

2011

France and

higher vocational education abroad



For the Ministry of Foreign and European Affairs (MAEE), development cooperation in higher vocational education is a priority task. **A strategic framework has been devised in close cooperation with other partner ministries, public operators and the private sector.** This work revealed the large number of French players with recognized skills working in higher vocational education throughout the world. The currently operating programmes reflect a **wide variety of actions** and bear witness to the **very high demand for development cooperation and expertise expressed by emerging and developing countries.**

This paper summarizes the actions undertaken and makes a number of recommendations based on the discussions that preceded its production.

WHAT IS HIGHER VOCATIONAL EDUCATION?

“Vocational education” usually refers to all the courses leading to higher and graduate qualifications based on a “career” approach and designed in close cooperation with the private sector so that the training proposed is appropriate for the world of work.

Higher vocational education, i.e., post secondary school, consequently comprises higher in-service training and teaching given in university technology institutes (IUTs), business and engineering schools supported by chambers of trade and industry (CCIs), regional vocational chambers, etc. French universities are also increasingly active in this sort of course.



The university of Saint-Quentin-en-Yvelines, offering over 200 multidisciplinary and qualifying courses, implements a serious international cooperation policy. © MAEE/Frédéric de La Mure.



Higher vocational education in France

A distinctive system

France's system of intermediate higher vocational education possesses a number of distinctive features in both initial and in-service training.

Variety of course types

Courses vary widely in duration, location and training methods, as do the forms of access to higher vocational education.

Selective admission

The major business and engineering schools supported by CCIs, the IUTs and BTS courses (advanced vocational diploma) admit candidates selected through application forms or competitive examinations.

Involvement of social partners

Employers and unions are involved in a distinctive form of course and qualification design using a methodology that now serves as a **European reference** (definitions of trades, activities, associated skills and knowledge, qualifications); high-level representatives of professional organizations are well represented on the committees in charge of defining vocational and qualification references.



Lift repair apprentices from the industry course of the Tours apprentice training centre. © MAEE/Frédéric de La Mure.

Effective vocational integration

The social dialogue between employees' unions and employers' organizations ensures the "employability" of the future diploma-holders and an appropriate place in collective bargaining agreements.

Long company internships (14 to 18 weeks over a year for the BTS) are compulsory and take place under the tutorship of professionals.

Increasing opportunities to opt for apprenticeship

In recent years these courses have been accessible via **sandwich courses** and **apprenticeships**, which are increasingly numerous in higher education, enabling students to receive an initial vocational integration and compensation.

ORIGINS OF HIGHER VOCATIONAL EDUCATION IN FRANCE

The very first vocational colleges date from the beginning of the industrial period, but higher vocational education only really began to structure itself in the 1950s in response to the technological upheavals affecting industrialized societies. This meant higher qualification standards, requiring a general restructuring of the education system with a new intermediate level of vocational education between the vocational aptitude certificate (CAP) and the engineering diploma.

This need for an "intermediate" form of higher education was met by the creation of the BTS (advanced vocational diploma) and a few years later the IUTs (university technology institutes).

Globalization is driving the demand for intermediate higher vocational courses

The diffusion and transfer of technology that goes together with the export of capital goods and infrastructure, such as the location of companies in emerging and developing countries, bring the **same requirements for qualification** as in industrialized countries.

Intermediate skill sets are a major asset emphasized by both business leaders and policymakers.

Faced with a **growing demand for higher education** from families, governments are seeking to enhance the prestige of higher vocational courses in order to attract a significant proportion of students and relieve the pressure on universities.

At the same time, governments are using the opportunity of the arrival of foreign companies to create or modernize vocational training centres, situating them within the framework of a general policy, especially for certification.



Making electric cables in Latin America. © MAEE/Frédéric de La Mure.

DREIC AND VOCATIONAL EDUCATION AT INTERNATIONAL LEVEL: THE COLLEGE-COMPANY MODEL

Under the impetus of the Directorate for European and International Relations and Development Cooperation (DREIC) of the Ministries of Education and of Higher Education and Research, this successful model of support for developing vocational education involves cooperation between the Ministries, the private sector and the local education partner (ministry or local authority). The private company provides the “technical facilities”, the DREIC the training and certification system and the partner the premises, logistics and teaching team.

In this way the international development of French companies is advanced in the short term by in-service employee training and in the medium-term by the creation of a pool of qualified labour. French technical training is shown to its advantage in the students’ initial training and the teachers’ in-service training.

<http://www.education.gouv.fr/cid1181/direction-des-relations-europeennes-internationales-cooperatio.html>



A number of major French groups have opened **training centres to support their overseas locations**: Peugeot-Citroën, Schneider Electric, Eurocopter, Airbus, Dassault Systèmes, Areva, Thales, Chaffoteaux et Maury, Casino, Sodexo, etc. These are designed primarily to **meet the companies' local need for skills**. But they also offer other French companies the chance of entering the local teaching services and material markets. This public-private cooperation has a multiplier effect in terms of **know-how exports**.

The growing awareness of the value of quality higher vocational education is leading to a **high demand for development cooperation**. This concerns both the institutional aspects and the governance of educational establishments, the design of baselines and certification, and, in some cases, the design and construction of educational establishments.

TWO MAJOR FRENCH GROUPS INVEST IN VOCATIONAL EDUCATION ABROAD

PSA Peugeot-Citroën and the French education system in vocational education abroad

The company cannot always find the skills it needs in the countries where it locates. It develops training centres together with the French Ministry of Education and local education systems to train basic and higher technicians: a trades campus in Slovakia, a training centre in Mexico.

Teachers chosen by the Ministry of Education (Professeurs sans frontières) also give technical courses abroad. Under the "college-company" partnership concept, the terms of reference are specified by the company.

<http://www.professeursansfrontieres.fr/>

Total Professeurs Associés (TPA) and vocational education abroad

TPA was set up in 2001 to foster relations between the oil industry and universities and engineering schools. The non-profit association, whose members are current and retired employees of the Total group, offer week-long courses on various oil industry topics (drilling, refining, human resources, etc.) to be included in the curriculum of local training establishments. TPA operates in some fifty countries: Institut supérieur de technologie d'Afrique centrale, Cameroon, Institut supérieur de technologie, Madagascar (ecological packaging techniques), Institute of Technology of Cambodia (geology, steel construction, reinforced concrete).

<http://careers.total.com/careersFO/tpa/home>



TPA class in Istanbul (Turkey). ©Total.

French development cooperation and higher vocational education: worldwide presence and diversified offering

In higher education, the MAEE's action has traditionally been directed towards universities. Alongside the inter-university exchanges directly managed by the universities themselves, France has developed a **foreign student support policy**, mainly by means of study grants. This policy focuses on the last two degree levels (master's and doctorate) and three discipline areas (so-called "hard" sciences and engineering, economics-law-management and politics). This corresponds to **France's long tradition**

of cultural diversity, attractive universities and worldwide influence which it is important to maintain. A quality charter, adopted in 2006, specifies how grants are to be awarded, with selection juries made up mostly of academics from France and the partner country. The Campus France agency, the MAEE's operator for the promotion of French universities abroad, is the showcase of this policy, with dedicated spaces in French embassies and cultural institutes.



Campus France exhibition in Dakar, Senegal. © Campus France.

CAMPUS FRANCE AND VOCATIONAL EDUCATION

Campus France is an agency dedicated to promoting French higher education abroad. It coordinates the answers given to students interested in studying in France, from initial enquiries to university applications. It maintains a network of 150 Campus France spaces run by French embassies in 97 countries, implementing the university attractiveness policy.

To publicize course offers, Campus France publishes a catalogue for foreign students in a number of languages. It contains information boxes on vocational qualifications and subject boxes. The total number of courses is 36,000.

<http://www.Campus France.org/fr/>



In recent years, action has also been taken to meet the growing demand for the creation and reform of higher vocational education courses. Some of this has been done directly by the MAEE with its **priority solidarity fund (FSP) projects** and agreements. The FSP system is supported by another major instrument of French development cooperation, **technical assistance**. This involves making high-level experts available to partner countries to provide a tailor-made support for institutional capacity building for the administrative departments France works with.

The experts undertake a large number of tasks of consultancy and training, and coordinate the support from the various French players the MAEE works with, working on site to improve higher vocational education.

There are three main types of support.

Institutional support

This supports the **creation or reform of national higher vocational education systems**. It is implemented by the MAEE via the FSP procedure or inter-state agreements (in recent years, for example, the MAEE has directly supported the reorganization of university courses along BMD lines and the introduction of vocational bachelor's degrees). The MAEE also enlists the help of other operators, such as the Agence française de développement (AFD).

TYPICAL FSP PROJECT: U3E (SUPPORT FOR EXTENDING UNIVERSITY COVERAGE, ESTABLISHMENT OF DOCTORAL SCHOOLS AND OPENING UP TO ENTREPRENEURSHIP) IN SENEGAL

Each year the massive increase in qualified school-leavers – 50% up in 2010 over 2009 – makes it urgent to complete university reform in Senegal. The FSP U3E project, based on two technical assistants, is designed to support this change.

One project component has involved creating eleven vocational bachelor degree courses at the regional university colleges set up in 2007 (Bambey, Thiès, Ziguinchor) and Cheikh Anta Diop University in Dakar (UCAD).

This could serve as a model for extending this type of degree course when the Bachelor's-Master's-Doctorate (BMD) system is set up in Senegal: the U3E project is a pioneer.



École supérieure polytechnique sign, Cheikh Anta Diop University in Dakar (UCAD). © IRD/Céline Ravallec.



Head of the Fungal Biotechnology Laboratory at Cheikh Anta Diop University in Dakar (UCAD) and students. © IRD/Céline Ravallec.

Support to French companies

Designed to foster location abroad or exports, this is granted by:

- the Ministry of the Economy, Finance and Industry via the Directorate General of the Treasury (DGT), to develop employment in France by **promoting exports** and **training courses** in the maintenance and use of equipment. The support is granted under two procedures:
 - emerging country reserve (RPE), in the form of loans for infrastructure and energy facilities,
 - private sector aid fund/vocational training (FASEP-FP), in the form of grants for feasibility studies.
- the Ministry of Higher Education and Research, via the DREIC, to support investment abroad by French companies by creating or developing training centres designed primarily to meet staff needs.

AFD AND HIGHER VOCATIONAL EDUCATION

At the request of the MAEE, the AFD is providing financial support for the design and construction of the Bizerte engineering school in Tunisia, in both its tangible (infrastructure and equipment) and intangible (technical capacity-building) aspects.

Usually the AFD and its subsidiary Proparco work with private operators. The AFD group possesses a wide range of financing instruments, including below market rate loans, allocated via local banks to student loans and teaching establishment loans, such as the one to Saint Joseph University, Lebanon, to develop a health technology cluster.

<http://www.afd.fr>





In June 2006, the DREIC set up a service for exporting technology, technical and vocational training in order to form new partnerships and prolong the life of existing centres. In this it is helped by the French association for the development of technical education (AFDET).

Support for the design of vocational programmes and certification

This is the focus of most education players: universities, IUTs, engineering and business schools, national conservatory of arts and crafts (CNAM), national association for adult vocational education (AFPFA), international centre for teaching studies (CIEP), chambers of commerce and industry and sectoral organizations such as CODIFOR. All maintain **bilateral relations between French and local partners**, some using the strategy of joint diploma awards.

SUPPORT FOR THE INTERNATIONAL INSTITUTE FOR WATER AND ENVIRONMENTAL ENGINEERING (2iE)

From its base in Ouagadougou, 2iE, formerly the Eier and Etsher schools, educates African students who will go on to support Africa's development in water and the environment. The courses offered range from vocational bachelor's degrees (five of which by distance learning) to doctoral studies.

France has supported the school since its creation and the MAEE grant of €10 million (from an inter-governmental FSP and central funds) from 2007 to 2010 helped turn the Eier-Etsher group of inter-governmental schools into the 2iE Foundation.

2iE is now a centre of excellence recognized by African and European institutions.

<http://www.2ie-edu.org/>



Main entrance to 2iE Foundation in Ouagadougou, Burkina Faso. © Communication 2iE.



Lecture theatre at 2iE in Ouagadougou, Burkina Faso. © Fondation 2iE.

Four priorities for the strategic framework

The MAEE's consultation and inventory exercise revealed a demand for a framework that will preserve players' diversity and enable them to align their action with shared priorities. These priorities are four in number.

1. Priority for emerging countries, the countries of Eastern Europe and the Mediterranean, and Africa

Emerging countries are now at the heart of global growth, in Asia, South America, North Africa and the Middle East, and the rest of Africa: in recent years they have seen growth rates of 6% to 10% and more. For companies from all over the world, and especially for the French ones, they offer two opportunities:

- **locations** to produce for expanding local markets or export;
- **destinations** for French exports of the capital goods and infrastructure these countries urgently need to sustain their growth.

The ability to meet the demand for qualified labour is consequently a major asset for French companies.

2. Priority for teaching intermediate skills

The emerging countries, with rare exceptions, educate all their young people to the end of secondary school and a significant number at university. However, **vocational education is often inadequate and suffers from low prestige**. Furthermore, these countries are faced with the inappropriate content and insufficient number of existing higher vocational courses, particularly those designed to teach intermediate skills that require scientific and technical knowledge, and management and team-leading capacities.

The MAEE's consultation exercise confirmed the existence of strong demand for development cooperation in higher vocational education.



Students at the Algerian Higher School of Business. © MAEE/Frédéric de La Mure.



3. Priority for local courses

In the emerging countries, courses in intermediate skills can only be designed for local teaching for at least two reasons:

- **extent of demand**, from tens or even hundreds of thousands of students;
- **closeness to companies**, both for skill acquisition and for opportunities for practical internships and the integration of courses with vocational integration.

4. Priority for constructing national certification frameworks

Many countries have begun the work of designing national certification frameworks. Certification has two functions:

- social recognition for the holder, a **testimonial of knowledge and know-how** from a recognized competent authority
- an **economic function** of organizing the labour market by “signalling” competencies sought by companies. National certification is essential in order to **unify recognized skills** for a unified geographical area.



Fitting Alstom turbine blades at Birr, Switzerland. © Alstom.

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The missions of the French Ministry of Foreign and European Affairs are:
summarize information on the changing global economy and put it into
perspective, prepare decisions on the French government's foreign policy;
draft France's foreign policy;
coordinate France's international relations;
protect French interests abroad and assist French nationals outside France.

The creation of the Directorate-General of Global Affairs, Development and
Partnerships (DGM) in April 2009, as part of the reform of the Ministry, enables
diplomacy to anticipate, identify and respond to the challenges of globalisation
more effectively.

Confronted with global issues that have a direct impact on the lives of our citizens
and multiple actors, the Ministry intends to emphasise the need to tackle global
issues, in the firm belief that every major economic, cultural and societal issue
calls for collective action with more outward focus, anticipation, interministerial
coordination, responsiveness, interdisciplinarity and a resolutely European
approach.



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