

**KOF** Swiss Economic Institute

The KOF Education System Factbook:

Benin

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# **KOF**

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#### **List of Abbreviations**

AFD French Development Agency

AQP Vocational Skills License (Attestation de Qualification Professionnelle)

BAC High School Diploma (Baccalauréat)

BEAT Tropical Agriculture Certificate (Brevet d'Etude Agricole Tropicale)

BEPC Primary Cycle Certificate (Brevet d'Etude du Premier Cycle)

BTS Higher Technical Certificate (Brevet de Technicien Supérieur)

CAP Professional Aptitude Certificate (Certificat d'Aptitude Professionnelle)

CEP Primary School Diploma (Certificat d'Etude Primaire Elémentaire)

CM Occupational Center (Centre Métier)

CNAB Benin National Confederation of Artisans (Confédération Nationale des

Artisans du Benin)

CQP Vocational Skills Certificate (Certificat de Qualification Professionnelle)

CQM Occupational Skills Certificate (Certificat de Qualification au Métier)

DEA Post-Graduate Diploma/Doctorate (Diplôme d'Etude Approfondie)

DEAT Tropical Agriculture Diploma (Diplôme d'Etude Agricole Tropicale)

DFA Apprenticeship Completion Diploma (Diplôme de Fin d'Apprentissage)

DRIJ Directorate of Conversion and the Youth Integration (Direction de la

Reconversion et de l'Insertion des Jeunes)

DTI Technical School Diploma (Diplôme de Technicien Industriel)

DTS Higher Technical Diploma (Diplôme de Technicien Supérieur)

EFAT Traditional Apprenticeship Completion Exams (Examens de Fin

d'Apprentissage Traditionnel)

EMICoV Integrated Modular Survey of Household Living Conditions (l'Enquête

Modulaire Intégrée sur les Conditions de vie des Ménages)

GCI Global Competitiveness Index

GII Global Innovation Index

GDP Gross Domestic Product

IIEP International Institute for Education Planning

ISCED International Standard Classification of Education

KOF Swiss Economic Institute

OECD Organisation for Economic Co-operation and Development

PET Professional Education and Training

UNESCO United Nations Educational, Scientific and Cultural Organization

VET Vocational Education and Training

VPET Vocational Professional Education and Training

VPETA Vocational and Professional Education and Training Act

WEF World Economic Forum

YLMI Youth Labour Market Index

#### **FOREWORD**

The increasing competitiveness of the world economy as well as the high youth unemployment rates after the worldwide economic crises have put pressure on countries to upgrade the skills of their workforces. Consequently, vocational education and training (VET) has received growing attention in recent years, especially amongst policy-makers. For example, the European Commission defined common objectives and an action plan for the development of VET systems in European countries in the *Bruges Communiqué on Enhanced European Cooperation in Vocational Education and Training for 2011-2020* (European Commission, 2010). In addition, a growing number of US states and other industrialized, transition, and developing countries (for example Hong Kong, Singapore, Chile, Costa Rica, Benin and Nepal) are interested in either implementing VET systems or making their VET system more labor-market oriented.

The appealing outcome of the VET system is that it improves the transition of young people into the labor market by simultaneously providing work experience, remuneration and formal education degrees at the secondary education level. If the VET system is optimally designed, VET providers are in constant dialogue with the demand-side of the labor market, i.e. the companies. This close relationship guarantees that the learned skills are in demand on the labor market. Besides practical skills, VET systems also foster soft-skills such as emotional intelligence, reliability, accuracy, precision, and responsibility, which are important attributes for success in the labor market. Depending on the design and permeability of the education system, VET may also provide access to tertiary level education (according to the ISCED classification): either general education at the tertiary A level or professional education and training (PET) at the tertiary B level. PET provides occupation-specific qualifications that prepare students for highly technical and managerial positions. VET and PET systems are often referred to together as "vocational and professional education training (VPET)" systems.

Few countries have elaborate and efficient VPET systems. Among these is the Swiss VPET system, which is an example of an education system that successfully matches market supply and demand. The Swiss VPET system efficiently introduces adolescents to the labor market, as shown by Switzerland's 2007-2017 average youth unemployment rate of 8.1 percent compared to 14.8 percent for the OECD average (OECD, 2017).

Though not many countries have VPET systems that are comparable to Switzerland's in terms of quality, efficiency and permeability, many have education pathways that involve some kind of practical or school-based vocational education. The purpose of the KOF Education System Factbook Series is to provide information about the education systems of countries across the world, with a special focus on vocational and professional education and training.

In the KOF Education System Factbook: Benin, we describe Benin's vocational system and

discuss the characteristics that are crucial to the functioning of the system. Essential

components comprise the regulatory framework and the governance of the VPET system, the

involved actors, and their competencies and duties. The Factbook also provides information

regarding the financing of the system and describes the process of curriculum development

and the involved actors.

The Factbook is structured as follows: First, we provide an overview of Benin's economy, labor

market, and political system. The second part is dedicated to the description of the formal

education system. The third section explains Benin's vocational education system. The last

section offers a perspective on Benin's recent education reforms and challenges to be faced

in the future.

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The KOF Education System Factbooks has to be regarded as work in progress. The

authors do not claim completeness of the information which has been collected

carefully and in all conscience. Any suggestions for improvement are highly

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VII

## 1. The Benin Economy and its Political System

One of the main purposes of an education system is to equip the future workforce with the skills needed in the labour market. The particularities of a country's economy and labour market are important factors determining the current and future demand for skills. These particularities relating to Benin are briefly described in Chapter 1 of this Factbook. In addition, this section provides an overview of Benin's political system with emphasis on education politics.

#### 1.1 The Benin Economy

Similarly to many countries in the Sub-Saharan region of Africa, Benin has been strongly affected by French colonialism. France's colonial reign began in the late 19<sup>th</sup> century and finally ended in 1960 with Benin's independence. French is still the official language and the language of instruction, but ethnic groups also speak a number of local and indigenous languages. Although Porto-Novo is the official capital of the country, Cotonou is the largest city in Benin, holds the key port, and is furthermore considered the unofficial administrative capital. The southern departments that contain these cities are home to over one third of Benin's 10.6 million citizens. The remaining population is scattered throughout the remaining provinces, which cover 75 percent of the country's total area. Roughly 40 percent of the population lives in the urban area surrounding Cotonou, which is the country's centre of commercial and political life (Encyclopædia Britannica Online, 2016).

According to the 2015 Human Development Index (HDI), Benin is a country with low human development (HDI-score of 0.48). The HDI is a multidimensional measure to assess key dimenions of human development based on life expectancy, expected and average years of schooling, and income per capita (GNI per capita, PPP\$). Thereby, receiving an index-value close to one implies a high level of human development, while a value close to zero represents a low level. Benin lags behind its neighbouring countries Ghana (0.58) and Nigeria (0.51). As an example for a highly-developed country, the US received a score of 0.92 in 2014 (UNDP, 2017).

In 2014, Benin's GDP per capita (PPP, constant 2011 international \$) was \$1,937 compared to \$5,639 in Nigeria and \$3,894 in Ghana. Between 1990 and 2014, Benin's annual real GDP per capita (constant 2005 US\$) grew by 1.2 percent, compared to 2.62 percent in Nigeria and 2.99 percent in Ghana (World Bank, 2015a).

Benin's economy is highly sensitive to Nigerian trade policy because they have the second largest economy on the continent behind South Africa. The World Bank estimates that informal

re-export and transit trade with Nigeria accounts for about 20 percent of Benin's GDP. In gnereal, the World bank estimates that about 80 percent of Benin's imports are destined for Nigeria via informal cross-border trade. This re-export and transit trade accounts for 25 percent of the government's revenue, which shows that corruption is a major problem within Benin's government circles. Besides its dependence on trade with Nigeria, another challenge for Benin's economy is its dependence on global cotton and oil prices. A drop in the oil price would imply less re-exports and transit trade with Nigeria, hence lower economic growth in Benin. The cotton price is not only controlled by global players at commodity markets, but also constanly threatened by adverse weather conditions.

The informal sector is very important to Benin's economy. The World Bank estimates that the informal sector accounts for about 65 percent of the total economy and over 90 percent of employment.

According to the World Bank's 2015 Doing Business Report, the country has made considerable progress in improving its business environment. Nevertheless, it continues to face significant challenges, including: internal revenue collection, structure of the financial control system, governance for autonomous public institutions, and accounting and budget information systems (World Bank, 2016).

Table 1: Value added and employment by sector, 2014

Sector	Benin: (% of GDP)	EU-28: Value added (%)	Benin: Employment 2010 (%)	EU-28: Employment (%)
Primary sector	35.7	1.6	45.1	5.0
Agriculture, hunting and forestry, fishing	35.7	1.6	45.1	5.0
Secondary sector	14.0	24.3	10.4	22.0
Manufacturing, mining and quarrying, and other industrial activities	9.5	18.9	n/a	15.6
of which: Manufacturing	8.2	15.3	n/a	14.0
Construction	4.5	5.4	n/a	6.3
Tertiary sector	50.2	74.1	44.0	73.1
Wholesale and retail trade, repairs; hotels and restaurants; transport; information and communication	29.4	23.8	n/a	27.5
Financial intermediation; real estate, renting, and business activities	10.1	27.4	n/a	15.9
Public administration, defense, education, health, and other service activities	10.7	22.9	n/a	29.7

Source: Ndoye & Fall (2015), World Bank (2015a), Eurostat (2015a; 2015b).

Table 1 describes the structure of Benin's economy. It shows the contribution of the different sectors to total GDP and the distribution of employment by sector and compares it to the EU-

28 countries.<sup>1</sup> Agriculture constitutes more than one third (35 percent) of the country's GDP. Industry contributes 14 percent, while the tertiary sector accounts for more than half (50.2 percent) of the GDP. Compared to the EU-28 states, the relative importance of agriculture stands out in Benin's economy.

Employment data for Benin is scarce. The World Bank's database only has data on Benin from 2003 and 2010. Detailed employment data by subsectors was only available for the year 2003. We use the most recent data from the year 2010, which disaggregates employment in a broader sense into the three principal sectors (primary, secondary, tertiary sector).

Almost half of Benin's workforce (45.1 percent) was employed in the primary sector compared to only 5 percent in the EU-28 countries on average in 2010. Only 10.4 percent of the fomally employed people worked in the secondary sector in 2010. An almost equal share of the workforce (44 percent) was employed in the tertiary sector, which is substantially lower than in the EU-28 countries on average (73.1 percent). The share of people in the EU28-countries on average working in the secondary sector was more than twice as high.

Figure 2 shows the dirstibution of employment by sector in 2003 and 2010. The available data does not show any substantial shifts in employment between the sectors in the seven years from 2003 to 2010.

120

100

80

60

40

20

2003

2010

Primary Secot Secondary Sector Tertiary Sector

Figure 1: Employment by sector (as percent of total employment), 2003 and 2010

Source: World Bank (2015a)

The International Competitiveness Report for 2015 ranks Benin 122<sup>nd</sup> out of 140 countries analysed. Benin is classified as having a factor-driven economy, meaning it mainly depends

<sup>&</sup>lt;sup>1</sup> For <u>BéninBenin</u>'s economy, a disaggregation by value added was not available; therefore, the sectors' weights in the economy are listed as percent of GDP.

on natural resources and unskilled labour for economic growth. It reaches an overall score of 3.5 out of 7. Benin's scores, despite being low in most categories, are more or less consistant with the average score of Sub-Saharan Africa. It scores particularly low in the subcategories Infrastructure and Technological Readiness (WEF, 2015).

In the Global Innovation Index of 2014, Benin placed 132<sup>nd</sup> out of 143 with a score of 24.21. Benin lags behind Nigeria (110<sup>th</sup>) and Ghana (106<sup>th</sup>) (Dutta et al. 2014). Benin was not featured in the 2015 edition of the report.

#### 1.2 The Labor Market

In the first part of this section, we will describe the general situation of Benin's labour market. In the second part, we will refer to the youth labour market in particular.

#### 1.2.1 Overview of Benin's Labour Market

Benin's labour market is underdeveloped. It is estimated that the informal economy covers approximately 94 percent of the working population (EMICoV, 2011). This percentage has risen over the past decades (it was 60.5 percent in 1992, 70.2 percent in 2002). Currently, the informal sector amounts to as much as 70 percent of Benin's GDP and youth employees are major contributors to this sector. (Education Development Center, 2011).

Workers' rights in formal sector jobs are generally enforced, with notable exceptions: reports indicate that the right to strike was restricted in the past and that collective bargaining was constrained on several occasions. Nevertheless, Benin has seven trade union federation centres that cooperate through joint activities and pool demands for decent working conditions (Ulandssekretariatet, 2014). The country experiences fast growth in trade union membership compared to other African countries. Around 14 percent of the labour force is represented by trade unions, including affiliated unions. In the public sector, estimates indicate that 75 percent of government workers are paying members of trade unions. In the private sector, this share is much smaller. (Ulandssekretariatet, 2014)

The official minimum wage in Benin is currently CFA 40,000 per month (US\$80) and was last raised in 2014. However, a large part of the workforce and foreign workers are not covered by the wage policy. Estimates indicate that the growth of real minimum wage has stagnated since 2000, which implies that wage standards were not effectively enforced (Ulandssekretariatet, 2014).

As shown in Table 2, about 73.5 of all people aged between 15-64 were in the labor force in 2014; that's is, either working or actively searching for a job, which was higher than the OECD average (71.2 percent). However, labour force participation was tremendously lower for the

15-24 year olds than for the 25-64 year olds (40.2 versus 75.3 percent). The labour force participation of both age groups was below the OECD average. In contrast, unemployment was substantially lower than in the OECD countries on average. This is a typical phenomenon of developing countries since the poor cannot afford being unemployed, not least because most of them work in the informal sector, which does not provide a social safety net. In fact, informal employment is very in Benin. According to estimates from the ILO (2016), about 96.8 percent of Benin's labor force works in the informal sector (number refers to 2011).

Table 2: Labour force participation rate, unemployment rate by age (2014)

	Labour force participation		Unemployment rate	
	Benin OECD average		Benin	OECD average
	(%)	(%)	(%)	(%)
Total (15-64 years)	73.5	71.2	1.1	7.5
Youth (15-24 years)	40.2	47.2	2.3	15.0
Adults (25-64 years)	75.3	76.2	0.8	6.5

Source: World Bank (2017), OECD (2015c)

Although Benin shows low rates of official unemployment, more than half of workers are underemployed. The term "underemployment" generally refers workers who can only find part-time employment or irregular work, such as short-term, seasonal, day or casual employment. It can also refer to workers who are overqualified for the type of job executed (Encyclopædia Britannica Online, 2016). Underemployment is particularly challenging for the youth, with only one third finding paid employment. The youth makes up half of Benin's current population, which further emphasizes the severity of the problem (Ulandssekretariatet , 2014). Benin's National Institute of Statistics and Economic Analysis confirms these findings: for 2010, the official rate of invisible underemployment was 62 percent in rural areas and 45 percent in urban regions (INSAE, 2015).

Table 3 shows the labour force participation and unemployment rate by educational attainment of the 25-64 years olds. Labour force participation is highest and unemployment lowest among people with less than upper secondary education, while people with university education have a lower labor participation rate and a higher unemployment rate. People with less than upper secondary education have even a higher labour force participation rate and a lower unemployment rate than the OECD average.

Table 3: Labour force participation rate, unemployment rate by educational attainment Benin (2010) versus OECD average (2010) (persons aged 25-64)

	Labour force participation		Unemployment rate	
	Benin (%)	OECD average (%)	Benin (%)	OECD average (%)
Less than upper secondary education	75.5 <sup>2</sup>	55.5	1.7 <sup>3</sup>	12.5
Upper secondary level education	43.9 4	73.7	5.9	7.6
Tertiary education	63.0 <sup>5</sup>	83.1	12.5	4.7

Source: EMICoV (2011), ILO (2013), OECD (2012).

#### 1.2.2 The Youth Labour Market

The KOF Swiss Economic Institute developed the KOF Youth Labour Market Index (KOF YLMI) to compare how adolescents participate in the labour market across countries (Renold et al., 2014). The foundation for this index is the critique that a single indicator, such as the unemployment rate, does not suffice to describe the youth labour market adequately nor provide enough information for a comprehensive cross-country analysis. To increase the amount of information analysed and to foster a multi-dimensional approach, the KOF YLMI consists of twelve labour market indicators<sup>11</sup> that are grouped into four categories.

#### **Dimensions of the KOF YLMI**

#### **Activity state**

- Unemployment rate
- Relaxed unemployment rate<sup>6</sup>
- Neither in employment nor in education or training rate (NEET rate)

#### Working conditions

Rate of adolescents:

- with a temporary contract
- in involuntary part-time work
- in jobs with atypical working hours
- in work at risk of poverty<sup>7</sup>Vulnerable unemployment rate<sup>8</sup>

#### Education

- Rate of adolescents in formal education and training
- Skills mismatch rate

#### **Transition smoothness**

- Relative unemployment ratio9
- Long-term unemployment rate<sup>10</sup>

Source: Renold et al. (2014).

<sup>&</sup>lt;sup>2</sup> The value statet for "Primaire" in EMICOV (2011), table 18

<sup>&</sup>lt;sup>3</sup> Calculated by weighting the rates for no schooling and primary schooling by the number of individuals in each category (table 2.7 in ILO (2013))

<sup>&</sup>lt;sup>4</sup> The value stated for "Niveau Secondaire 2" in EMICOV (2011), table 18

<sup>&</sup>lt;sup>5</sup> The value stated for "Niveau Supérieur" in EMICOV (2011), table 18

<sup>&</sup>lt;sup>6</sup> It is calculated as the number of unemployed and discouraged workers as a share of the entire labour force. Discouraged workers have given up the search for work (not actively seeking), although they have nor job and are currently available for work (also: "involuntary inactive").

<sup>&</sup>lt;sup>7</sup> Those who cannot make a decent living out their earnings, being at risk of poverty as a percentage of the working population.

<sup>&</sup>lt;sup>8</sup> Share of the employed population working on their own account or those working in their family business and thus contributing to the entire family income. Both are less likely to have formal work arrangements and are therefore less protected by labour laws and more exposed to economic risk.

<sup>&</sup>lt;sup>9</sup> Is defined as the youth unemployment rate (15-24 years) as a share of the adult unemployment rate (25+). If the youth cohort is affected in the same way than the adult group with respect to unemployment, then the relative unemployment ratio will be equal to one. If the youth are relatively more affected, then the ratio will be bigger than one.

<sup>&</sup>lt;sup>10</sup> Those unemployed for more than one year (52 weeks) in the total number of unemployed (according to the ILO definition).

<sup>&</sup>lt;sup>11</sup> The data for these indicators are collected from different international institutions and cover up to 178 countries for the time period between 1991 and 2012.

The first category describes the *activity state* of youth (ages 15-24 years old) in the labour market. Adolescents are classified according to whether they are employed, in education, or neither (unemployed, discouraged and neither in employment nor in education or training; see info box to the right). The category *working conditions* and the corresponding indicators reflect the type and quality of jobs the working youth have. The *education* category accounts for the share of adolescents in education and training and for the relevance of and their skills on the labour market. The fourth category, *transition smoothness*, connects the other three categories by capturing the school-to-work transition phase of the youth. Each country obtains a score of 1 to 7 on each particular indicator of the KOF YLMI. A higher score reflects a more favourable situation regarding the youth labour market and a more efficient integration of the youth into the labour market.

One of the major drawbacks of the KOF YLMI is data availability. When data is lacking, a category can occasionally be based on a single indicator or must be omitted entirely when not a single indicator for that category exists in a given country. A lack of indicators can make comparisons across certain countries or groups of countries problematic and sometimes even impossible.

#### 1.2.3 The KOF Youth Labor Market Index (KOF YLMI) for Benin

Only two indicators of the KOF YLMI are available for Benin: the unemployment rate and the relative unemployment ratio. The KOF YLMI index-values for Benin and the average of the OECD countries, based only on these two indicators, are shown in Figure 2.

Because it is unclear to what extent the data for Benin includes people working in both formal and informal sectors, comparing Benin to the formal sectors of the OECD countries remains a challenge (see Figure 2).

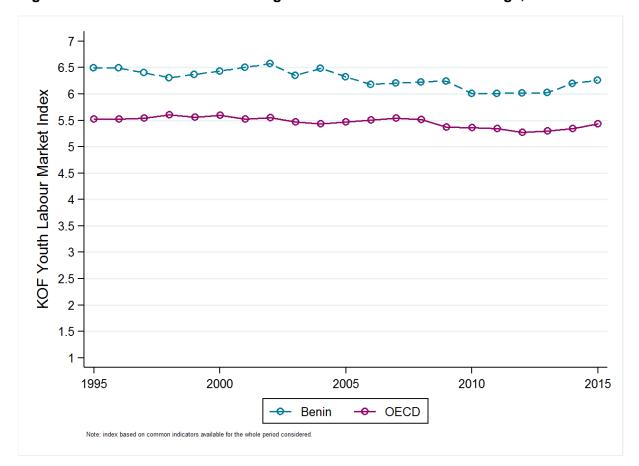


Figure 2: KOF YLMI Benin versus Togo and Sub-Saharan Africa average, 1991-2014

Source: KOF (2016), Youth Labour Market Index.

### 1.3 The Political System

Understanding the basics of a country's political system and getting to know the political goals with respect to its education system are crucial points for the understanding of a country's education system in a broader sense. In the first part, we explain Benin's political system in general. The politics and goals regarding the education system will be referred to in the second part.

#### 1.3.1 Overview of the Benin Political System

After gaining independence from France in 1960, Benin's early years as a supposedly democratic state were a difficult time. The first twelve years of the newly sovereign state were characterized by numerous coup d'états, which earned the country the rather unflattering title of "Africa's sick child". (Bénin Government, 2016)

A brief return to a more democratic system in the early 1970s ended in yet another military coup d'état in October 1972. The army remained in power up until the national conference in 1990. This episode of Benin's history is dubbed as a military-Marxist era, in which opposing

forces were exiled and in some cases even tortured and assassinated. In the late 1980s, the Marxist state system finally went bankrupt and the military leader gave up its power at the aforementioned national conference in 1990. This conference invoked two central reforms: First, it introduced economic and political liberalism, democracy and a constitutional state. Second, it nominated a prime minister to assist General Mathieu Kérékou, who kept his presidency albeit relinquished most of his previous prerogatives. (Bénin Government, 2016)

Benin is now considered one of the most stable countries in the Sub-Saharan region. On April 3rd 2016, Benin elected Patrice Talon as the new president. Talon, who took 65.4 percent of the vote, plans to reduce presidential mandates to just one five-year term from the current two terms. His government will be made up of 16 members, reducing the number from 28 in previous governments. The peaceful election was interpreted as proof of the democratic credentials of Benin. A Reuters journalist even described the country as a "bastion of stability in a region where elections are often marred by violence". (Reuters, 2016)

This assessment is reinforced by the Economist's Democracy Index 2015, in which Benin scores 5.72 points (87th place out of 165), well above the average of 4.38 for the Sub-Saharan African average (Economist, 2016). Given recent developments, one could expect an even better score next year if president Talon follows through with his proposals.

Transparency International's Corruption Perception Index 2015 places Benin 83rd among 168 countries investigated. The score has remained rather constant over the past four years but decreased slightly in 2015 compared to the previous year. Nevertheless, it remains well ahead of neighbours Togo (107<sup>th</sup>) and Nigeria (136<sup>th</sup>) (Transparency International, 2016).

#### 1.3.2 Politics and Goals of the Education System

It is currently unclear exactly who is in charge of education in Benin and how national and federal competences are divided. There are two ministers of education at the national level:

- State Minister of Secondary, Technical and Vocational Training and Integration of Youth. This position is currently held by Alassane Djimba Soumanou.
- Minister of Maternal and Primary Teaching (MEMP). This position is represented by Eleanor Yayi Ladekan.

However, neither Ministry appears to have published any documentation explaining its competences on a national or federal level.

The 1990's political reform in Benin was accompanied by a major reform of the education system. It is hailed as a great success and example for the feasibility of fast progress in education in developing nations. In 2006, the country followed up with a new 10-year education

development plan, the *Plan Décennal de Développement du Secteur de l'Education (PDDSE)*. The new plan implemented: (1) free pre-primary and primary education, (2) exemption of school fees for girls in the first three years of secondary education and (3) free university registration for students with no scholarship or financial aid (Ndoye & Fall, 2014).

The Overseas Development Institute (ODI) identifies three main factors that drove the progress in the education reform: (1) the different governments since 1990 made it a priority to address the education sector's many deficiencies, declaring access to education for all children as a constitutional right and a central policy objective. Increasing education expenditure and the gradual removal of school fees for primary school reinforced this commitment in application. (2) Development partners had an important role in the process, supporting the government from the very beginning of the reform efforts and contributing substantially both in terms of financial resources and technical expertise. (3) The Beninese government's outreach efforts were supported by numerous non-governmental organisations (NGOs) working at local levels. The support of NGO's was crucial for overcoming various hurdles and raising demand for education among the populace. Inducing normative changes as to the value of education was especially important given the context of a patriarchal culture, wherein girls face cultural barriers to education. (ODI, 2014)

Despite the progress, Benin faces challenges: increasing demand for education driven in part by rapid population growth makes it difficult for the government to keep up the supply. Insufficiently trained teachers and institutional constraints add to the challenge, and the reliance on donors both for financing and central planning raises questions about both national ownership and the sustainability of the reform. (ODI, 2014)

# 2. Formal System of Education

Primary education is the only mandatory element of Benin's education system (US Embassy, 2012). Benin has various different educational pathways that start to separate into general education, technical, and professional education pathways in as early as the first cycle of secondary education

Gross enrolment rates are high in primary education but drop steadily, even towards the late cycle of primary education. The survival function of educational attainment (see Figure 3) steadily declines throughout the primary cycle and more remarkably so for later stages of the education system, such as secondary and especially tertiary education (ODI, 2014). There is also a marked difference between girls' and boys' enrolment rates.

100% 85% Boys Girls 80% 69% 81% 62% 60% 44% 57% 39% 49% 40% 15% 30% 20% 23% **6**% 0% 1st year of 6th year of 1st cycle End of 1st 2nd cycle of Tertiary primary secondary secondary primary cycle

Figure 3: Male and Female Educational Attainment Survival Function

Source: Based on data in UNESCO - IIPE Pôle de Dakar (2014)

Importantly, access to education also shows stark regional differences. In the southern, most populated provinces, access and completion rates are generally high. In the northern, more rural areas, access is generally high, but completion rates are low. (World Bank, 2009)

secondary

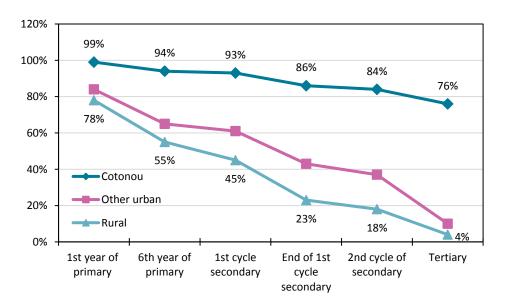


Figure 4: Educational Attainment Survival Function Urban vs Rural Regions

Source: Based on Data in UNESCO - IIPE Pôle de Dakar (2014)

27 26 Doctorate-**Higher Education** 25  $\left( \mathbf{6}\right)$ 24 CAPET and CAPES DESS 23 DEA 22 Master DEAT Engineering-License 21 Diploma License BAPET 20 (Profesi DTS and DEUG / BTS onelle) **BAPES** DEUL 19 Upper Secondary Education Second Cycle TVET: 18 Second Cycle TVET Second Cycle General Agricultural Focus 12th (3) 17 Secondary Education (Baccaleaurate (BEAT) Technique) (BAC) 16 11th **Lower Secondary** 10th 15 Education 9th 14 First Cycle General (2) First Cycle TVET - Technical and Professional Secondary Education 13 8th Secondary Education (BEPC) 12 7th 11 6th Primary Education 5th 10 4th Primary education 9 1 8 3rd 7 2nd 6 1st

Figure 5: ISCED 1997 Mapping of Benin's Education System<sup>12</sup>

Source: Own illustration based on 2008 data in UNESCO (2013)

ISCED Age

Recent developments allow for optimism regarding the evolution of the Beninese education system. Yet differences in regional access and completion rates are still obvious as is shown in Figure 4.

Grade

<sup>&</sup>lt;sup>12</sup>The size of the boxes does not coincide with the actual size or importance of the program in the education system.

Table 4 shows enrolment in different stages of the education system according to the latest available data provided by the UNESCO Institute of Statistics. Note that in tertiary education the data is incomplete. Enrolment in the lower levels of tertiary education is not well documented.

Table 4:Enrolment (in thousands) at different educational levels, 2014

Educational level	ISCED 2011	Enrolment (in thousands)	Enrolment (in percent)
Total students	0 – 8	3,304.2	
Pre-primary education	0	128.7	3.9
Primary education	1	2,133.3	64.6
Secondary education	2-3	896.8	27.1
Lower secondary education	2	665.5	20.1
Of which vocational education	2	3.8	0.1
Upper secondary education	3	231.3	7.0
Of which vocational education	3	19.8	0.3
Post-secondary non-tertiary education	4	n/a	n/a
Tertiary education	5 – 8	145.5 <sup>13</sup>	4.4
Short-cycle tertiary education	5	n/a	n/a
Bachelor's or equivalent level	6	n/a	n/a
Master's or equivalent level	7	19.1 <sup>11</sup>	0.6
Doctoral or equivalent level	8	1.4 <sup>11</sup>	0.0

Source: Own illustration, based on datasets provided by UIS (2016a)

Table 5 shows the gross enrollment ratio (GER) for Benin for 2014. The GER is the ratio of total enrollment in one level of the education system, regardless of age, to the total population of the age group that officially corresponds to the given level of education. For example, the GER for the primary education level compares the actual number of students in primary education to all Beninese children who are in the official age to attend primary education.<sup>14</sup>

Table 5: Gross enrolment ratio (GER) by level of education, 2014

Education level	Gross enrolment ratio (%)
Primary	129.0
Secondary	56.8
- Lower secondary	69.8
- Upper secondary	37.6
Post-secondary non-tertiary	n.a.

<sup>&</sup>lt;sup>13</sup> 2013 figure, 2014 data not available.

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<sup>&</sup>lt;sup>14</sup> A GER of 100 corresponds to a situation where each child in a given country is enrolled in primary education. A value above 100 could occurs due ifto students who are older than the typical enrolment age for primary education are also enrolled (e.g. have to repeat grade, adult learners). A value below 100 implies that not everyone who is in the typical age for primary education is actually enrolled.

Tertiary	n.a.

Source: (UNESCO, 2017).

While 129 percent of the Beninese attended primary school in 2014, only 56.8 percent attended secondary school (69.8 percent lower secondary and 37.6 percent upper secondary). Unfortunately, no data was available for the tertiary level. The high enrollment rate for the primary level could stem from students who have to retake a grade, as well as from adults attending primary school.

#### 2.1 Pre-Primary Education (école maternel)

Children above the age of two and a half years can enter pre-primary education (UNESCO, 2013). Enrolment is generally low but has increased in recent years with gross enrolment rates exceeding 10 percent in 2013. It is currently unclear whether the state or municipalities hold responsibility for pre-primary education.

#### 2.2 Primary Education

As mentioned above, primary education is the only mandatory element in Benin's education system. Fees for primary education were abolished, which led to a strong increase in enrolment. Notably, female enrolment is now almost on par with male enrolment. Gross enrolment rates of girls surpassed 100 percent in 2008 and are now close to 120 percent (UNESCO, 2014). Note that in the same period, net enrolment for all students increased from 80 to almost 100 percent, which indicates that the increase in gross enrolment is due to a net enrolment increase.

As the only mandatory education stage, and given its very high enrolment, primary education is arguably the most important component of Benin's education system. Primary education lasts 6 years and upon completion, students earn a certificate of primary studies, which is called *Certificat d'Etudes Primaires (CEP)*. Educational performance in Benin differs quite substantially from what one would expect in OECD countries. With an adult literacy rate of 42 percent, Benin is one of the nine African countries with adult literacy rates below 50 percent (UNESCO, 2012, p. 92).

To highlight such differences, we can draw on a major research effort by the Programme d'Analyse des Systèmes Educatifs (PASEC) (PASEC, 2015). This report investigates the quality of early and late primary education in Benin, Burkina Faso, Burundi, Cameroon, Chad, Côte d'Ivoire, Congo, Niger, Senegal and Togo. The report offers a plethora of insights

regarding the quality of mandatory education in Benin compared to several peer countries. The most relevant results are summarized in the following.

PASEC measures competencies in reading abilities and mathematics. At the outset of primary education, Beninese students' test scores are among the lowest in the international sample. The vast majority of students in Benin do not reach the score that PASEC classifies as the "Sufficient Competency Threshold" in either category. The only country where students performed worse is Niger (see PASEC 2015, pp. 34-35). While Beninese students start primary education with a marked handicap compared to their peers in other countries, they catch up throughout the course of the cycle. In tests designed to assess students' abilities at the end of the primary cycle, Beninese students score above average. The improvement is particularly impressive in the reading category. At the end of the primary cycle, more than half of Beninese students reach scores above PASEC's "Sufficient Competency Threshold" in reading and over 40 percent reach the threshold in mathematics. In the late primary stage, the only countries ahead of Benin in both categories are Burundi, Senegal and Burkina Faso, and the gap is closing. (PASEC, 2015). Even though Benin's relative performance improves substantially throughout the primary education process, the implications of the absolute results are sobering: over both tested categories, more than 50 percent of students at the late primary cycle do not reach the "Sufficient Competency Threshold". A definition of this threshold can be found in section 5.1 in the Appendix.

The fact that more than half of the students score at levels below the thresholds paints a bleak picture of their educational attainments towards the end of primary education. This may serve as an indication as to what educational levels to expect from students entering vocational education at the secondary level.

#### 2.3 Lower Secondary Education (1st Cycle)

The UNESCO Institute of Statistics combines both lower and upper secondary education (also refered to as first and second cycle) in the category "secondary education"<sup>15</sup> and reports gross enrolment rates for Benin of just above 50 percent in 2013 and 2014. On this level, a gap reemerges in enrolment by gender that is clearly in favour of male students. Male students' gross enrolment is above 60 percent whereas the rate for females is just above 40 percent. (UNESCO, 2014)

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 $<sup>^{\</sup>rm 15}\,{\rm For}$  a disaggregation for the year 2010, consider Table 4 above.

There are two separate pathways in lower secondary education, as is visible in Figure 4. One path is first cycle general secondary education, which lasts four years and lists the CEP as an entry requirement. Upon completion, students earn their first cycle diploma of studies - *Brevet d'Etudes du Premier Cycle (BEPC*). (UNESCO, 2013)

The other pathway is the technical and professional first cycle of secondary education. To gain access, students must hold the CEP and pass an entry test to technical education. Students complete this path after three years, granting successful students the certificate of professional aptitude - Certificat d'Aptitudes Professionnelles (CAP) or the certified diploma of nursing - Sciences de la Santé (SS). (UNESCO, 2013)

# 2.4 Upper secondary Education (2<sup>nd</sup> Cycle)

In upper secondary education, otherwise known as the second cycle, there are three separate pathways. One is the general upper secondary (second cycle) education pathway, which takes three years to complete and results in the attainment of the *Baccalauréat (BAC)*. In addition, there is the second cycle of technical and professional secondary education, which takes three years and grants students the *Technical Baccaleaurat (Baccalauréat Technique)*. The third pathway is the second cycle of technical and professional secondary education with a focus on agricultural sciences. It takes four years to complete and results in the diploma of agricultural sciences - *Brevet d'Etudes Agricoles Techniques (BEAT)*. Gross enrolment in the year 2014 was 37.6 percent for upper secondary education (see Table 5). (UNESCO, 2013)

#### 2.5 Tertiary Education

Gross enrolment in tertiary education has steadily increased over the past decades, though primarily driven by growing male participation. Female enrolment is less than half of the rate for men. The male gross enrolment rate reached 20 percent in 2012, while it is still well below 10 percent for women. (UNESCO, 2014)

In terms of education pathways, there are numerous types of diplomas that can be attained. The major categories will be described below. It is currently unclear whether the technical baccalaureate also allows for entry into tertiary education. The mapping or the education system found in UNESCO (2013) does not list a technical baccalaureate as an entry requirement for tertiary education. However, Figure 2.1 in UNESCO - IIPE Pôle de Dakar

(2014) report<sup>16</sup> suggests that a technical baccalaureate also allows for entry to tertiary education.

#### 2.5.1 Lower Level University Degrees (DEUG and DEUL)

Upon completion of the BAC, students may enter university to earn a "general" or a literary degree. This takes two years and grants successful students the *Diploma of General University Studies (DEUG)* or the *Diploma of Literary University Studies (DEUL)*. Both degrees allow for one year of further studies to attain a License.

#### 2.5.2 License, License Professionelle

With the BAC, students can directly enter the License or License Professionelle programs. Attaining the License takes three years for students entering with a BAC. As stated above, students can also complete both License programs in one year if they previously earned either the DEUL or DEUG. Students with a BTS can only enrol in the License Professionelle and complete this degree in one year. DEUG, DEUL and License cover the typical spectrum of natural and social sciences.

#### 2.5.3 Master, Advanced Masters (DEA and DESS) and Doctorate

Students holding a License or License Profesionelle can enter a Master, or Professional Master Program, which typically takes one year to complete. A Master's Degree gives students the opportunity to attain a Research Master Diploma - *Diplôme d'Etudes Approfondies (DEA)* or Specialised Higher Education Diploma - *Diplôme d'Etudes Supérieures Spécialisées (DESS)* with an additional year of study. A Master's is also the prerequisite for the CAPET and CAPES programs (see section on Teacher education) as well as Doctorate Programs, which typically take three years to complete. (UNESCO, 2013)

#### 2.5.4 Higher Technician's Brevet and Diploma (BTS and DTS)

As an alternative to the aforementioned paths, students can also enter a technical college with a BAC. This technical program takes two years to complete and results in the Higher Technician's Brevet - Brevet de Technicien Supérieur (BTS). (UNESCO, 2013)

Yet another pathway is attaining the Higher Technician's Diploma - *Diplôme de Technicien Supérieur (DTS)*, which is one stage above the BTS described above. Students can enrol directly with a BAC and then spend three years studying for the degree. Another possibility is

<sup>&</sup>lt;sup>16</sup>The Pôle de Dakar is a platform for expertise in education policy analysis provided by the International Institute for Education Planning (IIEP) and the UNESCO.

direct entry after completing the BTS, which brings the program's duration down to one year. (UNESCO, 2013)

#### 2.5.5 Engineering Diploma

According to the UNESCO (2013) classification, there is a separate engineering diploma that is independent of the subjects within the general university education diploma (DEUG). Students may enter this five-year program with a BAC.

#### 2.5.6 Technical Education in Agricultural Sciences (DEAT)

Completing technical secondary education with an agricultural focus (BEAT) paves the way for attaining a higher diploma in agricultural sciences - *Diplôme d'Etudes Agricoles Tropicales* (*DEAT*). This degree specifically requires the BEAT as an entry requirement. All other pathways list the attainment of the regular baccalaureate (BAC) as entry requirements. (UNESCO, 2013)

#### 2.6 Teacher Education

There are two different levels of teacher education in Benin. The lower level is called the teaching brevet for technical education - *Brevet d'Aptitude au Professorat de l'Enseignement Technique (BAPET)* or the teaching brevet for secondary education - *Brevet d'Aptitude au Professorat de l'Enseignement Secondaire (BAPES)*. To attain this degree, students must hold a BAC and study for three years. Alternatively, students holding the "License" can earn the degree in one year. (UNESCO, 2013)

There is also a higher level of teacher education, called the teaching license for technical education - Certificat d'Aptitude au Professorat de l'Enseignement Technique (CAPET) or teaching license for secondary education - Certificat d'Aptitude au Professorat de l'Enseignement Secondaire (CAPES). Earning this degree requires 5 years of education after earning the BAC or two years of studies after earning a Master's (UNESCO, 2013). The UNESCO ISCED classification does not specify the difference between the two degrees in terms of teaching competences.

## 3. The System of Vocational and Technical Education and Training

This section of the Factbook describes the vocational education and training (VET) system at the upper secondary level and the professional education and training system (PET) at the tertiary level. The term vocational and professional education and training (VPET) refers to both the VET and the PET systems.

# 3.1 Vocational Education and Training (VET; Upper Secondary Education Level)

As described above, the Beninese secondary education system offers a technical and vocational focus starting after completion of primary education. The system is called *Enseignement et Formation Technique et Professionnel (EFTP)*, which translates to Technical and Vocational Education and Training (TVET). In this Factbook we refer to this system as the VET system or program. According to UNESCO's seventh edition of World Data on Education, vocational and technical education has a lower priority than primary education in Benin. The report notes that the proportion of students that completed institutions of technical and vocational training over all cycles remains below 0.35 percent of people enrolled at any level of the education system. (UNESCO-IBE, 2012)

This has not changed significantly in recent history: Between 2006 and 2010, the number of students in the VET system increased by 22 percent to 211 students per 100,000 inhabitants. For comparison, enrolment in tertiary education over the same period rose by more than 43 percent to 2,006 students per 100,000 inhabitants. Female enrolment is roughly half that male enrolment in both education stages. (UNESCO - IIPE Pôle de Dakar, 2014, Graph 6.1)

The largest part of the population learns a trade through hands-on training, and does so in an informal context: The UNESCO estimates that the number of apprentices in the informal sector is ten times that in the formal education system. (UNESCO, 2013)

The fact that absolute enrolment in tertiary education is almost ten times that in the VET system underlines its relatively low importance in the Beninese Education System. In addition, most students are enrolled in education programs without on-the-job-training and very few students receive vocational education and training in a formal dual system, where they are trained both on the job and in school. An additional factor that explains the relatively low importance of the VET system is the cost of education: The UNESCO estimates that the cost of VET in Benin is more than three times that of upper secondary general education (UNESCO, 2012).

The VET program includes two cycles – each three years long – otherwise known as lower and upper secondary education. The exception is training in agricultural sciences, which takes

an additional year to complete at the upper secondary level. The programme has six focus areas: (UNESCO-IBE, 2012)

- 1. Industry Sciences and Techniques (STI sciences et techniques industrielles);
- 2. Sciences and Techniques of Administration and Management (STAG sciences et techniques administrative et de gestion);
- 1. Agricultural Sciences and Techniques (STA sciences et techniques agricoles);
- 2. Health Sciences (SS- sciences de la santé);
- 3. Domestic and Social Management (EFS enseignement familial et social);
- 4. Hotel and Restaurant Management (H-R hôtellerie-restauration)

Access to the VET program is only open to students with a primary education completion certificate (BEPC) and is conditional on success in a national entrance competition. The candidates with the best results in this competition can enter the VET program area of their choice and receive a grant from the State. Students that fail to succeed in the competition can either choose general education or enter the VET program at their own expense. (UNESCO, 2013)

There is no indication that the VET program areas listed above contain a dual system with onthe-job training. Part of the curriculum is specific to the focus area, while some subjects are common to all VET programs. The standard subjects are: general mathematics, physics, French, English, natural sciences, history and geography, legislation and prevention, civic instruction and sports. (UNESCO-IBE, 2012)

A description of the focus areas is available for four of the six areas. The Industry Sciences and Techniques (STI) branch offers training in the following professions: Electrician, General Mechanic, Automobile Mechanic, Masonry, Topography and Carpentry. Sciences and Techniques of Administration and Management (STAG) includes training in Administrative Work (Secretariat), Accounting and Commerce. In the Agricultural (STA) programs, specializations in Agricultural Engineering, Hydrology, Water and Forest Management, Fishery, Agricultural Economics as well as Animal and Vegetable Production are available. Paramedic training institutions train assistant nurses, registered nurses, midwives, social workers, laboratory technicians, etc. (UNESCO-IBE, 2012)

Students in the third year of the first cycle and students in the final year of the second cycle of the VET program are subjected to a year-end or end of training exams. At the end of the first cycle, they earn the vocational training certificate (CAP). Upon completion of the second cycle, they earn the bachelor of secondary technical education (BAC) or the industrial technician's

diploma (DTI) – equivalent to the BAC. The CAP as well as the technical BAC acknowledge the student's specialization. The DTI is awarded to students of industrial science, technical pathways and home economics. Agricultural education leads to the Brevet of Agricultural Sciences (BEAT) at the end of the second cycle (which lasts four years). (UNESCO-IBE, 2012)

In terms of job prospects, graduates from the focus areas Hotel and Restaurant Management and Telecommunications are the most successful. Completing a program in agriculture also fosters good chances of employment. In the remaining programs, the prospects are mediocre to good. (UNESCO, 2013)

#### VET programs that are coupled with apprenticeships

In VET programs that are coupled with apprenticeships, grade repetition is very rare. In contrast, grade repetition is quite common in the other VET programmes, especially during exam years that could result in a degree. According to the World Bank (2009), the average percentages of repeaters in each cycle of the VET program are very close to each other with 15 percent in the first cycle and 17 percent in the second cycle. This is comparable to the values observed in general secondary education. However, these averages mask wide disparities between different focus areas. Students enrolled in hospitality, family and social education, and agricultural science and technology almost never repeat a grade. In comparison, between one fifth and one third of those enrolled in administrative science, technology and management, and industrial science and technology repeat a grade in either the first or second cycle. In health sciences (SS), 8 percent of students repeat a grade in the first cycle and 10 percent in the second cycle. (UNESCO-IBE, 2012)

With only 3,500 students in 2011, enrolment in the formal dual VET system accounted for roughly 9 percent of the already low enrolment in the school-based VET program. Barriers to expansion of the dual VET system (and other apprenticeship-based models) include low educational attainments of prospective students and a lack of functioning institutions. In addition, a lack of local ownership complicates establishing the system, as dependence on foreign aid remains high. The UNESCO stresses the importance of functioning local institutions and involvement of local actors for the successful implementation of a broad vocational education system (e.g. *informal sector associations*). (UNESCO, 2012)

VET programs that are coupled with apprenticeships last two to three years. This part of the VET system was introduced in 2001 after an experimental implementation. Students enrol either in the dual system, where they work in a shop or business with parallel training in vocational training centres or secondary schools and technical colleges, or in Trades Centres, which train students with low educational attainment in artisan trades. Both pathways are

intended for young graduates aged 14 years who can read and write (UNESCO, 2012). In the dual VET system, students receive a day of theoretical training and four days of practical training per week. Master craftspeople receive support from local coordinators. These coordinators act as facilitators between workshops and training centres. (UNESCO, 2013)

After completing the dual VET program, the apprentice receives a certificate of professional qualification – *Certificate de Qualification Professionelle (CQP)*. When completing dual VET at a trades centre, the apprentice receives a qualification certificate in trades – *Certificate de Qualification aux Métiers (CQM)*.

Short apprenticeships are also offered to meet the demand of students who wish for shorter VET programmes that lead to earnable wages sooner. This so-called "formation de courtes durées" take between 3 and 6 months to complete. The Directorate of Conversion and Youth Integration (DRIJ - Direction de la Reconversion et del'Insertion des Jeunes) implements such programs for selected students, who receive certificates upon completion. (Conférence des Ministres du PQIP/DCTP, 2014)

#### 3.2 Professional Education and Training (PET; Post-Secondary Level)

At the tertiary level, university faculties and institutes as well as some "elite schools" (grandes écoles) offer PET programmes. Undergraduate programmes take three to four years to complete. Completion time depends on the area of specialization and the associated programme. PET programmes typically take two years at the postgraduate level. (UNESCO-UNEVOC, 2014)

In terms of specific programs, the only documented post-secondary professional education path is a degree in tropical agricultural sciences. Enrolment requires completion of the upper-secondary degree in agricultural sciences (BEAT). This four-year program grants students a higher diploma in agricultural sciences (DEAT).

#### 3.3 Informal Apprenticeships

As shown in Table 6 (next page), vocational education and training in the informal sector is far more common than in the formal sector, i.e. 50 times higher. Given the fact that up to 94 percent of the populace is active in the informal economy (see Chapter 1), this is not surprising.

The UNESCO (2013) reports that traditional vocational education and training in the informal sector covers 210 trades grouped into 42 bodies of crafts in 11 branches of activity. The quality of these VET programs is mediocre and only covers practical aspects of the trade, a trait not unique to Benin but typical for all countries in the subregion. Unfortunately, the report does not

contain a more thorough description of crafts in the informal sector and their relative importance.

**Table 6: TVET System Programmes Overview** 

Type of Training	Target Population	Location	Enrolled		
1. Formal type of training					
1.1 Technical Education (1st and 2nd cycles)	Students aged 12 to 17/18 Preparation for Technical Education Diplomas	17 public institutions 234 private institutions	9 300 20 000		
1.2 Training by Apprenticeship	)				
a) dual type apprenticeship (governed by apprenticeship contract)	Youth aged 14 that completed last year of primary school. Prepares for the Vocational Skills Certificate (CQP).	1 day / week in the facility, 4 days / week in business	3 500		
b) "Traditional "(open mostly to artisans)	Informal sector artisans in Formal training for trade modernization	Crafts and workshops Centres	18 000		
Training for "trade modernization"	Youth aged 16 years, who have taken training. Prepares for the Occupational Skills Certificate (CQM).	Workshops and business Centres	55		
c) "basic post-education" (governed by apprenticeship contract)	Youth aged 16 years, currently enrolled, late dropouts first cycle secondary education, unemployed graduates. Prepares for Vocational Skills License (AQP).	20% annually in the form of internship or in a workshop	14 (pilot phase)		
2. Non-formal Education					
Informal sector (excluding Ministry of Higher Education and Vocational Training)	All young people, whatever their level of education	Informal sector (artisan workshop, hands-on, self-training, etc.)	200 000 (estimate)		

Source: Own Table based on UNESCO (2013).

#### 3.4 Regulatory and Institutional Framework of the VPET System

After numerous reforms (see Chapter 4.1 for description), the institutions governing Benin's VPET system have experienced relative stability since 2007. Unfortunately, some successive actions since the reforms have been counterproductive. They have failed to facilitate achievement of key goals of the sector and did not permit the appropriation of the numerous study paths in the sector. They also failed to increase the intake capacity of the formal VPET system and did not result in a diversification of the professions for which VPET is offered. To name a tangible example, the last restructuring led to a quasi-shutdown of the collection of education data, which is the most important prerequisite for informed decision-making. Data collection is now characterized by discontinuity and low reliability. (UNESCO, 2013)

#### 3.4.1 Central Elements of VPET Legislation

In terms of strategy, the key initiatives governing Benin's VET system are

- The Education Sector Development Plan 2006-2015 (PDDSE Plan Décennal de Développement du Secteur de l'Education 2006-2015), which assigns the VPET system second priority after the primary education system;
- ii) The Poverty Reduction Strategy Paper (2011-2015) that aims to improve the VPET system and alleviate unemployment and poverty by providing youth with skills that match the demand in the labour market:
- iii) The 2004 Policy Letter on the Education Sector (*Lettre de Politique du Secteur de l'Education*), which demands that the VPET system be streamlined with the social and economic realities in Benin. (UNESCO-UNEVOC, 2014)

In terms of concrete legislation, the situation is somewhat opaque. There are a number of laws and decrees specifically related to VPET. However, given the institutional instability described above, the extent to which they are still relevant is uncertain. The central legislation elements described in UNESCO-UNEVOC (2014) are the following:

i) Decree n° 2001-336 (2001): This decree established the Ministry of Secondary Education, Technical and Vocational Education, and Integration of Youth (MESFTPRIJ - Ministère de l'Enseignement Secondaire, de la Formation Technique et Professionnelle, de la Reconversion et de l'Insertion des Jeunes). Note that this Ministry was eventually replaced by the Ministry of Higher Education and Vocational Training (see Section 4).

- ii) The Education Orientation Law (2003): Redefined the national education system and contained specific references to the need to broaden the VPET system at the secondary and tertiary education levels. It furthermore calls for the alignment of the programs to the requirements of the labour market.
- iii) Law n° 2005-33 (2005): This law describes the VPET system in general and specifies the types of institutions that may offer VPET programmes. Additionally, it calls for the promotion of equity in access to education for vulnerable groups and females.

#### 3.4.2 Key Actors

All departments involved in education in a broad sense participated in the development of the PDDSE education plan (see section 1.3.2 or 3.4.1). This is the reference document for all matters concerning the development of the education sector. The most important parties involved were (UNESCO, 2013):

- The Ministry of Economy and Finance, regarding the financial aspects and budgetary trade-offs;
- ii) Ministries in charge of education (primary to tertiary education) in terms of the coordination aspects of the teachings;
- iii) The Ministry of Agriculture, Livestock and Fisheries, regarding the elaboration of the National Strategy for Rural Training for current and future needs of the rural world;
- iv) Ministries in charge of crafts and labour;
- v) The Fund for the Development of Continuing Vocational Training and Learning (FODEFCA);
- vi) The Benin National Confederation of Artisans (CNAB).

#### 3.4.3 Government actors

Concerning the VPET system, the Ministry of Higher Education and Vocational Training (MESFTP) is the primary governmental institution responsible for the development of VPET in Benin. According to Benin's official government website, there are two Ministers that hold relevant functions: the Minister for Secondary, Technical and Vocational Education and the Minister for Higher Education and Scientific Research.

#### 3.4.4 Representation and advisory bodies

In an attempt to answer the need for a consultation body to facilitate the cooperation between educators, employers and other stakeholders, Benin established the National Education Council (*Conseil National de l'Education (CNE*)). In 2010, the MESFTP invoked two additional consultation bodies: the National Council for Technical Education and Vocational Training

(Conseil National de l'Enseignement Technique et de la Formation Professionnelle (CNETFP)) and the National Steering Committee on Vocational Training and Learning (Comité National de Pilotage des Formations Professionnelles par Apprentissage (CNPFPA)). (UNESCO, 2013)

These bodies hold the following responsibilities and competences: The National Education Council (CNE) oversees and controls compliance with major educational subject-fields and the implementation of the framework law on national education. It can make proposals on the programs, organization, results of education and training, and contribute to the coordination of the entire education system. It also elaborates the annual review of the national education system and the conducts field survey. It answers directly to the President of the Republic. (UNESCO, 2013)

In contrast to the National Education Council, the National Council for Technical Education and Vocational Training and the National Steering Committee on Vocational Training and Learning have no direct executive power and are restricted to advisory functions. The National Steering Committee on Vocational Training and Learning is exclusively designated to vocational education, while the other two bodies hold responsabilities that concern the entire TVET system. (UNESCO, 2013)

The National Council for Technical Education and Vocational Training (CNETFP) is designed as a national consultation authority for socioeconomic partners and stakeholders of the TVET system. Its main tasks are to facilitate the adaptation of the programs to match the business realities and to propose improvements to the TVET certification system. (UNESCO, 2013)

The National Steering Committee on Vocational Training and Learning (CNPFPA) acts as a facilitator for exchange and dialogue between the various stakeholders and partners of the apprenticeship training system. (UNESCO, 2013)

A key actor in vocational education is the Fund for the Development of Continuing Vocational Training and Learning (Le Fonds de Développement de la Formation Professionnelle Continue et de l'Apprentissage (FODEFCA)), which funds 90 percent of the fees for students in the dual apprenticeship programs, while the remaining 10 percent must be paid for by the student (Education Development Center, 2011). The Fund's work mainly concerns funding dual apprenticeships and master craftsmen training as part of the effort to modernize the traditional handicraft sector (UNESCO, 2013).

Another important actor is SwissContact, which is a major supporter of formal vocational training, especially in the development of the Vocational Skills Certificate (CQP) training pathway (Education Development Center, 2011).

The Danish Development Cooperation (DANIDA) supported the implementation of the dual apprenticeship system by providing financial support to the Fund for the Development of Continuing Vocational Training and Learning. It also created a public training center in Abomey but recently shifted its focus towards budgetary support for basic education. Similarly, the German GIZ was involved in the promotion of vocational education in the past, but has now shifted more towards aid in the agricultural sector, focusing specifically on cashew production (Education Development Center, 2011)

#### 3.4.5 Governance of Informal Vocational Education

As mentioned above, the informal part of the vocational education system is much larger than its formal counterpart. According to the UNESCO-UNEVOC (2014), various ministries support non-formal vocational education and training. The following examples are listed in UNESCO's World TVET Database:

- i. Ministry for Work, Public Functions, Administrative Reform, and Social Dialogue (Ministère du Travail, de la Fonction Publique, de la Réforme Administrative et Institutionnelle chargé du Dialogue Social ) provides VET training for workers from different occupations;
- ii. Ministry for Culture, Literacy, Crafts and Tourism (Ministère de la Culture, de l'Alphabétisation, de l'Artisanat, et du Tourisme MCAAT (MCAAT)) provides VET programmes and technical assistance to those involved in cultural activities, crafts, or the tourism sector. (UNESCO-UNEVOC, 2014, p. 9)

The Benin National Confederation of Artisans (CNAB) is another important player in informal vocational education. It covers the modernization of the traditional apprenticeship system. The CNAB implements a strategic approach it developed with the Ministry of Higher Education and Vocational Training for this purpose. (UNESCO, 2013)

A key criticism regarding the governance of the TVET system is that the Ministry of Higher Education and Vocational Training (MESFTP) is not involved in the politics of higher vocational and professional education. It would likely be beneficial if the governing actors on both levels would cooperate by sharing information and holding complementary responsibilities (UNESCO, 2013).

#### 3.4.6 Education and training providers

Within the formal technical education program, a number of institutions provide services. Around three quarters of them are private institutions. Most of these institutions specialize in one of the VET programmes described in Chapter 0. Some of them offer training in more than one VET programme.

Various institutions offer training in Sciences and Techniques of Administration and Management (STAG), Industry Sciences and Techniques (STI) and Agricultural Sciences and Techniques (STA). Training in Hotel and Restaurant Management (H-R) and Domestic and Social Management (EFS) is only offered by one institution, the Lycée Technique d'Enseignemen Familial et Social (LTEFS). No institution is listed for Health Sciences (SS). (UNESCO, 2013, Table 7)

Table 6 in the report by the Education Development Center (2011) contains a comprehensive list of locations for vocational training centers and schools. In total, 56 institutions are listed of which 46 are privately owned. The majority of the institutions are located in larger settlements such as Cotonou, Parakou, Porto-Novo and Abomey. Additionally the report lists four craft training centers for various trades (centres des métiers) in the smaller towns of Ouidah, Nikki, Cové and Sê.

## 3.5 Educational Finance of the VPET System

According to the 2014 report of the Pôle de Dakar, which is a platform for expertise in education policy analysis provided by the International Institute for Education Planning (IIEP) and the UNESCO, total public expenditure for the education sector between 2000 and 2010 grew by roughly 150 percent from around USD 140 million to roughly USD 350 million. Expressed as a share of GDP, public expenditure for education rose from 3.1 percent to 5.4 percent for this period.

In 2010, the majority of these funds (73 percent) went into personnel salaries, while 11 percent went into goods and services, 8 percent into transfers, 6 percent into scholarships and the remaining 2 percent to the Socio-administrative Capital Budget (BESA) (UNESCO - IIPE Pôle de Dakar, 2014, p. 99).

Public finance for education increased over the past years but stagnated between 2010 and 2011. While most of the budget is spent on the prioritized primary education, the secondary education sector and VET have also profited from the growth in financial resources for education. To the best of our knowledge, the information the UNESCO (2013) was able to collect does not distinguish between resources and expenditure for VPET system and those allocated to general secondary education.

The Ministry of Higher Education and Vocational Training's annual budget indicates the share of financial resources available to the VPET system. This budget is split between vocational and general secondary education. Unfortunately, the data is only available for the years 2009 and 2010. In 2009, the Ministry was awarded 28 percent of the education sector's total budget,

which translates to 4.9 percent of the general state budget. In 2010, this share declined to 25 percent of the budget for the education sector and 3.9 percent of total public expenditure. (UNESCO, 2013, Table 5)

From the available data it appears that apart from the public sector, private foreign development organizations contribute substantial amounts to VPET finance. However, their total contributions to the VPET system are unknown. Private institutions based in Benin do not appear to play a major part in the financing of the VPET system.

## 3.5.1 Educational finance of the VET system

The majority of institutions offering technical education programmes, which cover the six focus areas as described in Section 3.1, are private. Costs per student are roughly 30 percent lower in private institutions than in those operated by the public sector. The latest available data lists cost per student as:

- i. 282,519 CFA (\$US486) in public institutions
- ii. 197,844 CFA (\$US340) in private institutions

The cost difference is explained by the employment of many temporary teachers and local contractors in the public sector. UNESCO acknowledges that private institutions are slightly cheaper and also show higher student success rates. (UNESCO, 2013)

A very limited number of scholarships for formal technical education programs are provided by the state for students that excel on placement tests (numbers and funding pool not specified). Because of the limited amount of public resources in the form of scholarships, private households act as a second pillar of education finance along with NGO's and government foreign aid networks. Estimates suggest that in most VET programs, more than 50 percent of the education costs are covered by students' families (UNESCO, 2013, Table 6). Tuition for students in the formal technical education programs varies between CFA 52,000 and 362,000 (\$US 104 to 724) depending on the institution offering the training.

Due to the reliance on students' families to finance a large portion of the VET system and secondary education, substantial inequality exists regarding access to technical and vocational education. The UNESCO notes that this funding system promotes inequality to the extent that access to all training (formal or non-formal) depends upon families' income levels being high enough to afford their children's school fees. The system favors those who have a certain amount of financial resources and excludes poor and marginalized populations. Thus, students enrolled in all levels of secondary education are predominantly those with more privileged backgrounds. As a result, this fraction of the population also profits more from public

expenditure at this level of the education system due to their overrepresentation. (UNESCO, 2013)

VET programs that are coupled with apprenticeships with a dual system are mainly financed through the Fund for the Development of Continuing Vocational Training and Learning (FODEFCA), which covers 90 percent of a student's tuition fees. The remaining 10 percent are paid by the student. The total fees for dual apprenticeships range between 125,000 (\$US215) and 150,000 (\$US260) CFA per year. (UNESCO, 2013, Table 9)

The fees of students in VET programs coupled with apprenticeships (without the dual system) are much higher. Students must cover the entire cost of 120,000 CFA (\$US205) per annum themselves. The actual costs of both forms of apprenticeships and the extent to which tuition covers the total costs are unknown (UNESCO, 2013). Currently, no information is available that discloses contributions by the employers offering apprenticeships.

## 3.6 Curriculum Development

The curriculum is a central element for the functioning of a VPET system by defining the framework and the (quality) standards for the education system. The development of a curriculum can be divided into a three-step process with a curriculum design, a curriculum application, and a curriculum feedback phase. This theoretical concept is called the Curriculum Value Chain and is depicted in the picture below (CVC; for more details see (Bolli, et al., 2016)).

Curriculum
Feedback
Phase

Curriculum
Application
Phase

Curriculum
Outcome Phase

Figure 6: Curriculum Value Chain (CVC)

Source: (Bolli, et al., 2016)

In the curriculum design phase, VET curriculum content and qualification standards are decided upon by the relevant actors. The discussion in the respective subchapter below focuses on the degree of stakeholder participation concerning curriculum design in Benin. The

curriculum application phase revolves around the implementation of the curriculum. Because learning environments differ heavily across countries—especially with respect to the prevalence of workplace learning—the curriculum application phase subchapter in this factbook focuses on those learning environments. It specifically addresses where learning takes place and whether the curriculum dictates both school and workplace learning or only one of the two. Finally, curriculum outcomes can be collected and analysed in the curriculum feedback phase. This evaluation process is important as it may render a more refined curriculum design than was possible in the first place.

## 3.6.1 Curriculum Design Phase

The design phase is crucial to the entire curriculum process. In order to ensure that the skills taught in the VPET programmes correspond to the needs of the labour market, experts from companies should be involved in defining the qualification standards and learning contents of the curricula.

According to UNESCO-IBE (2012) a skills assessment seminar was held in Cotonou from May 31st to June 4th 1999. The seminar aimed to:

- i) Clarify and harmonize reference designs (output profile, curriculum, expertise, capabilities, taxonomic levels, evaluations);
- ii) Clarify the methodology the tools needed to develop the repository of evaluation indicators, situations, media, etc.;
- Plan the the different steps of the evaluation system to take into account the criteria of validity, reliability and feasibility (definition of specifications, production of items, sampling, pre-testing, procurement guide administration, treatment plan, etc.).

## 3.6.2 Curriculum Application Phase

The way in which a curriculum is implemented—especially with respect to learning environments—is important to achieve the intended learning outcome.

In Benin, separate curriculums are applied to dual apprenticeships and technical education. In technical education, the curriculum consists of a general part and a selection of classes that are specific to the occupation students are being trained in. In the dual system, students attend school one day per week and work four days per week. Specific content of the corresponding school curriculum for different apprenticeships is currently unavailable.

#### 3.6.3 Curriculum Feedback Phase

The curriculum feedback phase deals with the questions of if and how educational outcomes are analysed. Based on this, the curriculum could be re-worked and improved.

There have been a number of assessments of education reforms. Some of the advisory bodies described in section 3.4.4 likely analyse curriculum application and its effects. This is not explicitly described in the available information but given the bodies' responsibilities, it seems obvious that they would consider curriculum design and offer advice on possible improvements. An additional body is Benin's Bureau of Public Policy Evaluation (*Bureau d'Evaluation des Politiques Publiques*). This bureau provided an extensive analysis of the effects of the VPET reform within the last ten-year development plan, which it published in 2010.

## 3.7 Supplying Personnel for the VPET System (Teacher Education)

Teachers in the VPET system are trained at the Ecole Normale Supérieure of Technical Education (ENSET). Prospective teachers can apply for training either if holding a Bachelor degree, License or Master degree. Entry is competitive and based on a selection process by the teaching staff at the ENSET. Training lasts three years for the teaching brevet for technical education (BAPET), and an additional one or two years for the license for technical education (CAPET) (see teachers' education in section 2.6). (UNESCO-IBE, 2012)

The available data contains no information regarding the relative or absolute numbers of teachers in training for positions in the VET system. However, given the relatively low number of students described in the previous sections, one would expect that fewer teachers study for degrees that qualify them for VET education compared to general secondary education.

# 4. Major Reforms in the Past and Challenges for the Future

## 4.1 Major reforms

In the past 20 years, the education system in Benin experienced considerable instability at the institutional level as well as several restructuring efforts that affected its values, missions, functions and structures. In 1990, formal education and scientific research were grouped in the same ministry, that of National Education and Scientific Research.

In 2001, education was placed under the supervision of four newly created departments:

- i) the Ministry of Primary and Secondary Education (MEPS) to which nursery education was attached;
- ii) the Ministry of Technical Education and Vocational Training (METFP), responsible for both formal education in institutions offering VET and non-formal education (non-formal apprenticeships);

- the Ministry of Higher Education and Scientific Research (MERS) with relevant universities and higher educational institutions, including institutions of professional education and training (e.g. BTS);
- iv) the Ministry of Culture, Handicrafts and Tourism (MCAT), responsible for cultural policy, literacy and adult education.

In April 2006, a new restructuring of the government merged the Ministry of Technical Education and Vocational Training and the Ministry of Higher Education and Scientific Research into a single ministry, newly called the Ministry of Higher Education and Vocational Training (MESFP). Literacy came under the supervision of the Ministry of Culture, Youth, Sports and Recreation (MCJSL). This reform was followed by another restructuring effort in June 2007, which amended the functions of some ministries set up in 2006 and created the:

- i) Ministry of Primary Education, Literacy and National Languages (MEPALN);
- ii) the Ministry of Secondary Education and Technical and Vocational Training (MESFTP);
- iii) the Ministry of Higher Education and Scientific Research.

Finally, in November 2007, the literacy and national languages were the subject of the Ministry for Literacy and Promotion of National Languages (MAPLN), while the nursery and primary education were grouped into a single ministry called Ministery of Maternal and Primary Teaching (MEMP). (UNESCO, 2013)

In 2006, the Government developed a Ten Year Plan for the Development of the Education Sector (PDDSE) 2006-2015. The plan draws upon the education policy letter of declaration adopted in February 2005. It is based on the political vision of an emerging Benin with human capital concerns at all levels of education.

The objectives set by the ten year plan for the VPET system include adapting training to labour market needs and improving the quality and equity of the programmes as well as the management and control system. In total, 142 Billion CFA (\$US245 Mio) were assigned to the development of VPET. (MPDEPP-CAG, 2010)

## 4.2 Major challenges

The latest available assessment of the reform concludes that it was all but completely ineffective. The Beninese Bureau of Policy Analysis concludes that, while the policy design is adequate and in line with the goals of the reform, the implementation of Phase 1 of PDDSE showed weak effectiveness and efficiency. This was due to the inadequacy of the

institutional framework, a deficit of staff and skilled general program management, and especially a lack of experience managing vocational training systems. (MPDEPP-CAG, 2010)

The PDDSE did not deliver the expected results for Phase 1 of the reform. Thus, it is noted that (MPDEPP-CAG, 2010):

- The training offer has not improved (no elimination of supply deficit over demand, no improvement of the quality of training by reviewing training programs and teacher training);
- The policy has not produced institutional effects because the strategies that were supposed to produce these effects have either not been implemented or are delayed in their implementation;
- iii. The effects on training only resulted in the consolidation of the dual vocational and training system;
- iv. Strong effects on employability are not visible and unemployment remains high among graduates of the VPET system;
- Most of those who have managed to enter the labour market have not found a decent job;
- vi. Employment matching takes place for graduates from the sectors hotel and restaurant management, agricultural sciences and techniques, health, and to a lesser extent in industry sciences and techniques. This is not the case for those graduates of sciences and techniques of administration and management sector, whose employment does not match their training in 61 percent of the cases.

The bureau lists positive aspect as well. Apparently, the master craftsmen and owners of Vocational Skills Certificate (CQP) institutions are satisfied with the training received in the context of the dual VET. By contrast, leaders and teachers in private VPET institutions feel ignored by the policy. (MPDEPP-CAG, 2010)

The ten year development plan for the education sector is both relevant and coherent, but very ineffective. According to the Bureau of Policy Analysis, this is due to:

- Weak control of consecutive actions to the Ten Year Plan of Development of the Education Sector (PDDSE) due to a deficit of programme management skills and training systems;
- ii. The inadequacy of institutional and financial framework for the implementation of the PDDSE;

of the plan. (MPDEPP-C	AG, 2010)		

The absence of a performance obligation of those involved in the implementation

iii.

## References

- Bénin Government. (2016, 4 12). *Histoire du Bénin*. Retrieved from www.gouv.bj: http://www.gouv.bj/tout-sur-le-benin/histoire
- Bolli, T., Caves, K., Bürgi, J., Pusterla, F., Rageth, L., & Renold, U. (2016). *The Curriculum Value Chain. A Theoretical Framework for Analyzing and Managing Education and Training Systems.* Zurich: KOF Studies.
- Conférence des Ministres du PQIP/DCTP. (2014). *Politiques et Dispositifs d'Insertion Professionelle et de Creation d'Emplois.* Bénin Government.
- Debourou, D., Gnimadi, A., Caillods, F., & Abraham, K. (2008). Appendix 3 costs and financing of secondary education in Benin: a situational analysis. In K. M. Lewin, Strategies for sustainable financing of secondary education in Sub-Saharan Africa (Vol. 4). Washington, DC: World Bank.
- Dutta, S., Lanvin, B., & Wunsch-Vincent, S. (2014). *The Global Innovation Index 2014: The Human Factor in Innovation.* Fontainebleau, Ithaca, and Geneva: Cornell University, INSEAD, and WIPO.
- Economist. (2015). Democracy Index 2014: Democracy and its Discontents. London: The Economist Intelligence Unit Limited.
- Economist. (2016, 04 06). *Democracy Index 2015*. Retrieved from www.eiu.com: http://www.eiu.com/Handlers/WhitepaperHandler.ashx?fi=EIU-Democracy-Index-2015.pdf&mode=wp&campaignid=DemocracyIndex2015
- Education Development Center, I. (. (2011). *Benin Youth Assessment Report.* Education Development Center, Inc. (EDC).
- EMICoV. (2011). Enquête Modulaire Intégrée sur les Conditions de Vie des ménages. Cotonou, Bénin: l'Institut National de la Statistique et de l'Analyse Économique (INSAE).
- Encyclopædia Britannica Online. (2016, 04 04). *Benin*. Retrieved from http://www.britannica.com/place/Benin
- Encyclopædia Britannica Online. (2016). *Underemployment*. Retrieved from www.britannica.com: http://www.britannica.com/topic/underemployment

- European Commission. (2010). The Bruges Communiqué on Enhanced European Cooperation in Vocational Education and Training for the Period 2011-2020. Brussels:

  European Commission. Retrieved from http://ec.europa.eu/education/policy/vocational-policy/doc/br
- European Commission. (2010). The Bruges Communiqué on Enhanced European Cooperation in Vocational Education and Training for the Period 2011-2020. Brussels:

  European Commission. Retrieved from http://ec.europa.eu/education/policy/vocational-policy/doc/br (September, 12, 2015).
- Eurostat. (2015a). Gross Value Added and Income by A\*10 Industry Breakdown (nama\_10\_a10). Retrieved from http://appsso.eurostat.ec.europa.eu/nui/show.do (September 14, 2015).
- Eurostat. (2015b). *Employment by A\*10 Industry Breakdowns (nama\_10\_a10\_e)*. Retrieved from http://appsso.eurostat.ec.europa.eu/nui/show.do (September 14, 2015).
- ILO. (2013). Transition vers le marché du travail des jeunes femmes et hommes au Bénin. Geneva: ILO.
- ILO. (2014). Labour market transitions of young women and men in sub-Saharan Africa.

  Retrieved from www.ilo.org: http://www.ilo.org/employment/areas/youth-employment/work-for-youth/publications/regional-reports/WCMS\_235754/lang-en/index.htm
- ILO. (2015). *Data by Country Benin*. Retrieved from www.ilo.org: http://www.ilo.org/ilostat/faces/help\_home/data\_by\_country/country-details?\_adf.ctrl-state=842ophyng 163& afrLoop=1182198550058930
- ILO. (2015). www.ilo.org. Retrieved from Unemployment rate by sex and age (ILO estimates and projections) Benin: http://www.ilo.org/ilostat/faces/help\_home/data\_by\_country/country-details/indicator-details?country=BEN&subject=UNE&indicator=UNE\_2EAP\_SEX\_AGE\_RT&datasetC ode=YI&collectionCode=ILOEST&\_afrLoop=1182001223464327#%40%3Findicator% 3DUNE\_2EAP\_SEX\_AGE\_RT%26subje
- ILO. (2016). Informal employment and informal sector as a percent of employment by sex -Harmonized series (%) . Retrieved from International Labour Office (ILO):
  http://www.ilo.org/ilostat/faces/oracle/webcenter/portalapp/pagehierarchy/Page27.jsp
  x?subject=EMP&indicator=IFL\_4IEM\_SEX\_ECO\_IFL\_RT&datasetCode=A&collection

- Code=YI&\_afrLoop=282800517981342&\_afrWindowMode=0&\_afrWindowId=rmltqug m0\_1#!%40%40%3Findicator%3DIF
- INSAE. (2015). Institut National de la Statistique et de l'Analyse Economique Benin Socio Economic Database 2015. Retrieved from benin.opendataforafrica.org: http://benin.opendataforafrica.org/BJSECD2015/socio-economic-database-2015
- MPDEPP-CAG, M. d. (2010). Evaluation de la politique mise en oeuvre dans le domaine de l'einsiegnement technique et de la formation professionelle: etat des lieux. Cotonou: Bénin Bureau d'evaluation des politiques publiques.
- Ndoye, D., & Fall, E. H. (2014). Bénin Economic Outlook 2014. Retrieved from www.africaneconomicoutlook.org: http://www.africaneconomicoutlook.org/fileadmin/uploads/aeo/2014/PDF/CN\_Long\_EN/Benin\_EN.pdf
- Ndoye, D., & Fall, E. H. (2015). Bénin Perspectives économiques en Afrique. Retrieved from africaneconomicoutlook.org: http://www.africaneconomicoutlook.org/fileadmin/uploads/aeo/2015/CN\_data/Cn\_Long\_FR/Benin\_2015.pdf
- ODI. (2014). Benin's progress in education: Expanding access and closing the gender gap.

  Retrieved from http://www.developmentprogress.org/:

  http://www.developmentprogress.org/sites/developmentprogress.org/files/resource\_re
  port/benin\_report\_-\_master\_1.pdf
- OECD. (2012). Education at a Glance 2012. OECD Publishing.
- OECD. (2015a). *OECD Employment Outlook 2015.* Paris: OECD Publishing. Retrieved from http://dx.doi.org/10.1787/empl\_outlook-2015-en.
- OECD. (2015b). *OECD Annual National Accounts. Gross Domestic Product (GDP)*. Retrieved from https://stats.oecd.org/index.aspx?queryid=60702 (September 14, 2015).
- OECD. (2015c). *OECD Labour Force Statistics*. Retrieved from https://stats.oecd.org/Index.aspx?DataSetCode=LFS\_SEXAGE\_I\_R (September 22, 2015).
- OECD. (2015d). OECD Education Database: Population Who Attained Upper Secondary Education. Retrieved from http://stats.oecd.org/Index.aspx?QueryId=50386 (September 22, 2015).

- OECD. (2017). Short-Term Labour Market Statistics Dataset. Retrieved from http://stats.oecd.org/#
- PASEC. (2015). PASEC 2014 Education System Performance in Francophone Sub-Saharan Africa: Competencies and Learning Factors in Primary Education. Dakar (Senegal): Programme d'Analyse des Systèmes Educatifs de la CONFEMEN.
- Renold, U., Bolli, T., Egg, M. E., & Pusterla, F. (2014). *On the Multiple Dimensions of Youth Labour Markets A Guide to the KOF Youth Labour Market Index*. Zurich: KOF Swiss Economic Institute.
- Reuters. (2016). *Benin Election*. Retrieved from www.reuters.com: http://www.reuters.com/article/us-benin-election-idUSKCN0WS08X
- The White House. (2015). *Building American Skills Through Community Colleges*. Retrieved from www.whitehouse.gov/issues/education/higher-education/building-american-skills-through-community-colleges (August 30, 2015).
- Transparency International. (2014). *Corruption Perceptions Index.* Berlin: Transparency International.
- Transparency International. (2016, 04 07). *Corruption Perception Index 2015*. Retrieved from transparency.org: http://www.transparency.org/cpi2015#results-table
- UIS. (2016a). *Education: Enrolment by level of education*. Montreal: UNESCO Institute for Statistics. Retrieved June 1, 2016, from http://data.uis.unesco.org/?queryid=128#
- Ulandssekretariatet . (2014). http://www.ulandssekretariatet.dk/. Retrieved from Labour Market Profile 2014 Benin: http://www.ulandssekretariatet.dk/sites/default/files/uploads/public/PDF/LMP/Imp\_ben in\_2014\_final\_version.pdf
- UNDP. (2017). *United Nations Development Programme, Human Development Index*. Retrieved from http://hdr.undp.org/en/content/human-development-index-hdi
- UNESCO IIPE Pôle de Dakar. (2014). Rapport d'état du système éducatif béninois, Pour une revitalisation de la politique éducative dans. Dakar Sénégal: UNESCO IIPE Pôle de Dakar.
- UNESCO. (2012). Youth and skills: Putting education to work. Geneva: UNESCO.
- UNESCO. (2013). *ISCED Mappings*. Retrieved from www.uis.unesco.org: http://www.uis.unesco.org/Education/ISCEDMappings/Pages/default.aspx

- UNESCO. (2013). Revue de politiques de formation technique et professionnelle au Bénin. Paris: UNESCO.
- UNESCO. (2014). *Bénin Country Profile*. Retrieved 04 18, 2016, from http://www.uis.unesco.org: http://www.uis.unesco.org/DataCentre/Pages/country-profile.aspx?code=BEN
- UNESCO. (2017). *UNESCO Data on Education*. Retrieved from http://data.uis.unesco.org/?queryid=142#
- UNESCO-IBE. (2012). World Data on Education VII Ed. 2010/11. Benin. Geneva: UNESCO-IBE.
- UNESCO-UNEVOC. (2014). World TVET Database Bénin. Bonn: UNESCO-UNEVOC.
- US Embassy. (2012). Facts about Bénin. Retrieved 04 18, 2016, from http://cotonou.usembassy.gov: http://cotonou.usembassy.gov/facts\_about\_Benin.html
- WEF. (2014). *The Global Competitiveness Report 2014-2015: Full Data Edition.* Geneva: World Economic Forum.
- WEF. (2015). *The Global Competitiveness Report 2015-2016: Full Data Edition.* Geneva: World Economic Forum.
- World Bank. (2009). Le système éducatif Béninois. Washington D.C.: World Bank.
- World Bank. (2014). Worldwide Governance Indicators. Washington: World Bank.
- World Bank. (2015a). World Development Indicators. Retrieved from http://databank.worldbank.org/data/reports.aspx?source=2&country=&series=NY.GD P.MKTP.KD.ZG&period= (September 14, 2015).
- World Bank. (2016). *Benin Overview*. Retrieved from http://www.worldbank.org/en/country/benin/overview
- World Bank. (2017, April). World Development Indicators. Retrieved from http://databank.worldbank.org/data/reports.aspx?source=2&series=SL.TLF.CACT.ZS &country=

## 5. Appendix

# 5.1 Appendix to Chapter 2: PASEC's "Sufficient Competency Threshold" Reading Competency Minimum Requirements for reaching threshold (Level 3):

Pupils are able to combine two pieces of explicit information from a document or can carry out simple inferences in a narrative or informative text. They can extract implicit information from written material while giving meaning to implicit connectors, anaphora or referents. Pupils locate explicit information in long texts and discontinuous documents. (PASEC, 2015, p. 47)

Students that reach level 2 (best level below sufficient threshold) are reported to have the following reading competences at the end of their primary education:

Pupils draw on their orthographic decoding skills to identify and understand isolated words taken from their everyday lives. They are also able to locate explicit information in short and medium length texts by identifying clues in the text and questions. Pupils can paraphrase explicit information from a text. (PASEC, 2015, p. 47)

### Mathematics Competency Minimum Requirements for reaching threshold (Level 2):

Pupils are able to answer brief arithmetic, measurement and geometry questions by resorting to the three assessed processes: knowing, applying and reasoning. Some questions call on factual knowledge or a scientific approach; others require analysis of a situation prior to determining the appropriate approach. In arithmetic, pupils perform operations with decimal numbers and can also solve familiar problems by analysing the wording of the question or extracting data from a double-entry table. They know how to complete logical series with decimal numbers or fractions. In measurement, pupils can tell the time and convert units of measurement with or without a conversion table. They are also able to solve arithmetic problems involving operations with days, hours and minutes, or units of length. In geometry, pupils know the names of certain solids, basic geometric shapes and some characteristic lines (diagonal, median). (PASEC, 2015, p. 49)

Students that reach level 1 (best level below sufficient threshold) are reported to have the following mathematical competences at the end of their primary education:

Pupils can answer very brief questions by calling upon factual knowledge or a specific procedure. In arithmetic, they are able to carry out the four basic operations with whole numbers which might require writing down the operation using regrouping. In measurement, they recognize the length measurement unit: the meter. In geometry, they are able to orientate themselves in space by identifying directions and positions and by reading coordinates on a graph. (PASEC, 2015, p. 49)