



Work Study Program as a Model of Training: A Benchmark of International Experiences

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« L’alternance comme modèle de formation: Benchmark des expériences internationales »

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Résumé

Les notes d’information du Haut-Commissariat au Plan sur les principales caractéristiques du chômage au Maroc révèlent l’existence d’une corrélation positive statistiquement significative entre l’effectif des diplômés et le taux de chômage. Ce constat peut conduire à développer une hypothèse plausible : Au Maroc, les diplômés risquent le chômage plus que les non diplômés ! Une imposture préjudiciable à l’image de marque et à la notoriété de l’enseignement supérieur marocain dont la formation par alternance fait encore défaut. Une formation qui a pu contribuer à réduire le taux de chômage des diplômés et à améliorer leur employabilité dans les pays qui ont une longue tradition dans ce domaine. En examinant les meilleures expériences internationales à travers le benchmark, nous avons évalué la faisabilité des pratiques exemplaires dans le contexte de l’enseignement supérieur marocain à vocation professionnalisante. L’étude empirique révèle que l’enseignement supérieur en alternance au Maroc est viable. Cependant, sa mise en œuvre réussie nécessite certaines conditions préalables.

Mots clés : Alternance ; Formation ; Benchmark ; Enseignement supérieur .



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Abstract

The information notes of the High Commission for Planning on the main characteristics of unemployment in Morocco reveal the existence of a statistically significant positive correlation between the number of graduates and the unemployment rate. This observation may lead to the development of the following plausible hypothesis: Graduates are more likely to be unemployed than non-graduates. Such a claim is detrimental to the image and reputation of Moroccan higher education, which is still lacking work-linked training. This training might contribute to reducing the unemployment rate of graduates and improving their employability in countries with a long tradition in this field. By examining the best international experiences through benchmarking, we assessed the feasibility of the best practices in the context of Moroccan higher education with a professional vocation. The empirical study reveals that alternating higher education in Morocco is viable for specific fields of study. However, a successful implementation of work-study programs requires certain prerequisites.

Keywords : Apprenticeship ; Training ; Benchmark ; Higher education

1. INTRODUCTION

Graduates are the most affected by unemployment. This is the constant observation in the information notes of the High Commission for Planning on the main features of unemployment in Morocco. By way of illustration, in Morocco, the unemployment rate among graduates recorded 18.5% in 2020 against 15.7% in 2019. For its part, the unemployment rate among graduates of higher education increased by 2.3 points to reach 23.9% in 2020. It recorded its strong increase among higher graduates issued by faculties (+2.6 points with a rate of 26.1% in 2020). In contrast, the unemployment rate of non-graduates was only 5.6% in 2020 against 3.1% in 2019.

The figures of the High Commission for Planning reveal a statistically significant positive correlation between the number of graduates and the unemployment rate in Morocco. The category of the population "with a degree" seems to be the most vulnerable to this structural dysfunction that characterises the Moroccan labour market. The finding that non-graduates are more successful in entering the labour market than graduates may lead to the development of a plausible hypothesis which is graduates are more likely to be unemployed than other population categories in Morocco ! This is a falsehood that is detrimental to the image and reputation of Moroccan higher education. This fallacious argument should have made all the components of the system feel guilty if the unemployment rate of specialised and higher technicians was not the highest in Morocco.

It should be noted that the existence of a significant and reliable statistical correlation between two variables can be misleading in inferring a causal link between the two. Correlation and



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causality are certainly two relatively close notions, but they should not be confused! Consequently, it would be absurd to conclude that it is the availability of a higher degree that exposes one to the risk of unemployment. A risk that remains low for graduates from countries with a long tradition in the field of work-linked training. In other words, it is likely expected that Moroccan graduates are less prepared for the demands of the labour market because higher education is purely theoretical. Thus, the opportunities for students to apply the skills they have acquired are limited. This argument could explain the high unemployment rate among graduates. It is; therefore, legitimate to seek to learn from international best practices in work-linked training, practices that have shown better results in terms of both graduation rates and integration. What lessons can be learned from the best practices in the context of Moroccan higher education with a professional vocation? Through a benchmark of these practices, we seek to draw lessons from the "best practices" and to study the feasibility of work-linked training in the context of Moroccan higher education with a professional vocation.

2. APPRENTICESHIP: VARIOUS INTERNATIONAL PRACTICES

Despite its plural nature, most studies agree on considering alternation as a training system based on a device combining theory and practice, in a succession of learning times between a training institution and a professional environment (Vanhulle et al., 2007; Pentecouteau, 2012; Chaubet et al. 2018). A consensus seems to have been established in the literature regarding the protean nature of the alternation with the predominance of two complementary currents: The socio-pedagogical current and the bio-cognitivist current. The followers of the first current consider that the conception of alternation is part of "the relationship between knowledge and doing" (Romero-Pinazo, 2016). This conception generally refers to the classification "already described in 1979 by Bourgeon" (Bournel-Bosson and Henry, 2016). This categorization of social forms of alternation is still a reference in the field today (Vialle, 2011).

With reference to various international practices in the field of work-linked training, a benchmark was carried out by reviewing in particular the German-speaking European experiences (through the German and Hungarian experiences), the European Francophone experiences (through the French and Belgian experiences), the experience of Asian countries (particularly that of the Philippines), and the experience of North America (particularly that of Canada). The objective is to draw lessons from the "best practices" to be developed in the context of Moroccan higher education with a professional vocation.



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2.1 The German-speaking European experiences

2.1.1 The German experience regarding work-linked training

The experience of European countries that are pioneers in the field of work-linked training is rich in lessons, particularly the German corporate model, which is considered to be one of the 'best practices' and which is a reference in this field. Indeed, the strong points of this model are taken up by Bosch (2018, p.1) in these terms: "The German dual system of vocational training is a reference worldwide. It provides a workforce for an innovative economy and is not a second-best option for school dropouts. In the minds of parents and young people, vocational training leads to a job that opens up opportunities for professional development, while companies appreciate the benefits of training that is adapted to their needs, which they help to define and which prevents them from financing the laborious integration of young people who have just finished school."

In contrast to many countries where the vocational training system is synonymous with a palliative for school failure, a sort of emergency exit for pupils who have not been able to complete a successful normal course of study (e.g. Morocco), the German dual system of vocational training is synonymous with professional success and the successful career development of the trainees. For their part, companies appreciate this type of training, which provides them with skills and ensures flexibility in their management of jobs and skills, which is likely to boost their competitiveness. This is what justifies the good health of the German economy and its resilience to crises since the mid-1990s.

According to the Vocational Training Act¹ "initial vocational training shall provide trainees in a structured and officially approved training course with the vocational skills, knowledge and general competencies (vocational competence/ability to act) required for qualified workers in a changing working environment". One of the salient features of dual training in Germany is the corporate dimension (Bund-Länder-Kommission) around which the whole process is structured. According to the principle of subsidiarity, the public authorities are responsible for the legal framework but transfer the responsibility for the management of in-company training to representatives of the economic sphere, and the companies are responsible for training young people (Granato & Kroll, 2013).

A continuum between general and vocational education and training is the other characteristic feature of the German education system. Indeed, from the age of 6, German pupils enter compulsory school which they follow until the age of 15 (4 to 5 years at primary school



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(Grundschulen) followed by a 2-year cycle to orientate themselves towards one of the three secondary education streams providing gateways to vocational training: the "Hauptschule", the "Realschule", or the "Gymnasium").

- The "**Hauptschule**" is the shortest route to vocational education (5 years) and leads to a school-leaving certificate, which allows for further studies in vocational training or direct access to employment.
- The "**Realschule**" of a longer duration (6 years), this type of establishment provides a more complete and in-depth education than that offered in the "Hauptschule", allowing access to vocational schools (Berufsfachschule, dual system, etc.), technical colleges (Fachoberschule) as well as to universities of applied sciences (Fachhochschule) or the Gymnasium.
- The "**Gymnasium**" of longer duration (8 to 9 years), this type of school provides a general education leading to the German Baccalaureate ("Abitur"), which opens the way to higher education. Due to its quality and the opportunities it offers in terms of integration into the labour market, German vocational education attracts more students (51.49%) (Central Economic Council, 2014) than public secondary education. The schools (Berufsfachschule, Fachoberschule, Schulen des gesundheitswesens, etc.) that provide vocational training are mainly concerned with health and social professions, laboratory, media and information technology professions, while the dual system is what characterises the rest of German vocational training institutions. Indeed, a survey of the international company IBM in Germany shows that graduates of cooperative education show rapid career development. They earn higher salaries and hold higher positions than students from traditional universities (Göhringer, 2013). This finding is supported by Brahim (2013); Shin (2013); and Mutalib (2013) in other international studies.

2.1.2 Dual system university education in Hungary

The German dual system of education can be found in Hungary, which adopted this system at university in 2015. This so-called cooperative model combines classroom teaching with work experience in companies. Work-linked students, like their full-time counterparts, attend academic classes for 14 weeks per semester. After this period, they participate in practical training, lasting 8 weeks in winter and 16 weeks in summer after each academic session in a company, which has a cooperation contract with the university.



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Studies by Kovacs, Török (2016) and Yu (2012) show that dual education increases professional skills as long as the content of the taught programme is integrated during a sufficient period of internship with professionally qualified companies (Simonics, 2015). According to Pogatsnik's (2018) survey of Obuda University students, students thus convert their theoretical knowledge into practice, gain experience in their potential career path, improve their professional communication skills and enter the labour market as strong candidates, avoiding months of post-training internships or even years of rehabilitation training and the consequent financial expenses. However, the difficulty most mentioned by the students was to work and study in parallel, which requires a great deal of task and time management.

For companies, this form of training helps to meet their demand for a well-trained workforce and ensures the efficiency of their recruitment (Education, 2014). Furthermore, companies are involved in the design of the university's training programmes for their future recruits. This strong cooperation between the university and the company can lead to a research and development project. Universities expect more motivated students, active and regular cooperation with companies, a higher level of social and societal awareness, and an improvement in their rating among peers. The most important lesson to be learned from this type of training is its participatory dimension: companies, educational institutions and professional bodies ensure that training is adapted to the needs of the local industrial fabric.

2.2 The European Francophone experiences

2.2.1 The French experience of work-linked training

In France, work-linked training involves two types of contractualised vocational training: training under apprenticeship contracts and training under professionalisation contracts.

- **The apprenticeship contract**

Law 2018-771 specifies that "the apprenticeship contract is an employment contract concluded between an employer and an employee. Its purpose is to enable a young person to undergo general, technological and practical training with a view to acquire a vocational secondary education diploma, a higher education diploma or a vocational qualification registered in the National Directory of Professional Certification (RNCP) and eligible for apprenticeship". In this definition, it can be seen that vocational training is legally the subject of a contract under



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labour law, with all the consequences that this entails in terms of the rights and obligations of the contracting parties.

Engaged in the form of a time-limited contract for an average period of 1 to 3 years (depending on the specialisation), the maximum duration of apprenticeship training can be up to 4 years in the case of the disabled. This type of contract can even be concluded for an indefinite period. To encourage employers to take on apprentices, the State grants them numerous advantages (exemption from social security contributions, apprenticeship bonus granted by the regions, apprenticeship tax credit, "TPE jeunes apprentis" aid, aid for recruiting a first or additional apprentice). From January 2019, these aids have been replaced by the single aid for employers of apprentices.

- **Professionalization contract**

According to the French Ministry of Labour : "the professionalisation contract is an employment contract concluded between an employer and an employee. It enables the acquisition (within the framework of continuing education) of a professional qualification (diploma, title, certificate of professional qualification, etc.) recognised by the State and/or the professional branch. The aim is to integrate young people and adults into the labour market or return them to work. Similarly to the apprenticeship contract, the professionalisation contract is formalised by an employment contract which may be for a fixed period of 6 to 12 months, generally, or even for an indefinite period. This type of contract differs, however, from the apprenticeship contract in that it falls under the heading of continuing education, whereas the apprenticeship contract falls under the heading of initial education. The contractual clauses also differ from one contract to another, particularly with regard to age, remuneration and the aid granted to employers.

The professionalisation contract may concern young people aged 16 to 25 in order to complete their initial training, and jobseekers aged 26 and above. It may also concern recipients of the active solidarity income (RSA), the specific solidarity allowance (ASS) or the disabled adults' allowance (AAH) or those who have benefited from a subsidised contract (CUI single integration contract). All private companies, public industrial and commercial establishments (RATP, SNCF, the National Forestry Office, etc.) subject to the financing of continuing vocational training and shipping companies may offer this type of contract.



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What we remember about French-style work-linked training is the legal framework guaranteeing the rights of each of the contracting parties. The aid and incentives granted by the State to employers are attractive. It should also be noted that there is a balance between theory and practice: the hourly training budget covers at least a quarter of the total duration of the apprenticeship contract and 15% to 25% of this duration for the professionalisation contract.

2.2.2 University education through work-linked training in Belgium

In Belgium, work-linked higher education is considered to be an education in which the acquisition of the competencies required to obtain a diploma issued by a higher education institution takes place partly in a company and partly within the institution. In higher education certificates, bachelor and master programmes are organised on a dual system, the study programmes comprise, per study cycle, a minimum of 40% of days or periods of activity in the company and 40% of days or periods of activity in the higher education institution, the distribution of the remaining 20% being left to the choice of the institution.

Work-linked higher education can be organised in fields of study that lead to occupations in short supply, new jobs, changing occupations, jobs related to sustainable development or jobs related to economic recovery. Work-linked programmes give access to higher education diplomas that are of the same level and value as those awarded in the context of full-time programmes and in higher education for social promotion. A model work-study agreement is defined by the Steering Committee and approved by the Government. Each student must conclude a work-study agreement with a company and the higher education institution. This agreement must include at least :

- The list of skills to be acquired in the company and the higher education institution;
- The schedule of learning and assessment activities and school holidays;
- The student's status;
- The names of the company tutor(s) and the supervisor at the higher education institution;
- The commitments of each party regarding safety, work accident cover, work rules and ethics;
- Each party's responsibilities for follow-up;
- The contribution of each party to the evaluation and its practical arrangements;
- The method of dispute resolution and the possibility of terminating the agreement.

The learning activities include the acquisition of competencies in the company, which are subject to evaluation. When the student is in training in the company, he/she is covered by a



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work immersion agreement. Although the company participates in the assessment of the mastery of skills, according to the terms defined in the work-study agreement, it is the higher education institution that awards the marks for the teaching units. For each programme organised on a work-linked basis, a monitoring committee is set up, made up equally of representatives of the partner companies, teachers and students, which the higher education institution has the right to convene at least once per academic year.

2.3 The Asian experience of dual training in universities: The case of the Philippines

Investigations of dual training conclude that such training does not exist in the universities of nine Asian countries studied, namely Bangladesh, China, Indonesia, Japan, Korea, Malaysia, Singapore, Thailand and Vietnam. This is reflected in the main studies reviewed in these different contexts: Haolader et al, (2017); Tang and Shi, (2017); Kis and Park (2012); Yahiji et al, (2019); Razali (2019), to n

ame a few. The Philippines is unique in providing so-called ladder vocational university training as opposed to certificate-based academic training. This university training seems to borrow from the spirit of sandwich training.

In the Philippines, higher education is under the responsibility of the Commission on Higher Education, while TVET (Technical and vocational education training) is under the responsibility of the Technical Education and Skills Development Authority. There are four types of TVET in the Philippines: school-based TVET, central TVET, community-based TVET and enterprise-based TVET (see Table 3 below). Based on the sources of funding, TVET can be classified into public TVET institutions and private TVET institutions. Depending on the duration of education, TVET programmes can be classified into short-term programmes (within 3 months), medium-term programmes (3-9 months) and long-term programmes (1-3 years).

Under the Technical Education and Skills Development Act, the Philippine government created the Technical Education and Skills Development Authority (TESDA) in 1994 as a special government agency to oversee and manage TVET in the Philippines. TESDA plays an important role in setting standards and systems, providing policy guidance, preparing development plans, and regulating training institutions for TVET in the Philippines. In addition, TESDA also co-operates with the Philippine government, businesses and training institutions to provide society with industry information and support youth employment and entrepreneurship.



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TESDA's main functions are the development of competency standards, competency assessment and certification, programme registration and accreditation. Three training modalities are implemented in partnership with enterprises or institutions. These are the :

- **The Apprenticeship Program** is a mode of TVET implemented by companies offering apprenticeship positions. In the Philippines, the duration of study for apprenticeship training is a minimum of four months and a maximum of six months. Only companies whose apprenticeship programmes are accredited and registered with the TESDA can employ apprentices. This type of training aims to provide a mechanism for training skilled technicians to meet the needs of industries and companies. Its objective is to provide well-trained skilled employees through the participation of employers, workers, government and NGOs to establish a public apprenticeship and develop standards for apprenticeship training.
- **The Learnership Program** is a continuing education program. The duration of the study is usually no longer than six months and trainees can be employed by the company after passing a periodic assessment and obtaining a certificate of qualification. Only companies that are approved and registered with TESDA can recruit trainees.
- **Dual Training** is another form of in-company TVET in the Philippines. Trainees alternate between a training centre (school) and a company for one and a half to two years. Through close cooperation between companies and vocational schools, suitable employees are provided to companies. The advantage of dual training is that apprentices alternate between practical work in the company and academic studies, which nurtures and develops mutual learning in both environments.

2.4 The Canadian experience of professionalization in universities: the Quebec experience

Canada, and more particularly Quebec, has been engaged for several years in the process of professionalization of higher education with the implementation of two main formulas:

- **Work-study programs:** this is the formula adopted by vocational and technical training institutions. The study programmes that can be offered under the W.T.A. formula are those that lead to a diploma recognised by the Ministry of Education and Higher Education (D.E.P., A.E.C., D.E.C., Baccalaureate or Master's degree)



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- **The cooperative system:** this is the term used at the university level to also designate training where periods of work experience are planned to alternate with studies in the higher education institution. This formula has existed for 52 years already, since it was introduced in Quebec by the University of Sherbrooke in 1966. This indicates a particular and growing interest in the integration of internships into university curricula. This interest has also been reflected in the development of continuing education programmes in response to the changing needs of the labour market.

On a practical level, internships (paid or unpaid depending on the programme) are additional to compulsory internships. The duration of the internship varies according to the type of training and the programme chosen. On average, it lasts from 8 to 16 consecutive weeks for a cooperative placement in university training (bachelor's or master's degree), compared to a shorter duration for professional or technical training in work experience. Despite the compulsory nature of placements in university cooperative training, these placements are not systematically credited in the programme for the award of the diploma and degree. Only some universities have chosen to credit them in their programme as "elective credits". Broadly speaking, there are two types of internship options :

- **The integrated practical training mode :** allowing internships to be completed within the programme structure (usually offered during the summer term), thus avoiding extending the normal duration of the programme compared to the regular pathway;
- **Extended practical training mode :** allows placements to be completed in different terms during the year (autumn, winter or summer) in between the summer terms, thereby extending the normal duration of the programme by 1 or 2 terms compared to the regular pathway.

Several studies have focused on the issue of the professionalization of the Canadian university. Over a period between 1989 and 2006, Crespo (2013) sought to analyse the evolution of student choice of training programs in a set of Canadian universities. The results of this study show an increase in enrolment in professional programmes. Other studies confirm the strengthening of this trend towards the professionalization of higher education in Canada. These include the study by the Association of Universities and Colleges of Canada (2001). The same trend is noted in Manitoba. Looking at the programmes created during the period (1984-2001), Smith (2005) confirms this trend of creating applied or blended programmes at the expense of general



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programmes (Liberal Arts). The same trend is also observed in Ontario (Côté and Allhar, 2011). In analysing the contribution of professionalization to the development of university training, Doray et al. (2015) note that "professionalization is very much present in the construction and organization of training in Quebec.

The advantages of this mode of learning in terms of professional integration for young graduates are no longer in question. In 2016-2017, more than 7,000 students were enrolled in a programme in the cooperative formula with a placement rate of 98%.

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TABLE 1: SYNOPTIC VIEW OF THE SIX BEST INTERNATIONAL EXPERIENCES

Country	Legal framework	Educational architecture	Follow-up organizations	Major universities	Period	Main findings
GERMANY	<ul style="list-style-type: none"> • Vocational Training Act "Ausbildungsgesetz" adopted in 1969, and revised and entered into force in 2005. • Vocational Training Code (HwO) adopted in 1976 and revised in 1995. 	<p>"Hauptschule"</p> <p>"Realschule"</p> <p>"Gymnasium"</p>	<ul style="list-style-type: none"> • Chambers of Commerce and Industry (IHK) • Chambers of labor commerce (HWK) • Institutes for vocational training • Bundesagentur für Arbeit (Federal Employment Agency) 	<ul style="list-style-type: none"> • Technical University of Munich • University of Berlin • University of Hamburg • University of Frankfurt • Technical University of Darmstadt • University of Stuttgart • University of Leipzig • University of Munster • University of Cologne • University RWTH Aachen 	<ul style="list-style-type: none"> • Vocational apprenticeship programmes, which are usually related to a specific trade, usually last 2-3 years. • Higher vocational training programmes, which are related to more skilled occupations, may last 3 to 4 years. <p>However, it is important to note that these durations may vary depending on the region and the company where the work-linked training is envisaged.</p>	<ul style="list-style-type: none"> • Articulation of training around the corporate dimension • According to the principle of subsidiarity, the public authorities are responsible for the legal framework but transfer to the representatives of the economic sphere the responsibility for managing training in companies, and to the companies the responsibility for training young people.
HUNGARY	Cooperative Model 2015	Academic instruction for 14 weeks per semester followed by practical training, lasting 8 weeks in winter and 16 weeks in summer	<ul style="list-style-type: none"> • The Ministry of Employment and Social Affairs • The National Agency for the Qualification and Development of Work • The National Labor Council • The Hungarian Chambers of Commerce and Industry • Employers' and trade unions' organizations 	<ul style="list-style-type: none"> • Eötvös Loránd University of Budapest (ELTE) • University of Szeged • University of Debrecen • Budapest Technical University (BME) • Corvinus University of Budapest • Pannonia University of Veszprém • Hungarian Polytechnic University (HIT) • University of Nyíregyháza • University of Miskolc • University of Pécs 	<ul style="list-style-type: none"> • The duration varies according to the type of training and the level of study • For a higher education degree, the duration of work-linked training can be from 2 to 4 years • For secondary vocational training, the duration of work-linked training can range from 1 to 2 years 	<ul style="list-style-type: none"> • Participatory dimension: companies and educational institutions ensure that training courses are adapted to the needs of the local industrial fabric.

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FRANCE	Law n°2014-288 of 5 March 2014	Apprenticeship contract Professionalization contract	<ul style="list-style-type: none"> • General Directorate of School Education (Dgesco) • Interministerial Mission for Vocational Training (MIFOP) • Organization for the vocational training of adults (Afp) • Chambers of Commerce and Industry (CCI) • Chamber of Trades and Crafts (CMA) 	<ul style="list-style-type: none"> • University of Paris-Saclay • University of Paris-Est Marne-la-Vallée • University of Grenoble Alpes • University of Lorraine • University of Nantes • University of Lille • University of Bordeaux • University of Paris-Descartes • University of Toulouse 1 Capitole • Ecole des Ponts ParisTech 	<ul style="list-style-type: none"> • For level IV (CAP, BEP) and level V ("baccalauréat professionnel") diplomas, the duration of work-linked training is generally one year. • For level III diplomas (BTS, DUT), the duration of work-linked training is generally two years. • For level II diplomas (licence professionnelle), the duration of work-linked training is generally one year. • For level I diplomas (master's degree), the duration of work-linked training is generally two years. 	<ul style="list-style-type: none"> • Legal framework guaranteeing the rights of each of the contracting parties: training is legally the subject of a contract under employment legislation, with all the consequences that this entails in terms of the rights and obligations of the contracting parties. • Attractive aid and incentives granted by the State to employers: exemption from social security contributions, apprenticeship bonus granted by the regions, apprenticeship tax credit, "TPE jeunes apprentis" aid, aid for the recruitment of a first or additional apprentice). From January 2019, these aids have been replaced by the single aid for employers of apprentices.
BELGIUM	Decree 30-06-2016 M.B. 12-09-2016	A minimum of 40% in-company activities, 40% in-company activities at the higher education institution, the distribution of the remaining 20% being left to the choice of the institution	<ul style="list-style-type: none"> • Forem • Actiris • VDAB • Forem for Wallonia • The VDAB for Flanders 	<ul style="list-style-type: none"> • Belgium Catholic University of Louvain (UCL) • Free University of Brussels (ULB) • University of Ghent (UGent) • University of Liège • University of Mons • Vrije Universiteit Brussel (VUB) • KU Leuven • University Saint-Louis Brussels • Catholic University of Namur • Galilee University (HEG) 	The duration of work-linked training in Belgium depends on the type of training and the agreement between the company and the training institution. In general, work-linked training can last from 1 to 3 years.	<ul style="list-style-type: none"> • Work-linked courses giving access to higher education diplomas of the same level and value as those awarded in the framework of fully-fledged courses and in higher education for social promotion; • Professional immersion agreement ; • Work-linked training agreement ; • Monitoring Committee Steering Committee...

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PHILIPPINES	<p>Technical Education and Skills Development Authority (TESDA) established in 1994 under the Technical Education and Skills Development Act</p>	<ul style="list-style-type: none"> • Apprenticeship Program • Learnership Program • Dual Training System 	<ul style="list-style-type: none"> • The Bureau of Local Employment (BLES) • The Technical Education and Skills Development Authority (TESDA) • The Department of Labor and Employment (DOLE) • The Philippine Chambers of Commerce and Industry • Business and labor organizations 	<ul style="list-style-type: none"> • Ateneo de Manila University • University of Santo Tomas • University of the Philippines 	<p>There is no set standard duration. The duration will depend on the industry and the occupation being trained. Some courses may last a few months, while others may last several years.</p>	<p>So-called staggered professional university training in relation to academic training</p>
CANADA (QUEBEC)	<p>There is no specific legislation on dual training in Quebec, Canada. However, there are several apprenticeship and professional development programs.</p>	<ul style="list-style-type: none"> • A.T.E • Cooperative regime 	<ul style="list-style-type: none"> • Emploi-Québec • The Ministry of Education and Higher Education • The Commission de la construction du Québec (CCQ) • The Chambers of Commerce and Industry of Quebec • The union and employer organizations 	<ul style="list-style-type: none"> • Laval University • University of Montreal • University of Quebec 	<p>The length of the work-study program in Quebec, Canada varies depending on the program and the occupation. Some programs may last a few months, while others may last several years.</p> <p>For example, to obtain a Diploma of Vocational Studies (DVS) in alternation, the duration of training can vary from 18 months to 2.5 years, while an apprenticeship in a recognized profession lasts from 3 to 5 years, depending on the trade chosen.</p>	<ul style="list-style-type: none"> • Very high percentage of professional integration • Integrated practical training mode • Extended practical training mode

Source: the authors



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3. WORKING METHODOLOGY

The experiences reviewed above are full of lessons for Morocco, which aspires to play the role of a true African economic hub but whose education system is still lagging behind in terms of a alternation. Through an exploratory empirical approach, we sought to analyse the feasibility of "best practices" in the context of Moroccan higher education with a professional vocation. A series of focus group discussions with professional actors and academic leaders in the RSK region was conducted. The choice of this data collection technique was motivated by its flexibility, which allowed the respondents to better understand the scope of work-linked training for Moroccan higher education in general and for open-access institutions in particular. The formalisation of the interview guide is carried out with the aim of encouraging comparative and cumulative analysis strategies between respondents from professional and academic backgrounds. The different themes to be explored were validated following a pre-testing stage and a consensus of the members of the research team. Interviews lasting an average of 45 minutes were conducted at the respondents' premises. To ensure anonymity, interviewees were coded. Once transcribed, a thematic analysis was carried out in three stages: coding of data, counting of themes and content analysis of the speeches.

This data collection technique allowed us to collect the opinions, attitudes and reactions of professionals and academics on the feasibility of work-linked training in Morocco as in other countries. The selected participants discussed international practices in work-study training, its advantages and constraints related to its implementation in Morocco, as well as their wishes for the installation of this type of training.

Through a contextual analysis followed by a vertical analysis, we were able to cross-reference the views of higher education officials and professionals. The cross-referencing of the information collected allowed us to benefit from several points of view and to multiply the insights into the scope of work-linked training for Moroccan higher education with a professional vocation.

4. EMPIRICAL RESULTS

The subsequent analysis of the data collected, due to its richness, has led to the following conclusions:

4.1 The implementation and success of a work-linked training system in Morocco requires a number of requirements to be met

At the institutional level	At school level	At company level
<ul style="list-style-type: none"> ● Establish a specific legal framework for work-linked training and gradually open it up to all forms of education, following the example of the OFPPT; ● Define, during the training period, the relations between the parties involved by : <ul style="list-style-type: none"> - The work-study agreement, which should specify the educational project and the missions of each party; - The CIP, which should define the working relationship between the student and the company. ● Establish a system of incentives to encourage companies to take on trainees; ● Clarify the conditions for access to work-linked training; ● Improve the readability of diplomas by integrating acquired skills; ● Link additional skills and/or optional modules with certificates. 	<ul style="list-style-type: none"> ● For the higher education institution, the work-study student is deemed to be enrolled in a course of study leading to a diploma recognised by the Ministry of Higher Education; ● It is up to the student to find the host company. However, the student will be guided in this task by the higher education institution from September onwards; ● The student cannot make any commitment without the agreement of the higher education institution, which must first ensure that the company subscribes to the training project; ● Preparation of the internship project ; ● Early immersion of students from the 1st year; ● Progression in the levels of learning in internships; ● Preparation of trainees beforehand (behaviour, neutrality, image, feeling of belonging to the institution, etc.) ● Programming spread over the year to regulate the flow of trainees; ● Internship charter (with the CGEM); ● Trainee's guide (adapted to the expected learning according to the year); ● Setting up a mentoring system for the supervision of trainees (e.g. by former trainees); ● Summative evaluation of the course as part of a module... 	<ul style="list-style-type: none"> ● Be more open to trainees; ● Complete the theoretical learning provided by higher education institutions; ● Formulate clear issues that will be the subject of the internship project; ● Provide the annual reception schedule for trainees for optimal programming of internships via the CGEM; ● Ensure effective supervision of trainees; ● Contribute to the evaluation of the skills acquired during the internships; ● Make the tutors (who must be designated in the work-study agreement) within the company aware of their responsibilities (supervision, etc.); ● Ensure the practical conditions for receiving the work-study student (workstation, laptop, etc.); ● Inform the human resources department and the company's internal bodies; ● Comply with the legal requirements in terms of health and safety; ● Declare the young person to an insurance organisation for accidents at work, so that he/she is included in the company's insurance policy...



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4.2 Recommendations for the successful implementation of work-linked training in Morocco

One foot in the company, the other in the university, everything is done to get the best of both worlds. However, the construction of the programme must take into account several constraints, including:

A-The management of the alternation time : It is important to ensure that students have enough time to follow their theoretical training at the university while having enough time to put their knowledge into practice in the company. In addition, the management of work-linked training time must vary according to several criteria, including, the structure in which it takes place, the type of training, the sector, etc.

B- Flexibility of scheduling over the year : It is important to ensure that the scheduling of the sandwich course can be adapted to the needs of the company and the student. There are several ways of ensuring flexibility in the scheduling of work-linked training over the year :

- **Synchronisation of training and company periods:** It is possible to adapt the training periods in the educational institution to the needs of the company, by synchronising the training periods with periods of lesser activity in the company;
- **Modulation of the duration of training:** It is possible to modulate the duration of the training periods according to the needs of the company and the student. This makes it possible to meet the specific needs of the company or the work-study student, while respecting the objectives of the training;
- **Flexibility in the organisation of the training:** It is possible to offer distance learning or face-to-face training formulas, to enable work-linked learners to follow the training according to their timetable and personal situation;
- **Adaptation of training content:** It is possible to adapt training content to the needs of the company and the student, focusing on the aspects most relevant to their professional activity;
- **Individualised follow-up:** It is important to ensure individualised follow-up of the trainee, taking into account his/her needs and background, to ensure that the training is adapted to his/her professional needs.



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C- Consistency of educational objectives between the establishment and the company: it is important that the educational objectives of the establishment and the company are aligned in order to guarantee effective training. There are several ways to ensure the coherence of the educational objectives between the institution and the enterprise:

- The creation of the Steering Committee, whose missions are to define the framework model of the work-study agreement and submit it to the Government for approval. This agreement must include at least the list of competences to be acquired in the company and in the higher education institution.
- The creation of a monitoring committee for each programme organised on a work-linked basis, made up equally of representatives of partner companies, teachers and students. The higher education institution sets up this monitoring committee and convenes it at least once per academic year. This monitoring committee ensures that the organisation of the programme is optimised and adapted according to the needs identified. The establishment of a liaison committee between the school and the company, which meets regularly to discuss the educational objectives and ensure that they are aligned;
- Participation of company representatives in school planning meetings to discuss learning objectives and ensure that they meet company needs;
- Conducting periodic surveys of employers to assess the relevance of the learning objectives and to ensure that they meet the needs of the company. It is important to note that public or private bodies supervise the quality of this training, in order to ensure that the students' skills are in line with the needs of the labour market.

Finally, it is important to note that this pedagogical architecture is framed by training agreements signed between the student, the company and the training institution which define the modalities of implementation and follow-up of the training.

D- Training of placement supervisors (in companies): it is important that the people in charge of supervising work-linked students are sufficiently trained to fulfil this task. The training of placement supervisors is indeed crucial to ensure the coherence of educational objectives between the institution and the company. Course supervisors are responsible for supervising the work-linked students and guiding them in their daily work. They, therefore have a key role to play in achieving the educational objectives and the success of work-linked training. It is therefore essential that placement supervisors are sufficiently trained to fulfil this



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task. This may include training in the professional skills and technical knowledge needed to supervise work-linked students. It is also important to encourage exchanges between the school's placement supervisors and teachers to ensure that the educational objectives are aligned and that the students receive complete and coherent training.

E- Professional ethics: It is important to ensure that students learn about and adhere to the ethical standards of their profession to ensure that they act responsibly and professionally in the labour market. Professional ethics should be an important part of the training of students in all fields. Curricula should include rules and principles for confidentiality, integrity, transparency and accountability to the community at large. By integrating these ethical standards into training, students can be better prepared to understand the consequences of their actions on others, to manage the ethical challenges that will arise in their profession and to contribute to the well-being of society.

5. CONCLUSION

Work-linked training is beneficial for all stakeholders involved. It is a win-win situation for all parties involved. Work experience, improved employability, a better understanding of the labour market and networking are the benefits for the students. For their part, companies benefit from a qualified workforce trained according to their needs, while educational institutions benefit from a close link with the professional world and can adapt their teaching to the real needs of the labour market.

The most important lesson to be learned from international best practices in work-linked training is its participatory dimension: companies and educational institutions must constantly ensure that training is adapted to the needs of the local productive fabric. Only strong cooperation between the university and the company can lead to the successful implementation of work-linked training in higher education.

For Morocco, which aspires to play the role of a real African economic hub, work-study training could be a key factor of success for market-oriented training. Nevertheless, its pedagogical architecture should be thought out according to each targeted programme and should be based on a partnership between educational institutions and companies. The participatory approach would allow Morocco to effectively integrate theory and practice into the university curriculum and to really prepare students for the labour market.



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In other words, only strong partnerships between educational institutions and employers could ensure a permanent match between students' skills and the needs of the labour market. However, thought should also be given to setting up monitoring and evaluation systems to measure the effectiveness of work-linked training. Indeed, the successful implementation of work-linked training in Morocco would only be possible through the clear and precise definition of the contours of a reference framework which should meet conditions at the institutional, organisational and pedagogical levels. These conditions are very restrictive in open access establishments where the problems of massification complicate the situation further on the one hand and the dominance of SMEs in the Moroccan productive fabric on the other.

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