries is encouraged, particularly between key trading partners. Strong vocational training and education research connections are supported as is the recruitment of international students and the corresponding entitlement of students to study abroad.	🇳🇿
		• **Quantification:** The skills strategy overtly contributes to economic development and social inclusion goals which are in turn translated into quantified targets; this helps enable a robust evaluation strategy to determine the successes and failures of specific innovations and the strategy as a whole.	🇰🇷

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

Functional category 4

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

	FUNCTIONAL CATEGORY 4: BUDGET PLANNING AND FUND ASSIGNMENT		
Function S	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Effective management of public resources	1. *Deploying funding to secure the maximum value in return for public investment*	• **Linking funding to quality:** A dedicated agency is responsible for both funding and monitoring training providers. Funding is made available with clear expectations of performance supported by information on skills supply and demand to make better investment decisions.	
		• **Employer co-funding**: VET is funded more or less equally between public funds and employer investment; this provides a more effective and sustainable model than full time, wholly publicly funded training.	
		• **Payment by results:** A proportion of funding is contingent upon the achievement of results and of the continuous improvement of standards. For example, providers must demonstrate that trainees move on to a secure job or progress to a higher level of training within six months of completion.	
		• **Economies of scale:** An explicit objective of the funding regime should incentivise fewer, larger and higher quality Vet institutions as well as strengthening the links and encouraging greater collaboration between schools, colleges, employers and careers organisations.	
	2. *Ensuring a stable and sufficiently well funded financial basis for the skills system to meet its strategic objectives*	• **Long term commitment:** The system is well resourced with strong, sustained and shared financial responsibility being maintained even during the economic crisis. A legally enforced levy system provides an employer run infrastructure to support the role of employers in providing training whilst employers also contribute individually by paying the wages of apprentices and supporting their own staff to train as trainers and provide mentoring and coaching support to apprentices.	
		• **Infrastructure investment:** Investment in infrastructure (premises, facilities and equipment), materials, technology, teachers and teacher training need to be maintained at a high level to ensure the quality of provision is maintained. This is often best done through maintaining close relationships with employers (eg through 'Meister schools') able to help guide the prioritisation of funding decisions and the attainment of high teaching standards.	
		• **Investment partnerships:** Co-funded 'partnership agreements' representing consensus between the national and state level create a mutual interest in the success of the system. The funding regime also seeks to enable the publicly resourced system to compete on a level footing with the many private training providers.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY 4: BUDGET PLANNING AND FUND ASSIGNMENT			
Functions	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Effective management of public resources	3. *Apportioning funding effectively between different government ministries and geographical layers, and types of provider including those in the private sector*	• **Cross-Ministry:** Support for training is across government departments. Responsibility for funding is shared between education and business ministries reflecting their respective remits for initial vocational education and training (IVET) and continuing vocational education and training (CVET). Each Ministry oversees a funding agency with specific objectives associated eg to progress into jobs/further training (IVET) and to support workforce development (CVET) with the resources they manage.	
		• **Policy flexibility:** In a federal system, funding is split between the national government and the states. This enables states to have some flexibility in allocating resources and allows some policy flexibility to respond to local needs or to different priorities as expressed by their citizens. At the same time overall national coherence is maintained.	
		• **Regional autonomy:** In a federal system, the state may maintain a degree of detachment from the funding of training delivery so that the costs are shared between the companies – responsible for the on the job element; and schools/colleges funded at regional level (eg by the lander in Germany) responsible for the off the job element. The regional level may also initiate funding schemes to support their own policy initiatives or deal with specific localised priorities.	
	4. *Addressing 'market failure' by deploying funding where the resources of other stakeholders - including individuals and employers - is demonstrably insufficient*	• **Differential funding:** Based on national Labour Market Intelligence, the federal government offers states/regions a higher funding rate for areas of skill shortage (an example being 'para professional roles' in Australia) and caps funding where there is oversupply. The system allows for an element of both national and regional prioritisation.	
		• **Multiple funding streams:** Public funding from general taxation is supplemented by Employment Insurance with both employer and employee contributions hypothecated for Vocational Training. This arrangement ensures the commitment of both firms and members of the workforce.	
		• **Targeted funding:** An explicit funding priority is adopted focusing on delivering skills for industry with investment adjusted where required. Typically this is to meet areas of unmet industry demand, such as engineering and information and communications technology.	
		• **Additionality:** Government funding is informed by 'additionality': the principle that regards public money as best spent where there is minimal 'displacement (ie substituting for the investment of other players including employers) and 'deadweight' (ie funding provision and activities which would have happened even had public resources not have been made available).	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY: BUDGET PLANNING AND FUND ASSIGNMENT			
Function T	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Aligning resources to policy priorities and strategic objectives	1. *Apportioning funding so that policy priorities are delivered and the maximum impact is secured.*	• **Policy objectives:** Funding is apportioned at national level to specific objectives such as business competitiveness; wider skills development; apprenticeships; access courses and pathways to learning; help for new industries and overall support for the system. .	
		• **Coherent governance:** A single government department is responsible for the budgets of all vocational education expenditure at all skills levels. Where more than one department is involved, mechanisms exist for joint governance across education, business and/or employment for overlapping areas eg all age apprenticeships.	
		• **Return on Investment:** Research is systematically carried out to evaluate the return to investment through cost benefit analysis in the range of training and education policy interventions and different programmes of learning. This should include international comparisons.	
	2. *Incentivising training and education which meets the skills needs of the economy.*	• **Skills shortages:** Resources are targeted at skills shortages especially in technical areas such as science or engineering and transferable skills (eg critical thinking and communication).	
		• **STEM:** Higher Education institutions are incentivised to respond effectively to the increase in demand for Science, Technology, Engineering and Mathematics studies by developing facilities that will support an increased flow of highly employable graduates into industry. Institutions need to match-fund any allocations on at least a one-to-one basis	
		• **Outcome based funding**: Public funding is allocated proportionately to those interventions and organisations that make the best contribution to the positive labour market outcomes including sustainable employment and progression to further learning opportunities. .	
		• **Evidence based**: Based on national labour market intelligence, the government provides a higher funding rate for areas of skill shortage (for example, 'para-professional roles' in Higher Education) and caps funding where there is oversupply. The system allows for an element of both national and regional prioritisation.	
		• **Infrastructure**: Funding for projects that create or develop significant infrastructure in higher education, research and vocational education and training institutions are judged against criteria which reflect the policy priority of building a modern, productive, internationally competitive economy.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

		FUNCTIONAL CATEGORY: BUDGET PLANNING AND FUND ASSIGNMENT	
Function T	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Aligning resources to policy priorities and strategic objectives	5. *Planning holistically to ensure all training and education activity at all levels is complementary and maximises benefits at al levels of the economy and society*	• **Integrated funding and planning:** The funding and planning of vocational and education courses and apprenticeships is coherent and integrated with the process for higher education and professional training opportunities. A variety of different funds improves outcomes across foundation education, vocational education, and promotes the participation of disadvantaged groups in higher education.	
		• **Full spectrum:** Funding covers a range of target groups including young people leaving school; apprentices; the unemployed; the current workforce; and disadvantaged groups. This funding is calibrated to reflect ability to pay.	
		• **Access courses:** Specialist courses build upon vocational training and apprenticeships imparting deeper occupational knowledge. They lead to the acquisition of a university entrance qualification to science degrees or, where a second foreign language is offered, a general higher education entrance qualification.	
	6. *Addressing wider social and economic exclusion policy priorities through interventions aimed at tacking poverty and disadvantage in the labour market.*	• **Proportionality:** Public funding is proportionate to need with higher rates available to younger people, the unemployed and those with employability skills deficiencies.	
		• **Positive action:** Public funding incentivises support for employers to help disabled, jobless or disadvantaged people to start apprenticeships or take up training. For example, introductory training modules utilise aspects of the curriculum from apprenticeships and other formal VET pathways.	
		• **Social returns:** The cost benefit analysis of the value of skills and learning extends to wider social measures including health, crime, state benefits and poverty when considering the deployment fo resources to support access and progression for disadvantaged groups.	
		• **Income contingent grants:** Financial support in the form of grants for the poorest students is available to those least able to afford to train and who cannot afford to take out loans.	
		• **Targeted training:** Financial initiatives help small companies employ unemployed young people and provide training to meet the employer's needs. In parallel, assistance for disengaged youth who are not attending school to move into the workforce or start vocational education is also available to community based organisations.	

TOWARDS A 'GOLD STANDARD' SKILLS SYSTEM

FUNCTIONAL CATEGORY : BUDGET PLANNING AND FUND ASSIGNMENT			
Function U	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Providing incentives and encouraging contributions	7. *Encouraging financial contributions from employers to train the workforce and take on young people and the unemployed in jobs with training*	• **Targets for intermediaries:** Intermediary employer led bodies are funded by government on the basis of the number of companies they enlist to provide workforce training and apprenticeships.	
		• **Cost effectiveness:** Employer (co-) funding for apprenticeships enables the state to focus resources on areas of more acute need. If employers did not fund apprenticeship places, higher volumes of full time education would be needed. The costs of youth unemployment to the state are also lower.	
		• **Levy funding:** A payroll levy on large firms provides an answer to the issue of a structural decline in training at craft and technical level putting investment in skills on a long-term, sustainable footing and reducing poaching from competitors.	
		• **Employer insurance:** Employers benefit from an insurance scheme to help workers gain the skills to remain in work and for the young people and the unemployed to (re) enter employment.	
		• **Ability to pay:** Financial contributions vary depending on the size of the company although all are expected to pay some proportion of the cost.	
		• **Levy funding:** Employers are required by law to join and pay a levy to the Chambers for a range of services including apprenticeship training. This ensures training serves the collective interests of the economy in additional those of individual firms.	
	8. *Providing incentives for employers to train the workforce and take on young people and the unemployed in jobs with training*	• **Portable qualifications:** In return for training to common specifications meeting the needs of a spectrum of employers in a given sector or for a given occupation, funding for training is provided from public funds with the intention of guaranteeing quality and portability for the learner.	
		• **Targeted incentives:** Additional incentives are provided to companies to create additional places, help insolvent firms or provide intercompany training.	
		• **Combined policy priorities:** In a federal system, financial incentives are deployed at both national and regional/state level according to relevant public policy priorities.	

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FUNCTIONAL CATEGORY: BUDGET PLANNING AND FUND ASSIGNMENT			
Function U	**Critical Components**	**Characteristic features and examples of good practice**	**Exemplars**
Providing incentives and encouraging contributions	*9. Encouraging financial contributions from individuals to invest in their own learning with dispensations where required*	• **Income contingent loans:** Given the expected wage returns to degrees, post graduate and professional qualifications, higher level vocational training is normally expected to be funded privately and often by individuals. However, loans are available to meet the up front cost and only repaid if a sufficiently high salary is attained. Subsidies and bursaries are available to address skills shortages.	
		• **Co-funding:** With the exception of apprenticeships, for people of post compulsory school age training grants at 50% of the cost are available with the remaining amount coming from the student and/or employer.	
		• **Targeted grants:** Financial support in the form of grants for the poorest students is available to those least able to afford to train and who cannot afford to take out loans.	
		• **Reduced minimum wage:** Apprentices are expected to work for considerably less than the minimum wage over their 'time served' period. This represents a substantial 'in kind' contribution to their training and other costs borne by their employer and the state.	
		• **Employment Insurance**: Employees contribute to employment insurance; this enables them to benefit when retraining is required from training accounts, tuition subsidies and/or low interest loans.	
	10. Providing incentives enables government to secure a more effective system	• **Labour market needs:** Where employers or individuals source their own training, for example from private institutions, public funding provides incentives to align provision with labour market priorities and improved quality.	
		• **Value for money:** Government requires a financial contribution towards the cost of training to ensure employers and individuals have an incentive to demand relevant, high quality training and good value provision.	
		• **Key sectors**: In sectors vital to the long term health of the economy (such as engineering, construction and the media) a compulsory levy system run by business and enforced by government provides grants to business to train.	