**REPUBLIC OF BENIN**

**UNIVERSITY OF PARAKOU**

**DOCTORAL SCHOOL**
**« Agricultural and Water sciences »**

**Department: Sociology of Natural Resources**

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Doctoral thesis submitted in fulfillment of the requirements for the degree of Doctor in Agricultural Sciences at the University of Parakou

# Appropriating of dual apprenticeship in Benin: An empirical analysis in the (in)formal sector


## BANKOLE Adéyèmi Rubain


Defended publicly on January, 14th 2021

**Supervisor:**

Dr. Ir. NOUATIN Guy Sourou, Senior Lecturer, University of Parakou, Benin

**Composition of the Jury**

**Chairman:** Prof. Dr. Ir. VODOUHE Simplice D., Full Professor, University of Abomey-Calavi, Benin

**Members:** Dr. Ir. NOUATIN Guy Sourou, Associate Professor, University of Parakou, Benin
Prof. Dr. RENOLD Ursula, Full Professor, ETH Zurich, Switzerland
Prof. Dr. Ir. MOUMOUNI M. Ismail, Full Professor, University of Parakou, Benin
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# Appropriation du modèle de formation professionnelle par apprentissage dual au Bénin : Une analyse empirique du secteur (in)formel


## BANKOLE Adéyèmi Rubain


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**Cover photos:**

1. Photo 1 illustrates the proximity between the apprentices and their trainer in the adoption of a competence-based approach in apprenticeship. This photo describes a practical training session in sewing under the supervision of the lead trainer in a training centre in Parakou, Benin. Source: by the author.
2. Photo 2 was taken by the author during the field visit in a technical high school *Lycee Technique et professionnel* of Kpondehou, Cotonou, Benin. Photo 2 depicts a building in process by the students under the supervision of the trainers and with the support of the staff. Source: by the author.

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## DEDICATION

To

My Dear Parents;

And Adoukè, my fiancée.

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## ABSTRACT

The focus of this research is to study the appropriation of dual training in Benin apprenticeship. To conduct this research, a qualitative method has been essentially adopted. The units of observation comprise master craftsmen, apprentices, staff from professional associations, heads of vocational training centres, trainers, consultants, officials from public institutions and parents. Data have been collected through direct and participatory observation, life-history, individual semi-structured interview and non-structured interview, with 269 participants in Cotonou and Abomey-Calavi, southern Benin cities; and Parakou, a metropolitan northern Benin city. Adoption and diffusion of innovation theory, institutional theory of organisations, learning theory, socio constructivism and social change theory were used to apprehend the main findings. The results show that the program does not follow the executor implementation plan. However, apprentices who participate in the program develop social cognitive capacities. The findings revealed that trainees are motivated by curiosity and explicit knowledge from the training program while master craftsmen are satisfied with the formal accreditation. It is found that the overlapping of roles between public institutions in the management of the training program. The research also shows that skills development and the implementation of dual training are sources of business for stakeholders. This reform has led to transformation within crafts sector. Graduates from this program are able to refine the skills learning using explicit practices to train apprentices. Moreover, the labour market competition is favourable for the graduates who develop self-esteem to show their satisfactory outcomes on the job.



**Keywords:** Technical Vocational Education and Training, Innovation, Dual apprenticeship, Participation, Certificate of Professional Qualification, Littoral and Borgou, Benin.

## RÉSUMÉ

Cette recherche vise à étudier l'appropriation de la formation duale introduite dans l'apprentissage au Bénin. Une méthode essentiellement qualitative a été adoptée. Au total, 269 participants composés de maîtres artisans, d'apprentis, de membres d'associations et collectifs d'artisans, de responsables de centres de formation / métiers, de formateurs, de consultants, de personnels des institutions publiques et des parents ont été enquêtés à Cotonou et Abomey-Calavi (Sud Bénin) et Parakou (grande ville du Nord). Les données ont été collectées à l'aide de l'observation directe et participante, du récit de vie, des entretiens semi-structurés et non structurés. La théorie d'adoption et de diffusion d'innovation, la théorie des organisations, la théorie d'apprentissage, le socioconstructivisme et la théorie du changement social ont été utilisées pour interpréter les résultats. La recherche a montré que la formation n'est pas mise en œuvre selon le cadre d'exécution prévu. Cependant, les apprentis développent des capacités sociocognitives. Les résultats révèlent une autre catégorie d'adoptant du programme : les "adoptants / utilisateurs à but lucratif". Les apprentis qui y participent sont motivés à par curiosité et par les connaissances reçues. La certification officielle du programme fait la satisfaction des patrons. Par ailleurs, il existe un chevauchement de rôles entre les institutions publiques impliquées dans la gestion de la formation. Le développement des compétences de métiers et la mise en œuvre de la formation constituent des enjeux importants. Aussi, il se dégage que des transformations s'observent au sein du secteur artisanal. Les diplômés utilisent leurs acquis pour améliorer la formation des apprentis. Aussi, s'en sortent-ils sur le marché du travail et manifestent leur estime.



**Mots clés :** Formation Technique et Professionnelle, Innovation, Apprentissage dual, Participation, Certificat de Qualification Professionnelle, Littoral-Borgou (Bénin).

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## Abbreviations

BEPC : Brevet d'Etudes du Premier Cycle

BTEC : Professional Baccalaureate

CAP : Certificate d'Aptitude Professionnelle

CEAP : Certificat d'Aptitude Elémentaire Professionnelle

CPPE : Centre de Perfectionnement des Personnels des Entreprises

CQP: Certificat de Qualification Professionnelle

DEC : Direction des Examens et Concours

DIPIQ : Direction de l'Inspection Pédagogique de l'Innovation et de la Qualité

Direction de la Formation Continue, de la Main-d'œuvre et de l'Apprentissage

DGRCE : Direction Générale du Renforcement des Capacités et de l'Employabilité

D-TVET: Department of Technical Vocational Education and Training

FODEFCA: Fonds de Développement de la Formation Continue et de l'Apprentissage

INIFRCF : Institut National de l'Ingénierie de la Formation et du renforcement des Capacités des Formateurs

INSAE: Institut National de Statistique et de l'Analyse Economique

OSCED: International Standard Classification of Education

TVET: Technical Vocational Education and Training

UAC: University of Abomey-Calavi

Union Inter départementale des Chambres de Métiers du Bénin

UP: University of Parakou

VET: Vocational Education and Training

# Chapter 1: General introduction

## 1 Introduction

Through this research, we claim that the increasing of pitfalls among stakeholders in the dual training affects the appropriation of dual apprenticeship in Benin. Youth employment remains an important challenge to be addressed as a global issue. It is argued that "the youth employment in developing world linked to a complex interaction of economic, social and demographic factors" (Assaad & Levison, 2013, p. 3). The situation is very determinant for low income and middle-income countries as those in developing countries as in sub-Saharan Africa. In Benin, education is considered as a priority and thus, the government aims to promoting educational programs in the public policies (article 12, Constitution of Benin). The primary education is the first priority in national-wide. In this regard, the entry in primary education must be progressively ensured by the government for all school-age children (article12, Constitution of Benin). However, a study conducted by the Ministries in charge of education and literacy (MEA, 2014) revealed that in a cohort of hundred students, only 69% completed the primary school; 35% pass in junior high school and 7% complete their senior high school (MEA, 2014). That implies that many students leave formal education in Benin. Most of school dropouts either enter the apprenticeship system or end up migrating, being emotionally insecure, using drug, etc.

Apprenticeships are very widespread in the informal sector, which involve the craft sector and non-farm work in West African countries. This informal sector in Benin is dominated for about 95% of the labour force (UNESCO-BIT, 2013). INSAE (2010) reported that 70% of GDP are provided by informal economy in Benin and this sector uses about 80.3% of labour force

(Walther, 2007). According to Davodoun (2014), the estimated number of apprentices in informal or traditional apprenticeship is more than 800,000 in Benin. Compared to the number of stduents in technical high schools cycle 1 and 2 estimated at 22,098 (MESTFP, 2016) in the same period, it is noticed that traditional or informal apprenticeship is a source of training to many youths. Considering this, it is imperative to reduce barriers to skills development. Agenda 2030 leads public policies to contribute to the achievement of goal four for sustainable development which consists to "ensure inclusive and equitable quality education and promote lifelong learning to youth people" (UN, 2015). Although the traditional apprenticeship contributes largely to youth employment, it is noticed that it was not included in the formal education system until 2005, the year Benin government undertook reforms through two accredited apprenticeship programs: a dual training and an upgraded traditional apprenticeship leading to formal certificates. Both programs are implemented on the standards from skills development with the support of donors. According to Altinyelken (2015), the participation of international donors agencies to skills development have significantly influenced educational policies and reforms in the past 15 years, among others, via funding mechanisms and aid conditionality. Adams, de Silva and Razmara (2013) thinks that the skills improving will be helpful for small and medium enterprises (SMEs).

Between both programs, why has the Benin government chosen to implement dual apprenticeship? How was this program designed? Who are the stakeholders who participate in its implementation? And how is it performed? To understand this, the current research is interested in the topic: "Appropriating of dual apprenticeship in Benin: An empirical analysis in the (in)formal sector". Such object of study involves multidisciplinary such,

sociology of education, sociology of development, anthropology of development, sociology of actors, sociology of innovation and so forth.

## 1.1 Problem statement

### *1.1.1 Dual apprenticeships as model for developing countries*

Apprenticeship is an old system of skills acquisition which prepares apprentices for the world of work. UNESCO considers apprenticeships as formal education when programs take place partly in the workplace and lead to a qualification by national education authorities or equivalent (UNESCO, 2012). This form of formal apprenticeship is developed in European countries such as, Austria, Germany, Switzerland, Denmark, etc. through dual apprenticeships as vocational education or a component of technical vocational education and training (Bauer & Gessler, 2017; Howard & Régine, 1994). This dual apprenticeship is the most popular formal education for young people at the upper secondary education in Germany and Switzerland (Muehlemann et *al*., 2010). According to same source of UNESCO (2012), apprenticeships are informal learning when learning activities are not institutionalised, less organised and less structured. This informal learning is widely developed in developing countries as in West African countries where most apprentices are school dropouts. The expansion of this informal learning in sub-Saharan Africa results from the traditional apprenticeships which lie in the traditional custom which consists of skills transferring to young generations within family or clan members (Davodoun, 2011a). In Benin, the traditional apprenticeship enrols an important amount of young people estimated at more than 800,000 (Davodoun, 2014). Hereby, it is noticed that traditional apprenticeship plays an important role in education by preparing youth for the labour market.

Many studies were conducted on the apprenticeships in sub-Saharan Africa illustrating the persistence of traditional skills learning with weaknesses which affect its efficiency. It is stated that master craftsmen/women train apprentices in the informal sector. (Walther, 2007; ILO, 2012). Thus, the

training is not accredited by public authority. Traditional apprenticeship is not structured and is essentially integrated into the production. The skills acquisition is provided by imitation of the master craftsman/woman who remains the only one person who can assess the achievement of the apprentices (Anokye & Afrane, 2014). By doing this, master craftsmen/women transfer their own skills gap to apprentices from one generation to the next.

### *1.1.2 Adopting dual training in the Benin apprenticeship context*

The dual VET systems in Germany and Swizerland consists of combining work-based training in companies or industries with one or two days per week for vocational education at schools (Acemoglu & Pischke, 1999; Gessler, 2017). Based on the success of these countries in dual VET systems, the adaptation of dual system to the Benin context will aim to restructure the traditional apprenticeship by developing the standards of the training and qualification through a competency-based approach called Developing A Curriculum Method (DACUM) (Yokossi, 2016). Due to the lack of vocational schools which must offer vocational education as implemented in Germany, Benin government created a dual apprenticeship program[1] accordingly to the specificity of Benin (Davodoun, 2011b). This specificity consists of traditional apprenticeship with the growth of the informal sector (Teal, 2016). Through the decree No. 117/2005, the government introduced an act by creating two apprenticeship programs: the Certificate of Professional Qualification (*Certificat de Qualification Professionnelle*-CQP) and the Certificate of Occupational Qualification (*Certificat de Qualification au Métier*-CQM). The CQP certificate is given to apprentices after completing this so-called dual apprenticeship program. Dual training or CQP

[1] Apprentissage de type dual

program consists of a week day of vocational education in vocational training centres or in technical high schools and the rest of the week for work-based training in masters' workshops or crafts units of production (Davodoun, 2011b). This dual system lies in the two principles: the first is the duality of the training and the second principle is the primacy of the occupation which engages the commitment of the master craftsmen/women as core actors (David-Gnahoui & Ahouangnivo, 2017). The training process must follow the DACUM integrating an assessment mode of the apprentices with formal certification by CQP. Thus, the program is an accredited apprenticeship program. CQM program is addressed to apprentices after completing the informal apprenticeship program. Apprentices who are not eligible for dual system take part in the CQM program. They are trained in the workshops or the units' production and take an examination organised at the national level for the CQM certificate.

### *1.1.3 Difficulties of appropriation of dual apprenticeship in Benin*

Between both programs, dual training or CQP program is the innovative training program introduced in the crafts sector since master craftsmen/women use to train apprentices only in firms/workshops through their work experience. In an evaluation report, David-Gnahoui & Ahouangnivo (2017) found that the principle of duality is not applied in the implementation of the program. The exploratory research conducted in 2018 with some master craftsmen in Cotonou revealed that the contents of the training are too out-of-date to strengthen apprentices' competency. Nevertheless, it is reported that CQP apprentices and graduates are able to develop higher competencies than other learners. While participating in dual apprenticeship, apprentices can strengthen their learning capacities. Moreover, the enrolment in this dual system is subject to discrimination according to some masters because the process of the selection of CQP

apprentices is considered as very closed. On this point, the staff of the head of Department of TVET from the Ministry of Secondary School and Technical Vocational Education and Training, stated that Benin government provides scholarships each year depending on the priority occupations and on the available funds. Hence, some CQP candidates may not to be selected although they got a high score from the entrance test. Consequently, master craftsmen with their apprentices are less motivated to still participate every year to the CQP enrolment process. In 2016, an audit study carried out the administrative and financial management of dual apprenticeship shows low efficiency (Ferland, 2016). Through these remarks, this dual apprenticeship is an innovation in the Benin TVET sector that allows to strengthen the informal skills learning of the master craftsmen and leads to innovative learning and work approaches. Based on the two principles mentioned before, dual apprenticeship binds master craftsmen/women to leave their apprentices one day per week for vocational education. But what will be the master craftsmen/women responses to this duality while they must make profits from the production in the workshops?

Through a study on five European countries with successful experience in dual apprenticeship, Bauer and Gessler (2017), show that public institutions as well as private share roles into dual apprenticeship systems. In the two contexts, the governement plays important roles to set the adequate intitutional and organizational framework whereas private sector are commited in the training provision. The introduction of dual apprenticeship in Benin has also led to the distribution of roles between public and private institutions for its management and implemention. In this introduction phase, Swisscontact supported the process technically and financially from 2003 to 2005 (exploratory research, 2018). The ministry in charge of TVET, through its technical departments, has been responsible for the management since

then the dual apprenticeship act was introduced in 2005. Hence, it is noticiable that the implementation of dual apprenticeship has led to a partnership between public and private institutions with professional associations. Hence, we postulate that the problem statement is that Benin TVET stakeholders have difficulties of appropriating the innovation of the dual system.

### *1.1.4 Theoretical backgrounds of the study of appropriation of the dual system*

In the context of innovation, there are several theoretical approaches which analyse the adoption of an innovation. Everett Rogers is the most-cited author who broadly studied the diffusion of an innovation through his innovation diffusion theory. In the first lines of his study, Rogers (1983) asserts that "One reason why there is so much interest in the diffusion of innovations is because getting a new idea adopted, even when it has obvious advantages, is often very difficult" (Rogers, 1983, p. 1). Through this quote, he draws attention on how very difficult the diffusion of an innovation. According to him, the process of the diffusion of innovations involves four main elements: innovation, communication channels, time and social system. Through this process the innovation can be adopted or rejected by a decision or a collective authority. In the classification of innovations, there are three types of innovation: product innovation, process innovation and position innovation which may involve each other (Kogabayev & Maziliauskas, 2017). In Benin context where dual apprenticeship is transferred for adaptation to the traditional apprenticeship, we include it in the process innovation category.

The introduction of the dual system implies that several institutions and actors from national and international level are involved at the specific stages. Institutional analysis of organisations is thereby important because of

the position of actors/institutions involved, their roles and their ability to influence the process. To analyse institutions, Chaty (1999) suggests to take into account three elements of the institutional structure: residents ("*les habitant*"/"*agents*"); places and materials used (*les lieux et les choses*) and the rules ("*les règles*"). Thereby, Chaty's institutional analysis model emphasises on actors, institutions and regulation. Tolbert and Zucker (1996) has contributed to the institutional theory of organisation which results from three phases. The first phase is preinstitutionalization, the second phase semi-institutionalization and third, the phase of the maturity which is full-institutionalization.

Based on these two theoretical approaches (adoption theory and institutional theory of organisations), this research aims to contribute to the understanding of the educational policy transfer in the developing context and its social impact. To forward the research, we formulated a lead research question and four sub-questions.

### *1.1.5 Research questions*

The overarching research question formulated to conduct this research is: how does appropriating of dual training in Benin apprenticeship influences the participation of craft artisans? This main question has led to four sub-questions:

- Has the dual apprenticeship training developed the social cognitive capacities of the apprentices in Benin?
- How do master craftsmen perceive this dual apprenticeship program in Benin?
- How are roles distributed between public and private institutions in the application of dual system in Benin apprenticeship?

- How do TVET stakeholders act to earn and to safeguard their individual or collective interests in the implementation of dual apprenticeship?

In order to study dual apprenticeship in the Benin context, we used the theoretical approaches of the diffusion of innovation, systematic analysis of institutions and change theory in order to analyse how such a TVET innovation works.

## 1.2 Studying the adoption of dual apprenticeship in Benin context: Theoretical and analytical framework

### *1.2.1 Theory of adoption and diffusion of innovation*

Diffusion of innovation by Rogers (1983) is the most popular theory used to analyse the adoption and diffusion of innovation. An innovation is "an idea, practice, or object perceived as new by an individual or other unit of adoption" (Rogers, 1995, p. 11). The diffusion of innovation involves four main stages, invention of innovation, communication channels or diffusion, time and consequences. Innovation consists of new practice or knowledge which is addressed for the target population. It is an invention that designs new measures for adopting in work conditions. Its diffusion requires relevant communication through channels to lead people to adopt it. Thus, the adoption depends on the message used ("information-exchanged") to motivate people. The communication needs a set of networks by which information will be shared to people, mass media channel, television, newspapers, etc. However, to adopt an innovation, duration or time dimension is very important in Rogers' view. The process of decision-making to adopt an innovation needs time for its approval by the beneficiaries. And the social system involves "individual, informal groups, organizations, and/or subsystems" (Rogers, 1995, p. 24). In the adopters' classification, the author identified five categories: innovators, early

adopters, early majority, late majority and laggards. Besides, Rogers (2003) proposed five attributes of innovations to analyse individuals' perceptions of an innovation. The first characteristic is "relative advantages". It includes cost and social status motivation of the innovation. The second attribute is "compatibility" that consists of the adaptation of the innovation to the existing values. The perception of innovation may be positive when it meets the needs of beneficiaries. Complexity is the third characteristic of innovations and can have negative influence on the adoption whether it is difficult to be used in terms of technology and methodology. On the fourth attribute, Rogers (1983) states that the innovation is more adopted when it experimented with. Changes can be introduced while experimenting an innovation. And fifth, the last attribute is observability which is considered as a positive motivation factor of adoption of innovation. Hence, the adoption of an innovation depends on these five attributes which influence the adoption and diffusion of an innovation.

On the one hand, this theory helped to identify CQP adopters and on the other, to analyse their perception of dual apprenticeship through the attributes of an innovation.

### *1.2.2 Systematic analysis of education*

The systematic analysis of education provides theoretical approaches based on the institutional analysis of organisation and actors-oriented approach.

The institutional theory of organisation by Tolbert & Zucker (1996) proceeds of three phases which retrace the maturity of an institution. The first phase of institutionalization process is preinstitutionalization or "habitualization" through which the organization staff face challenges and explore possible solutions to solve them. By developing innovative ideas and practices to solve their problems, " new structural arrangements" arise that integrate the social system. In the second phase of the process, actors perform the new

practices and consolidate them: this is semi-institutionalization. The new practices are set as the new "patterns" which direct the organisation. Hence, the social system adopts widely the new patterns with a large consensus. It is a theorization of the new ideas, new practices and new institutions. The third phase, full-institutionalization is the end of the transition toward the new structural institution. Thus, the new regulation of the institution can be transferred to future generations. According to the authors, this process remains traditional and can be perfomed at a particular time.

Based on the institutional theory of organisation by Tolbert and Zucker (1996), we analyse the process of how TVET institutions have been involved to manage the implementation of dual apprenticeship from 2005 up-to-date. Hence, we first identified the TVET institutions involved from the beginning, their roles and second, we analysed their evolution in the process of implementation of the dual apprenticeship program.

The actor-oriented approach by Long (2001) is a systematic approach used in three different contexts: education, workplace and development interventions. The approach was applied in learning situation by Muller Mirza and Perret-Clermont (2016) to analyse VET actors in Madagascar.

The actor-oriented approach was introduced to analyse the development interventions and the social change in sociology. According to Long (2001), the modernisation theory, theory of political economy used in this period to analyse development interventions and social change were not connected with the social and cultural aspects for structural and institutionalist analysis of the development interventions. The actor-oriented approach postulates that a development intervention must focus on the actor with her/his social norms and values. Long (2001) developed two main concepts "social actor" and "agency" to apply his approach. "Social actor" depicts the situation in which beneficiaries from an intervention are "active participants who process

information and strategies in their dealings with various local actors as well as with outside institutions and personnel" (Long, 2001, p. 13). Social actors are not as passive beneficiaries of intervention because they steer their ways in difficult circumstances using their lived "experience". The lived experience is embedded in knowledge and power that determine the capacities of social actor to act collectively with his peers. Hence, Long (2001) introduced the concept of "agency" "to identify and characterize differing actor practices, strategies and rationales, the conditions under which they arise, how they interlock, their viability or effectiveness for solving specific problems, and their wider social ramifications" (Long, 2001, p. 20). Therefore, "social actors" or "agencies" are very important because of the variation of their position in the community or in the institution and their capacity to influence others in interactions.

Using Long's approach, Muller Mirza and Perret-Clermont (2016) analysed the different interpretations of the development intervention between promoters and beneficiaries' reactions in learning context in Madagascar. Muller Mirza and Perret-Clermont (2016) distinguished "prescribed work" to "real work" in the intervention of development. "Prescribed work" is defined as the task given to practitioners to perform an intervention; and "real work" is what is done to perform the intervention by practitioners. The authors found that there are discrepancies or contradictions between actors in development interventions. They agree that there are no mistakes or misunderstandings for the fact that discrepancies or contradictions may be taken as interpretative and meaning-making processes of workers. Then, it is necessary to look for the objective interpretation of individuals and groups of actors; the strategies developed; and to seek the potential data in their contradictions to make changes happen.

The "actor-oriented approach" is very useful to understand the "social actors", "agencies" as actors and institutions, the strategies developed to act in the implementation of dual apprenticeship.

### *1.2.3 Social constructivism and learning theory*

In learning situation, two main approaches have emerged to analyse the achievement of knowledge by human being: social cognitive development approach and theory of learning. Both approaches try to study the appropriate conditions of the acquisition of competencies. One of researchers who contribute much by his research is Piaget (1975). Considered to be the founder of *genetic epistemology*, Piaget had built materials for the skills/knowledge development theory by analysing the process of cognitive equilibrium.

Results of Piaget's studies allowed other researchers, his fellow researchers, to build a theoretical framework on social constructivism to study the social cognitive development of a child. Among these researchers, Perret-Clermont (1979); Doise & Mugny (1981); Perret-Clermont and Nicolet (2001); and Zittoun et *al*., (2013) develop an interesting approach of social constructivism theory. Through their studies, the authors showed that the development of cognitive capacities of the child can be analysed by two main processes. First, the "social interactions" process in which children share their primary experience with the family members, with other children in community and with their teachers or trainers at school. This also requires individual cognitive capacities of the child. Second, the authors used the "social cognitive conflict" process to say how a child can develop his/her intellect. This process consists in sharing different view from other children. By sharing his/her experience, the child achieves more knowledge and develops capacities to improve his/her knowledge. The social constructivism by Doise and Mugny (1981) suggests that to develop the cognitive capacities

of the child, it is very important to leave him in a social interactive environment. According to Zittoun et *al*., (2013), the "social cognitive conflict" is the process that allows the child to perform skills based on his/her "experiment" with other fellow learners.

A contemporary theory of learning developed by Illeris (2009) provides conceptual proprieties to further analyse the learning process. Illeris (2009) built his theory on two basics processes and three dimensions of learning. The first basic process is the "external interaction process" in which learner collaborates with her/his environment (social, cultural, material); and the second basic process is "internal interaction process" of the skills development and acquisition. Illeris (2009) states that the join of both basics processes (external and internal) is only one condition to study the skills development in human being. In this regard, Illeris (2009) developed three dimensions that involve the learning process, its incentive attraction and environment. First, the learning process depends on the content dimension. Second, the characteristics of the learning content determine the incentive feature of leaning process. And third, the learning process involves the interactive dimension (environment). The interactive dimension offers a perfect "integration" and "sociality" of the learner and the content dimension provides "meaning abilities" that learner has to develop linking to her/his mental sensitivity (ability).

The social constructivism by Perret-Clermont and Nicolet (2001) and the learning theory by Illeris (2009) are used to analyse the effect of dual apprenticeship on the CQP apprentices and graduates. By doing this, we aim to describe whether dual apprenticeship improves the skills learning by the CQP apprentices/graduates in Benin.

### *1.2.4 Social change theory*

Social change theory by Rocher (1968) shows how experiments can affect social change. Rocher (1968) identified five factors and three agents for social transformation. On the one hand, the factors of change comprise: demography, technology, economy, culture, ideology, and conflict relationship. In terms of demographic factors, the author argues that demographic and moral density influence the division of labour in society. The technological factors are characterized by the practical patterns of innovation that lead to new transformation. Therefore, the technique factors are dominated by innovations. However, economic, cultural and ideological factors remain the important challenges for the modern societies because of the conflict relationships which arise between social classes. On the other hand, Rocher (1968) develops three main typologies of agents of change. First, "elites" represent potential actors who are able to influence collective decision-making. Second, "social movements" can be considered as social classes to which each actor belongs. And the third, "motivation and success need" consist of personal change and progressively leads to the collective change.

This social change theory provides a theoretical background to the social transformations analysis in the crafts sector through the implementation of dual apprenticeship. We emphasized the technological and demographic factors, conflicts and contradictions to identify the emerging behaviour patterns in the crafts sector resulting from the implementation of dual apprenticeship. The three agents of social change were taken into account for further analysis on the actors who influence the changes.

### *1.2.5 Analytical framework of the research for studying an educational transfer*

The development of an analytical framework combing adoption and diffusion of innovation theory, institutional theory, actor-oriented approach, social constructivism and social change theory is presented in figure 1. The first step of the analytical framework starts with the adoption and diffusion of innovation of Rogers (1983). We built four parameters from his theory: adopters' categories, mobilisation strategies, satisfaction and motivation of the masters and apprentices. Second, step 2 of the framework involves institutional theory of Tolbert and Zucker (1996) and actor-oriented approach of Long (2001). By using institutional theory of Tolbert and Zucker (1996), we set the components of the actors/institutions' analysis by identifying them in the implementation of dual apprenticeship and their roles. Third, the analytical framework uses social constructivism of Perret-Clermont and Nicolet (2001) and learning theory of Illeris (2009) to study the effect of dual apprenticeship on apprentices. We combined both theories to analyse the factors that contribute to learning. It includes social interactions (Perret-Clermont and Nicolet, 2001) and external interaction process on the one hand and cognitive conflict (Perret-Clermont and Nicolet, 2001) and internal interaction process on the other. The social change theory of Rocher (1968) is used to analyse the factors and agents of changes. the factors of change comprise technology, demography, conflicts and contradictions. The agents of change are elites, social movements/classes and motivation and success need (figure 1).

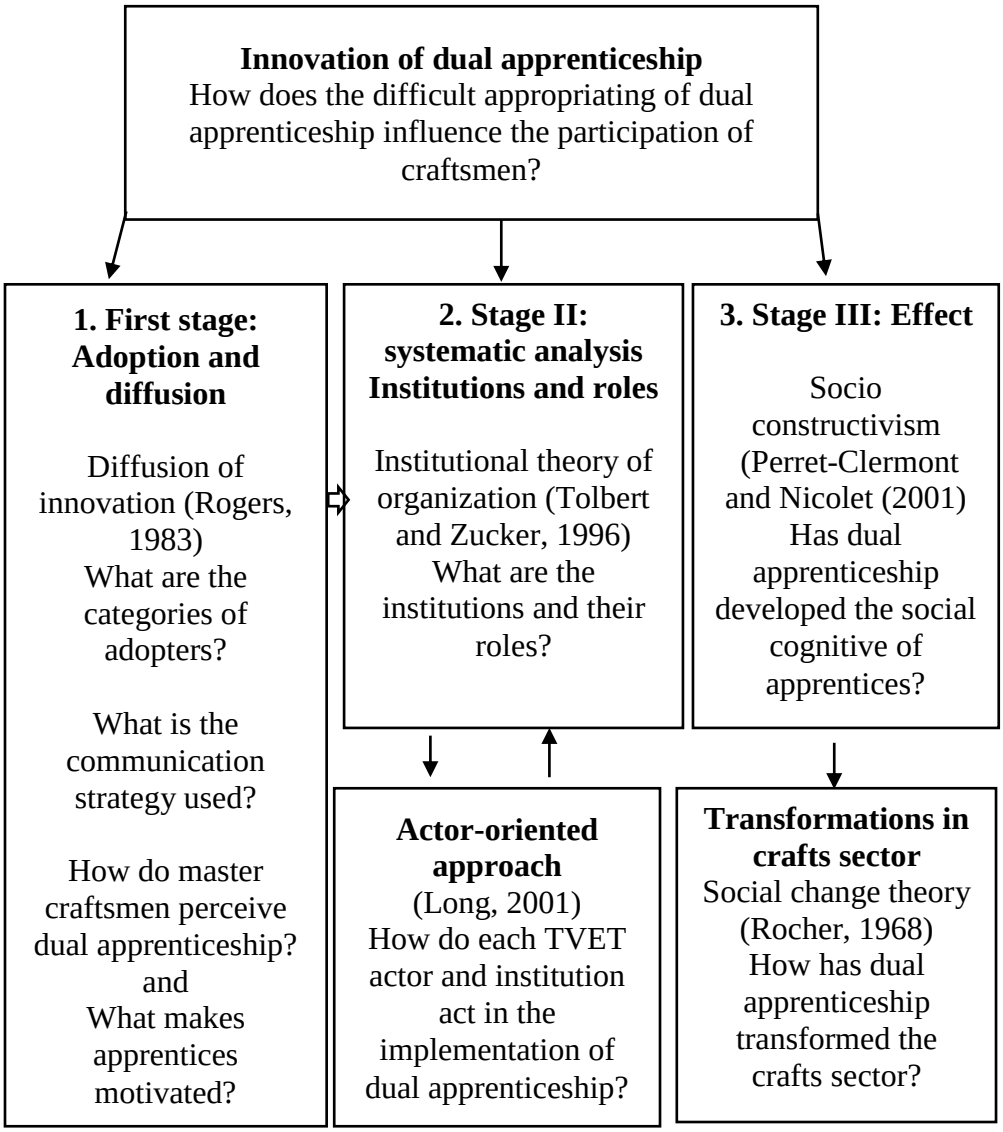


**Figure 1:** Analytical framework of the thesis

## 1.3 Research objectives and hypotheses

### *1.3.1 Research objectives*

From the specific research questions formulated, we aim to study the appropriation of dual apprenticeship program in Benin context with the

growth of informal sector. Through the overarching research objective, four specific objectives are formulated to conduct this research.

The specific objectives of this research are:

- to assess the capacities of CQP apprentices/graduates to develop new skills learning through the dual apprenticeship program;
- to analyse the masters' perception of dual apprenticeship (CQP program);
- to investigate Benin CQP stakeholders' roles, their interests and the strategies developed;
- to evaluate the transformations carried out in the craft sector with the implementation of dual apprenticeship.

### *1.3.2 Research hypotheses*

In order to move forward with the research, we elaborated four main hypotheses:

- the increasing of social cognitive capacities developed by CQP apprentices / graduates influences of the introduction of dual system in apprenticeship in Benin;
- the satisfaction and the motivation of the master crafts people and apprentices enable to apprehend their perception of the dual apprenticeship program;
- the diverse interests and strategies developed by actors affect the participation of craftsmen to dual apprenticeship (CQP program);
- the adoption of the competence-based approach by CQP graduates and the labour market competitiveness shape the social transformations in Benin crafts sector.

These hypotheses allow to design the adequate methodology for the research.

## 1.4 Research methodology on dual apprenticeship in Benin

### *1.4.1 Spatial and empirical delimitations*

- Spatial delimitation

In order to conduct this research, three districts were chosen. Two in the Southern Benin: Cotonou and Abomey-Calavi (Littoral and Atlantique) and the district of Parakou (Borgou) in the Northern Benin, at about 413 kilometres from Cotonou.

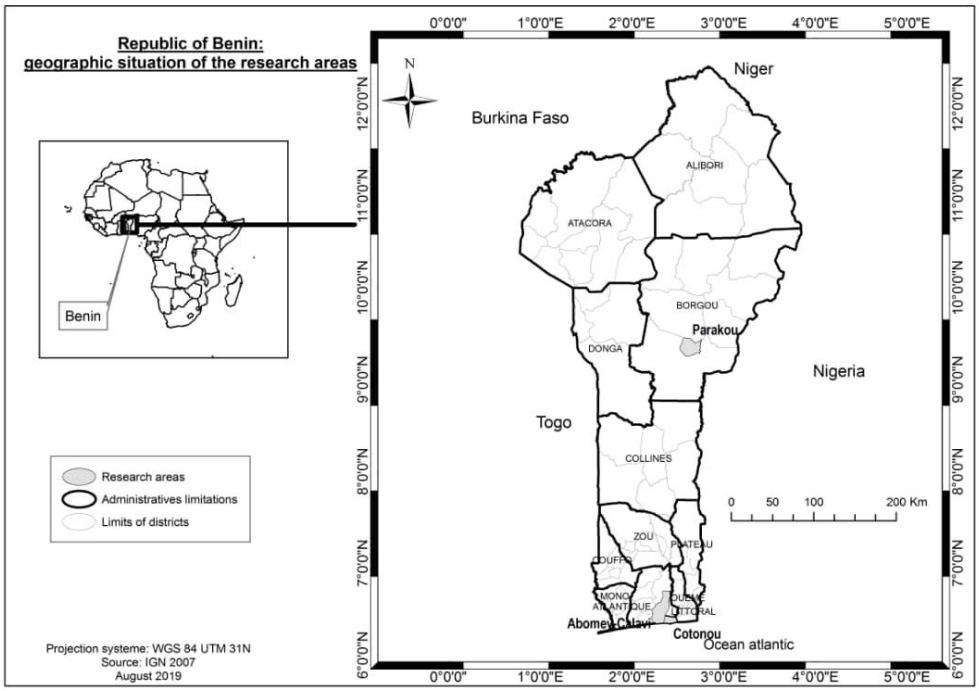


**Figure 2:** *Geographic situation of Benin and limitation of research field*

The three geographical areas served the empirical field of the research. First, in Cotonou, many public and private organizations, institutions and actors who play major roles in the implementation of dual apprenticeship, are located in these regions. Most units of decision-making are from ministries, public and private institutions. Moreover, the national representative bodies of craftsmen (CNAB and UCIMB) are situated in Cotonou. Donors' agencies

which provide technical and financial support for the implementation of dual apprenticeship are also located in Cotonou. In Abomey-Calavi, the research involved academia and consultants who have studied TVET subject and dual apprenticeship.

Second, we selected Parakou in Borgou for three reasons. Indeed, it is globally remarked that in the context of development, the proximity to decision-making units influences the behaviour of beneficiaries. Then, we think that the distance between Cotonou (Benin administrative capital) and Parakou can allow to collect relevant data. Another reason why Parakou was selected is that Borgou is one of regions in which many development interventions by Swiss Department of Cooperation were carried out in crafts sector (Davodoun, 2008). Third, by conducting the research in this region, we aim to favours the proximity to the monitoring and supervision of the doctoral advisory committee who are mostly lecturers at the University of Parakou.

The table presents the progress of the population growth in the three districts through the census of the period of 2002 and 2013:

**Table I:** *Evolution of the population of Cotonou, Abomey-Calavi and Parakou 2002-2013*

| **Region** | **District** | **Papulation** | | **Population growth rate** |
|---|---|---|---|---|
| | | **2002** | **2013** | |
| Littoral | Cotonou | 665,100 | 679,012 | 0.18% |
| Atlantique | Abomey-Calavi | 307,745 | 656,358 | 6.9% |
| Borgou | Parakou | 149,819 | 255,478 | 4.8% |

**Source:** INSAE (2015).

The table shows the growth of population in the three regions between 2002 and 2013. The growth in population of Cotonou has been low (0.18%) whereas Abomey-Calavi and Parakou have high population growth, 6.7% for Abomey-Calavi and 4.8% for Parakou (INSAE, 2015).

A census conducted by BAA (2008) amounted 6,362 apprentices in region of Borgou with 23 craft occupations. This census involved eight districts: Bembèrèkè, Kalalé, Nikki, Pèrèrè, N'dali, Sinadé Tchaourou and Parakou. The main objective of this census was to provide a database on the master craftsmen and apprentices for strategic management of dual apprenticeship in the region of Borgou (BAA, 2008). Based on the requirements (literacy and numeracy and at least six months of apprenticeship in one CQP apprenticeship scheme), data analysis of this census revealed that only 623 apprentices (9.8%) were eligible for dual apprenticeship. That implies that dual training is much closed to the apprentices' educational backgrounds.

- Empirical framework of the research

Studying dual apprenticeship program requires to define an accurate field of research. First, the empirical field of research includes the master craftsmen firms and vocational training centres (VCT) in which apprentices are trained. Both places can be considered as "social arenas" in which the training is delivered. According to Renn (1993), the concept of arena is a response from social groups in context of risk. This conceptual framework states that individuals and organizations can influence the policy process if only they have sufficient resources to pursue their goals (Renn, 1993, p.181). Through the duration of the training, apprentices receive their training from the master craftsmen in the firms or workshops. VTC also provide training in each craft occupation involved in the dual apprenticeship program. In both social arenas, we observed how the training is delivered *in situ* and interviewed training providers and apprentices. Through the field visits in the masters'

firms and VTC, we learnt about how the program is implemented and about the training constraints.

Second, the master craftsmen/women are involved in conferences, in roundtables and in workshops organized by the TVET public institutions in order to support the craftsmen for the training on capacity building. These official events provided empirical evidence on Benin TVET reforms, especially on the dual apprenticeship program.

### *1.4.2 Justification of position of this research*

This research is undertaken in an international research project called "Linking Education and Labour Market: under what conditions can Technical Vocational Education and Training improve the Income of youth?" (LELAM TVET4INCOME), which addresses the question "under what conditions can technical vocational education and training reduce unemployment, improve employment, quality of work and thus the income of youth?". Four countries participate in this project: Chili and Costa Rica both considered as middle-income countries on the one hand; Benin and Nepal as low-income countries. The ETH-Zürich through Chair of Education Systems (D-MTEC) and NADEL Centre for Development Cooperation participate as coordination team of the project. The financing of the LELAM TVET4INCOME is supported by the Swiss Programme for Research on Global issue for development jointly with Swiss National Science Foundation and Swiss Agency for Development and Cooperation (SDC). LELAM TVET4INCOME project addresses fours sub questions:

- Q1: How to measure and define social institutions of TVET?
- Q2: How can we measure the labour market situation of the youth?
- Q3: Do linkages between the education and labour market improve the labour market situation of the youth?

- Q4: How to implement and continue systemic change in TVET?

As we achieved a varied educational background in sociology within research interests in education, innovation, culture and development, we are interested in the first research question "How to measure and define social institutions of TVET?". Thereby, our thesis research lies in the TVET institutions area.

### *1.4.3 Units of observation, sampling techniques and research progress*

To lead all of the dual apprenticeship stakeholders, we first made a mapping of TVET actors/institutions involved from the conception of the training to the implementation. A list of public institutions was established. The head of Department of TVET (D-TVET) from the Ministry in charge of TVET was the first institution we visited in 2018 at Cotonou. Hence, we proceeded by visiting other public institutions, FODEFCA and the department of test and exam (DEC). Second, we were directed to some private institutions: Swisscontact agency due to the fact that it is the first institution that supported the introduction phase of dual apprenticeship program; National confederation of craftsmen (CNAB) as the representative body of the professional associations at national level. The visits in these organisations were very decisive because it consisted to get in touch with the focal persons who provided us access to those actors. Using purposive sampling and snowball sampling we reached officials from public and private institutions. Dual apprenticeship is addressed to young people who have been enrolled in traditional apprenticeship. Hence, the first beneficiaries are apprentices; but due to the fact that they are only found either in workshops or in vocational training centres, we then proceeded by visiting some technical high schools and vocational training centres (*Lycée technique Coulibaly; Lycée technique d'Akassato; Centre Don-Bosco; Centre de formation Black Style Coiffure et*

*Cosmétque*, at Cotonou, Abomey-Calavi and Parakou) that provide dual training.

Second, we participated to five different meetings of craftsmen at national level: two of these were organised by public institutions on 25 October 2018; 6 November 2018; and three other meetings organised by the LELAM TVET4INCOME project team on 3, 9 and 10 October 2018. Our participation to these meetings helped to develop more the list of TVET actors/institutions who are involved in the implementation of dual apprenticeship. To conduct in-depth interviews, we selected people according to their role in Cotonou, Abomey-Calavi and Parakou (the districts selected for the research).

Third, we conducted two sequential surveys: the first period is from July-August 2019 involving more officials from public and private institutions, academia, staff of professional associations and CQP apprentices. The second period covers March and June 2020 taking into account CQP masters, CQP trainers and heads of vocational training centres. In total, 269 persons participated in the research.

**Table II:** *Number of participants per research chapter*

| **Category** | **Number of respondents** |
|---|---|
| Chapter 2 | 30 |
| Chapter 3 | 66 |
| Chapter 4 | 42 |
| Chapter 5 | 35 |
| Chapter 6 | 96 |
| **Total** | **269** |

### *1.4.4 Methods of data collection and analysis*

- Methods of data collection and analysis

Data collection methods used were chosen based on the research data related to the specific hypotheses. However, some techniques were globally used: desk-based research with literature analysis; life-history technique with master craftsmen, CQP graduates and DACUM facilitators; informal interviews with officials from public institutions, master craftsmen and some staff of professional associations. On the desk-based research, we relied on the following electronic sources: Google Scholar; Research Gate, Open Edition and Cairn Info. For interesting desk research, we used keywords such as: "apprenticeship"; "informal apprenticeship"; informal sector and training"; "skills development"; "labour force and employment"; "education and labour market"; "TVET system"; "dual apprenticeship"; and so on. Life-history and informal interview were very useful for detailed information we collected from respondents.

For data analysis, we used essentially content analysis, in place descriptive statistics with Excel 2016.

**For the research hypothesis 1:** we assume that the social cognitive capacities developed by CQP apprentices/graduates are functions of the introduction of dual apprenticeship in Benin;

- ***Data and methods***

To study the effect of Benin dual apprenticeship on CQP apprentices, we looked for data about the context of the reform, the institutional and organizational framework, the different phases of the curriculum value chain of dual apprenticeship. We collected data for this research project trough qualitative descriptive method. The first technique that was applied is direct observation in the vocational training centres in Cotonou. We did not have

the opportunity to make observations in Parakou because most of the training centres were closed from 2018. The last cohort trained in Parakou is for the year 2017. By visiting master craftsmen firms and vocational training centres, we collected empirical data about the implementation of dual apprenticeship in Benin. The second technique used is the individual semi-structured interviews with the staff of public and private vocational training centres.

**For the hypothesis 2:** the satisfaction and motivation of the master craftsmen and apprentices influence their perception of dual apprenticeship program;

- ***Data and methods***

In order to analyse the perception of the master craftsmen/women about this dual system, we first examined their perceived attributes. First, we learnt how master craftsmen have been aware of the program. Secondly, we looked for the factors of satisfaction of the masters and apprentices (CQP regulatory acceptance) who participate in the program and third, we sought the factors that create dissatisfaction for the masters who do not participate in the program.

In the mobilisation phase, we were interested in the strategies used, the involvement of professional associations, their roles, and the challenges faced. Second, for the factors of satisfaction of the master craftsmen, we looked for data regarding what makes the master craftsmen satisfied about dual apprenticeship, the CQP apprentices' backgrounds, the advantages and disadvantages of the program. And third, we look for information to understand why other masters do not participate in the program.

The main technique used is individual semi structured interview. We designed a guideline for each category of actors: master craftsmen and the

staff members of professional associations, and apprentices who graduated from the dual apprenticeship program.

- ***Data Analysis Method/Technique:***

To analyse data, we used content analysis. The variables we used for analysis are: categories of adopters, strategies of mobilisation, the satisfaction or dissatisfaction factors of the master craftsmen/women and motivation of the apprentices.

**For the hypothesis 3:** the diverse interests and strategies developed by actors affect the participation of craftsmen to dual apprenticeship (CQP program);

- ***Data and methods***

To develop this hypothesis, we collected data on the public and private institutions considered as stakeholders of dual apprenticeship in Benin. Throughout informal interviews, we identified roles, interests and by in-depth interview, we collected information on the strategies they use to reach their interests in the implementation of the program.

This research was conducted by the descriptive qualitative method.

**For the hypothesis 4:** We postulate that the adoption of the competence-based approach by CQP graduates and the labour market competitiveness shape the social transformations in Benin crafts sector.

- ***Data and methods***

The objective of the reform of dual apprenticeship is to develop craft occupations. Hence, the study looked for the transformations which occurred in the crafts sector with the implementation of the program. It aimed to investigate whether there is a positive or negative impact on the work experience for master craftsmen and whether it improves their work

experience. The research was interested in the skills offered in the masters' firms and in vocational education in vocational training centres. In addition, data about the difference between CQP graduates and non-CQP apprentices and the labour market competition between both apprentices were collected.
To collect data, the main technique used is semi-structured interview. The technique was used to interview master craftsmen who participate and those who do not participate in the program, the members of professional associations, CQP graduates, officials of the public and private institutions and donors involved in the implementation of the program.

### *1.4.5 Structure of the thesis*

In accordance with the four specific research objectives and hypotheses, we structure the results in seven chapters. We discussed in chapter 1 about the problem statement in theoretical aspect as well as empirical foundations only takes into account the literature review on the research.

In chapter 2 deals with the apprenticeship systems in the International Standards Classification of Education (ISCED). By doing this, we described the position of apprenticeship systems in ISCED. Moreover, we focused on the TVET system in sub-Saharan Africa in order to describe apprenticeship systems in these countries. The common features of these countries are that the apprenticeship systems are widely provided in the informal sector. Hence, this chapter allowed to elucidate the fact that the sub-Saharan Africa share the common realities regarding the capacity of the public sector to reform in-depth the informal sector which remains the important source of employment for young people. Considering this, these countries are open to the support from donors to reform traditional apprenticeship.

Chapter 3 contributes to the understanding of the reforms undertaken by public sector in apprenticeship system. As we postulated in the introduction,

the Benin government received technical and financial support from donors to implement the dual system in the traditional apprenticeship system. To contribute to the understanding of the appropriating of dual apprenticeship, this chapter reviewed the context of the introduction of the reform and described the program in theory and in practice. By doing this, we evaluate the effect of the implementation of the program on the social cognitive capacities of CQP apprentices. The results were analysed through social constructivism and learning theory.

Since then dual apprenticeship has involved new structural arrangements in the practice of apprenticeship, chapter 4 analyses the craftsmen perception of the program. We assumed that the appropriation of dual apprenticeship may result from the perception of the master craftsmen to whom the innovation of dual apprenticeship is addressed. Based on the theory of adoption and diffusion of innovation, we first tried to identify the adopters' categories and the mobilisation strategies used to aware craftsmen. Second, chapter 3 analyses the satisfaction and motivation of the craftsmen and apprentices while participating in the program.

The literature review allowed to note that apprenticeship system in Benin as in many West African countries, has been held by craftsmen and their associations. At the time that public authorities undertook the modernisation of traditional apprenticeship, the management of the system has been ensured by public sector in collaboration with private sector. We postulated that the share of roles between public and private institutions influences the appropriation of the program since then each actor/institution acts accordingly to its position. Chapter 5 presents the TVET actors/institutions involved in the program, describes the distribution of roles and analyses their

acts throughout the implementation of the program. The institutional theory of organisation was applied to analyse the actors and their roles.

Analysing in deep how this institutional and organisational framework of dual apprenticeship influences the traditional one, the actor-oriented approach is used to figure out in chapter 6, how individual and collective interests capture actors and the strategies they used. The chapter argues the reasons why firms and vocational training centres participate in the training of apprentices.

In chapter 7, we discuss the transformations occurred in apprenticeship system and in crafts sector. It is postulated that CQP graduates who achieved competence-based approach and apply it to train and to produce in their workshops contribute to the appropriating of dual apprenticeship by encouraging young people to experiment this dual system. Factors and agents of social change theory were used to analyse the research results. The chapter 6 highlights the evidence that CQP graduates show the improvement of their working conditions, which increases their self-actualisation and their self-esteem to be participants in dual apprenticeship. Hence, while dual apprenticeship contributes to improving the working conditions and the satisfaction of youth, it contributes to its appropriation.

Based on the results achieved, the general discussion is articulated in three major points. First, it deals with policy transfer, concerning educational programs in developing countries. Second, the discussion put in the evidence the impact of the policy transfer in the developing countries. And third, the discussion analyses the concept of community participation in the development interventions.

# Chapter 2: Educational levels and TVET system: a critical review of literature

**Abstract:**

This chapter deals with the literature analysis on the education systems, especially on TVET including apprenticeship systems. To learn about apprenticeship programs, we conducted desk-based research using Google Scholar; Research Gate and Open Edition, Cairn Info. To ease the desk-based research, we used as keywords: "education system in ISCED"; "informal apprenticeship"; informal sector and VET system"; "skills development"; "labour market and youth employment"; "education and labour market"; "TVET system"; "apprenticeship"; "dual apprenticeship" etc. The results from this literature analysis show that even in the International Standards Classification of Education, apprenticeships provided in the informal sector have not received accreditation. As in many countries in sub-Saharan Africa such as Senegal, Ghana, Mali, Benin, Togo, Cote d'Ivoire, the apprenticeship system has been remained the commitment of master craftsmen and their professional associations. Reforms have been introduced in the system from 1980s with the support of the World Bank and the development cooperation agencies such as the German Development and Cooperation Offices, and the French Development Agencies. The existing literature illustrated that the apprenticeship system in sub-Saharan Africa plays important role in the employment generation of young people in disadvantaged backgrounds. However, its weaknesses affect the labour market situation of the workers. Hence, the reforms introduced new practices such as skills development and dual apprenticeship as a model with successful experience in European countries.

**Keywords:** Education system, Technical vocational education and training, Apprenticeship, Skills development, Sub-Saharan Africa.

**Résumé :**

Ce travail s'insère dans une perspective d'appréhender la place qu'occupe l'apprentissage dans les systèmes éducatifs, surtout en Afrique sub-Saharienne. Pour ce faire, la recherche documentaire a consisté à l'utilisation des sources électroniques telles que Google Scholar, Research Gate and Open Edition, Cairn Info… Pour faciliter la recherche, des mots clés ont été saisis dans les navigateurs : apprentissage, système éducatif selon la Classification internationale type de l'éducation, développement des compétences, marché du travail et emploi des jeunes, formation technique et professionnelle, apprentissage traditionnel, apprentissage dual, etc. Les résultats montent que la classification type de l'éducation, n'a accordé aucune certification dans l'apprentissage donné dans le système informel. Dans la plupart des pays de l'Afrique subsaharienne, tels que le Sénégal, le Ghana, le Mali, le Bénin, le Togo, la Côte d'Ivoire, les systèmes d'apprentissage étaient restés sous la responsabilité des artisans et de leurs associations. De nombreuses réformes ont été introduites dans le système à partir de la décennie des années 1980, avec le soutien des institutions internationales et des agences de développement et de coopération. Bien que les systèmes d'apprentissage en Afrique subsaharienne jouent un rôle important dans l'emploi des jeunes, leurs faiblesses affectent la situation des jeunes du marché du travail. Ainsi, les réformes proposées insistent sur le développement des compétences de métier et l'introduction de l'apprentissage dual, modèle à succès dans certains pays européens.

**Mots clés :** Système éducatif, Enseignement / formation technique et professionnelle, Apprentissage, Développement des compétences de métier, Afrique subsaharienne.

## 2.1.Introduction

The literature review is a very important task in the research process. First, it aims to describe the previous research by illustrating the research gap. Secondly, it aims illustrate the relevance of the research problem. And third, the literature review drives the researcher in the methodological and theoretical approaches to be used to conduct his/her study (Snyder, 2019). Hence, our specific literature review focused on the thematic approach to review the position of apprenticeship in education systems; the apprenticeship system in developing countries such as in sub-Saharan Africa; its strengths and weaknesses and the challenges of the traditional apprenticeship in these countries. We based the review on international standards classification of educational (ISCED) framework in order to learn about the apprenticeship position in education systems across ISCED countries. We also took into account the existing literature in sub-Sahara African countries such as Benin, Burkina-Faso, Côte d'Ivoire, Ghana, Mali, Togo and Senegal regarding their apprenticeship system.

## 2.2.Methods

To conduct the desk-based research, we proceeded by seeking literature on vocational education and related items in the global or international context. Besides, we reviewed literature carried out in sub-Saharan Africa regarding the current debates on the youth employment and the challenges for public sector. Furthermore, we have also reviewed literature at national level by visiting some institutions: Swisscontact agency, the head of Department of TVET, the National confederation of Craftsmen, FODEFCA and consultants as those have owned important information about the reforms introduced by the Benin government in TVET system.

We conducted desk-based research using Google Scholar; Research Gate and Open Edition, Cairn Info. To conduct the desk-based research, we used as keywords: "education system in ISCED"; "informal apprenticeship"; informal sector and VET system"; "skills development"; "labour market and youth employment"; "education and labour market"; "TVET system"; "apprenticeship"; "dual apprenticeship" etc.

Hard copies and electronic documents we have collected have been categorised in the different typologies: books, reports, research papers, working paper, newspapers, thesis, flyers, videos files and others. Based on a grid format which, comprises "references", "topic", "chapter / section", "summary", "quotes" and "comments", we collected data after selecting the titles of the documents we have been interested.

## 2.3.Educational levels and TVET system

### *2.3.1. ISCED classification of education*

International Standards Classification of Education is a framework designed to classify educational activities as defined in program and the resulting qualifications into internationally agreed categories (ISCED, 2012). ISCED comprises formal and non-formal education programs. It does not cover informal education programs. The ISCED classification of education programs is structured in 9 levels.

**Table III:** *ISCED education levels and programs*

| ISCED level | Programs involved | Duration |
|---|---|---|
| Level 0 | Early childhood education programs | 100 days per year |
| Level 1 | Primary education | 4-7 years |
| Level 2 | Lower secondary education | 2-5 years |
| Level 3 | Upper secondary education | 2-5 years |
| Level 4 | Post-secondary non-tertiary education | 6 months to 2 or 3 years |
| Level 5 | Short-cycle tertiary education | 2-3 years |
| Level 6 | Bachelor's degree | Depends across countries (3-4 years) |
| Level 7 | Master's degree | Depends across countries (1-4 years) |
| Level 8 | Doctorate programs | 3 years |

**Source:** Designed from ISCED 2011, ISCED, 2012.

In addition to this classification, apprenticeships can be considered formal education when the qualifications are recognised by national education authorities. Non-formal education comprises institutionalised educational programs, intentional and offered by an educational provider as alternative or complement to formal education. However, their qualification is not recognised by any public institution. Hereby, apprenticeships offered by an educational institution is considered non-formal education. In countries where apprenticeships are provided neither by public authorities nor by an educational provider, it is considered informal education.

According to the national education act No. 17/2003, the Benin education system comprises three levels. The level 1 includes kindergarten and primary education. The level 2 comprises general secondary education and technical

secondary education. The level 3 covers higher education and scientific research. Detailed information on educational programs is included in the table below.

**Table IV:** *Benin education system*

| Education level | Programs involved | Duration | Graduation |
|---|---|---|---|
| Level 1 | Kindergarten | 2 years | No degree |
| | Primary education | 6 years | Certificate of primary education |
| Level 2 | Lower general secondary education | 4 years | O-Level[2] |
| | Lower technical secondary education (TVET cycle 1) | 3-4years | Certificate of Professional Aptitude[3] and equivalents |
| | Upper general secondary education | 3 years | Baccalaureate |
| | Upper technical secondary education | 3-4 years | Professional baccalaureate and equivalents |
| Level 3 | Bachelor | 3 years | Bachelor's degree |
| | Master | 2 years | Master's degree |
| | Doctorate | 3-5 years | Doctorate degree |

Source: Benin education act and Nouatin et *al*. (2019).

Before the year 2005, apprenticeship system is not accredited. The reforms carried out by the government were supported by donors for the accreditation and introduction of dual apprenticeship and upgraded traditional apprenticeship. According to these reforms, the two apprenticeship programs are the second component of the TVET system. The first component is

[2] *Brevet d'Etude du Premier Cycle*

[3] *Certificat d'Aptitude Professionnelle*

technical secondary education offered in technical high/secondary schools. It comprises lower technical secondary education or technical high school cycle 1 and upper technical secondary education or technical high school cycle 2. The second component is apprenticeship system within the two programs: dual apprenticeship or certificate of professional qualification[4] program and upgraded traditional apprenticeship of certificate of occupational qualification[5] program (figure 3).

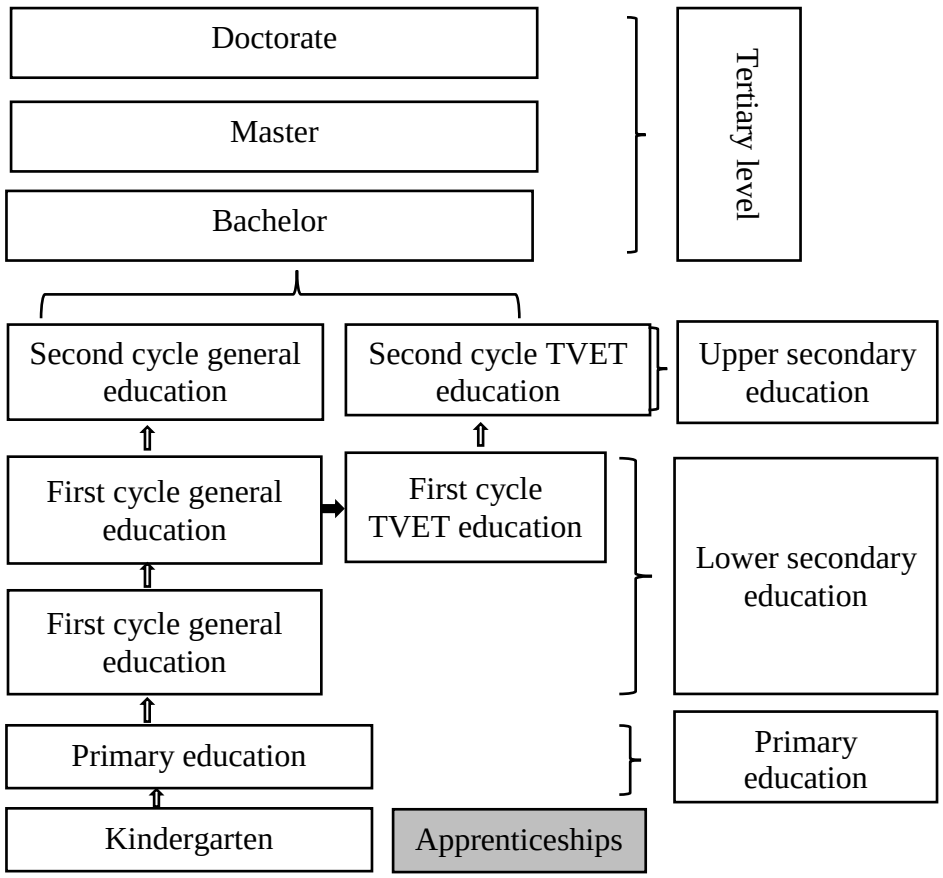


**Figure 3:** Overview of Benin education paths

[4] *Certificat de Qualification professionnelle* (CQP)

[5] *Certificat de Qualification aux Métiers* (CQM)

Even though apprenticeship system is included somewhere in formal and non-formal education, it is noticed that in Benin, apprenticeship has not been accredited for several years. It was essentially managed by master craftsmen/women and their associations.

### *2.3.2. Understanding the concept of TVET*

Technical Vocational Education and Training (TVET) has different spelling across context. In most of European, the common terms used is “Vocational Education and Training” (VET). However, in the Swiss context, another term used is “Professional Education and Training” (PET). Through the literature both spellings “Technical Vocational Education and Training” and “Vocational Education and Training” are the common use. How can we define TVET?

According to UNESCO-UNEVOC (2015), TVET includes three dimensions: (i) non-academic technical education and practical training that develop the skills and knowledge (e.g. apprenticeship); (ii) part of the education system which, is transition from secondary education to work (e.g. post-secondary and tertiary education); and (iii) aspects of the educational process (general education with additional study of technologies and related sciences), and the acquisition of awareness, knowledge, skills, attitudes… relating to occupations (e.g. dual VET system). TVET or "VET prepares students for the labour market, usually by combining practical training at either a workplace or school with curriculum-specific theory and some general education" (Renold, et *al*., 2016, p. 1).

Considering these definitions, TVET can be found in three different categories of education and training: informal offered by individuals, non-formal provided by a private or public institution and formal sector which, is accredited and implemented in the executor frame by the public as well as private sector.

The terminology of TVET involves many similar concepts as "training", "learning" and "apprenticeship". While using "training", we refer to vocational education or prescriptive knowledge given by vocational training centres in the dual system. When using "learning", we emphasise the skills acquisition in the informal sector; hence, traditional apprenticeship.

### *2.3.3. Apprenticeship and its maturity levels*

In a recent paper by Gessler (2019), the concept of apprenticeship is described through its maturity levels. He found that apprenticeship has been developed in six levels: informal apprenticeships, semiformal or time-served apprenticeships, output-oriented apprenticeships, input-oriented apprenticeships, process-oriented apprenticeships and collective apprenticeships. These six levels of the apprenticeship retrace its progress over the world. Informal apprenticeship is the first stage of apprenticeship system which is considered as purely private. The earliest formal apprenticeship is the semiformal or time-served apprenticeship which had been polished in Europe in nineth century with the cities initiative in order to accumulate human capital and to restrict young men's mobility. The author states that "The intention of the time-served apprenticeship was, therefore, to tie young people to the cities" (Gessler, 2019, p. 679). The maturity stage of the apprenticeship leads to the evidence of a problem which is then addressed and must be solved. Output-based apprenticeships are the first level of the maturity of the standard-based apprenticeship. It consists of the introduction of a formal certificate which requires a formal assessment. Input-oriented apprenticeships are the advanced maturity level. It includes the availability of curriculum, defined infrastructure and qualification criteria. However, input-oriented apprenticeship is not the maturity level of apprenticeship systems. Process-oriented apprenticeships are another level that leads to the cooperation between stakeholders like public and private

institutions. The maturity level involves collective apprenticeship with involvement of social partners, flexibly pathways and mobility and meaningful social dialogue.

Apprenticeship is defined by (Gessler, 2019) as the employment including training; hence, employment logic and education logic are first a characteristic of this concept. Second, the formality of apprenticeship shows the progress from an informal to a semiformal and finally to a formal system. The informal apprenticeship system is seen to be the most share of apprenticeship in informal economy with micro and small enterprises. The main foundation of the informal apprenticeship is on-the-job training and the relationship between master and apprentice. The third characteristic of apprenticeship lies in the world of work environmental dimensions which do not include necessary the learning (defensive and expansive). Fourth, apprenticeship is characterised by its learning process. Gessler (2019) distinguished two types: implicit knowledge and explicit knowledge. According to his findings, the development of explicit knowledge leads to reflective practice. The master craftsman is taken as an expert in the field who poaches apprentices to reproduce knowledge with advice and explanation. And fifth, apprenticeship is characterised by on-the job or workplace training and off-the job or theoretical learning. The combination of both types of learning is dual VET apprenticeship.

## 2.4.Apprenticeship in sub-Saharan Africa countries

### *2.4.1. Apprenticeship in sub-Saharan Africa countries: origins and evolution*

Traditional apprenticeship is traditional heritage embedded in the traditional custom of African population. It is considered as firms in which members of family, apprentices and journeymen work together (Gersdorff, 1969). In his

research paper, Adekola (2013) states that informal apprenticeship arose in the Yoruba clan in the southwest of Nigeria through the development of occupations such as hunters, drummers and diviners' compounds. Davodoun (2011a) urgues along similar lines illustrates that its evoluation has been developed by labor market competition and immigration. In the view of Adekola (2013) apprenticeship developed by the penetration of Europeans into Africa. Colonization contributed to the development of the informal apprenticeship by on-the-job training to support the colonial administration in the exploitation of the raw materials (Davodoun, 2011a). Hence, literature reports widely the evidence of the existence of apprenticeships in sub-Saharan Africa.

The skills transfer in this apprenticeship follows three main phases: the observation phase, learning by doing phase and following instructions from advanced learners and master craftsman (Anokye and Afrane, 2014). Over time, informal apprenticeship has grown to widespread enrolment of young people who mostly live in disadvantaged backgrounds (Walther, 2008; Davodoun, 2011a; Adams, 2011). The study by Walther (2008) in West African countries identified two types of apprenticeship: the Sahelian apprenticeship in countries like Burkina Faso, Mali, Niger and the coastal apprenticeship in case of Benin, Togo and Senegal. According to him, even though Sahelian and Costal apprenticeship have the similar characteristics, the difference between both is that Coastal apprenticeship is essentially based on the commercial relationship between master craftsmen and apprentices with their families / relatives and the release ceremony (Walther, 2008). The common training pattern of both Costal and Sahelian apprenticeships is based on the roles played by the master craftsmen. Most of the master craftsmen play role of the family-type to apprentices by providing them lifelong education and skills learning in the craft occupations. The

informality of the training system which leads master craftsman the only one actor committed to the skills acquisition and the duration of the training. Even though this traditional or informal apprenticeship aims to transfer skills from one generation to another, it is noticieable that it has strengthens and weaknesses.

### *2.4.2. Traditional apprenticeship in sub-Saharan Africa countries: strengthens and weaknesses*

Traditional apprenticeship plays a positive role in society. A study conducted by Sonnenberg (2012) revealed that traditional apprenticeship is a practical orientation. Although it is traditional, it is regulated by the social and cultural norms which aim to prepare young people for the world of work (Adams, 2008). The self-financing of the system has a strong influence in the productivity of the firms. Moreover, Sonnenberg (2012) shows that the learning process of traditional apprenticeship in sub-Sahara Africa can be considered an important advantage in improvement apprentices' work conditions and enhance the legitimacy of the training by formal certification. Hence, the first reform involves dual/reformed apprenticeship which consists of improving skills and contributing to social inclusion. Secondly the reform improves the structure of apprenticeship, standardizes certification and upgrades master craftsman training. The study of ILO (2012) emphasizes on the social legitimacy of the regulation of the traditional apprenticeship in Africa. In their study, Adams, de Silva and Razmara (2013); Savadogo and Walther (2013) showed that tradiational apprenticeship is an important source of employment in the informal sector in urban and rural areas. Teal (2016) also found that traditional apprenticeship in this African region has expanded with the growth of the informal sector, as has its contribution to the informal economy. As examples, Walther (2007) found that the share of informal employment in Benin is 95%; 90.4% in Cameroon 90.8% in

Ethiopia and 77.5% in Senegal. The evidence of the study conducted by Adams, de Silva and Razmara (2013) illustrates that employment and earning in the informal sector can be attractive and can match and exceed those of the formal sector. The surveys conducted in Rwanda and Ghana showed the positive effects of the traditional apprenticeship in the informal sector.

The weaknesses of traditional apprenticeship are very clear. Adams, de Silva and Razmara (2013) set out four constraints for the skills development. First, the constraint lies in the cost structure, which is different from larger enterprises due to the fact that small firms only invest for their needs and are bounded by production time. Hence, this has negative effect on the training timing. Second, there is the lack of capital and inability of small firms to generate self-investment; apprenticeships only finance their firms with the small fees by the worker. Third, it is difficult to find training providers offering multiskilling for the informal sector: the self-employed owner of a small household enterprise is frequently responsible for purchasing raw materials, producing goods and services, managing inventory, taking care of marketing and sales, doing financial accounting, and managing personnel (Adams, de Silva, & Razmara, 2013). Fourth, the investment in skills is impeded by financial and technical constraints. Another point to be considered in traditional apprenticeship in West Africa is the commercial relationship between master and apprentice on the one hand and the release ceremony on the other, which are the major limitations for the apprentices in coastal countries (Walther, 2008).

Through literature on apprenticeships in sub-Saharan Africa, it is shown that the informal sector broadly affects the structure of vocational skills. In many of these countries, the support from donors have engaged in the transfer of skills development.

### *2.4.3. Reforms of apprenticeships in West Africa and challenges*

The transfer of skills development in developing regions like sub-Saharan Africa has emerged from the pre-colonial and colonial patterns of skills (King, 2014).

Eido, Marghella and Deplazes (2017), through the development of weaknesses in developing countries, explore solutions by providing a variant of dual system which can be adapted to each context. "Connect dual VET" is the can be considered as a variant of dual system they found to be the best model to separate training and education. In this regard, they recommend the local presence of coordinating institutions, well-structured and standardized of the skills for the success of its implementation in public private partnership.

TVET was introduced in sub-Sahara African countries in the 1980s and 1990s with the adoption of the Structural Adjustment Policies. Benin and Togo have implemented the pilot phase of dual apprenticeship in the same period: 1991 in Togo and 1993 in Benin by donors (Walther, 2008). In 1989 and 1996 dual apprenticeship was introduced in Mali and Burkina Faso; respectively; and in 2000 in Senegal by donors' agencies (Kehl, Troxler, & Ye-Sawadogo, 2018). Hence, all of countries receive donors' support to introduce the dual system in formal and informal apprenticeship.

Literature about the challenges of dual apprenticeship in these countries revealed the following points as common challenges:

- More involvement of professional associations in the management to foster the public-private partnership;
- Co-funding by local organisations and government;
- Standardisation of the curriculum design method for skills development;

- Selection of occupations for the dual training based on the training needs;
- Formal certification of the qualification.

From this literature review, it is noticed that there is an abundant literature on apprenticeship in sub-Sahara African countries. While some authors undertake comparative study of traditional apprenticeships, other research focus on the strengths and weaknesses for the opportunities of skills development. Moreover, available literature offers technical pathways to adapt dual system to the local context of developing countries. However, the literature gap that this research aims to fulfil is the appropriation of this innovation even by professional associations and public institutions. In other words, why does TVET policy have difficulties in widely incorporating dual apprenticeship into the education system? This research is carried out to study the Benin case in the implementation of dual apprenticeship in order to understand the appropriating of educational programs in the developing context.

## 2.5. Conclusion

Throughout the literature review, apprenticeships are presented as vocational education and training programs that lead to employment. In most of sub-Sahara African countries we reviewed the literature, apprenticeships are found to be widely provided without accreditation in the informal sector. However, many reforms have been undertaken by public authorities jointly with international organisations and development cooperation agencies. The literature review showed that apprenticeship system in sub-Saharan Africa plays important role in the employment generation for young people in disadvantaged backgrounds. By improving apprenticeship systems, the reforms develop skills learning for occupations. Moreover, it is noticed that

dual apprenticeship as a model which has been introduced in many sub-Sahara African countries based on its successful experience in European countries with positive impact on youth labour market integration.

# Chapter 3: Dual apprenticeship in Benin: Between theory and practice

Published as research paper

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**Abstract**

This chapter discusses the effect of dual apprenticeship training on the program fellows in Benin. The research sought to apprehend how dual training was introduced in traditional apprenticeship and how this dual training is executed in the Benin context. This research was conducted in three districts mentioned before (Cotonou, Abomey-Calavi and Parakou), using a descriptive qualitative method with three data collection techniques. First, literature analysis was used to review the existing literature on Benin dual apprenticeship. Second, individual semi-structured interviews were conducted to collect data from actors, public and private institutions and CQP apprentices. Third, direct observation data were collected through on-site visits in the training centres. In total, 30 persons were interviewed using purposive and snowball sampling. Social constructivism and learning theory were applied to analyse findings. Results show that a so-called Developing A Curriculum method was utilised to develop curricula in about 13 craft occupations for this dual apprenticeship training. It's figured out that the implementation this CQP training program does not follow the requirements regarding the duality of the training. The collaboration challenge between training providers decreases the commitment of the master craftsmen / women. The lack of an evaluation plan for the training received in workshops does not enable to assess the skills learned in the master workshops. However, although Benin dual apprenticeship builds the social cognitive capacities of the apprentices, the skills learning is not sustainable due to the intensive approach used to train apprentices and because of the lack of materials and work equipment in the master workshops.

**Keywords:** Technical Vocational Education and Training, Dual Apprenticeship, Certificate of Professional Qualification (CQP), Skills Achievement, Capacity and Competency, Benin.

**Résumé**

Ce chapitre s'intéresse à l'effet de l'apprentissage de type dual sur les apprentis ou les diplômés au Bénin. La recherche a exploré le processus d'introduction du système dual dans l'enseignement et la formation technique et professionnelle et sa mise en œuvre dans le contexte béninois. Cette recherche a été conduite sur la base de la méthode qualitative descriptive à l'aide de trois techniques dans les trois zones indiquées précédemment. D'abord, l'analyse documentaire a été utilisée pour traiter la littérature existante sur l'apprentissage de type dual au Bénin. Ensuite, l'entretien semi-structuré a été utilisé pour enquêter les acteurs du secteur public et privé et les apprentis CQP. Au total, 30 personnes ont été choisies à l'aide d'échantillonnage par choix raisonné et boule de neige. Le socioconstructivisme et la théorie d'apprentissage ont servi de base pour l'analyse des résultats. Les résultats montrent que 13 métiers artisanaux ont été développés à l'aide de la méthode *developing a curriculum*. Le programme de formation ne suit pas les exigences en matière de la dualité. De même, le manque de collaboration entre les centres de formation et les maîtres artisans n'accroît pas leur responsabilité et leur participation. Le système d'évaluation (évaluation continue et sommative) ne prend pas en compte les connaissances acquises sur le tas en atelier. Cependant, malgré le fait que l'apprentissage de type dual construit les capacités sociocognitives des apprentis, la durabilité des acquis pose problème dès lors que la plupart des centres de formation utilisent une approche de formation intensive et en raison du manque de matériels modernes dans les ateliers artisans.

**Mots clés :** Enseignement et Formation Technique et Professionnelle, Apprentissage Dual, Certificat de Qualification Professionnelle, acquisition des connaissances, Capacité et Compétence, Bénin.

## 3.1. Introduction

Traditional apprenticeship in Benin provides significant work-based competencies to young people. In 2010, the number of the apprentices who are trained in the apprenticeship schemes was estimated to be 200,000 (UNESCO-BIT, 2013). This number has increased to 800,000 in 2014 according to Davodoun (2014). Thus, traditional apprenticeship enables many young people, especially the school dropouts and those with no prior education to take part in an alternative education / training. Apprenticeship training consists of learning by doing within a workshop in order to prepare learner for the world of work. According to the national standards classification of craft occupations, there are 311 occupations in the Benin business sector. As mentioned before, this apprenticeship was not organised and public institutions have no control over it. As traditional apprenticeship does not lie in a conventional pedagogy for skills learning, the Benin government introduced reforms in traditional apprenticeship which enable to accredit apprenticeship as part of TVET through an apprenticeship act 117/2005 consolidated by the one of 641/2010. This reform was supported by donors through technical and financial assistant. According to this reform, two apprenticeship programs have been created to train young people in the crafts sector: a particular dual apprenticeship program which offers a certificate of professional qualification (CQP program) and an upgraded traditional apprenticeship. CQP program should combine vocational education and training in accredited TVET schools or training centres and apprenticeship training in the master craftsmen workshops. The upgraded informal apprenticeship program comprises of a national evaluation after the completion of skills learning in workshops. The dual training is built from the German and Swiss dual VET system. Those development cooperation

agencies have provided technical and financial support to experiment dual training in the Benin apprenticeship system.

An early overall literature review on the Benin apprenticeship system shows that, few studies have been conducted on apprenticeship reforms to analyse the management of the TVET sector. In the study of Davodoun (2007), an insight view of the institutional and organizational framework of the apprenticeship acts in Benin, has been given by. In his books, Davodoun (2011a; 2011b) described the traditional apprenticeship and reviewed the introduction of dual training in apprenticeship in Benin. Davodoun (2015) also made a comparative analysis of traditional apprenticeship and dual apprenticeship. Many other studies such as Atindehou (2013); David-Gnahoui & Akouété-Hounsinou (2015); David-Gnahoui and Ahouangnivo (2017); Ferland (2016) illustrate that the funding of Benin dual apprenticeship program is more supported by donors' aids than the annual budget and the contribution of the apprentices. As Walther (2008) conducted research on the reforms of vocational education in West Africa, it is found that the management of the Benin dual apprenticeship comprises two categories of actors. A first group of the CQP actors includes apprentices, trainers and master craftsmen/women. The second category comprises parents, employers, trade unions and experts from public sector. These studies did not state about the students outcomes from the implementation of this program.

The objectives of this chapter are first to depict this dual apprenticeship and second to evaluate its effects on the skills learning by CQP apprentices. The research finds that the introduction of dual apprenticeship in Benin has developed the social cognitive abilities of the apprentices.

## 3.2. Methods

To conduct the chapter of this thesis, we adopted a qualitative descriptive method to collect data. We applied three techniques: first, literature analysis was highly used through the desk-based research and the literature review. This technique was very helpful to review existing literature about the dual training system in apprenticeship in the Benin context. Secondly, we had visits in the master craftsmen workshops to observe how they train the apprentices and visits in vocational training centres[6] (VTCs) which offer dual training in metallic construction, electricity building, plumbing, and hairstyling. During the visits in the two training locations, we focused the observation units on a comparison analysis of the equipment and materials they used. Thirdly, we conducted semi-structured interviews with 30 actors: 3 experts of Swisscontact, 4 officials of the head of Department of TVET (DEFTP), 15 master craftsmen and 18 CQP graduates and apprentices. The selection of our respondents from the TVET institutions was based on purposive sampling and snowball sampling was applied to select the training providers. Interviews were conducted on the context of the introduction of the reform of dual training with its CQP program certificate, its implementation process and the ability of CQP students/apprentices to perform occupational tasks. We based on the content analysis to use data.

The interpretation of the main findings was made using the theoretical approach of the social cognitive development of the child and the learning theory. The social cognitive approach developed by Perret-Clermont and Nicolet (2001) sates that the development of cognitive capacities of a child can be illustrated through two processes: the "social interactions" within the community and the "social cognitive conflict" which arises from their

[6] *Centre de métiers* or *centres de formation professionnelle*

collaboration. The "social interactions process" in a child development consists of sharing primary experience with the family members, other children in the community and with teachers or trainers at school. In this process, the child increases his/her cognitive capacities. Through the "social cognitive conflict process", the child builds further his/her cognition by performing tasks.

Learning theory by Illeris (2009) is helpful to in-depth understanding of the conceptual note of the learning process. Illeris (2009) built his theory on two basics processes and three learning dimensions. The "external interaction process" is the stage in which learners collaborate with their social, cultural, and material environment. The second stage of this process is the "internal interaction process" which suggests that learning is built while the child develops self-capacities. The author stipulates that the connection of the two basics processes (external and internal) is the essential condition which enables to study the skills development in human being. In order to analyse the social interaction among the CQP students, we took into account the social, cultural and material conditions under what apprentices are trained in the dual training combining workshop training and training in Vocational training centres (VTCs).

In this chapter, we would like to contribute to the well understanding of the social cognitive conflict in the learning process, emphasizing the development of self-capacities by the CQP students.

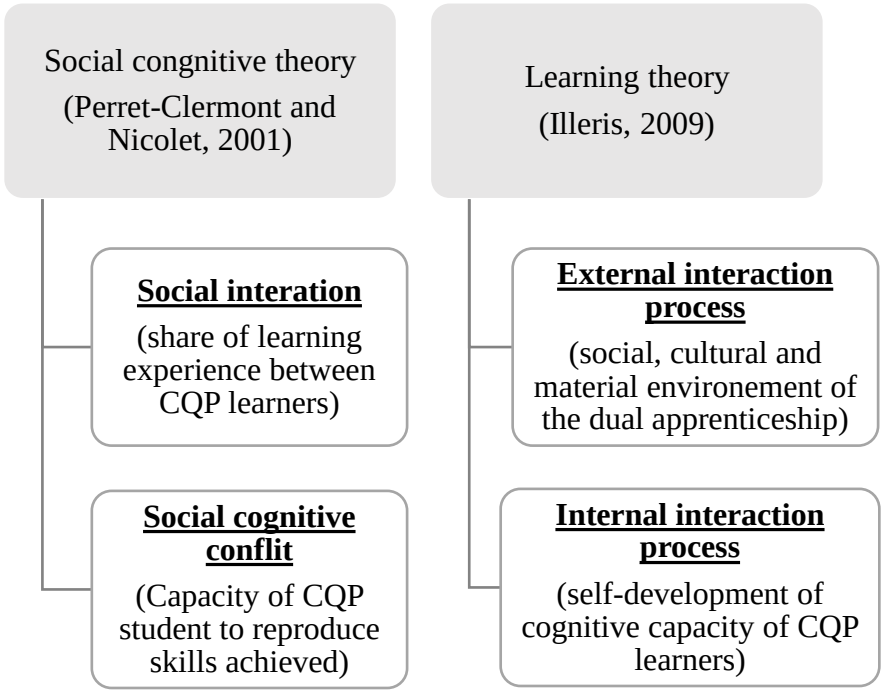


**Figure 4:** *Theoretical analysis applied to analyse dual apprenticeship*

### 3.3. Introduction of dual apprenticeship in traditional apprenticeship

#### *3.3.1. Backgrounds of the introduction of dual training in Benin apprenticeship*

The historical foundation of dual training in Benin backs from 1993 in the same period with the Togo Republic. An international development organisation, the Hanns Seidel Foundation, established its partnership with Benin and Togo to implement a pilot dual training in apprenticeship in combining vocational education in some training centres with the training in workshops (Walther, 2008). Through this pilot phase, Hanns Seidel foundation supported to build a training centre in Abomey (southern Benin) in collaboration with professional associations in the crafts sector. These

associations played a very important role in the master craftsmen awareness to participate in this experience. In order to conduct this pilot phase, the Foundation developed standards for the training sessions in four occupations: automobile mechanic, motorcycle mechanic, mechanic construction and wood carpentry. In 1999, Hanns Seidel Foundation conducted training on capacity building with the objective to increase the master craftsmen skills and ability to train efficiently the apprentices after the experience of dual training (Walther, 2008).

In 2001, the Benin government identified Swisscontact as a potential donor to support the implementation of dual training in further craft occupations. Foreign donors such as Danish Development Agency, Swiss Development Corporation, French Development Agency, World Bank, also contributed through financial subsidies. The support of Swisscontact consisted in the elaboration of curricula 13 craft occupations: Hairstyling7; Metallic Construction8; Sewing9; Electricity10; Cold and Air Conditioning[11]; Masonry[12]; Car Mechanic[13]; Motorcycle Mechanic[14]; Wood Carpentry[15]; Photography[16]; Plumbing[17]; Coating[18] and Weaving[19] (Ferland, 2016).

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[7] *Coiffure*

[8] *Construction métallique*

[9] *Coupe couture*

[10] *Electricité*

[11] *Froid et Climatisation*

[12] *Maçonnerie*

[13] *Mécanique auto*

[14] *Mécanique deux roues*

[15] *Menuiserie*

[16] *Photographie*

[17] *Plomberie*

[18] *Revêtement*

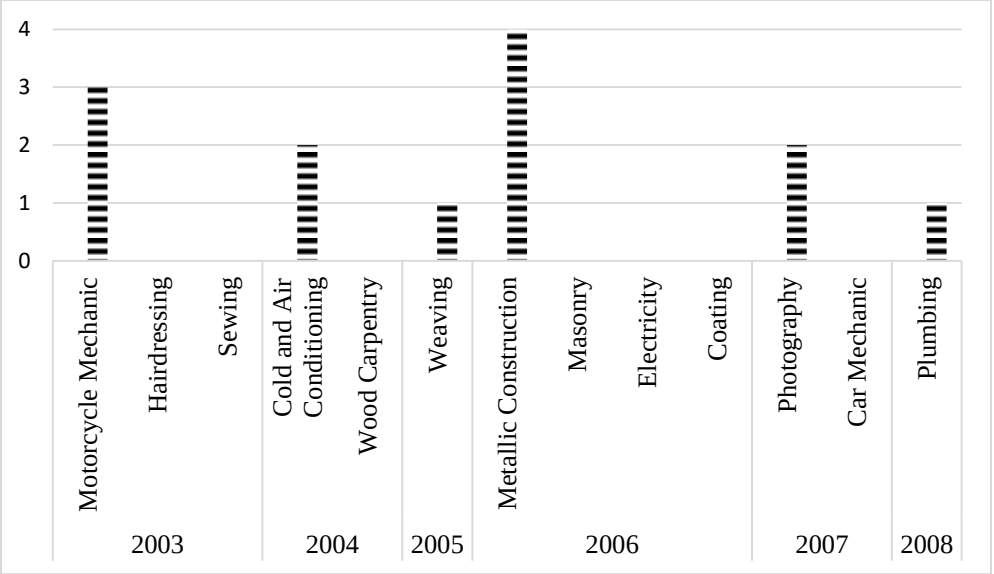


**Figure 5:** Craft occupations involved in dual apprenticeship from 2003-2008
**Source:** Own depiction using data from David-Gnahoui & Ahouangnivo (2017) and Swisscontact (2017).

Figure 5 helps to illustrate how the 13 occupations have been included in the application of a style of dual apprenticeship in Benin. In 2003, Swisscontact launched the training with three occupations: motorcycle mechanic, hairstyling and sewing. In 2004, the following occupations were introduced in the training program: cold and air conditioning and wood carpentry. But in 2005, weaver occupation was integrated in dual training. In 2006, four occupations were added: there are metallic construction, masonry, electricity and coating. In 2007, photography and car mechanic were taken into account in the program. Finally in 2008, the plumbing was introduced.

### *3.3.2. Curricula development through DACUM method*

The development of curricula for those 13 craft occupations has been done by Swisscontact using the Developing A Curriculum (DACUM) method.

[19] *Tissage*

DACUM method is a methodological approach which is created by a Canadian association for VET system. It is a performance-based training (PBT) that enables to clarify the specific "duties" for a job or an occupation (Norton, 1997). This method was upgraded by a unit of facilitators for competency-based training so called the Center on Education and Training for Employment of the Ohio State University. The DACUM method comprises five stages: curriculum analysis, curriculum design, instructional development, training implementation and program evaluation (Norton, 1997).

**Stage 1: Curriculum analysis**

The main function of this stage is to analyse a job or an occupation in order to identify the training needs which require the training standards or the training package based on the selection of tasks.

**Stage 2: Curriculum design**

After the definition of tasks for the training needs, the stage 2 consists of setting the approach that enables to organise the tasks into the training objectives. It leads to the design of a training plan.

**Stage 3: Instructional development**

This stage emphasizes the development of competency profile, the training guidelines, the curriculum materials and the lesson plans. This stage is completed by a pilot-test which enables to improve or review the training materials. According to Norton (1997), pilot-testing and curriculum materials revision are very important and require time and financial investment because of their function in the learning achievement.

**Stage 4: Training implementation**

This stage focuses on the training application including the training scheduling and the resources to be used such as equipment, trainers, trainees, facilities, and formative evaluation.

**Stage 5: Program evaluation**

The fifth stage of the DACUM method covers summative evaluation, monitoring and follow-up, and the external efficiency of the training program considering the labour market outcomes. The main findings of this evaluation may serve to improve the program.

Although DACUM is structured in five phases, it's suggested that stages 2 and 3 are combined as a unique phase. Therefore, the experts we interviewed advocate four major phases: curriculum analysis, curriculum design, curriculum application and program evaluation.

In the Benin context, the application of DACUM method for curriculum development followed three pilots testing. First, Swisscontact elaborated three occupations: motorcycle mechanic, hairstyling and sewing. The pilot was conducted in four districts such as Cotonou, Parakou, Porto-Novo and Abomey-Bohicon. Second, Swisscontact identified and trained five local experts as DACUM facilitators. They were trained in the craft occupations analysis and in the occupational profile definition for curriculum development[20]. These experts were selected from the public institutions, Fund for the development of continuing vocational education and apprenticeship (FODEFCA[21]), Swisscontact, *Bureau d'Appui aux Artisans* (BAA) and *Cabinet Africain d'Ingénierie de Formation* (CAIF). They participated in the curriculum development for the implementation of dual apprenticeship. Curricula were designed for 13 occupations by those experts under the coordination of Swisscontact. For each occupation, a competency profile chart, supported by the training standards, and the training guidelines, were elaborated. Third, Swisscontact implemented the dual training in collaboration with D-TVET that accredits VTCs for vocational education

[20] https://drive.google.com/file/d/1yeNEupOcwF4EWMWfksNcB6Kjm02SU7un/view

[21] *Fonds de Développement de la Formation Continue et de l'Apprentissage* (FODEFCA)

and training and with FODEFCA which ensures the monitoring and follow-up. VTCs trainers and CQP master craftsmen train apprentices accordingly to requisite the training standards and guidelines.

## 3.4. Implementation phase of the reform of dual apprenticeship

### *3.4.1. Conditions for the training contract to VTCs and workshops*

The first basis factor for the VTCs recruitment in the program is the legal accreditation operated by the Ministry of secondary education and TVET. As we mentioned before, five categories of VTCs were identified in this dual apprenticeship training: public, private, confessional, association and NGOs. Before selecting VTCs to be partnered, they must be accredited by D-TVET. In the evaluation report by David-Gnahoui & Ahouangnivo (2017), it is noticed that many VTCs train apprentices without receiving the accreditation. Hence, the accreditation remains the first condition to get the dual training contract from FODEFCA.

Second, VTC must attest environmental sanitation of the training centres, requisite infrastructure, equipment and materials. According to the guidelines for environmental sanitation, infrastructure may be easy access and adequate space for the training sessions. Furthermore, VTC must dedicate a specific place for the classrooms training for instructional education and another place for the practical training session. In addition, administrative officers may have bureaux for the staff members and a bathroom for all including students. They must also ensure the instructional materials and equipment according to the occupations in which apprentices are trained.

Third, master crafts people involved in this dual training are well qualified, with about 12 years work experience. They may also guarantee minimal working conditions in the workshops: this is very important for the training in workshops or firms.

### *3.4.2. CQP students' enrolment in this dual apprenticeship training*

Apprentices must fulfil four conditions for the admission to the dual training. First, the program is dedicated to young people at least 14 years of age, according to the article 12 of the apprenticeship act No. 64/2010. But, the crafts code within the West African Economic and Monetary Union (the WAEMU community)[22], apprenticeship is dedicated to youth with at least 15 years of age (art. 19 of the code No. 01/2014). Secondly, apprentices must contract with a master crafts person in an apprenticeship scheme or with a production unit for at least six months. Third, the prior education requires is at least the fifth grade of primary school. However, the fourth and decisive condition is that the candidate has to pass with success the CQP entrance test. Admission from this test allows apprentices to be eligible for the scholarship offered by FODEFCA (UNESCO-BIT, 2013; MPDEPP-CAG, 2010; Atindehou, 2013).

The enrolment process is planned to be organised twice a year in March and April. According to Davodoun (2015), this is not regularly done. For example, there was no CQP entrance test between 2016 and October 2018. In April 2016, there was a political alternation; then the government suspended the CQP enrolment in order to audit FODEFCA. After this audit, a new the entrance test was organized in November 2018.

The registration of apprentices starts with a call for application to the dual training program. Professional associations from national, regional and local levels are committed for the enrolment phase. The National Confederation of Craftsmen (CNAB)[23] plays a very important role to raise awareness master people to recruit as many apprentices as possible for the entrance test. They conduct a national awareness campaign via through TV and radio sessions,

[22] Union Economique et Monétaire Ouest-Africaine (UEMOA)

[23] Confédération Nationale des Artisans du Bénin (CNAB)

meetings with professional association at local level. According to the apprenticeship acts, the national chamber of skilled crafts (UCIMB)[24] must be involved but, their role is not defined in any apprenticeship act. Herby, chambers and their national institution (UCIMB) do not play any role so far in the process.

After registration, apprentices are required to submit a dossier which includes an application form elaborated by D-TVET, ID photo, a copy of birth certificate and the copy of the apprenticeship contract at least six months ago. D-TVET in collaboration with professional association (CNAB) and with the Department of Pedagogical Inspection, Innovation and Quality (DIPIQ)[25] organizes the entrance test. This test includes basis knowledge of French and Mathematics in unique form for 2 hours. The main purpose of this test is to evaluate the literacy and numeracy ability of the apprentices for easy participation in the training sessions.

For the November 2018 entrance test, the D-TVET reports that 8,413 apprentices participated. During this test, we conducted a visit at Lycee Coulibaly in Cotonou. We noticed that 45 out of 544 candidates did not apply before. They submitted their application dossiers on the test day. Moreover, as there is no maximum age limit, we found participants older than 25 years of age who participated in the entrance test. There were also fake test-takers who participate on behalf others in order to get a best score for the scholarship. Therefore, some apprentices obtain their scholarship with low literacy level. This depends on the scholarship available for each occupation. Regarding the fake test-takers, one of the resource persons from FODEFCA articulated the following:

[24] Union des Chambres Interdépartementales des Métiers du Bénin (UCIMB)

[25] *Direction de l'Inspection Pédagogique de l'Innovation et de la Qualité* (DIPIQ)

> There are so many fake practices in the entrance test. Globally, it is remarked that some people take the entrance test for apprentices without required literacy level. Many apprentices dropped out from school three or five years before entering in the apprenticeship system. Due to the lack of practice, they do not have a good literacy level. Hence, for the CQP entrance test, they pay for fake exam takers (Mr M., 38 years, resource person, September 2019).

This quote illustrates the existing of fake practices during the entrance test. Most of staffs of VTC found that the fifth grade of primary school is not enough to recruit CQP applicants.

The enrolment process also includes the selection of the apprentices who get at least the average score which is 10 points out of 20. Those who get the best score have maximum chance to be selected to benefit from FODEFCA scholarship. However, the number of selected apprentices depends on the fund available to FODEFCA and on the occupations considered as the priority for the government. Another other problem identified in this enrolment phase is that some occupations (e.g. metallic construction and mechanics) are considered to be "dirty occupations" and there are low registrations because the apprentices are not interested in these occupations. Due to the lack of the applicants in "dirty occupations", FODEFCA selects some apprentices who got lower score than the average. After selecting the CQP apprentices, FEODEFCA matches them into VTCs according to their occupations and considering the regions where they were being trained. Nevertheless, the research revealed that in the CQP cohort 2018, we found some apprentices in metallic construction which were matched to take mechanic, vice versa. This mismatch problem was detected in Bohicon and Abomey (Southern Benin) during a study in which we participated. This survey was conducted from July to August 2019, jointly with NADEL Institute of ETH-Zürich (Switzerland) and the Faculty of Agricultural Sciences of the University of Abomey-Calavi (Benin), to evaluate "the effectiveness of dual training in microenterprises in Benin".

### *3.4.3. Training sessions for dual apprenticeship program*

The Benin dual training is a TVET component which consists of the theoretical and practical training in VTCs and on-the-job training in the artisans' workshops or firms. Theoretical as well as practical training is offered by instructors and trainers under the coordination of the lead of the centres. VTCs' instructors and trainers organise formative evaluation to monitor the students' learning and to assess their achievement before they pass to the next level of the program. Apprentices take a summative evaluation to end each cohort of dual training. This is a national evaluation offered by the Department of evaluation and test which also provides Certificate of professional qualification (CQP certificate) to graduate students[26].

- Training sessions in VTCs

The training sessions in VTCs are organised in three levels that are segmented in 32 weeks per level. Overall, the training providers are mostly from the private sector and worked as artisans in the workshops. Three categories of trainers participate in the training in VTCs: lead trainers[27], local trainers/instructors[28] and educational supervisors[29]. Lead trainers are the principal instructors who are responsible for the students' training. The local trainers/instructors contribute to the training under the supervision of the lead trainers. And the educational supervisors are professionals who connect VTC to the master crafts mentor. He / she may develop collaboration with workshops leaders through a communication notebook. Instructors are from public schools and worked as lead instructors or lead trainers in VTCs. Most

[26] *Certificat de Qualification Professionnelle* (CQP)

[27] *Formateur principal*

[28] *Formateur endogène*

[29] *Formateur de suivi*

local trainers and educational supervisors are from crafts people who were recruited by the FODEFCA to serve as trainers for VTCs. David-Gnahoui and Ahouangnivo (2017) reported that 102 VTCs participated in Benin dual system. There are 24 VTCs out of 102 from the public sector. Among the remaining VTCs, 60 belong to private actors, 11 from NGOs, 5 from confessional and 2 from associations. There is no training schedule which specifies the training period as it's given for those students in primary and secondary school. Hence, the training does not begin in the nationwide at the same period. For example, the cohort of CQP students enrolled in November 2018 begun the level 1 of their training in August 2019 in some VTCs, in September and October 2019 for other VTCs. According to the training plan, apprentices may participate in the theoretical and practical sessions one day per week and work the rest of week in their masters' workshops. But, our interviews revealed that apprentices are trained in intensive training conditions. For example, VTCs gather apprentices who live far from the centres, for two weeks or 16 days for intensive training (Mrs L. A., Swisscontact, September 2018).

According to another respondent:

> The decision which consists of gathering apprentices for intensive training was made together between department in charge of TVET, donors, Swisscontact and training providers. In 2014, apprentices in some regions such as Borgou were delayed regarding the training planning. In this period, it was necessary to state on the solution to lead apprentices to take their final evaluation. Therefore, we agree with the strategy of gathering apprentices for intensive training in VTC (M. M., Resource person from FDEFCA, October 2019).

It's reported that VTCs adopted this training approach when a CQP cohort delayed to begin the training program. The major challenge that remains for student is that some apprentices have low literacy level compared to others to achieve competency in accelerated training conditions. Apprentices hardly achieve knowledge because they have dropped from primary school many years before their entry in the dual training program.

VTCs provide training depending on each occupation. Nevertheless, there are basic French lessons on general topics for the theoretical sessions and they are also occupational training. For example, apprentices learn "technology"[30], "drawing skills"[31] and "design patterns"[32] in sewing. During the practical sessions, CQP apprentices are trained utilised specific occupation materials (figures 6; 7 and 8). Therefore, VTCs must provide textbooks, materials and equipment for the training. Vocational training centres must follow the competency profile chart for the training. This implies that training centres must be accredited by the Ministry in charge of TVET and FODEFCA before getting contract for the dual training.

FODEFCA and DIPIQ are charged of monitoring and follow-up of the training in VTCs. However, the supervision of the training centres is not frequently done because of the lack of financial resources.

**Figure 6:** *Journeymen performing tasks in a wood carpentry*

[30] *Technologie*

[31] *Dessin*

[32] *Schéma*

**Figure 7:** *Materials for practical session in Electricity*


**Figure 8:** *Electric sander for wood*

- On-the-job training in the masters' workshops

Dual training suggests that school collaborates with companies or industries in which apprentices are trained. The German and Swiss dual VET systems

consist in general education in schools combines with vocational education in companies (Gessler, 2017). Thereby, dual training emphasizes two main principles: the duality of the training and the primacy of occupation (Davodoun, 2011b). This implies that apprentices must be trained in two separate spaces vocational training centres and workshops. The specificity of the Benin dual training is that VTCs offer low general instructions and technological education compared to technical high schools[33]. Master craftsmen are charged of work-based training in the workshops accordingly to occupations.

In Benin, most master artisans work small workshop and household enterprises embedded in the informal economy. In the implementation of the dual apprenticeship training, CQP apprentices are trained within the masters' firms or workshops the whole duration of the program. Artisans must follow the competency profile chart. Overall, master people and advanced learners[34] are those who train apprentices based on their skills and the labour market. The training process in the workshop is organised in three phases: observation phase; skills acquisition phase by following instructions and self-performing work. First, apprentices learn from their masters and the other advanced learners by observation. Second, apprentices learn the tools of work and how to use them. Third, it consists of self-performance or reproduction of tasks and activities. This process is informal because of its non-prescriptive approach of learning. In the workshop, the training covers six days from Monday to Saturday and apprentices must work in the firm depending on the occupation and the master leadership. Apprentices always attend the workshop at 8:00 a.m. and can leave after the firm or workshop completes the daily tasks.

[33] *Lycées techniques*

[34] *Sous-patron*

### *3.4.4. Costs and financing of Benin dual apprenticeship*

The costs of this dual apprenticeship training comprise two distinct components. The share of costs includes the apprenticeship fees for on-the-job training in the workshops and the training grant for instructional and practical education offered in VTCs.

Before their enrolment in dual apprenticeship, apprentices must start the training in a master craftsman's workshop. To attend the work-based training in the workshop, apprentices and their parents agree with an apprenticeship contract. The training contract is either oral or in a written template which often includes the entrance fees, the tools box fees, the apprenticeship training fees and probably the graduation event paid by parents and relatives. The findings revealed that all the fees vary across occupations and the master artisan. For example, the entrance ceremony in building electrical system is estimated at USD 37.5, i.e. XOF 25,000 (interview, July 2019). According to the same source, the tools box is estimated at USD 30 (XOF 20,000). In the view of Davodoun (2011a), the apprenticeship fees can cost EUR 300 (XOF 200,000). Interviews with other master crafts people suggest that the apprenticeship fees can vary from USD 120 (XOF 80,000) to USD 450 (XOF 300,000). Although the graduation ceremony is banned by the apprenticeship acts, this closing event in traditional apprenticeship remains a widespread. It consists of celebrating the training completion and involves the participation of the whole community for the graduation of the apprentices. We will come back to this in chapter 6. But our findings cannot estimate the cost of this celebration because it also includes many in-kind and in-cash donations.

Among the different fees, the training fees are very important for master craftsmen because the apprenticeship training fees can be considered as a financial resource for the workshop production. In Benin, most apprentices

have poor living condition as they live in disadvantage backgrounds. Therefore, some parents do not pay the training fees to the master craftsmen. To this end, some apprentices have to work for the master for several months or years after completing the training in order to pay the apprenticeship fees. This additional work time in the master's workshop is also dedicated to the apprentices as work experience.

Regarding the training received in VTCs, its cost varies from each level of dual training. It's reported that Benin government bears 90% of the cost through FODEFCA scholarships and apprentices and their parents pay the rest of the share of cost. According to Swisscontact, this parental contribution dropped from 10 to 5 and to 3% in the period of 2003 to 2011 (Davodoun, 2015; David-Gnahoui and Ahouangnivo, 2017). FODEFCA pays per apprentice about EUR 160 to 400, i.e. XOF 108,000 to 252,000 per level (UNESCO-BIT, 2013; David-Gnahoui and Akouété-Hounsinou, 2015). Hence, the estimated cost for the three levels, ranges from EUR 480 to 1200 i.e. XOF 324,000 to 756,000. The 10% paid by the apprentice is estimated at EUR 30 per level, i.e., EUR 90 for the three levels (XOF 20,000 and XOF 60,000).

The financial resources used by FODEFCA are provided by the annual budget of the government, the support from foreign donors and the NGOs contributions. According to David-Gnahoui & Akouété-Hounsinou (2015) and Ferland (2016), donors' subsidy helped to pay an important part of the dual training costs to VTCs. Among donors, there are Danish Development Corporation (DANIDA), Swiss Department for Development Corporation (SCD), Swisscontact and French Development Fund (AFD) and the World Bank. The results the FODEFCA audit showed low satisfactory of the administrative and financial resources management for dual training

(Ferland, 2016). An official from SDC expressed the low satisfaction of their organization:

> "Through the PAFPAA project, the Swiss Agency for Development and Cooperation supported the CQP and the CQM programs. But we faced two major problems: the management issue of the coordination team and unsatisfactory" (Mr. A. SDC, 2018).

Consequently, FODEFCA does not have more financial resources to provide scholarships to many apprentices from the entrance test of 2018. Only 830 apprentices are selected to receive scholarship from FODEFCA: 593 are supported through the national budget and 237 apprentices supported by AFD through AFPIJE[35] project.

### *3.4.5. Summative assessment of CQP students and certification*

Apart from formative evaluation, a final assessment allows to provide the certificate to the beneficiaries. This exam is planned for each December a year by the department of evaluation and tests (DEC)[36] of the Ministry of secondary education and TVET. But, DEC does not organise regularly the exam. This summative evaluation process leads to the definition of many committees: (i) a committee that prepares examination, (ii) a committee which may supervise evaluation and (iii) a third committee for the post evaluation services for certification.

According to the legislation act (art. 10 of decree No. 0012/2006), the summative assessment of the CQP apprentices suggests 10% of the theoretical exam and 30% of the practical test to achieve a total grade. The rest of points is dedicated for formation evaluations through the class sessions. This formative evaluation consists of the theoretical session which marks 20% and 40% for the practical session (Davodoun, 2011b; Davodoun, 2015; David-Gnahoui and Ahouangnivo, 2017). Focusing on this grading

[35] Appui à la Formation Professionnelle et à l'Insertion des Jeunes (AFPIJE)

[36] Direction des Examens et Concours (DEC)

scale, it is noticeable that formative evaluations take 60% of the total grade. Meanwhile, apprentices stay 4 or 5 days in the masters' workshops and one day in VTCs. Even though master craftsmen may participate in grading apprentices, most of them we interviewed criticise VTCs for low collaboration with the trainers. Moreover, the formative as well as summative evaluation does not include the training in the workshops.

### 3.5. Effect of dual apprenticeship on the skills learning

To evaluate the effect of the dual system on the skills learning by CQP apprentices, we interviewed master craftsmen, apprentices and staff of Swisscontact. The core questions addressed to the different respondents are: "What makes CQP apprentice different from non-CQP apprentice?" and "what can a CQP apprentice do with what he / she has learnt from the program?".

In the implementation of dual apprenticeship, apprentices receive training in VTCs and are pleased to learn with the trainers and with other fellow learners. Besides, CQP apprentices have learnt in theory and practice, the different tools and materials for occupations which, are not often used in the workshops. A CQP graduate asserts the following statement:

> "In vocational training centres, we found and used tools which are not available in our master's workshop. I was very funny because we had this great opportunity to use them" (Mr. V. CQP graduate, hairstyling, October 2018).

The statement shows that make learning fun for apprentices is a great way to lead them to achieve. This is the most important experience shared by CQP apprentices. Hence, CQP apprentices know more than non-CQP apprentices about the tolls and materials used in their occupations. They also learn in interactive conditions by sharing their experience.

As CQP apprentices have received theoretical knowledge and perform more in practical sessions in VTCs than in the workshops, the results revealed that many apprentices were not willing to pursue anymore their training in workshops with the master craftsmen. Furthermore, some apprentices have developed strong competences in the workshops. Instead of taking advantages of the apprentices' competences, master craftsmen become jealous. Thereby, many master craftsmen refused to release apprentices to participate in the training. See the following quote from a staff of Swisscontact:

> "The direct effect of this training is that apprentices achieve more skills and efficiently use them in workplaces or firms. Considering this, some apprentices preferred to be trained only in VCTs while the training must follow the duality. Moreover, other apprentices show a lack of discipline in the master workshops …" (Mrs. D. C., expert of Swisscontact, October 2018).

Throughout this quote, it is noticeable that the positive effect of the implementation of the dual system has also led to negative behaviours from the apprentices. As response to solve this issue, master craftsmen, officials from the public institutions and staff of Swisscontact agree for providing training on capacity building to the master craftsmen:

> "In the future, it is necessary to train the master craftsmen before restarting the dual training otherwise, we will face the same challenge between apprentices and their masters" (M. Z., master craftsman, 2018).

An official of FODEFCA asserts that the program planned to provide a specific training for master craftsmen before starting. However, master craftsmen did not agree to receive any training in that period. Nowadays, most of the masters accept to receive this training in collaboration with the training centres.

> "We proposed that they (master craftsmen) be trained to reinforce their capacity but they did not agree. They did not see the importance of training on capacity building. Currently, they ask for training but we do not have financial resources to provide them training any more" (Mr. L. A., FODEFCA, 2018).

Through this statement, it is understandable that the implementation of dual apprenticeship in Benin has led master craftsmen to be aware of the necessity of the training on capacity building.

### 3.6. Analysis and discussion

The Benin dual training is a new style of apprenticeship for young people with prior education with a minimal literacy and numeracy levels. This chapter highlights the application modes of this innovation in the TVET sector. To attend the main findings, this research reviews the skills learning by the CQP students or CQP apprentices is the two separate training spaces i.e. vocational training centres (VTCs) and workshops. The chapter also utilised empirical data to analyse the implementation of dual training in the Benin context.

As aforementioned through the study of Davodoun (2011b), the first principle of the Benin dual training is the duality of the training. In the European countries such as Germany, Switzerland and Australia, where dual VET system meet the structure of the labour market, the duality consists of two weekdays of training in public vocational schools for general subjects with practical sessions and the rest of week in the workplace (Acemoglu and Pischke,1999; Tremblay and Le Bot, 2003; Gessler, 2017). In the Benin context, the public institutions that hold the charge of TVET have limited resources to build many vocational schools for dual training. During the pilot implementation of the dual system, VTCs were created to serve as public vocational schools for the training. According to the Benin education acts, private actors are allowed to participate in the national education (art. 15 of the law No. 17/2003). In line with this regulation, private actors, confessionals and associations or NGOs receive accreditations from the Ministry of secondary education and TVET in order to participate in the training program. VTCs may be competent in apprentices training for a

weekday out of 32 weeks per level. Those administrative arrangements can be linked to what the learning theory by (Illeris, 2009) suggested to be the external interaction process. The implementation of dual training in Benin showed that apprentices achieve in-depth skills which their masters did not earn in the traditional apprenticeship.

The social cognitive perspective of Perret-Clermont and Nicolet (2001), suggests that learners are able to develop cognitive capacities as they share work experience by working together. That is what the authors designated as social cognitive conflict. In VTCs, apprentices are trained to learn instructional education and practical ability about the technology in their respective occupation. Hereby, dual training offers accurate occupational skills that apprentices learn through the training sessions. Studies of Davodoun (2011b), David-Gnahoui and Ahouangnivo (2017) and Swisscontact (2017) reach the same findings regarding the growth performance of the CQP graduates. A study carried out by Swisscontact (2017) on the labour market permeability of 46 CQP graduates revealed that CQP graduates perform well their knowledge but have hard labour market entry because of their disadvantaged backgrounds. This is in line with the study of Langthaler (2015) that shows that the transfer of dual vocational training has little impact in a wider context.

There are many challenges through the dual training implementation. First, it's said that apprentices had low level of prior education and thus, developed inefficient skills acquisition. Moreover, the adoption of accelerated training sessions in VTCs has negative effect on the skills acquisition of many apprentices. This accelerated training consisted of a two weeks training strategy to tackle the training schedule due to limited financial resource to conduct vocational education and training. The ability to perform the skills learning also necessitates more practice. Those who are not able to practice

any more the skills learned during the dual training sessions cannot sustainably develop cognitive capacities. Hence, self-development of social cognitive capacity Illeris (2009) and social cognitive conflict Perret-Clermont and Nicolet (2001) are not sustainable in case of Benin dual apprenticeship.

Regarding the principle of primacy of occupation, dual apprenticeship recommends that vocational schools collaborate with companies between (Gessler, 2017). The findings revealed three categories of trainers in the dual training for VTCs: lead trainers37, local trainers/instructors38 and educational supervisors39. This framework should allow collaboration between VTCs and workshops to support the occupational skills update by artisans. However, it is noticeable that master people are not motivated to collaborate any more with VTCs and no communication notebook works. This is because apprentices tend to correct his/her leader in the workshop. This finding parallels with the results reported by Minghat and Mustakim (2017). Hence, the social environment of the dual training in Benin is not efficient. In a feasibility study of the dual VET system in Romania (EACEA, 2015), the participation of social partners was very relevant regarding the management and operational conditions of dual system. In the Benin case, Swisscontact developed 13 craft occupations in collaboration with CNAB and the participation of some craftsmen. The selection of these professionals was based on the social legitimacy of work experience among others. Though, it is noted that the introduction of dual system in traditional apprenticeship did not reach the global consultation of social partners, especially the master craft artisans. By analysing the success factors of dual

[37] *Formateur principal*

[38] *Formateur endogène*

[39] *Formateur de suivi*

VET system, Bliem et al., (2015) found that "Ownership by companies and social partners" governance and financing comprises a very important and first success factor. In order to enhance the quality of TVET in Sub Saharan Africa, Serumu (2019) recommends that stakeholders work in partnership to set better TVET institutions, to organize training and retraining programs for teachers and instructors, to tackle the mismatch of competencies in the labour market, to develop linkages between TVET institutions and industries…

### 3.7. Conclusion

To conclude this chapter, Benin government experiments dual training designed on the German and Swiss VET system. This research was conducted through a qualitative descriptive method to describe the program and analyse the skills learning and its effect on apprentices who participate. This dual training program combines training in vocational training centres and learning in the masters' workshops. The program has led to the curriculum development of craft occupations via a performance-based method so-called Develop a Curriculum (DACUM). It is found that the program is not implemented on a planned framework. Moreover, despite the involvement of artisans in the curriculum development and in the training implementation, the conception of the program does not receive a global consultation of the craftsmen and the local community for its acceptance. But, apprentices who participate in the program develop cognitive capacities as they are trained in VTCs with modern equipment, tools and materials. The adoption of accelerated training, the low prior education by apprentices, low collaboration between VTCs and workshops, and the expensive cost of the dual training, do not allow apprentices and graduates to sustainability of the self-development.

# Chapter 4: Craftsmen perception of dual apprenticeship or CQP program

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**Abstract**

This chapter aims to analyse craftsmen perception of dual apprenticeship in Benin. The introduction of dual system in traditional apprenticeship as a component of TVET consisted in setting new practices in traditional apprenticeship. The program requires that the apprentice is trained one day a week in a training centre and the rest of the week in the master's workshop. In this chapter we evaluate the perception of this dual training by adopting qualitative research method. It was conducted in Cotonou, Abomey-Calavi Parakou including the participation of the master crafts people such as artisans, apprentices, staffs of professional associations, trainers and heads of the vocational training centres. Purposive sampling and snowball sampling techniques were used to select 66 participants. We collected data through life-history and in-depth semi-structured interview. Findings revealed six adopters' categories. Innovators are those who contributed in the curriculum development. The early adopters comprise staff members of professional associations. Early majority and late majority adopters are two categories of artisan members of professional associations, especially leaders of associations in the local level. Laggards are crafts people who remain connected to the traditional apprenticeship. In addition to these five categories, we also identified the business users' category which gathers training centres that recruit their own CQP apprentices. Apprentices are motivated to participate in the program by curiosity and by explicit knowledge received in vocational training centres. Artisans' satisfaction is determined essentially by the formal certificate the apprentices earn in the program completion.

**Key words:** Dual Apprenticeship, Innovation, Adopters' categories, Motivation, Satisfaction, Parakou, Benin.

**Résumé**

L'introduction de l'apprentissage dual dans l'enseignement et la formation technique et professionnelle a établi de nouvelles dispositions structurelles dans l'apprentissage traditionnel. Les apprentis doivent aller une fois par semaine dans les centres de formation pour recevoir des cours théoriques et pratiques. En considérant cette alternance dans la formation, cette recherche s'est donnée comme objectif d'analyser la perception des artisans du modèle de formation professionnelle par apprentissage de type dual au Bénin. La recherche a adopté une méthode essentiellement qualitative. Elle a été conduite à Cotonou, Abomey-Calavi et Parakou avec la contribution des maîtres artisans, prenant en compte, les responsables d'associations, les apprentis, les formateurs de centres et les responsables de centres. Au total, 66 personnes ont été enquêtées par la technique de récit de vie et d'entretien semi-structuré.la théorie d'adoption et de diffusion d'innovation a permis d'analyser les résultats. En se basant sur la classification des catégories d'adoptants, les résultats de la recherche ont abouti à six catégories d'adoptants. En ajout aux cinq catégories d'adoptant selon le modèle théorique utilisé, la recherche a permis d'identifier une autre catégorie désignée sous le vocable de d'adoptants ou utilisateurs à but lucratif pour désigner les centres de formation qui recrutent pour leur propre compte les apprentis. Les apprentis CQP sont motivés à aller suivre la formation dans les centres par curiosité et les connaissances explicites qu'ils reçoivent. Les patrons quant à eux, sont satisfaits du programme dans la mesure où elle donne droit à un certificat officiel aux apprentis.

**Mots clés :** Apprentissage dual, Innovation, Adoptants, Motivation, Satisfaction, Parakou, Bénin.

## 4.1.Introduction

In chapter above, we described the dual system, how it is implemented in the Benin context. The results illustrated that, both informal workshops of the craftsmen and vocational training centres participate in the implementation. While craftsmen provide work-based training to the apprentices, the training centres offer vocational education. Thereby, dual apprenticeship leads to the combination of two training processes. While vocational training centres provide theoretical instruction and practical knowledge master craftsmen essentially offer practical skills to deal with the labour market supply. Sonnenberg (2012) stated that the dual training reform initiated in many sub-sahara African countries, such as Ghana and Senegal, has contributed in transforming traditional apprenticeship. This modernisation may take into account the specificity and nature of different categories of informal traders (Lesser & Moisé-Leeman, 2009). The reform contexts are a very important success factor. Considering this, we state that the artisans' satisfaction and the apprentices' motivation of the dual training reform influence their perception of the program.

The theory of adoption and diffusion of an innovation by Rogers (1983), suggests that individuals' perceptions of the characteristics of innovations predict their adoption. That means that understanding the perception of beneficiaries is very important to apprehend the adoption of an innovation. Hereby, the research sought the craftsmen perception of the dual training program to know what makes master artisans satisfied with dual apprenticeship training. The research examines also the motivation of the apprentices for this dual system. The research objective we fixed for this chapter is to analyse the masters' perception of dual apprenticeship training or CQP program.

First, we made a classification of adopters' categories among crafts people participating in dual apprenticeship since 2005. To this end, we focused our analysis on the communication techniques for craftsmen participation in the program. Second, we looked for relative advantages of master artisans and the apprentices' motivation to participate in vocational education in the training centres.

We designed figure 9 to build a conceptual framework based on the Rogers' (1983) of adoption and diffusion of innovation for our analysis of perception of the master craftsmen of the innovation of dual apprenticeship (fig. 9).

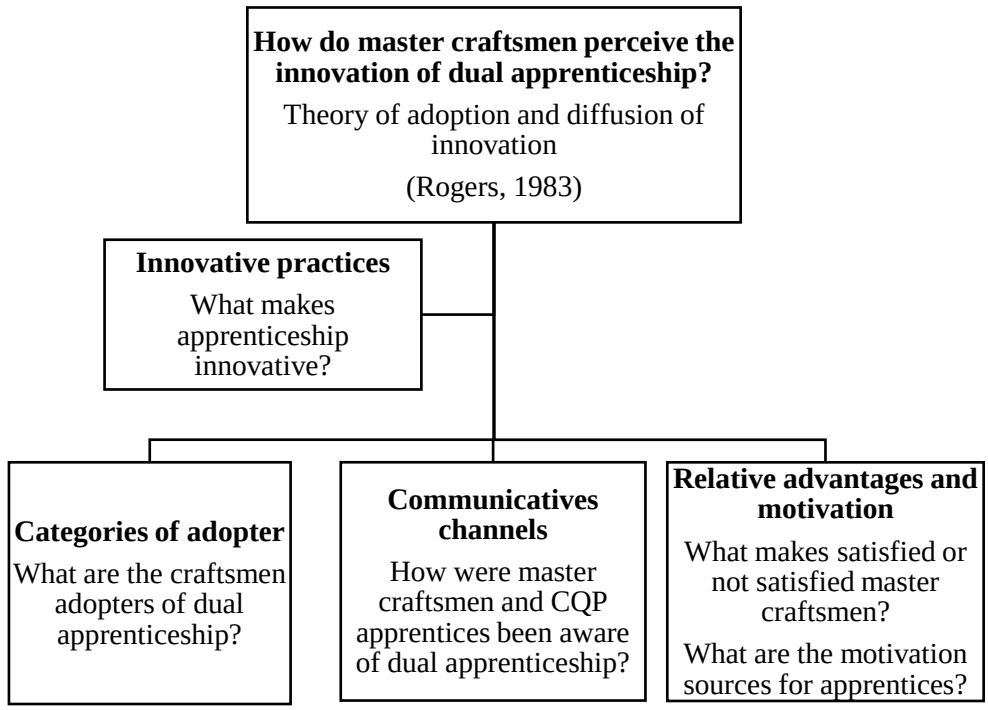


**Figure 9:** *Analytical framework of craftsmen perception of dual apprenticeship*

Through fig. 9, first we stipulate that craftsmen perception of the dual apprenticeship training begin with the identification of innovative practices

in apprenticeship. Hereby, we asked question to know "what makes innovative dual apprenticeship?". Innovation introduced in traditional apprenticeship through the dual training reform has been reported in the previous chapter. Second, we hypothesise that master craftsmen participate in the dual training program differently. In this regard, the classification of adopters will contribute to a full-understanding of the process of the introduction of dual training in traditional apprenticeship. Third, we state that the communication channels for the diffusion of dual training among crafts people play important role. And fourth, we suggest that the relative advantages for master craftsmen and the apprentices' motivation influence the participation in the training program.

### 4.2.Methods

To conduct this chapter, we also applied qualitative method to collected and analyse data. Cotonou, Abomey-Calavi and Parakou constituted the research area where we interviewed master craftsmen/women, staffs of professional associations, apprentices, trainers and heads of vocational training centres. We chose them using purposive sampling and snowball sampling techniques. In total, 66 actors were interviewed (table IV). We conducted life-history with master artisans to learn from their old experience in traditional apprenticeship before the reform of dual training. The individual semi-structured interview was utilised to investigate the participation of artisans, the different communication techniques, the relative advantages and the satisfaction of artisans, and the motivation of apprentice in participating in this dual training. A guideline was elaborated on the previous items for data collection. Data was analysed through content discourse analysis and descriptive statistics and we interpreted findings with the Rogers' theory of adoption and diffusion.

**Table V:** *Number of respondents per category*

| Category | Number of participants |
|---|---|
| Master craftsmen | 24 |
| Apprentices | 30 |
| Trainers/VTC | 7 |
| Heads of VTC | 5 |
| Total | 66 |

### 4.3.Adopters' categories and mobilisation strategies

#### *4.3.1. Adopter categories of the dual apprenticeship program*

The Rogers' (1983) theory of adoption of an innovation states that people adopt innovation in the different time sequence. Rogers distinguishes five adopters' categories: innovators, early adopters, early majority, late majority and laggards. In the findings interpretation, we matched each category to the master artisans who have participated in the dual apprenticeship training in Benin. Then, we found an additional category of dual training adopters which we named "business users".

**Inventors:** this category includes actors who are motivated to try new ideas. Rogers named those actors "venturesome". The communicative strategies and social networks through friendship are the channels they develop to share innovation. In the adoption of dual training in Benin, inventors are craft artisans who participated in the elaboration of curricula for the implementation of dual apprenticeship schemes. Also, we include professional association at the national level who are part of stakeholders of dual apprenticeship in Benin.

**Early adopters:** this category of adopters in the classification by Rogers (1983) represents all integrated actors from a local social system. Leaders of groups are those who can influence the decision to adopt an innovation.

Leaders play important role in the innovation diffusion process, by giving example in adopting innovation. In the Benin dual apprenticeship, leaders of professional associations at local and district levels are considered as the early adopters. In the dual training, leaders of professional association are in charge of the mobilisation of potential candidates to participate in the enrolment in this dual training program. Hereby, they contributed to the enrolment process of the apprentices in the entrance test of dual apprenticeship. Early adopters are crafts people members of professional associations.

**Early majority:** it is comparable to the category of early adopters because they interact with their network. In this period, the decision to adopt an innovation may be longer than the two other categories. Thereby, leaders of professional associations at the national, district and local levels are still dominant and play important role in the diffusion process.

**Late majority:** the late majority adopt innovation by the necessity to do so. There is no risk for them to adopt an innovation. They adopt innovation because everybody adopt. Thus, the social pressure influences their positive response to innovation. In this research, it is found that master crafts people who are classified in this category are not essentially members of professional associations as in the previous groups.

**Laggards:** in the process of the diffusion of an innovation, laggards are those people who belong to the last category of Rogers' classification of adopters. This category includes those actors with disadvantaged position as they have no decision power to adopt an innovation. They adopt an innovation while comparing what have been done in the traditional habits to what suggests the new ideas or innovation. In our research, laggards comprise master crafts people who remain connected to the old practices in traditional apprenticeship.

Going beyond Rogers' classification of adopters, the research findings have revealed another category so-called "**business users**". According to the articles 6 and 7 of the apprenticeship act 042/2005 which introduce dual training in the Benin TVET system, public institutions as well as private actors may participate in vocational education and training. Our findings figured out that the training centres recruit their own apprentices to apply for the entrance CQP test. We used the concept of "business users" to name this category of the training centres that recruits their apprentices for the CQP program. Considering their position in this dual training as the owners of vocational training centres (VTCs), they are not adopters, but they use dual training to raise their business.

After discussing the different categories of the dual training adopters, we identified the communication strategies used to lead craftsmen and their associations aware of the program.

### *4.3.2. Mobilisation strategies for dual apprenticeship*

Three main strategies for the mobilisation of artisans were identified: social media mobilisations, awareness campaigns at national, regional and local levels, field visits carried out by the leads of the training centres.

Public institutions are responsible for the social media mobilisation through TV and radio sessions on the public channels. This is supported sometimes by donors through the share of experiences in dual system. For examples, a video was carried out in 2017 on the apprenticeship reforms, especially the dual training so-called dual apprenticeship. By following the link in foot page[40], you can watch an illustration. From 2016 to 2018, the CQP entrance

[40] http://www.web-edu.tv/index.php/2017/03/07/la-certification-dans-le-systeme-informel-de-formation-professionnelle-au-benin-un-gage-de-qualite-et-de-reconnaissance-sociale/

test has not been taken place. Before launching it in 2018, a TV session was produced and reported on the experience of Swiss dual system in collaboration with a research team from the University of Abomey-Calavi (UAC), University of Parakou (UP) and officials from D-TVET, CNAB and FODEFCA. This TV session can be watched following the link indicated in foot page[41]. In November 2018, the number of the candidates for CQP entrance test increased to 8,413 applicants. The following figure shows the enrolment of the apprentices in the entrance test between 2007 and 2018:

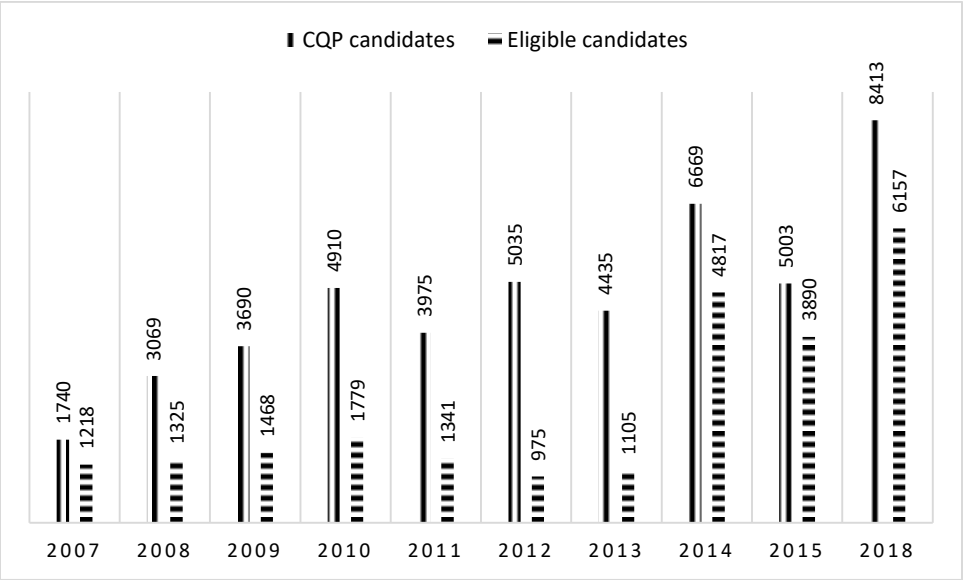


**Figure 10:** *Progress of CQP candidates for entrance test 2007-2018*

Source: own depiction based on the data provided by D-TVET

Figure 10 shows an increasing of the CQP candidates across the years with the highest number in 2018. However, the number decreased with low enrolment for the entrance test in 2011, 2013 and 2015. This can be

[41] https://www.youtube.com/watch?v=YqZDtfY9GQA

explained by the fact that in 2010, 2012 and 2014, Benin government did not dedicate sufficient financial resources to sponsor the eligible apprentices who participate in the entrance tests. Hence, in the following years i.e. 2011, 2013 and 2015, the number of apprentices has decreased.

In addition to the TV sessions, public institutions at the national and regional levels proceed by the radio sessions through the press releases. In 2020, the Benin government launched the recruitment of 1,000 artisans to be trained for a month of accelerated training to provide the CQP certificate to them. This policy lies in the new strategy for TVET validated in September 2019. To increase the social mobilization for the participation of artisans, the Minister of secondary school and TVET made a press release. The heads of the regional Department of TVET also made press releases to support this policy through press releases (see appendix 2).

Professional associations also contribute to the master artisans' mobilisation through the awareness campaign from national to regional and to local community levels. Staffs of CNAB conducted the awareness campaigns to the 80 associations[42] which exist in the 77 districts. Professional associations at the district level have to interact with those at the local level in order to share information among craftsmen. In developing a chain of information, professional associations work to make the dual training program more attractive for craftsmen and their apprentices.

> "We held two awareness campaigns into the nationwide in 2015. We did not attend all the regions but our memberships from professional associations at district and local levels are still working to share information about the CQP program" (J. A. President of CNAB, Cotonou, 2018).

This quote of the president of CNAB elucidates the necessity of the collaboration with other stakeholders, notably crafts people associations and artisans to achieve the reform goals.

[42] *Collectifs des artisans*

In contribution to the mobilisation strategies, vocational training centres develop more field visits on the master craftsmen workshops in order to recruit many apprentices for the CQP entrance test. The discussion with one of the heads of vocational training centres revealed the evidence:

> "The mobilisation of apprentices for CQP application is entitled to the professional associations at district level. But later, we (training centres) also engage in the mobilisation by visiting the craftsmen workshop in order to recruit more apprentices who will apply for the entrance test […]" (Mrs. S. D. B. L., head of the training centre, hairstyling, Parakou, 2019).

The quote shows how the role has progressed from professional associations to vocational training centres. We made an in-depth analysis of the actors or stakeholders in the program, their role in chapter 5 (Dual apprenticeship in Benin: pitfalls and strategies of the stakeholders). For now, let us learn about the satisfaction and motivation of craftsmen/women about the program.

## 4.4. Introduction of the dual system in the traditional apprenticeship: relative advantages and motivation

### *4.4.1. Relative advantages for the master artisans*

The master crafts people we interviewed have a positive view of the dual training program for two reasons. First, master craftsmen have well-perceived the dual apprenticeship program because of its formal accreditation that leads to the Certificate of Professional Qualification (*Certificat de Qualification Professionnelle* – CQP certificate) graduates receive. For most artisans, this certificate is equivalent to the Certificate of Professional Aptitude[43] which is the lower secondary TVET graduation. The following quotes illustrate the evidence:

> "The CQP certificate is an important degree introduced in the apprenticeship system. It is currently the highest graduation that exists in the apprenticeship system. Many of my colleagues who graduated with the CQP certificate were recruited in the public sector. Hence, CQP certificate gives access to the public function" (B. A, CQP graduate, sewing, Parakou, 2020).

[43] *Certificat d'Aptitudes Professional* (CAP)

> "Craftsmen were tending to be reluctant to participate in the program because it is addressed also to masters as well as apprentices. However, they were also eager to experiment the program whether it will fill some expectations such as the accreditation of traditional apprenticeship and the certification" (A. M. staff from professional association, Parakou, 2019).

Second, the program is well-perceived because it has contributed to the occupational skills development. In the master craftsmen view, the program has led to the definition of the standards of the training and the qualification norms through the curriculum design. In chapter 7, we argued the evidence that the dual system has generated important changes in traditional apprenticeship.

Despite the positive perception of the CQP program, master craftsmen revealed three main limitations. First reason, the program is addressed to apprentices who only completed the last two years of the primary education that corresponds to the level 1 of the ISCED (literacy and numeracy). This education level excludes the apprentices who do not achieve the literacy requirements to participate. The training providers from the training centres found that some CQP apprentices meet the literacy requirements but do not have adequate literacy and numeracy levels to achieve much knowledge. Second reason, the scholarship offered by FODEFCA is not often enough to enrol many apprentices in various occupations in which the program is implemented. The amount of the scholarship offered in each occupation depends on the fund available and on the priorities of the government which also vary across the years. Thereby, the number of the scholarships is very low when there is low financial support from donors (figure 10 and "Cost and financing of dual apprenticeship" in chapter 3). This affects the implementation of the program which does not follow an adequate planning as it exists for schools' programs. Third reason, the master craftsmen revealed that the governance and the management of dual apprenticeship are

essentially held by public institutions (chapter 5 for the role of each institution). Hereby, the master craftsmen think that they are low involved. The following quotes state:

> "It is the public institutions that are responsible for the management of the dual system from the recruitment phase to the implementation of the program and its certification. We are not involved in the definition of priorities of the government for the apprenticeship system" (M. S., Master craftsman, metallic construction, Cotonou, 2019).

> "Our staff members of associations participate in the conferences in which they are invited. But I think that, most of the government priorities for the apprenticeship system are not built in collaboration with private sector. Furthermore, the professional associations in crafts sector are not strong to persuade public officials during the meetings. Hence, we are not well-involved in the decision making for apprenticeship the system.

The quotes elucidate two related challenges: the involvement scale of the business sector in the reforms carried out in the apprenticeship system and the robustness of the professional associations. Despite the participation of the staff members of professional associations in the reforms, master craftsmen found that their involvement must be improved.

We learnt about the relative advantages for craftsmen and some limitations in the artisans' view. In the following subsection, we study the motivation of the apprentices to participate in the program.

### *4.4.2. Motivation sources for participating in dual apprenticeship*

We interviewed 30 CQP graduates and apprentices to apprehend their motivation to participate in the vocational education offered by VTCs. First, we asked them the question " How did you know the about the dual apprenticeship program?" The figure presents the responses from the interviewees:

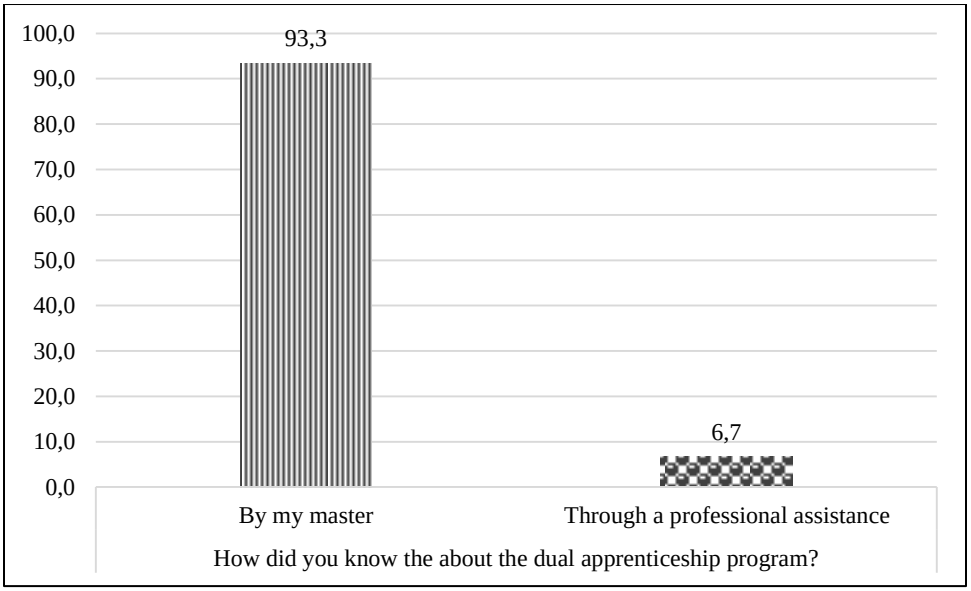


**Figure 11:** *Sources of Knowledge of dual apprenticeship*

Figure 11 shows that most apprentices know about the dual training program through their master craftsmen. This finding displays the evidence that the community-based mobilisation among artisans used were essentially addressed to reach craftsmen / women through their professional associations. Thereby, apprentices get access to information mostly through their masters. Even though these strategies were used in order to reach an important number of craftsmen/women, the research found that many craftsmen/women do not participate in the associations.

The research sought the motivation sources of the CQP apprentices to participate in this dual system. We asked them the question: "What makes you motivated to take part in vocational education in the training centres?"

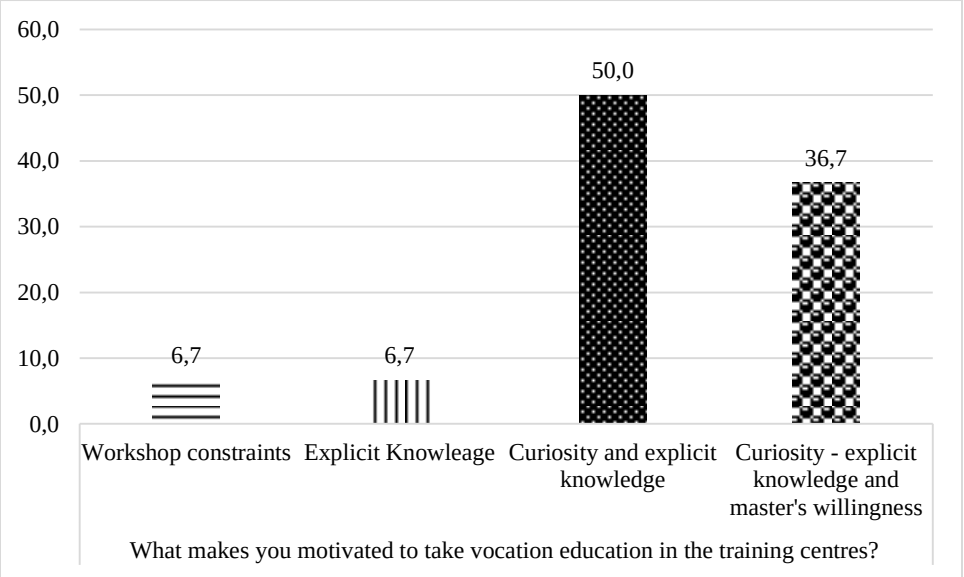


**Figure 12:** *Motivation sources for CQP apprentices*

Figure 12 displays the significance of the modality "curiosity coupled with explicit knowledge". This modality was the most significant for 50 percent of CQP graduates interviewed. In the rest of the interviewees, 36.7 percent pointed out the modality "curiosity, explicit knowledge and master's willingness". Hence, the results on the motivation for apprentices show three important modalities: curiosity for knowledge, explicit knowledge and the master's willingness to release apprentices for vocational education. The other modality that is not significant is "workshop constraints". The workshop constraints mean that the work conditions are difficult for the apprentices. In this regard, we asked apprentices to know the relative advantages of vocation education received in the training centres (figure 13).

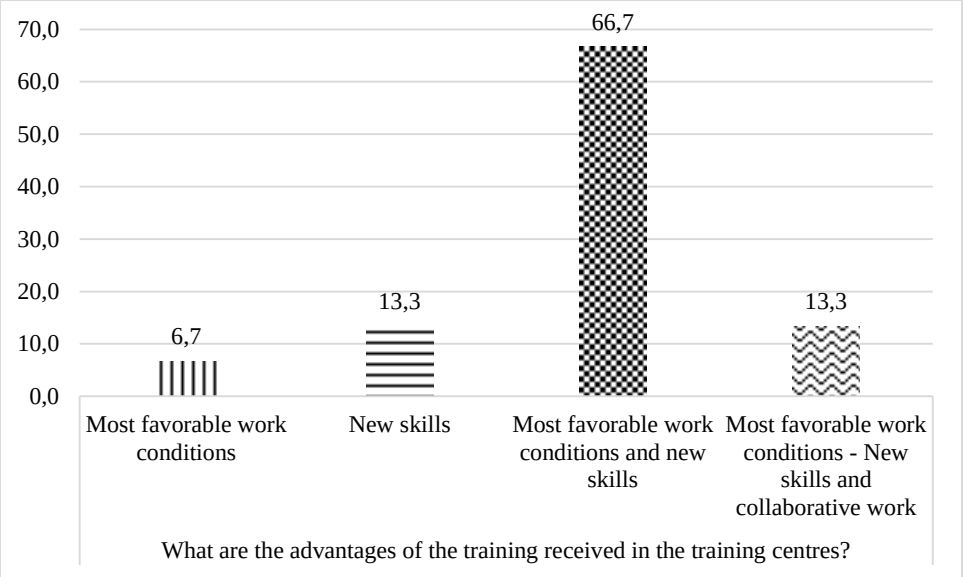


**Figure 13:** *Relative advantages for CQP apprentices*

The most significant response regarding the advantages CQP apprentices about the vocational education they receive in the training centres combines favourable work conditions and the new skills they earn. One of the CQP graduate asserts:

> "I was very eager discover what happens in the training centres; it is very interesting. We were trained on the materials, how to use them and we use them to practice" (Mrs. E. A., CQP graduates, Parakou 2020).

The quote also underlines the importance of work conditions as a modality which includes the latest technology used for materials and equipment. The new skills refer to the competency that apprentices learn in the training centres.

### 4.5.Analysis and Discussion

Our analytical framework was built from the theory of Rogers to understand the adoption and diffusion of innovation. Data analysis figured out three major points in the innovation diffusion process: the strong influence of professional associations in the mobilisation strategies, the formal accreditation of the program and governance and management challenges.

In the mobilisation process, social media, TV and radio sessions and press releases were the main mobilisation channels. The findings revealed that professional associations at the national, district and local levels have played an important role as they are committed to make craftsmen aware of the dual training program. As vocational training centres in the private sector need to contract with FODEFCA, leads of those institutions also engaged in the mobilisation through field visits to the master artisans' workshops for the recruitment of apprentices. This shows that when craftsmen and their associations are committed to roles, they contribute to support the innovation.

Even though master craftsmen are reluctant to adopt the innovation, the review of the relative advantages illustrates their willingness to experiment new approach. Dual training leads apprentices with prior education to earn a formal certificate (CQP certificate) while those apprentices without any educational background, are not eligible for the program. This finding matches to those by Sonnenberg (2012) in Senegal and Ghana where vulnerable and marginalised young people are excluded from the skills training programs. However, CQP certificate and curriculum development for the training are the important advantages in the view of the master craftsmen. Considering this, we can state that dual apprenticeship training matches to the expectations in that it improves skills development in the crafts sector. The introduction of the program leads to the formal recognition of skills learning in the informal sector and aims to upgrade traditional apprenticeship. For the CQP apprentices/graduates, the improvement in the learning conditions and the acquisition of new skills represent the key advantages. Hence, curiosity and the improving pedagogy of learning influence the motivation of the CQP apprentices/graduates. This result was supported by Walther (2008), who presented the evidence that the formal

certificate CQP and the social validation of the craftsmen's competence are sources of motivation.

Apart from these positive aspects of the program, the research revealed that there is a great challenge with the robustness of the professional bodies that represent craftsmen in the program. The governance of the program, its management and financing are essentially held by public institutions and donors rather than public and private sectors share power and roles. A study by Cros, et *al*., (2009) has already shown that curriculum reforms through the competence-based approach in Africa faces challenges of management, planning and time management. David-Gnahoui & Akoute-Hounsinou (2015) also highlighted the inefficacity of the financing model of dual apprenticeship in Benin. However, the robustness of the private institutions or business sector in the governance, management and financing of this dual apprenticeship is not studied. We also do not go in-depth regarding the measurement of the robustness of the private institutions because, this requires specific methods and tools.

### 4.6.Conclusion

Following the Rogers' classification of adopters, we found that innovators are crafts people who participated in the curriculum development and the members of professional associations at the national level. The early adopters include staff members of professional associations at the regional and local levels. Early majority and late majority adopters include master craftsmen members of professional associations, especially leaders from associations in the local community. Laggards are those who remain connected to their traditional custom of the apprenticeship system. In addition, the findings suggested another category that we named "business users". This category is applied to vocational training centres that recruit their own apprentices for the CQP entrance test in order to maximise their

training contract with FODEFCA. Although the introduction of dual training was supported more by donors, this chapter showed that it has increased the traditional apprenticeship and its accreditation. There are the most two important points on which master craftsmen perceive well the program. CQP apprentices who participate in the program are motivated by curiosity and explicit knowledge. The literacy conditions to applying for CQP candidates exclude many young people with no prior education. Nevertheless, the research findings show that the governance of the program and its management are essentially held by public institutions whereas the financing is supported by donors. For further understanding of the actors and institutions involved in the program, the following chapter focuses on their classification and their roles and analyses their ability to steer the program in direction of their interests.

# Chapter 5: Dual apprenticeship in Benin: strategic actors and roles

This chapter has been published as a book chapter:

Bankolé, R. A., Nouatin, S. G., & Gandonou, E. (2019). The dual apprenticeship in Benin: Strategic actors and roles. In D. Amouzouvi, *Mélanges en l'honneur du Professeur Titulaire Emérite Albert J. NOUHOUAYI*. Cotonou: Edition LARRED. ISBN: 978-99982-0-229-0, Université d'Abomey-Calavi - pp. 537-558.

**Abstract**

This research deals with the role of Benin TVET actors/organizations, their interests and strategies used in the implementation of dual apprenticeship in Benin. The introduction of dual apprenticeship has led to involvement of many actors from the public as well as private sectors for its implementation whereas in traditional apprenticeship, master craftsmen and professional associations are in charge of the training provision. The research postulates that the introduction of the dual system has generated structural and institutional changes in the management of the Benin apprenticeship system. The qualitative descriptive method was used to collect data through literature analysis, individual semi-structured interviews and direct observation. In total, 42 actors were interviewed using purposive, snowball and accidental samplings in Cotonou, Abomey-Calavi and Parakou. The institutional theory of organization and actor-oriented perspective was applied to analyze actors' capacities to act in the system. The results showed that some public actors/organizations involved do not play any role. Through the roles of government and donors, there is a positive collaboration in the experience, the transfer of competencies and in the allocation of financial resources. The research found that the skills development and the implementation of the dual apprenticeship program are sources of business for DACUM facilitators and craftsmen. In the evaluation and certification of the CQP competence qualification, while public institutions are subject to prejudice in the composition of the examination boards, the research revealed the persistence of the graduation ceremony.

**Key words:** Technical vocational education and training, Dual Apprenticeship, Strategic Actors, Participation, Benin.

**Résumé**

L'introduction de l'apprentissage dual a conduit à une reconfiguration de plusieurs acteurs/institutions du secteur public et privé alors que la gestion du système d'apprentissage traditionnel avait été sous la charge des maîtres artisans et de leurs associations. Ainsi, l'objectif de cette recherche vise à présenter les acteurs, à décrire leurs rôles et les stratégies adoptées pour se repositionner et sauvegarder ses intérêts. La méthode qualitative a été utilisée pour conduire cette recherche. Elle a été menée à Cotonou, Abomey-Calavi et Parakou. La méthode de collecte des données s'est basée sur la méthode qualitative descriptive en raison de la nature des données. L'analyse documentaire, l'entretien semi structuré et l'observation directe sont les techniques utilisées pour la collecte des données. Au total, 42 personnes ont été enquêtées et sélectionnées par choix raisonné et boule de neige. La théorie institutionnelle des organisations et l'approche centrée sur l'acteur ont servi de modèle thorique d'analyse. Il en découle que tous les acteurs/institutions impliquées ne jouent pas des rôles décisifs. Il est noté une bonne collaboration entre les institutions publiques et les partenaires dans la mobilisation des ressources financières et dans le transfert des compétences. Cependant, la collaboration entre les formateurs et les maîtres artisans est faible. La recherche a révélé que le développement des métiers et la mise en œuvre de la formation sont sources de "business". Dans le processus d'évaluation, des préjugés sont recensés sur la composition des jurys de l'examen du CQP organisé par les structures publiques. Quant à la certification du programme, il est noté la persistance des cérémonies de libération qui sont proscrites avec la formalisation de l'apprentissage.

**Mots clés :** Enseignement et Formation Technique et Professionnelle, Apprentissage dual, acteurs stratégiques, Participation, Bénin.

## 5.1.Introduction

The introduction dual training in apprenticeship as part of TVET system has led to institutional reform. For several years, the management and the regulation of the apprenticeship system were supported by master craftsmen and their associations. According to Davodoun (2007), the Benin government had interested for the first time ever, in the crafts sector in 1976. However, the government had undertaken initiatives for the crafts sector in 1990s. In 2001, a crafts code No. 98-037/2001 for regulating the sector was elaborated and voted Davodoun (2007). The accreditation of the apprenticeship system was carried out in 2005 with decree No. 117/2005. As mentioned before, this reform of the dual system was stimulated by a German development agency to support public institutions to experiment with dual apprenticeship. At the time when apprenticeship is accredited as a component of TVET, the government built an institutional and organisational framework for the governance and the management of the apprenticeship system. The new governance of the apprenticeship system has led to the creation and distribution of roles across public and private institutions. Walther (2008) and Sonnenberg (2012) highlighted the evidence of this distribution of roles in their studies. In most of the cases, public institutions are in charge of the governance and the management. Private institutions are involved to collaborate with public institutions in order to address challenges. Based on these remarks, we postulate in this chapter that dual training has influence the share of roles and institutional frameworks.

Institutional theory of organisation by Tolbert & Zucker (1996) was used to analyse the institutional framewok of dual apprenticeship. Aforementioned theory of organisation, it aims to analyse the process through institutions are strongly established. Following the three phases of the theory suggested by Tolbert & Zucker (1996), we describe the institutions involved in the

implementation of dual apprenticeship. In the preinstitutionalization or "habitualization" phase, the authors emphasized on the structural arrangments established to resolve problems. We applied by identify TVET institutions involved in order to manage dual apprenticeship. In the semi-institutionalisation, it is stated that actors develop and consolidate new practices in order to strenghen the organisation. We use this approach to analyse the role of actors/institutions involded in dual apprenticeship. In full-institutionalisation, the oragisation is seen as strong. Based on the previous two phases, we conclude in the third phase by offering our view on whether the TVET institutions are strong enough to conduct a dual apprenticeship program in the Benin context.

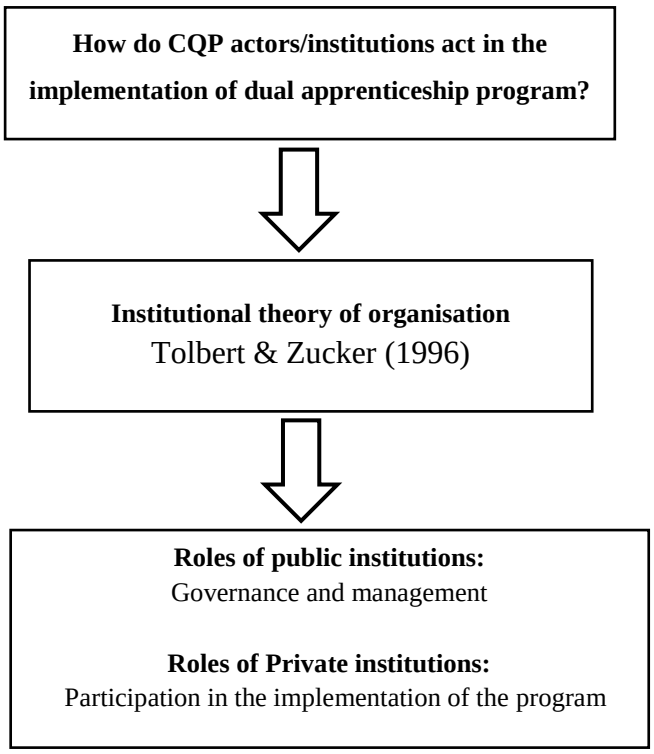


***Figure 14:*** *TVET institutions analysis framework*

In the following subsections, we first depict the methodological approach used, and second, we describe the roles of public and private institutions involved in dual apprenticeship.

### 5.2.Methods

The dual training program is implemented in the 12 departments of Benin. However, this research was conducted in Cotonou, Abomey-Calavi and Parakou. The research used a descriptive qualitative method comprising three techniques to collect information. First, we used literature analysis to collect and analyse information from existing literature. Second, individual semi-structured interviews were conducted with interview of officials of the public and private sectors, as well as consultants and craftsmen. The actors were selected by three sampling techniques: purposive sampling to select actors from TVET institutions, donors, members of organizations of craftsmen[44]. Snowball sampling was applied to find some resource persons and academia. In total, we interviewed 42 actors.

**Table VI:** *Number of participants per category*

| **Category** | **Number respondents** |
|---|---|
| Officials from public institutions | 14 |
| Donors | 04 |
| Consultants / academia | 05 |
| Members of craftsmen organizations | 19 |
| **Total** | **42** |

[44] Confédération Nationale des Artisans du Bénin (CNAB)

## 5.3.Implementation of dual training in Benin: strategic actors and roles

### *5.3.1. What have we learnt about CQP actors based on the dual apprenticeship acts in Benin?*

Through decree No. 117/2005, consolidated by decree No. 641/2010, the Benin government created two training programs for the certificate of professional qualification[45] after completing dual training and the certificate of occupational qualification[46] to graduate upgraded informal apprenticeship. By decree No. 118/2005, the Benin government introduced the implementation of dual apprenticeship in the TVET sector. As a member of West African Economic and Monetary Union[47] (WAEMU), Benin has also approved the regulation No. 01/2014 of the craft occupations and apprenticeship in WAEMU region.

According to the two decrees (art. 18; 16) and the WAEMU regulation, there are four main institutions which must be involved in dual apprenticeship. These institutions are:

- Ministry of Secondary Education and Technical Vocational Education and Training[48];
- Ministry of Labour and Public Service[49];
- Ministry of Art, the current Ministry of Small and Medium Sized-Enterprises and Employment Generation[50];
- Private actors as training providers.

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[45] *Certificat de Qualification Professionnel* (CQP)

[46] *Certificat de Qualification aux Métiers* (CQM)

[47] *Union Monétaire Ouest Africaine* (UEMOA).

[48] *Ministère des Enseignements Secondaire, Technique et de la Formation Professionnelle* (MESTFP).

[49] *Ministère de du Travail et de la Fonction Publique* (MTFP).

[50] *Ministère des Petites et Moyennes Entreprises et de la Promotion de l'Emploi* (MPMEPE).

However, it is noticed that there are more actors/institutions involved than specified by the acts. In the next sub-section, a detailed knowledge is provided about all the actors/institutions and their roles in the implementation of dual apprenticeship in Benin.

### *5.3.2. Public actors / institutions and their roles in the dual training program*

Through the literature and results of interviews, four public institutions and five private institutions are involved in Benin dual system.

In the public sector, the first institution involved is the Ministry of Secondary Education and Technical Vocational Education and Training[51]. Five directorates play big roles in this ministry:

- Department of technical vocational education and training[52]: DETFP is an education agency for the ministry in charge of TVET in Benin. It plays a decisive role of the implementation of TVET policy. On dual apprenticeship, DETFP holds the recruitment test of the CQP candidates who will be eligible for the scholarships. The directorate is involved in the accreditation for "private vocational training centres"[53].
- Department of pedagogical inspection, innovation and quality [54]: DIPIQ is charged of pedagogical inspection, quality assurance of the training, administrative and financial inspection. Because of the lack of financial resources, DIPIQ does not play this role:

> « […] Due to the lack of financial resources, the pedagogical inspection and control are not regularly done. Inspectors provide

[51] *Ministère des Enseignements Secondaire, Technique et de la Formation* Professionnelle (MESTFP).

[52] *Direction de l'Enseignement Technique et de la Formation Professionnelle* (DETFP).

[53] *Opérateurs de formation*.

[54] *Direction de l'Inspection Pédagogique de l'Innovation et de la Qualité* (DIPIQ).

> evaluation once instead of the three times planned for each level of dual apprenticeship » (Mr. A. D. D-TVET, 2018).

- Institute of curricula design and capacity building for trainers: the role of INIFRCF[55] is to design and review curricula and to provide training on capacity building for craftsmen.
- Department of test and exam[**56**]: DEC is an education agency for the ministry of TVET that deals with the recruitment test and the final evaluation for dual apprenticeship. DEC also holds the role of the CQP certification jointly with DETFP.
- Technical high schools and vocational training centres in public sector: Both technical high schools[57] and vocational training centres[58] are involved in providing the training. In 2016, the Ministry in charge of TVET identified 51 public and 60 private vocational centres in which the dual training is delivered (MESTFP, 2016).

Second, another important public organization involved in dual apprenticeship is the Ministry of Labour and Public Service[59]. Three main departments of this ministry are specified:

The Fund for continuing vocational education and training development and apprenticeship[60]: FODEFCA is the financial institution that has role to look for money and to manage the financial resources for developing the training schemes. FODEFCA was created by decree No. 053/1999 under the supervision of the Ministry of Labour and Public Service. In collaboration

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[55] *Institut National de l'Ingénierie de la Formation et du renforcement des Capacités des Formateurs* (INIFRCF).

[56] *Direction des Examens et Concours* (DEC).

[57] *Lycées techniques*

[58] *Centre de métiers* and *centre de formation professionnelle.*

[59] *Ministère du Travail et de la Fonction Publique*

[60] *Fonds de Développement de la Formation Professionnelle Continue et de l'Apprentissage*

with DETFP, FODEFCA grants accreditations to private training providers (*Opérateurs de Formation*-OF). After the entrance test, FODEFCA matches the CQP apprentices to vocational training centres (20-25 apprentices) and sponsors their vocational education for each level. FODEFCA bore 90 to 95 percent of the dual training cost to each apprentice for each level. FODEFCA controls and inspects vocational training centres and the masters' workshops. It is also in charge of the training on capacity building for craftsmen (Ferland, 2016). During the pilot step of the introduction of dual training, FODEFCA was involved in the curriculum development by Swisscontact. A DACUM facilitator from FODEFCA was trained on DACUM method.

> « FODEFCA must have a look at the curriculum development to appreciate what is financed for and also can contribute to the quality of the device [...] In the others view, FODEFCA must only be involved as financing agency as the banks do. But I think at the banks, people must first study the relevance of the project before granting you fund [...] FODEFCA must also play additional roles about the curriculum development. We were trained by Swisscontact as DACUM facilitators, hence, we can also work with the institute » (Mr L. A. FODEFCA, 2018).

Through this quote, FODEFCA has played the role of curriculum development and in this expert view; thus, FODEFCA finds itself in this role.

- Department of training on capacity building, labour force and apprenticeship[61]: DFCMA is charged of regulation of the relationship between the master craftsman and his/her apprentices through the design of the labour code and law.
- Head Direction of the training on capacity building and employability[62]: Jointly with DETFP, INIFRCF and FODEFCA, DGRCE is a public body that deals with the TVET policies,

[61] *Direction de la Formation Continue, de la Main-d'oeuvre et de l'Apprentissage* (DFCMA)

[62] *Direction Générale du Renforcément des Capacités et de l'Employabilité* (DGRCE)

accreditation to the private vocational training centres and controlling.

The third public organization we note is the Ministry of Art, the current Ministry of Small and Medium Sized-Enterprises and Employment Generation. In this ministry, we have only:

- Union of chambers of trades and crafts[63]**:** UCIMB is a semi-public representative body of craftsmen formed by 95 percent of professional associations and 5 percent of self-employed in craft occupations. Chambers of trades and crafts collaborate with local organizations of craftsmen and mainly with the National Confederation of Craftsmen (CNAB). UCIMB is created by decree No. 557/2003 under the supervision of Ministry of Art, the current Ministry of Small and Medium Sized-Enterprises and Employment Generation. There are six chambers set in six old departments/regions of Benin. Nevertheless, UCIMB does not play any role so far in dual apprenticeship in Benin. According to WEAMU code No. 01/2014, Unions of chambers must ensure the training of the master craftsmen and apprentices. They must be an adviser and craftsmen representative body to the public institutions (articles 72 et 78). Their roles are not observed in the organizing and the implementation of the dual apprenticeship in Benin. CNAB plays their roles instead. However, the chambers of trades and crafts might be more involved and would play important roles in dual apprenticeship in the future.

[63] *Union Inter départementale des Chambres de Métiers du Bénin*

### *5.3.3. Private actors / institutions and their roles in the dual apprenticeship program*

In the private sector, five categories of actors/institutions are involved in dual apprenticeship. Their roles are decisive for the training delivery.

- Private vocational training centres[64]: in this set of actors, there are master craftsmen who hold the individual training firms in which apprentices are trained. For dual apprenticeship, 13 trades are involved: hairstyling, metallic construction, sewing, electricity-building, cold and air conditioning, masonry, car mechanic, motorbike mechanic, wood carpentry, photography, plumbing and weaving. In the firm, apprentices work with their masters four to five days per week (Walther, 2008; UNESCO-BIT, 2013). The second category of actors/organizations is the vocational training centres in which apprentices receive general and specific education. They provide one day of training per week, i.e. 32 weeks of training for each of three levels. In certain regions with difficult access, vocational training centres proceed sometimes to gathering apprentices for two weeks of intensive courses. This strategy is used to cover the time allocation for the training while the conditions are less adapted for apprentices to receive regularly their training. First, 94% of the training providers interviewed think the skills achievement of the apprentices is very low. Second, some masters said that the content of the training is out-of-date, and therefore that the strategy of gathering apprentices for three weeks of intensive training is not a good method. However, vocational training centres have more equipment and materials to perform the training than the

[64] *Opérateurs de Formation* (OF)

master craftsmen's firms (Swisscontact, 2017). It is many advantages for apprentices who achieve more ability than their masters in the firms.

- Professional associations at local level of craftsmen and the national confederation of craftsmen: The local associations and collectives of craftsmen[65], and the national confederation of craftsmen (CNAB) play decisive roles in dual apprenticeship.

  First, the professional associations at district and local levels are in charge of sensitising master craftsmen/women. They must collect apprentices' documents to the CNAB's office for the entrance test. At this level, CNAB prepares the list of the apprentice candidates and jointly with DETFP, the test of entry is organized. CNAB and the local organizations of craftsmen bring awareness to master craftsmen through the broadcasts on radio and TV, roundtables and so on. Secondly, as the representative body of craftsmen associations, CNAB sets partnerships with public and private institutions and donors. They participate to designing and implementing of the policies for the craft development and training on capacity building for craftsmen.

- Apprentices and their parents: There is no apprenticeship without apprentices. Apprentices are the main beneficiaries of the dual system. They pay apprenticeship frees, about USD 68 to 507 (XOF 40,000 to 300,000) to their master depending on the occupation. These apprenticeship fees are born by parents or relatives. In the dual training, apprentices pay about 10 to 5 percent per each level of the training (Davodoun, 2011a; (David-Gnahoui & Ahouangnivo, 2017).

[65] *Organisations Professionnelles Artisanes* (OPA)

### *5.3.4. Other actors / institutions involved in the dual apprenticeship program*

In the other category of the CQP stakeholders, two actors/institutions: donors and consultants.

- Donors: They have held the implementation of this program since 1998 with German Development Corporation. In 2001, Swisscontact took the charge of the implementation of dual apprenticeship as an expert in curriculum development over the world. Swisscontact has been working on and developed at least 13 crafts by DACUM the method "Developing a Curriculum Method" in collaboration with the Benin government, craftsmen organizations and other donors. Dual apprenticeship in Benin has become an important tool for skills development in the crafts sector. One of the experts of Swisscontact says his/her optimistic view about the results: "The effect is that many apprentices achieve more competencies than their masters [...]" (Mrs. C. D., Swisscontact, 2018).

  Many donors have provided financing support to FODFCA: Danish Development Corporation (DANIDA), World Bank, Swiss Agency for Development Cooperation (SDC), French Development Agency (FDA). For example, World Bank took actions with PEJ project[66] and French Development Agency with AFPIJE project[67] and Swiss Agency for Development Cooperation by PAFPAA project. According to Ferland M. (2016), FODEFCA received about XOF 10 billion (USD 16,899,068)[68] from 2007 to 2014 from national and international donors. David-Gnahoui & Akouété-Hounsinou, (2015)

[66] *Projet Emploi des Jeunes* (PEJ)

[67] Appui à la Formation Professionnelle et à l'Insertion des Jeunes (AFPIJE)

[68] The change rate use is $ US 1 = XOF 591.749, 21 August 2019.

showed that the model of financing of dual apprenticeship is dependent on the financial aid of the foreign donors. Currently, there is no financial donor who support the program. Swisscontact remains the only one organization which provides technical support.

- Experts and researchers: Their position and the results of their studies influence the dual system. For examples, Davodoun (2003; 2006; 2007; 2008; 2011a; 2011b; 2015) provides detailed knowledge about the organisation of craftsmen associations and about the traditional apprenticeship. David-Gnahoui (2017) shows the importance of financial aid to the dual system. Ferland (2016) described the management of FODEFCA through the institutional audit.

Through the share of roles, a mapping of actors and organisations involved in dual training is designed. See figure 15.

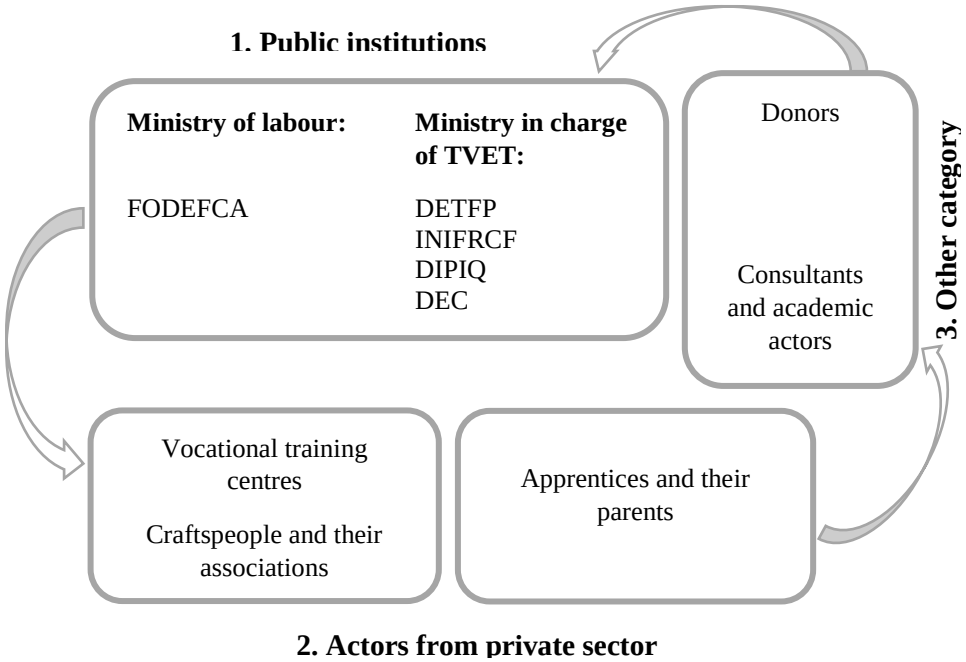


**Figure 15:** *Mapping of actors/institutions of dual apprenticeship in Benin*

### 5.4.Analysis and discussion

By using Tolbert & Zucker (1996), two major points are figured out in the analysis. First, there is overlapping of roles between public institutions. Secondly, the results showed good collaboration between public institutions and donors and some difficulties between firms and vocational training centres.

By applying the institutional theory by Tolbert & Zucker (1996), it is found that Benin government distributed roles into its public and private institutions in order to provide an institutional and organisational framework to the implemntation of dual apprenticeship. However, it is remarked that there is an overlapping of roles. First, DETFP, FODEFCA, DGRCE and INIFRCF share the role of accreditation of vocational training centres and the training on capacity building for the master craftsmen. The four public

institutions play the role of accreditation and the training on capacity building for master craftsmen. Secondly, for the masters' training, FODEFCA, DGRCE and INIFRCF are in charge of the charge of the same role. And third, FODEFCA and INIFRCF strive for the curriculum design. Thereby, five public institutions play strategic roles in the implementation of dual apprenticeship in Benin: DETFP, INIFRCF, DIPIQ and DEC from the Ministry in charge of TVET; and FODEFCA from the Ministry of Labour and Public Service. Trade union and crafts chambers (UCIMB) do not play any role in the implementation of dual apprenticeship while the law has assigned the chambers roles in the enrolment and the implementation of the program. Hence, the distribution of roles into public institutions are not particularly efficient.

In the private sector, craftsmen, their professional associations at local level and their national confederation are the main actors responsible for the training provision. As said in chapter 2, apprentices and their relatives pay about XOF 55,000 to 62,000 (USD 93 to 105) for the training fees to the master (interview, 2018). Apart from these actors, donors are the most important stakeholders because they contribute to the financing of the dual training. According to Zinsou (2012) in David-Gnahoui (2017), the dual training cost would be about XOF 108,000 to 252,000 (USD 182 to 426) per level. The results of Ferland (2016) show that 13,326 apprentices were supported by FODEFCA from 2007 to 2014.The last category of strategic actors involves academia and consultants who investigate the training program. The results of their studies are helpful for policy makers and donors in the decisions making. Through this analysis, two main actors / organizations can be found within this dual apprenticeship: the first category is named CQP program leaders and the second category is called external CQP actors (Figure 16). CQP leaders as well as external actors are both those

who make the system functional. The CQP program works dependently of those two categories of actors.

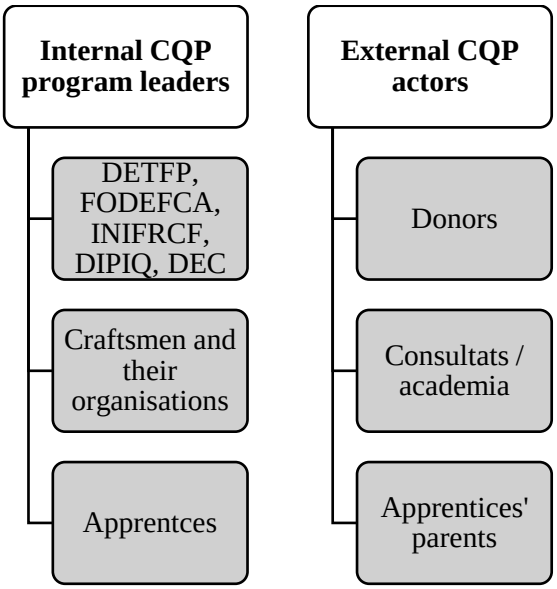


**Figure 16:** Strategic actors of dual apprenticeship

Gessler (2017), analysing the collaboration between vocational schools and companies, used three concepts: "coordination", "cooperation" and "co-construction" to build his analysis. Empirical evidence shows on the one hand, a good collaboration between public organizations and donors about the transfer of competencies in curriculum development and for the mobilization of financial resources. The Benin government had invited Swisscontact for the implementation of dual apprenticeship towards the year 2000. Swisscontact set its organization in Benin in 2001 and developed 13 craft occupations for dual apprenticeship. Swisscontact also trained experts for the curriculum development by DACUM method and trained master craftsmen to improve their capacity building. In 2016, Swisscontact legally transferred the responsibility to DETFP and DETFP to INIFRCF. In the same regard, FODEFCA received financial resources from donors (World Bank, SDC, AFD, DANIDA...) to finance the implementation of the

program. Nevertheless, the organizational and institutional audit of FODEFCA showed less than satisfactory results (Ferland, 2016).

On the other hand, we analysed the collaboration between firms and training centres by focusing on their "cooperation" during the dual training process. A critical analysis of the collaboration between the firms and vocational training centres involved showed that legally, local institutions of craftsmen must participate in the control of the training because they were involved in the contracts between FODEFCA and vocational training centres. However, these acts mentioned above do not specify their specific commitment.

75.2 percent of masters interviewed do not know in what apprentices are trained in the vocational training centres. However, results from interviews show that CQP graduates achieve much experience than their masters. Consequently, some masters craftsmen refuse to send apprentices to receive the specific training due to the competition in the future in their career. Most of the master craftsmen did not receive an official diploma/certificate. In contrast, the CQP certificate is an official certificate given by the public institutions to the apprentices after completing dual apprenticeship. Referring to TVET system, this certificate is higher than others given in apprenticeship system. In the article 15 of decree No. 641/2010, master craftsmen are also solicited to take part in the CQP exam for the validation of their professional experience. Master craftsmen do not agree with this. They prefer to take another evaluation different from their apprentices. They need training on capacity building and they claim to be trained but they do not agree to take the same program with their apprentices.

This illustrates some of the difficulties in collaboration between firms and vocational training centres in the implementation of dual apprenticeship. This can affect the quality of the training and the youth integration into the labour market.

## 5.5.Conclusion

This section reviewed the context of the introduction of dual apprenticeship in Benin. Both official and empirical sources support that the introduction of the program is supported donors. The results regarding the role of actors/institutions involved revealed that the key public institutions are: DETFP, DEC, FODEFCA, DIPIQ and INIFRCF. In the private sector, there are: local and national organizations of craftsmen (associations, collectives and CNAB), training providers and apprentices with their parents. In another category, we have donors (Swisscontact, SDC, World Bank, AFD and so on.) and academia or consultants. It is found a positive collaboration between public organizations and donors for the resource's mobilization (technical and financial support). However, the connection between training providers has been low. In the next chapter, we apprehend what make stakeholders to collaborate or to be reluctant in this program.

# Chapter 6: Dual apprenticeship in Benin: pitfalls and strategies of the stakeholders

This chapter is not published yet:

**Abstract**

This chapter deals with interests which, arise from the implementation of dual apprenticeship in Benin. It also describes the strategies used by actors to earn and safeguard their interests. The introduction of dual apprenticeship has led to new configuration of actors and organisations from the public as well as private sector in the apprenticeship system. In traditional apprenticeship, master craftsmen were the core actors who essentially hold the charge of the training provision. The research postulates that individual and collective interests which, arise from the introduction of dual apprenticeship strongly influence its implementation. A qualitative method was used to conduct this research in Cotonou, Abomey-Calavi and Parakou. Data was collected through literature analysis, individual semi-structured interviews with some informal interviews and direct observation. In total, 67 actors were interviewed using purposive, snowball and convenience samplings. Actor-oriented perspective for analysing a development intervention was applied to analyse actors' capacities to act in the system. The research found that the skills development and the implementation of the dual apprenticeship program are sources of business for DACUM facilitators and craftsmen. In the evaluation and certification of the CQP competence qualification, while public institutions are subject to prejudice in the composition of the examination boards, the research revealed the persistence of the graduation ceremony which has been forbidden by the law.

**Key words:** Dual Apprenticeship, Participation, Interests, Strategies, Benin.

**Résumé**

Ce chapitre s'intéresse aux intérêts qui naissent de la mise en mise en œuvre de l'apprentissage dual au Bénin. Il décrit également les stratégies qu'utilisent les acteurs pour obtenir ou sauvegarder leurs intérêts. En effet, l'introduction du système dual dans l'apprentissage a conduit à une reconfiguration des acteurs and organisations tant du secteur public que privé sur le système d'apprentissage alors que dans l'apprentissage traditionnel, les maîtres artisans étaient les principaux acteurs qui ont la charge de l'offre de formation. La recherche émet l'hypothèse que les intérêts particuliers et ceux collectives générés par l'introduction du système dual l'apprentissage influencent fortement sa mise en œuvre. Une méthode qualitative a été adoptée pour conduire cette recherche. La revue documentaire, l'entretien semi-structuré avec par endroits des entretiens informels et l'observation directe sont les techniques utilisées pour collecter les données. Elle a été menée à Cotonou, Abomey-Calavi et Parakou. Au total, 67 personnes ont été enquêtées et sélectionnées par choix raisonné, boule de neige et de convenance. L'approche centrée sur l'acteur social et l'agent a servi de modèle théorique. La recherche a révélé que le développement des métiers et la mise en œuvre de la formation sont sources de "business". Dans le processus d'évaluation, des préjugés sont recensés sur la composition des jurys de l'examen du CQP organisé par les structures publiques. Quant à la remise de diplôme, il est noté la persistance des cérémonies de libération, lesquelles sont interdites par les textes de loi.

**Mots clés :** Apprentissage dual, Participation, Intérêts, Stratégies, Bénin.

## 6.1.Introduction

The Benin TVET reform with the introduction of dual apprenticeship has generated individual and collective interests. As the previous chapter highlighted, the introduction of dual apprenticeship revealed that master craftsmen and their associations are not committed in the management of the apprenticeship system. Public institutions are those which hold its governance, management and implementation.

First, study of Adams (2008) showed that the productivity in traditional apprenticeship is strongly influence by its self-financing as the craftsman was the one who organised and managed the training in workshop. In traditional apprenticeship, master craftsman gives an informal diploma to apprentices at the end of the training. A graduation ceremony is organised as a symbolic event to celebrate the successful completion of a cohort of apprentices (Davodoun, 2011a). Since apprenticeship is accredited with the Certificate of Professional Qualification (CQP programme) and the upgraded informal apprenticeship (CQM programme), master craftsmen is not allowed neither to provide an informal certificate nor to organise a release ceremony to apprentices.

Second, despite the fact that master craftsmen are those who still recruit apprentices, the government remains the core actor for the regulation of both vocational education in the training centres and in workshops. Duration of three levels (i.e. years), including 32 weeks per level is set out for the training. Particularly, this dual apprenticeship binds master craftsmen to release apprentices for a weekday of vocational education in the training centres. Even when the organisation of the accelerated training sessions is needed to complete a dual apprenticeship level, master craftsmen cannot participate in the decision-making for the definition of the training agenda.

Third, the existing TVET public schools are not sufficient to provide vocational education in the implementation of dual apprenticeship. Hence, the government has given accreditation for individuals, associations and for-profit organisations to set suitable training centres to participate in dual apprenticeship through training contracts with FODEFCA (Ferland, 2016).

Fourth, during the pilot phase of the introduction of dual apprenticeship, Swisscontact developed its expertise in skills development. Swisscontact trained local facilitators in Developing a Curriculum (DACUM) method. In 2005 the year Benin government accredited apprenticeship, and two apprenticeship programs have been put under the responsibility of the public institutions. Then, DACUM facilitators have become independent experts in the curriculum or skills development.

Considering these, it's noticeable that master craftsmen/women and their professional associations who were the core actors in traditional apprenticeship, do not have no more commitment in managing the apprenticeship system. Master craftsman was the leader of the training for unfixed-term contract and was the person who decided to release the apprentice through the graduation ceremony. Hereby, master craftsmen/women and their associations can no longer control their hegemony in traditional apprenticeship due to the regulation by the reforms. Emphasising the social dimension of apprenticeship in West Africa, Guile & Young (1998) highlighted in their perspective that apprenticeship is a social institution. These authors showed how that learning in apprenticeship is a form of a community of practice. Hence, by the time that the reform of accreditation of apprenticeship has changed the community of practice within master craftsmen workshops and their associations we postulate that diverse interests and strategies developed by actors affect the appropriation of dual apprenticeship (the CQP program).

This dual training reform aims to upgrade apprenticeship system. In order to analyse how the stakeholders act throughout the implementation of the reform we applied the actor-oriented approach by Long (2001). This author argues that there are diverse responses from beneficiaries in a development intervention. We consider here the intervention, the reforms of dual apprenticeship (the CQP program) introduced in Benin TVET system.

Long's theory focuses its analysis on the "social actors" to express differential partners or social categories "as active participants who process information and strategies in their dealing with various local actors as well as outside institutions and personnel" (Long, 2001, p. 13). Social actors are considered as the stakeholders of an intervention, who are able to steer their interests in difficult circumstances. In the reform of CQP program, social actors include first, public institutions that are in charge of its implementation. Second, it comprises the private sector such as professional associations at the local, district and national levels, master craftsmen and apprentices. Third, we found other actors who are represented by donors. Long' theory recommends consideration of the "lived experience" of actors in order to study their capacity to navigate difficult scenarios or circumstances. That aims to build an understanding of the social life of actors and their responses in the context of development interventions. Among the social actors in the reforms' implementation, private actors play are key actors because of their role in the training delivery. Our analytical framework states that first the reforms have involved structural changes in terms of apprenticeship management, skills transfer and training completion or certification. The interests of training providers can rise from this process of the reforms' implementation.

Long's theory uses the concept of "agency" or "human agency" to indicate the ability of individual actors to process social experience even in extreme

forms of coercion (Long, 2001, p. 16). An individual actor or agent can strongly influence her/his peers to reach their interests. In our analytical framework, we second assert that training providers, especially master craftsmen develop strategies and are able to earn and safeguard their interests despite the regulation of the system through the reforms. See figure 19.

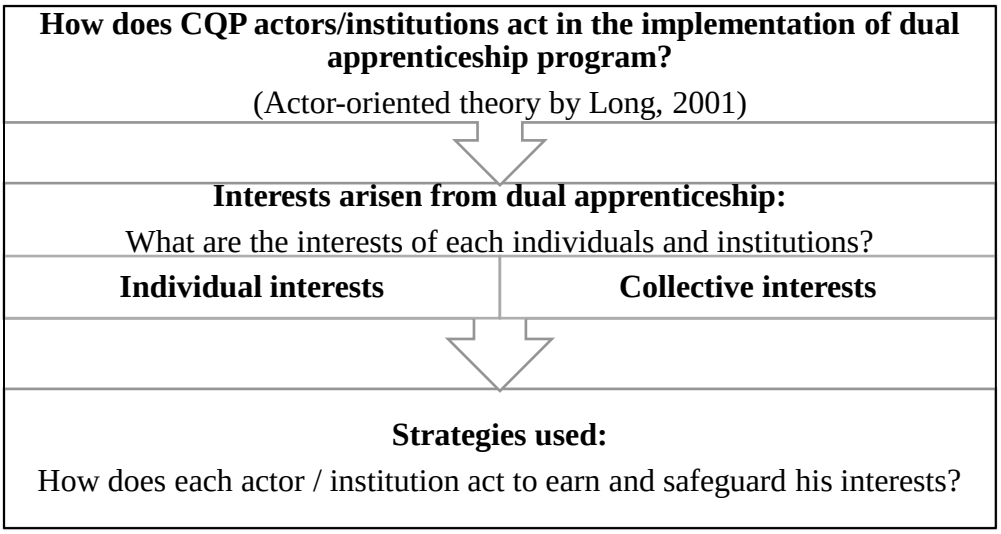


**Figure 17:** *Actor-oriented approach for analysis of CQP actors' interests*

In the following subsections, we first define the methods used; second, we rely on the context of the introduction of dual apprenticeship to figure out third, how the implementation of dual apprenticeship incorporates diverse interests and how actors act in the process to obtain or safeguard them.

### 6.2.Methods

To develop this chapter, we collected data in three big cities of Benin, Cotonou, Abomey-Calavi and Parakou. The research has adopted a qualitative method using three techniques. First, we reviewed literature on the informal learning to capture the social dimension of apprenticeship among craftsmen. This literature review has served to define the guidelines

for the field research. Second, we conducted individual semi-structured interviews with master craftsmen, heads of vocational training centers (VTC), trainers, DACUM experts, officials of the public and apprentices. Sometimes, we conducted informal interviews because craftsmen are reluctant to give some information which they consider prejudicial. Informal interview was helpful to collect in-depth information on how the TVET actors act and interact in the implementation of dual apprenticeship. And third, we used direct observation to collect data while visiting both training places VTC and workshops. And third, direct observation was used to collect information during three roundtables with TVET stakeholders in Cotonou. Participants were selected using purposive sampling for officials, head of VTC, trainers. Snowball sampling technique was used to reach some persons like DACUM experts and craftsmen. Convenience sampling was used to choose craftsmen and heads of vocational training centres. In total, 35 actors have been interviewed.

**Table VII:** *Number of participants per category*

| **Category** | **Number respondents** |
|---|---|
| Craftsmen | 10 |
| Heads of VTC | 09 |
| Trainers | 06 |
| Apprentices | 05 |
| DACUM experts | 02 |
| Officials from public institutions | 03 |
| **Total** | **35** |

### 6.3. Introduction of dual apprenticeship in Benin: between educational transfer and craftsmen innovation

Both tendencies, official and empirical versions were noted during the research field. A first assertion from official sources states that the

introduction of dual apprenticeship in Benin is an educational transfer from donors, earlier from German Agency for International Cooperation, with Danish Development agency to Swiss Development Cooperation and later by the support of French Development Agency.

### *6.3.1. Official sources of the introduction of dual apprenticeship*

The official sources of information about the introduction of the dual system in Benin are similar to the literature. According to officials and consultants interviewed, the introduction of the dual system in Benin apprenticeship was based on the success of German dual system. Indeed, the German Agency for International Cooperation took the initiative to experiment with dual apprenticeship in Benin during the decade of the 1990s. In 1993, the Hanns Seidel Foundation supported this initiative to implement with the dual system into the Benin TVET system. Due to the lack of vocational schools offering vocational education like German dual system, it was decided to create a variant of dual apprenticeship in the Benin context. This dual system consists of one day a week of theoretical or vocational education in vocational training centres, in the crafts units of production or in technical high schools and the rest of the week for work-based training in the masters' workshops (Davodoun, 2011b). This dual system rests on the two principles: first, the principle of duality of the training and second, the primacy of the occupation which engages the commitment of the master craftsmen/women who must be core actors (David-Gnahoui & Ahouangnivo, 2017). This pilot phase of Benin dual apprenticeship was introduced jointly with Republic of Togo, a neighbouring country to the west. In this introduction phase, the program was implemented in the district of Abomey, Central Benin (Walther, 2007). In collaboration with the professional association in Abomey, a vocational training centre was built to provide training in four occupations: car mechanic, motorbike mechanic, mechanic construction and

wood carpentry (Walther, 2007). Five years later, in 1998, the Hanns Seidel Foundation conducted an evaluation of the project. The study showed positive results for the pedagogical framework of the training and the capacity building of the master craftsmen/women (Walther, 2007). Although the study showed some limitations regarding the institutional and technical aspects, the Benin government decided to introduce this dual system in the TVET.

### *6.3.2. Empirical position about the introduction of dual apprenticeship in Benin*

The second source of information about the introduction of dual apprenticeship in Benin results from the resource persons interviewed in the district of Parakou. These sources claim that master craftsmen were the lead initiators of the introduction of dual apprenticeship within DACUM method in Benin.

In contrast to the official source, it is illustrated that a baseline study was conducted for the introduction of the dual system in Benin apprenticeship. This baseline study was conducted by CYNERGIE.NET, a local nongovernmental organisation with a group of sewing professionals in Parakou, under the financing of the Swisscontact agency in Benin. This study was conducted 25-29 January 2004 and aimed to figure out the way dual apprenticeship can be introduced in sewing. The study classified the skills needed to learn in three years the occupation. In addition, the study suggested three steps for the implementation of dual apprenticeship. The first step of the program should provide the training to reinforce the competence of the trainers who will mentor the trainers; the second step should involve legally the mentors in the implementation with specific attributes and roles; and the third step should bring awareness and involve staff members of professional associations in the implementation (appendix 3).

One of the professionals interviewed on this introduction phase of dual apprenticeship states the following:

> "the pilot phase of dual system with the support of Hanns Seidel Foundation was implemented was the output-based apprenticeship different from the competence-based approach. The introduction of the dual system in traditional apprenticeship through the competence-based approach (DACUM) was supported by our association. We built this initiative on the Burkina Faso experience. We worked with experts from Swisscontact who trained us in the application of the DACUM method (E. M., 53 years, DACUM facilitator, craftsman, sewing, Parakou, 2020).

Some of the resource persons have abandoned or resigned from the system because the program was being diverted from its initial aim. For others, people played dirty tricks on them while working with actors who see their interest in risk.

Through both points regarding the introduction of dual apprenticeship in Benin, the evidence from the research shows that the actors involved in the program act to safeguard their respective interests in the program by developing their own strategies.

## 6.4.Actors tendencies throughout the implementation of dual apprenticeship

In the implementation of dual apprenticeship, DACUM facilitators, vocational training centres, master craftsmen and apprentices, each of actors/category act in order to safeguard their position or to further their interests. In order to highlight how each actor acts in the system, we considered the curriculum value chain (CVC) of dual apprenticeship program.

### *6.4.1. Curriculum design: business of skills development*

As mentioned before, Swisscontact was the first donor that implemented dual apprenticeship using the DACUM method. Since then, the Benin government accredited dual apprenticeship in TVET system and Swisscontact transferred the competencies by training local DACUM facilitators from public and private sector. All of 13 craft occupations in

which dual apprenticeship has been implemented, were developed through the competence-based approach by DACUM method. Many networks of DACUM facilitators were formed and have developed occupations in the crafts and farm sectors. In order to keep strictly confidential, we will not identify any organisations. A network of DACUM facilitators is experts from officials in public institutions joining with NGOs. Another network of DACUM facilitators is represented by apprenticeship consultancy services. And other facilitators are job analysists who work in the private sector in collaboration with professionals. Thereby, every network of DACUM facilitators acts to get business contract in skills development for occupations. In this regard, the end is the means by which you achieve it. Some quotes elucidate the evidence:

> "[…] I have been defeated several times; same thing to my colleagues. The reason is because, I have never agreed with fake tricks. That is why I was removed from the dual system. Nowadays, there are too many experts of skills development who are developing occupations without applying the DACUM methodology. They know that it is fake but they do it to earn money" (E. M., DACUM facilitator, Parakou, 2020).
>
> "The curriculum development becomes an opportunity for earning much money. For the workshops organised for the skills development, each participant earns too much money. I had a chance to participate of one of the workshops and also received money. It seems like people are invited to receive free money!" (M. Y., Consultant, Cotonou, 2019).

The business of skills development can also be elucidated by the estimation of the amount of skills development. On this point, one of the DACUM experts and another facilitator from professionals have shared different responses. According to the first person, the curriculum development in an occupation can amount at about USD 84,460 or 101,351 (i.e. XOF 50 or 60 million). According to the second person, the skills development including job analysis and instructional materials for occupation can amount at about USD 25,338 or 33,784 (i.e. XOF 15-20 million). Through this, it is noticeable that there is a large difference between the amount provided by both. The first response was collected during an official visit of the team of

LELAM-TVET 4 INCOME, in Cotonou in October 2018. And the second respondent was interviewed as informal interview in Parakou, in May 2020. Although the contexts in which we received the two responses are not similar, it is important to note that the first estimation of the amount is twice as expensive as the second. The reason can be understood through the next quote:

> "If the amount for developing skills in one occupation is USD 84,460 or 101,351 (i.e. XOF 50 or 60 million), it is because of they calculated the wage for each participant in the process and estimated their revenue for their organisation. I have been earned many businesses for skills development in many occupations like blacksmith, rewinding and electronical repair, apiculture, and so one and I never spend money more than USD 25,338 or 33,784 (i.e. XOF 15-20 million)" (E. M. DACUM facilitator, Parakou, 2020).

This quote illustrates that the skills development of occupation has become an important business interest for each network of DACUM facilitators. Apart from the curriculum design phase of the CVC, we follow actors in the curriculum application phase to analyse their behaviour in the system.

### *6.4.2. Why do vocational training centres train for dual apprenticeship?*

In the curriculum application phase of dual apprenticeship, craftsmen, professionals and professional associations are the core actors because of their role of the training provision. The aforementioned context of the implementation of dual system in Benin showed that the dual apprenticeship program was adapted to the local context, using the accredited training centres to provide vocational education and traditional apprenticeship for training in a firm. In this regard, private sector has been allowed to create vocational training centres with the extension of the program to further occupations.

In 2017, 102 training centres were involved in the implementation of dual apprenticeship in which 60 centres are from private sector, 24 from the public sector, 11 from NGOs, 5 from confessionals and 2 from craftsmen

associations (David-Gnahoui & Ahouangnivo, 2017). The same study reports that there is any act which specifies the participation of vocational training centres to dual apprenticeship. Hence, the creation of the private training centres and their participation in dual apprenticeship were not controlled. While some training centres were initiated by professionals the others were created by officials from public institutions on the behalf of craftsmen. Every actor aims to get a training contract with FODEFCA in order to make profit. Before getting a contract, FODEFCA must inspect the centres to see whether they fill the required conditions. The requirements bind promoters of the training centres to be either craftsmen or professionals who provide the training and operate as a production unit in the occupation. Apart from the fact that the training centres must be accredited by the Ministry in charge of TVET, they must also use new materials to offer the training. What happens is that, some private training centres develop fake practices in order to get the contract. The fake practices consist of partial or complete non-compliance with the required conditions. How can this happen since public institutions (FODEFCA, D-TVET and DIPIQ) ensure compliance with the requirements? First, we found that FODEFCA regularly conducts its visits before having training contracts with the training centres. During the visit, the inspection team of FODEFCA finds that the training centres meet the requirements. But how do the training centres that develop fake practices to get contracts with FODEFCA? Either the supervision team support the fake practice or these training centres develop strategies to achieve their aims. The following quotes demonstrate evidence of both:

> "In order to have the support from the inspection team, the training centres collected money to pay them the hotel fees, restauration and pocket money whereas the Ministry pay them all fees" (M. E., trainer, sewing, Parakou 2020).

> "Before our inspection visits in the training centres, they lend materials and equipment from those who own the latest technology and pay for that. When we are on the field for inspection, we find that everything is compliant and after our visits,

> they give the materials and equipment back to the owners. That is a strategy they use" (A. L., FODEFCA, Cotonou, 2019).

The staff members of professional associations may be involved in this strategy because professional associations play a core role in contracting VTC with FODEFCA. Professional associations must attest to the existence of the training centres and must approve their support to the private training centres.

The evidence from the research show that most staffs of professional associations who meet the conditions have become lead trainers[69] for the training centres. As trainers, they earn USD 203 (i.e. XOF 120,000) per level of the programme. Here, the main question is how are the trainers recruited? The recruitment of the trainers remains the role of the Ministry in charge of TVET that organises a test in order to select potential trainers. The candidates for the trainers must have at least O level or the 10$^{th}$ grade and at least five years of the work experience. Apart from these conditions, those who pass with success the test must be trained in appropriate the pedagogical skills. According to some sources, there is partial or complete non-compliance with these conditions. Our respondents have mentioned this:

> "There is also a big problem with the recruitment of the trainers. The trainers are recruited without taking into account the conditions. They have recruited their friends and relatives with the support of staff members of professional associations who encourage this practice" (M. A., consultant, Cotonou, 2020).

> "I was recruited as an educational supervisor with the support of those trainers who trained me while I was CQP apprentice. I was valedictorian of my cohort in the training centre. Thus, I have a higher competency than others who are lead trainers. In the field, there are many trainers who do not have the competency to do this job" (A. E., educational supervisor, sewing, Parakou, 2020).

While trainers are paid for the training provision, the research results show that most of the trainers from private and, in some cases, trainers from public

[69] Formateurs principaux

training centres required to contribute 10 percent of their wage to the training centre. How can this be explained? Trainers and head of the training centres have provided detailed explanations of this return of 10 percent of the wage. For both, this return of the wage aims to support the operating costs of the training centre. According to a trainer this a financial participation to support a common initiative:

> "The training centre is from the association of sewing and design professionals of Parakou. By making a return of 10 percent of our wage, we contribute to support the centre in order to move forward the training" (E. A., trainer, sewing, Parakou, 2020).
>
> "We must pay for the place we hired for the training. Apart from that, we must pay for the electricity and water supply. Moreover, we must pay for the security guard, and the administrative staff. There are additional fees that are not born by FODEFCA. In order to cover for operating expenditures, we agree with the proposition to make return of 10 percent of the wage" (A. J., head of the training centre, sewing, Parakou, 2020).

Referring to this quote, the common initiative by craftsmen can lead to a financial participation if the member makes a profit from it. The case we learnt here is the training centre from a professional association. This argument is the most common reason used to justify the return of the wage in other occupations like in hairstyling.

The training providers must be available to stay on in-full time in the training centres. It becomes difficult for them to be trainers and still keep practicing the occupation in workshops without any advanced learners and apprentices. Thereby, most of the training providers have closed their workshops in order to focus on their new job in the training centres. Surprisingly, since 2016, the government does not have much more money to subsidise dual apprenticeship. According to the new strategy plan for TVET, the priority for dual apprenticeship program has been addressed to ten other occupations. Among the occupations, sewing and hairstyling have not been taken into account. Consequently, promoters have closed their business training

centres. The trainers from these training centres are not working in the training centres any longer and are in a disadvantaged position to undertake new workshops. Figures 18 and 19 illustrate the situation from two training centres in Parakou.

Since the vocational training centres must enrol more apprentices in order to receive training contract with FODEFCA, they develop a strategy of field visits on the craftsmen workshops to recruit more apprentices. The strategy consists of two modalities. First, it is used for making more master craftsmen/women aware in order to have their approval and to send their apprentices to the CQP entrance test. Secondly, the strategy is used to recruit their own apprentices who will receive both vocational education and on-the-job training in the training centres.

> "The recruitment of CQP candidates is entitled to professional associations at the local and district level. The CQP test is organised by the department of TVET. Apprentices who achieved the best scores are selected for the program. FODEFCA matches them to the training centres. It is remarked that some of the training centres do not receive enough apprentices from FODEFCA. Hence, we (the training centres) engage ourselves in apprentices' mobilisation. Then, every centre receives apprentices according to the number of applicants it provided" (Mrs. S. D. B, Head of training centre, hairstyling, Parakou, 2020).

The quote illustrates that training centres have their own apprentices in dual apprenticeship while they might participate in the process by providing vocational education. In this sense, the principle of duality is not applied as established.

The figure 18 illustrates the evidence that equipment is stored after the dual apprenticeship has been suspended in the sewing occupation.

**Figure 18:** *Sewing matching stored after the training centre closed*

**Figure 19:** *Classroom situation after the training centre closed*

### *6.4.3. Discrepancies in the evaluation process and persistence of the graduation ceremony*

The research results revealed that many prejudices are entitled to the status and the roles of professionals involved in the curriculum evaluation process. The implementation of dual apprenticeship also consists of a final or summative exam of the apprentices. In this stage, master craftsmen and professionals play decisive roles. As mentioned before (chapter 2), three committees are regularly established to conduct the summative evaluation of the apprentices: the evaluation preparatory committee, the examination boards and the certification commission. The ministry of secondary education and TVET is the core public institution that organises the CQP exam in collaboration with the craftsmen and their associations. According to the inter-ministerial decree 117/2005 consolidated by decree 641/2010, art. 18, the summative CQP exam must involve training providers from vocational training centres, craftsmen and professionals from the business sector delegated by their associations and delegated officials from the ministries that are in charge of TVET. The results found that many practitioners in the examination boards are not trainers from this dual training. Hence, the summative evaluation is criticised regarding the efficiency of the measurement of the CQP apprentices' performance. The following quotes illustrate the perception of actors regarding the effectiveness of the evaluation process:

> "In the 2003 to 2008 period and maybe to 2011, everything was perfectly done. But after this period, it is remarked that among the people recruited for the supervision of the CQP exams, there are those who are neither craftsmen nor professionals… Officials who is because they recruit their friends, relatives to participate in order to lead them to earn money. The related issue is that, these people are involved in the evaluation of the CQP apprentices' performance" (L. A. Official from public institutions, Cotonou, 2020)

> "The quality of the evaluation forms is not very strong in terms of measuring the apprentices' performance. For apprentices who have been trained for three years in the dual system, they must be evaluated on specific competencies. As the

> evaluation forms are designed now, it does not allow for the measurement of the real achievement of the CQP apprentices. I ask myself whether the evaluators know about the competencies in which apprentices were trained. It will be very important to improve the evaluation forms" (Z. G. C., master craftsman, wood carpentry, Cotonou, 2018).

Considering the two quotes, the mismatch in the evaluation process can be observed in the selection or recruitment of the craftsmen or professionals who must be involved. This can affect the quality of the evaluation and thus the external effectiveness of the CQP graduates, who do not have enough competencies.

### *6.4.4. Persistence of the graduation ceremony*

In a research paper (Nouatin, *et al.,* 2019), it is developed in a broad scope the reason why the graduation ceremony remains in evidence, despite this practice is prohibited by the national crafts code No. 116/1991. Art. 1 recommends only a symbolic ceremony for the apprentices' graduation. The article 2 of this act prohibited the dowry paid to the master and consequently, the apprentice may pay not more than USD 36.4 (XOF 20,000) to her/his master. In the article 20 of decree 363/2005 regulating the apprenticeship system in the Benin crafts sector, it is stated that master craftsmen only enrol their apprentices in both CQM and CQP programs or in one of the two apprenticeship programs. Hence, the traditional apprenticeship must not exist anymore, including the graduation ceremony. Professional associations are in charge of the application of the regulation in their social communities. However, the results demonstrated that despite the fact that the practice is prohibited for the two CQP and CQM programs which, lead to formal certificates, master craftsmen still practice it. One of the staff members of professional associations in Parakou explains:

> "The graduation ceremony is prohibited. It is an event that consists a limitation for the apprentices' release after their apprentice completion. Due to the introduction of accredited apprenticeship programs, it is legally prohibited. We are still raising awareness among craftsmen in order to abandon this practice. We have some

> examples of those who were arrested" (Mrs. A. M. C., staff member, professional associations, Parakou, 2019).

Following this quote, there are some craftsmen who still practice the graduation ceremony and there are sanctions for those who were arrested. The research investigated why the sanction is not efficient and how the event is still practiced.

In the apprenticeship act No. 116/1991, art. 3, the sanction consists of the lump sum payment from USD 18.2 to 91 (XOF 10,000 to 50,000) and the temporary business closure. The evidence shows that the persistence of the practice is supported by the apprentices and the masters. The reasons for the persistence of the practice are first, the marketing function the event plays for the new graduates and second, the return on investment for master craftsmen/women. In addition, it may also have a ritual function for professional integration.

The graduation ceremony plays marketing function because during the celebration, the social community is involved to supporting the graduate. Just as students are awarded in the formal education system, this event becomes an opportunity for graduates to show their progress in learning skills. Moreover, the graduates earn their first clients from the participants who are witnesses.

> "The graduation ceremony helps us to start our business after completing the training. If you are very competent, you will increase the potential clients in the labour market. But if you are not really strong, you will lose your clients" (A. B., master craftsmen, hairstyling, Parakou 2019).

Throughout the apprenticeship process, most of the apprentices are under the charge of their master for their accommodation, daily allowance, transportation, and pocket money. Thereby, after completing the apprenticeship, master craftsmen do not release apprentices, but rather keep them to work in the workshop. This is mostly adopted when the apprentice

did not pay the apprenticeship fees in full. Furthermore, the apprentices must pay a dowry for her/his master. This dowry includes gifts in cash and in-kind donations. This is given to the master for the preparation of the graduation ceremony in which parents, relatives and friends are involved. Due to the fact that many apprentices face financial limitation to pay the dowry and to organise the graduation ceremony, the practice was prohibited. But how do apprentices and master craftsmen do to perform it? The results of the research showed that most of the people who still practice the graduation ceremony do it in churches, mosques and private places in order to avoid the police. Some of them do not care about the police. During the ceremony, the master craftsman simulates the latest punishment[70] of the apprentice. At this time, parents, friends, relatives and the whole assistance must pay in cash for the value of the punishment. By doing this, master craftsmen earn much money from the ceremony. In terms of the ceremony, participants celebrate the event with food, drinking and so forth.

In the view of some master craftsmen view, the graduation ceremony is a ritual of professional integration. This ritual ceremony involves communication with "*Gun*" or "*Ogun*" which represents the Vodoun of metal in order to provide its approval and its blessing to the new master in the career. This ritual requires bitter kola, alcohol, drinking and so on. For those who do not share the same faith, this ceremony consists of a blessing practice through the master prayers at church, mosque or in private places. One of our respondent states:

> "When you complete your training and you aim to benefit from your skills by setting up your own workshop, if you do not receive blessings from your master through a blessing prayer, or a ritual ceremony, you cannot really take advantage of your apprenticeship" (M. C. master craftsman, masonry, Parakou, 2020).

[70] Coût de palmatoire

In this master's view, two evidences can be figured out: the symbolic function of the graduation ceremony for successful career and the evidence to operate depending on his/her faith and resources. Then, to recommend it from their master CQP graduate gives their certificate to the master. By doing this, apprentice with his/her parents in the collaboration with will organise an event accordingly.

**6.5.Analysis and discussion**

Based on the actor-oriented approach (Long, 2001), the findings of the research highlighted how each actor acts in the system. First, the introduction of dual apprenticeship has led to a big business opportunity for skills development. Only 13 out of 311 occupations were taken into account in the crafts sector. Moreover, the skills development is also needed in other sectors such as agricultural sector, tourism and so on. In this regard, the research found that DACUM facilitators make their business either as individuals or in experts' networks. In the interaction among experts, the results show that they play tricks on each other for the skills development. In the application phase of the program, it is revealed that many professionals or craftsmen seek to profit from the training contract offered from FODEFCA. Many training centres were created without having strong experience in the training. In order to keep their business working, they have also engaged in the recruitment of apprentices while this role is entitled to professional associations. Hence, many of the private vocational training centres closed their business due to the fact that FODEFCA do not have the financial resources to sponsor a large number of apprentices. It is the same remark for some craftsmen who engaged in the dual system as trainers by closing their workshops. After the training centres closed their businesses, many of the trainers no longer work in either training centres or in a

workshop. These two results have not figured out yet in the existing literature about the reforms of apprenticeship in Sub-Saharan Africa.

In the summative CQP evaluation process, respondents produce prejudiced views on the officials from public institutions who are in charge of the composition of the different commissions for the exam. It is said that officials from these institutions develop favouritism to select examination boards. This practice may affect the effectiveness of the evaluation. Studying corruption in West Africa, Blundo & Olivier de Sardan (2007) found that corruption is socially encouraged by the social relationship. Hence, because of their relationship, officials can adopt favouritism in the composition of the commissions for CQP exam. Moreover, this can also be supported by professional associations that are involved in the examination process.

In traditional apprenticeship, the graduation ceremony is the only event that proves the completion of training for apprentices. Ever since the apprenticeship system has been included as part of the TVET system, this ceremony has been prohibited by the government. Despite the prohibition of this practice, the results found that it is still organised private places. Davodoun (2007) has already found that master craftsmen have rejected the prohibition of this practice through an initiative called "*ligue anti dot à 20,000*" because it does not meet their expectation.

FODEFCA has few financial resources remaining to sponsor apprentices for dual apprenticeship. FODEFCA is currently looking for financial resources. This result corroborates the findings of David-Gnahoui & Akouété-Hounsinou, (2015) and Davodoun (2011b), who regret the financial dependence of the Benin dual system on foreign donors' aids. For donors' opinion, the government would keep FODEFCA by reforming its organization and attributions: SDC and Swisscontact have noticed that the

financial management by FODEFCA did not satisfy the expectation of donors. This result is in line with the results of the audit by Ferland (2016).

### 6.6.Conclusion

In this chapter, we highlighted how diverse interests of stakeholders can be pitfalls in the implementation of dual apprenticeship for actors. Reform of dual apprenticeship has essentially led to improving the learning approach from a "community of practice" in the workshops to a competence-based approach in combination of two training places. In the process, the results have illustrated that it arises a business of the curriculum design among the networks of DACUM facilitators who play fake tricks on each other. In the implementation phase, private vocational training centers (VTC) have been created in the collaboration with their professional associations. Many VTC operated not compliant with the requirements despite the inspection of FODEFCA. Hence, there were VTC which strive the training contracts with FODEFCA in order to make business. In the final examination, public institutions are criticised of the favoritism in the composition of the different examination boards. Meanwhile, the persistence of the graduation ceremony shows a misunderstanding of such a practice which plays social, economic and symbolic functions.

# Chapter 7: Social transformations in Benin crafts sector through the competence-based approach of dual apprenticeship

This paper has been already submitted for publication to The International Review of Education – Journal of Lifelong Learning

**Abstract**

This paper analyses the social transformations that have been occurred in the crafts sector through the implementation of dual apprenticeship in Benin. Dual apprenticeship combines a weekday of vocational education in training centres with on-the-job training in the workshops. Graduates from this programme receive the certification of professional qualification (CQP). The qualitative method of direct observation is used during visits in seven training centres and thirty-nine workshops. This research was conducted in the district of Parakou, the largest city in northern Benin. A life-history technique was used, with informal interviews with craftsmen and semi-structure to in-depth interviews with CQP owners, non-CQP graduates, staff of professional associations, training centres staff and CQP trainers. In total, 96 actors were interviewed based on a purposive sampling to select actors from professional associations and snowball sampling to reach other participants. Social change theory was applied emphasising the factors and agents of change. Results of the research show that dual apprenticeship has a positive impact in skills development, the transfer of competencies face job performance. It is noted that CQP graduates have achieved theoretical instructions and practical knowledge during their training. Those who succeeded their installation, develop competence-based approach to train apprentices and stand out in the labour market competition. Craftsmen who are unable to stand out in the labour market competition are in job insecurity. Most of the CQP graduates interviewed develop self-esteem to show their satisfactory outcomes which also affects their relationship with old generations of craftsmen.

**Key words:** Social transformations, dual apprenticeship, competence-based approach, labour market competition, Benin.

**Résumé**

Ce chapitre s'attache à analyser les transformations générées par la mise en œuvre de l'apprentissage dual au Bénin. La méthode qualitative a été utilisée pour conduire cette recherche à travers l'utilisation de la technique d'observation directe dans sept centres de formation et trente-neuf ateliers artisans. La recherche a eu lieu à Parakou, chef-lieu des départements du Nord Bénin. Le récit de vie à travers des entretiens libres, et l'entretien semi structuré sont les techniques utilisées pour enquêter les diplômés CQP, les apprentis non-CQP, les responsables d'associations et des centres de formation et les formateurs. Au total, 96 personnes ont été pris en compte par l'échantillonnage par choix raisonné et boule de neige. La théorie du changement social, portant sur les facteurs et agents de changement, a été utilisée pour analyser les résultats. La transformation du milieu artisan avec la mise en œuvre de l'apprentissage dual s'observe d'abord par la capacité des diplômés CQP à utiliser l'approche par compétence pour améliorer l'apprentissage traditionnel. Ensuite, il est noté que la compétition du marché du travail est favorable pour les diplômés CQP à travers la meilleure qualité de leur service et de production. Enfin, les résultats ont révélé que les diplômés CQP développent une estime de soi pour manifester leur satisfaction dans l'exercice du métier.

**Mots clés :** Enseignement et Formation Technique et Professionnelle, Innovation, Apprentissage dual, Participation, Certificat de Qualification Professionnelle, Littoral-Borgou (Bénin).

## 7.1.Introduction

In the last four chapters (chapters 3, 4; 5 and 6), we studied how dual apprenticeship was introduced to match the Benin context, how master craftsmen perceive the program and how it generates interests and diverse strategies. In traditional apprenticeship, most of the small and household firms operate with paid domestic services (Benjamin & Ahmadou, 2012). Traditional apprenticeship in West African countries is a process of skills transfer which consists of on-the-job training in a workshop/workplace/firm within an interdependent relationship between a master craftsman and apprentices. Despite its strengths, apprenticeships in West African countries are subject to some weaknesses. As mentioned in the thesis statement, the study of Walther (2008) reveals that the skills' learning is unstructured. In addition, the skills transfer depends on the labour market and on the master craftsman who is the only person responsible for the decision making of the training completion. This training process is performed within the transfer of skills gap to the next generations. It is shown that the commercial relationship between master craftsman and apprentice is a weakness of the system.

We claim that the adoption of the competence-based approach by CQP graduates and the labour market competitiveness shape social transformations in Benin crafts sector. While evaluating the effects of dual apprenticeship on the achievement of the apprentices (chapter 3), the current chapter studied the qualitative impact of the program in the apprenticeship system and in the crafts labour market. The research question addressed is: how has dual apprenticeship transformed the Benin crafts sector through the competence-based approach used for its implementation? The objective is to assess the transformations carried out in craft occupations by dual apprenticeship.

After elucidating the method used and the theoretical framework, we first analyse the new patterns observed as changes in apprenticeship. Second, we figured out the process through which the program has influenced the labour market structure in terms of competitiveness and the behaviour of CQP graduates compared to the others.

The theoretical and conceptual framework used focuses on the factors and agents of change to analyse the transformations which, occurred in the crafts sector through dual apprenticeship. In order to identify the changes in the crafts sector and how craftsmen are being affected by the implementation of dual apprenticeship, social change theory by Rocher (1968) was used. Among the factors of change, the research emphasizes the technological and demographic factors, as well as conflicts and contradictions, to identify parameters that allow for the analysis of the behaviour patterns that dual apprenticeship has raised in crafts sector. Technological factors consist in describing the new structures of skills learning within dual apprenticeship. Demographic factors provide basic characteristics of the market competition in the crafts sector. Conflicts and contradictions are factors which contribute to the market competition in the crafts sector. The agents of social change are elites, social movements and motivation and success needs, applied for actors' analysis mainly, their contribution to the crafts transformations. In the Fig. 18, elites are represented by the public and private institutions in charge of the management of dual apprenticeship. It also includes leaders of professional associations of craftsmen who have a positive influence on the programme. For examples, there are craftsmen who participated in the curriculum development. The concept of social movements describes the structure of dual apprenticeship within vocational education and on-the-job training. The concept of motivation and success needs is used to underlines

the importance of the motivational determinants of CQP graduates to achieve their goal.

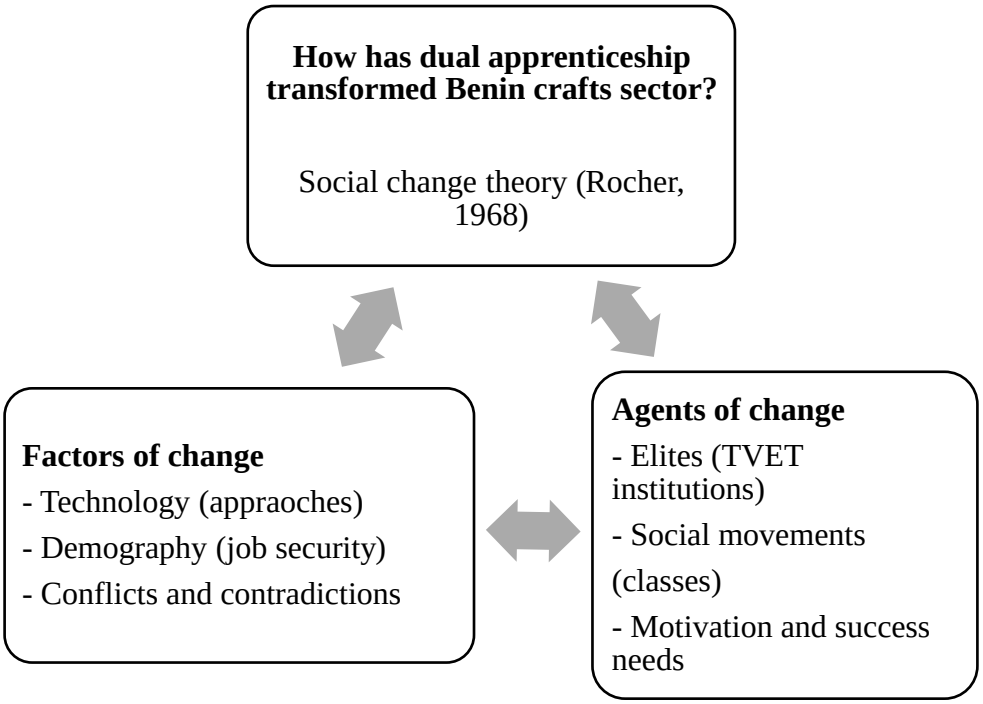


**Figure 20***: Theoretical framework of social transformations in crafts sector*

Dual apprenticeship displays innovative practices in traditional apprenticeship. In the following subsections, the methodological approach is described and the research results are presented to elucidate the experience of the CQP graduates in this dual system in the crafts sector.

**7.2.Methods**

Due to the data used, a qualitative method was applied to conduct this research. Data were collected in the district of Parakou, located in the centre of Benin, about 400 kilometres from Cotonou, the economic capital.

The first technique used is direct observation through visits in seven vocational training centres and 39 workshops. These vocational training centres and workshops work in the following fields: sewing, hairstyling,

motorcycle mechanics and wood carpentries. These visits aim to collect data and to make a before-after comparison between the workshops and the training centres. This comparison aims to identify whether it varies from CQP to non-CQP graduates. A life-history technique through informal interviews with 19 CQP master craftsmen and semi-structure interview to in-depth interviews with 48 owners of CQP, 10 non-CQP graduates, 5 staffs of professional associations, 6 staffs of the training centres and 8 CQP trainers was used. In total, 96 actors participated in the research. See table 1.

The research respondents were selected using first purposive sampling to choose the members of professional associations and second, snowball sampling to reach CQP master craftsmen and CQP graduates. Finally, the convenience sampling was applied with non-CQP graduates. For data analysis, content analysis was used.

**Table VIII**: *Number of participants for the study*

| **Category of participants** | **Amount** | **Percentage** |
|---|---|---|
| CQP graduates | 48 | 50,0 |
| CQP master craftsmen | 19 | 19,8 |
| Non-CQP graduates | 10 | 10,4 |
| Staff of professional associations | 5 | 5,2 |
| Staff of the training centres | 6 | 6,3 |
| CQP trainers | 8 | 8,3 |
| **Total** | **96** | **100,0** |

## 7.3. Impact of dual apprenticeship on the skills learning and the pedagogical approach in traditional apprenticeship

### *7.3.1. Toward the refining of the skills learning in traditional apprenticeship through the Competence based-approach*

In traditional apprenticeship, master craftsmen mostly use out-of-date materials and equipment. The skills transfer consists of imitation and depends only on the master who mentors the apprentices. The results of this research show that CQP graduates have achieved much knowledge in the use of new technologies and in the explicit pedagogical practices for skills acquisition.

The introduction of dual apprenticeship in Benin has improved the skills offered by traditional apprenticeship. The training centres that hold vocational education provide latest technologies of curriculum materials and equipment. Hence, CQP apprentices are being trained within new curriculum materials and equipment that master craftsmen do not own in their firms or workshops. CQP graduates interviewed attest to this:

> "I discovered new tools and materials that we have ever seen in the workshop. As example, it is the first time I saw and learnt to use a curve rule in sewing. Moreover, every apprentice has access to the curriculum materials for the theory training session. Hence, we had theoretical and practical class sessions" (A. M. 29 years, CQP graduate, sewing, 2020).

> "During the training in vocational training centres, we learnt that most of the products we use to clean hair are hazardous chemicals… We were being trained on how to apply the products by wearing protective gloves. I think that many masters ignore the right practice in hairstyling. We also learnt how to straighten hair as professional using a flat iron" (A. B., 35 years, CQP graduate, hairstyling, Parakou, 2020).

Going beyond the fact that CQP have achieved in terms of new technologies, these quotes illustrate the acquisition of new values and attitudes on the tasks' performance. Hence, CQP apprentices have started to develop further competencies in terms of job performance of master craftsmen, through their

professional associations, have also applied to the public institutions in charge of dual apprenticeship for training on capacity building. Master craftsmen are trained periodically according to their skills needs. A professional association staff from sewing states that:

> "Master craftsmen have also asked for the training on capacity building. To do so, our association (*Association des Professionnels Artisans Habilleurs de Parakou* - APAHP) sometimes organise training with an individual participation fee that varies from USD 6.3 (XOF 3,500) to USD 9 (XOF 5,000). We also receive financial and technical support from FODEFCA" (A. E., 42 years, staff of APAHP, sewing, Parakou, 2020).

Through this quote, it is understandable that many craftsmen have found it necessary to update their skills. Nowadays, professional associations in different fields such as hairstyling and motorcycle repair mechanics, organise monthly or weekly meetings carried out particular tasks in order to share and learn new career skills. In the case of hairstyling association (*Groupement Mutualiste Epargne et Crédit entraide des Coiffeuse de Parakou* - GMECC), the meeting is held on every second Monday of the month. The association of motorcycle repair technicians (*Association des Mécaniciens, Engin à deux Roues Parakou* - ASMEP) holds its meeting session on Friday.

### *7.3.2. Improving the skills transfer in traditional apprenticeship through the Competence based-approach*

Apart from the skills learning improvement, the training method used for the training is very determinant in the dual system. The pedagogical approach used in the training centres offers favourable conditions for interactive training. In the training centres, apprentices are allowed to ask questions, several times, to the trainers to acquire knowledge, whereas this is not allowed in traditional apprenticeship. Apprentices who complete the dual system with success renew the traditional apprenticeship by training apprentices through an explicit pedagogical method within theory and practice. CQP graduates who have already trained apprentices, have

provided evidence of the improving training method. Mrs E. A., master craftswoman answered to the question "What makes your training approach different from those masters who did not take dual training?":

> "The approach a CQP graduate uses to train them is totally different! In my workshop, I give my apprentices, theoretical instructions and practical illustrations. I first provide them oral explanations on the design of a sewing patternmaking, then I show them how to make the basic garment patterns before sewing clothes. By doing this, they ask me questions and I give them responses" (Mrs E. A. 38 years, CQP graduate, sewing, Parakou, 2020).

Considering this, it is noticeable that CQP graduates are very aware of the necessity of theoretical instructions to train in the apprenticeship system. Hence, they use at least oral explanations and practical illustrations to transfer skills to apprentices. Those CQP graduates who do not have apprentice, have better work conditions in their workshop than non-CQP graduates. One of the CQP graduates in motorcycle repair mechanic states:

> "First, many clients find that my workshop is neat and tidy. The reason is because we were trained on the fact that the mechanic repair is not a dirty work… Second, I use some materials that most of non-CQP motorcycle repair technicians do not know how to use. As an example of material, there is the motorcycle flywheel repair" (O. A. 31 years, CQP graduate, motorcycle repair mechanic, Parakou, 2020).

**Figure 21:** *Motorcycle flywheel repair*

From this quote, the working conditions include suitable arrangements to keep the workshop clean and for easy work. This is important to make the job attractive for the clients, which can positively impact their satisfaction.

CQP graduates have also achieved business management skills for their workshop management welfare. The experience of the first cohort of the CQP graduates in 2003 revealed an important gap about the management of the workshop as most of the graduates are very young and without work experience. Hence, business management was added to vocational education offered in the training centres. The business management session consists of learning how to do daily or weekly inventory in the workshop in order to estimate the benefits from the productions or services. One of the interviewees explains how the inventory is carried out in her workshop:

> "We were trained on how to calculate our benefits of the productions in the workshop. The calculation of benefit derives from inputs and outputs in the workshop. The inputs include raw materials or basic materials used to offer services. As an example, there are the products used to clean hair, the strands of hair… The outputs represent the financial value of the service including products, raw materials and basic materials used. The business management help us to estimate the amount of money we have spent for raw materials and the profits. It also helps to provide a budget for the extension of the workshop and to plan the priorities of the expenditures" (A. R. 36 years, CQP graduate, hairstyling, Parakou, 2020).

Most of the master craftsmen in traditional apprenticeship did not have any background in workshop management. This often results from their work experience. CQP graduates who have been trained in the management of workshops are able to take more advantage from this opportunity on the job. Another CQP graduate states the following:

> "It is often observed that when young people have a job, they are more interested in earning money to fulfil unnecessary desires. The business management course we have received in dual system has changed our mind on what is the most important to foster our occupation at an early age" (B. S. 35 years, CQP graduate, motorcycle repair mechanic, Parakou, 2020).

It is understandable that CQP graduates without work experience in the workshop are able to perform an adequate workshop management.

## 7.4.Transforming the crafts labour market

### *7.4.1. Crafts labour market competition*

CQP graduates stand out in the labour market. The labour market competition is the biggest challenge for craftsmen due to the highly informal economy. Most of the workshops are small firms and household enterprises which produce and provide services without formal accreditation. The crafts labour market includes professionals with formal certificates and traditional diploma and others with no certification. Working without a formal certificate or traditional diploma can be considered as an illegitimate job. The control of the regulation of this illegitimacy is entitled to the commitment of the professional associations that have hard control of the labour market. On this point, a staff member of a professional association explains in the following:

> "Today's challenge in our sector is that many young people are working without completing their apprenticeship scheme. This evidence leads to discrepancies in the quality of the production and in the compensation of the labour… We don't have enough resources to solve this issue. Some of us (masters craftsmen) encourage this practice demanding much higher apprenticeship fees from youths who mostly live in disadvantaged backgrounds" (J. A. 46 years, staff of professional association, Parakou, 2020).

In this master craftsman view, the competition of the labour market lies in the training issues whereas another master craftsman highlights the important amount of youth in the apprenticeship. Moreover, it is noticed that the number of apprentices in traditional apprenticeship has increased. The results of the study by Davodoun (2014) estimated the number of apprentices at 800,000 in traditional apprenticeship. Therefore, craftsmen who provide the best quality of production can stand out in the competitive market. Most CQP graduates who are working in their workshops showed their ability to satisfy their clients:

> "We are somewhere discouraged by the clients who are still looking for the cheapest services. As example, for a clothing model I can sew for USD 5.4 or (XOF 3,000)[71] the client can cancel the service because he/she can have the cheapest price with another person who agreed to provide the service for USD 2.7 (XOF 1,500). The most important issue is how to convince them of the value of the service. To convince my clients, I offer a high quality of service as possible to satisfy their well-being to increase the chance of getting loyal clients (Mrs A. M., 29 years, CQP graduate, sewing, Parakou, 2020).
>
> "If you create a high quality product, the price of the product must also be high. But when the market is saturated, you must lower the price accordingly. You try to earn your profit with the high quality product" (Mrs E. A. 38 years, CQP graduate, sewing, Parakou, 2020).

As for these two CQP graduates in sewing, the service guarantee and product warranty can only provide the strongest competition.

### *7.4.2. Self-actualization and Esteem among craftsmen*

Beyond the fact that CQP working graduates are finding themselves actualised to be in the productive situation, most of them develop self-esteem through the job performance. One of the biggest challenges faced by CQP graduates after completing their apprenticeship is how to set up their own workshops with adequate working conditions. The research results show the difficulties with integration into the labour market for the CQP graduates. Hence, those who succeed in setting their own workshops achieve the biggest goal:

> "After we graduated from the final CQP evaluation, the training centre has never checked on us, whether we succeeded in installing our workshops to practice what we achieved during training. Many of the cohort mates who are working, have set their workshop with their own resources; while others received financial support from their parents and relatives. It was very difficult for me to set up this workshop but I am very proud of that. The additional challenge for me is how to extend the workshop to get a large of medium-size unit of production that will be a training centre" (P. H., 27 years, CQP graduate, sewing, Cotonou, 2020).

As young craftswoman, this CQP graduate is an example of the illustration successful integration into the labour market. Moreover, the quote shows a

[71]Now, 1 USD = 554 XOF

high belief and willingness to achieve further goals in her career and in the apprenticeship system. Along similar lines, CQP graduates show a higher self-esteem compared to other graduates from the apprenticeship system. First, it is because of the competence-based approach they earn from dual apprenticeship which approach have been renewing the traditional apprenticeship. See the following quote:

> "There is no comparison between those who graduate from dual system and other graduates from apprenticeship system. As example in sewing, the difference can be made in the work performance and in the fabric finishing. The clothes manufactured by CQP graduates is the best quality. As trainer, I am proud to contribute to this high level of the improvement of traditional apprenticeship" (L. B., 47 year, CQP trainer, sewing, Parakou, 2020).

Second, the CQP certificate allows owners to apply for the recruitment process in public or private sector where other certificates from apprenticeship are not allowed. As in the following quotes, CQP graduates and trainers are aware of this important advantage:

> "With a CQP certificate, we have currently more advantages than other graduates from the apprenticeship system in Benin. We can get a contract with public or private institutions; we can apply and take the army test; we can work abroad, because the CQP certificate is formal and is the equivalent of the partial completion of international standards classification of education level 2 (at least grade 8$^{th}$)" (W. B., 24 years, CQP graduate, motorcycle repair mechanic, Cotonou, 2020).

> "Most of the labour force used for installing motorcycles by motorcycle companies (e.g. CFAO motor, *Aojue* motor, *Sanya* motor…) in Benin are CQP graduates. They achieved the competence to do this job easily among professionals of motorcycle repair. I can illustrate this with an example. We asked for young people to install motorcycles within four hours among three CQP graduates, three CAP[72] and three DTI[73]. During a period of four hours, the CQP graduates installed the motorcycles. Only one CAP was also able to do the job but none of the DTI candidates was able to do it" (M. E., 52 years, CQP trainer and DACUM facilitator, Parakou, 2020).

[72] Certificate of Professional Aptitude or *Certificat d'Aptitude Professionnelle* (CAP) is a certificate that is equivalent to the grade 11$^{th}$ after completing the first cycle of technical high school.

[73] Certificate of Higher Secondary Education or *Diplôme de Technicien Industriel* (DTI) is a diploma receive after completing the second cycle of technical high school.

Through the last quote, it has been illustrated how CQP graduates are able to perform with higher competency than other apprentices and students from higher school. This self-esteem has affected the relationship between the old generation and the new generation of craftsmen. Some CQP apprentices consider the old master craftsmen as under-qualified due to the lesser skills they developed in job practice. Throughout dual apprenticeship, there are apprentices who no longer want in the workshops while the training must be done with the dual system.

**7.5.Analysis and discussion**

Through the change theory by Rocher (1968), we state on the one hand that, technological and demographic factors, as well as conflicts and contradictions, illustrate the main patterns of the social transformations of dual apprenticeship in the crafts sector. On the other, the agents of social change, elites, social movements and motivation and success needs contribute to the illustration.

The collected data revealed two major points on which we aggregate the social transformations in the Benin crafts sector through the competence-based approach. First, it includes the knowledges achieved by CQP graduates: curriculum materials and the latest technologies used during the dual system of apprenticeship. This is technological factors of change in crafts sector. The set of this structural arrangements has contributed to the improvement of the features of traditional apprenticeship through the competence-based training. In traditional apprenticeship, the master craftsman is responsible for monitoring the apprentice whereas in dual apprenticeship, the apprentice has been trained in interactive training conditions among many other apprentices and in collaboration with trainers in the specific occupation. Based on their achievements, CQP graduates have changed the traditional leaning approach to the competence-based approach

through oral instructions and practical illustrations in the workshops. Hence, the transformations in traditional apprenticeship are observed in skills development for the dual apprenticeship and from the improvement of the pedagogical approach used. A study conducted by (Easton 2020) on street children in Nairobi showed that Undugu apprentices who were trained in a similar dual apprenticeship system practice progressive technical upgrading of informal sector production.

Second, the transformations also lie in the competition among the craftsmen in the labour market. Traditional apprenticeship is an important source of education and alternative training for early school dropout and out-of-school. This demographic factor shows the saturation of the labour market within traditional apprenticeship. The estimated number of apprentices is about 800,000 whereas general secondary educations count about 700,000 students and 15,000 in technical secondary schools (Davodoun 2014; Baba-Moussa 2017). The results of the research show that CQP graduates stand out in the labour market competition in the informal sector through the quality of their service and production. In the social change theory, conflicts and contradictions are interactions and interrelationship into the crafts labour market. As long as CQP graduates are successful in labour market competition, they have job security. Other craftsmen who are unable to stand out in the labour market competition face job insecurity. This result is in line with the findings of Ali and Najman (2016) who revealed that in sub-Saharan Africa region, "the intensity of competition is higher in capital cities, in cities surrounding the capital and in big cities" because of "the highest level of demand and the largest number and variety of consumers" (Ali and Najman 2016). The authors provide examples of Jinja (Uganda), Kinshasa (Democratic Republic of Congo), Nouakchott (Mauritania), Dakar (Senegal) and Maputo (Mozambique).

In social change theory, elites represent public and private institutions which work together to promote the innovation of dual system in apprenticeship. It comprises public institutions and the staff of professional associations. In an earlier paper (Bankolé, Nouatin and Gandonou, 2019), we presented CQP stakeholders from public and private institutions and their roles in the implementation of dual apprenticeship. The results of this paper showed good collaboration between public and private actors in the mobilization of financial resources and in the transfer of competencies on the one hand and low connection between training centres and firms on the other. Social movements depict the training provision as vocational education by the training centres and on-the-job training in the master craftsmen firms. In Bankolé and Nouatin (2020), we also developed this dual system in a broad sense. In the current research, motivation and success needs are the incentive resources that foster the self-actualisation of CQP graduates. Even though the labour market competition is much easier for CQP graduate than others, the research results show that CQP graduates as well as other graduates from apprenticeship find their integration in the labour market very difficult. CQP graduates who succeed in founding their own workshop achieve an important challenge and goal. Moreover, most of them showed their high self-esteem regarding their knowledge, job performance and satisfaction.

### 7.6.Conclusion

This paper highlighted the transformations patterns that has occurred in the Benin crafts sector through the implementation of dual apprenticeship. The introduction of dual system in apprenticeship is an innovative training model which aims to upgrade traditional apprenticeship. Using social change theory, the research has led to three important outcomes. First, the crafts transformation within dual apprenticeship arises from the ability of CQP

graduates to perform the competence-based approach to refine the traditional apprenticeship. Second, it has been illustrated that the labour market competition is favourable for CQP graduates through their high quality of service and production. Third, the results revealed that CQP graduates develop self-esteem to show their satisfactory outcomes on the job. Self-esteem is considered to be an important and additional agent of social change which has contributed to the in-depth understanding of the social transformations in the crafts sector.

# General discussion

In the last five chapters, we learnt (chapter 3) from the Benin experience in the implementation of dual apprenticeship, especially how the innovation was adapted to the social and economic contexts and how it is implemented within traditional apprenticeship. We analysed the craftsmen's perception of dual apprenticeship by describing the mobilisation strategies and by identifying the relative advantages of the program, its limits for craftsmen and the motivation for apprentices (chapter 4). In chapter 5, we mapped the CQP stakeholders by focusing on their specific roles. In chapter 6, it's illustrated the way actors act in the implementation of the program to safeguard and obtain their private and collective interests. This chapter shows how diverse interests of stakeholders can be pitfall for the implementation of the program. And in chapter 7, we assessed the transformations, which have occurred in the crafts sector through the introduction of this dual system in traditional apprenticeship.

The findings of the research lead to three main thematic analysis for discussion: educational policy transfer to developing countries; development interventions in Africa: issues and challenges; and community participation in the context of development interventions.

## 1 Educational policy transfer to developing countries

Studying the educational transfer of the German dual system in foreign countries (case of United states), Gessler (2017) concluded that this transfer can be less successful imitation or adaptation due to the practice of cooperation and permeability between companies and schools. According to Ow Yong & Cameron (2019), policy transfer is a process of making policy in the context of globalisation and the political context of global goverance. In this study, we define policy transfer as the process by which an idea or a set of practices is applied or adopted in another policy context different from the initial environment. In this regard, the policy in process is an innovation

which can be successfully adopted in the host environment. McDonald (2012) reports that unless imported policies and ideas are contextually acknowledged, strategically planned, and implemented within a cultural frame of reference, then adoption may be thwarted. Palmer (2009) has already recommended that reforms in process in Ghanian TVET system take into consideration the formal as well as the infomal apprenticeship system. Thereby, it is noticeable that innovation needs to be adapted to the new context before its introduction. In case of dual apprenticeship in Benin, a variant of dual system was created due to the fact that public sector was not able to provide vocational education as it is offered in Germany, Switzerland and so on the countries from which it was borrowed (Davodoun, 2011b). Its adaptation to Benin context has led to the creation of vocational training centres that will support technical secondary schools from public and private sectors in order to ensure the theory and additional practice sessions.

Policy transfer is a global phenomenon that occurs in a variety of ways including in-country training, student training/education in a foreign country, distance education programs, educational study tours, policy adoption, exchange programs and the establishment of educational institutions across borders (McDonald, 2012). The policy transfer to developing countries is strongly supported by the United Nations agencies and international bi-lateral support initiatives. But why do some policies succeed and other fail? By analysing the policy transfer in economic and politic domains, Alou (2010) asserts that African countries are the best experimental laboratory for public policies. The author used the example of the introduction of the competence-based approach (*Licence Master Doctorat*-LMD) introduced in higher education. It is illustrated that many universities from francophone countries have adopted the LMD system as the best model. Olivier de Sardan (2019) states that most of the policy transfer called "*modèles voyageurs*", are

those that have successful experiences in a foreign country. It is validated and strongly supported by "policy entrepreneurs", experts' groups and international bodies (Benson & Jordan, 2011). Even though the *modèle voyageurs* are introduced in order to make changes, the author highlights the fact that the *modèle voyageurs* have not adapted to the real context of their implementation. The process of transfer sometimes involves a series of facilitators who mostly are from development agencies at international, national and local levels. Hence, it is a source of employment generation at all levels and consists of distribution of money to disadvantaged social groups.

Considering this, the first issue related to the introduction of dual apprenticeship in Benin is to know whether it matches the traditional apprenticeship features. Since the master craftsmen were involved in the curriculum development and they participate in the training provision, we can postulate that dual system was adapted to the Benin context. However, we would be careful to postulate its adaptation to its host context because, it may also be because of money that is often distributed in the implementation phases, from the selection of the international development agencies involved in the pilot step to the curriculum value chain. The research findings (chapters 3 and 6) show that the budget for the curriculum design for a dual training scheme through DACAUM method can vary from USD 33,784 to 101,351 (XOF 20-60 million). The findings also illustrated that vocational training centres have used field visits to recruit their own apprentices in order to get the training contract with FODEFCA. In the implementation phase, the program enrols low number of apprentices while donors do not provide financial aids to the Benin government. Thereby, even though the program is well-designed and matches the traditional

apprenticeship context, its success depends on the actors' decisions in the implementation.

A second preoccupation is to know how the actors act in the process the transfer. The actor-oriented approach used to analyse the results contributes to understanding the actors' behaviour. It is found that there are too many actors and institutions in the management and the implementation of dual apprenticeship. Some institutions are not involved as they should be according to the apprenticeship acts (articles 72 et 78 of WEAMU No. 1/2014). Moreover, the diverse strategies used by each actor or category of actors in order to safeguard their positions and their interests in the system affect the well-being of the implementation of the program. In chapter 4, master craftsmen's perception showed that business sector or professional associations do not really have a strong influence on decision making despite their involvement.

Since the public institutions face financial challenges to the implementation of the program, the new strategy plan for TVET carried out in September 2019 has reformed the dual apprenticeship program by a renewed approach of dual apprenticeship that will focus on priorities for the government. These priorities are essentially based on ten selected occupations (appendix 2). During the elaboration of this strategy plan for TVET, the business sector, professional associations, donors, academia and consultants were invited to participate. The strategy plan, in the third point, suggests an increase in the involvement of the business sector in the management of TVET and in diversification of a sustainable mechanism for TVET financing. Has this strategy for TVET reform taken into account the real labour market needs and the social and economic context of traditional apprenticeship? Future research in few years on the effects and impact evaluation will be helpful.

## 2. Impact of educational transfer on skills development: lessons from Benin dual apprenticeship

Despite the fact limits noted in the policy transfer to developing countries, they have also effects in the apprenticeship system. Adams, de Silva, & Razmara (2013) have already postulated that improving the quality of the apprenticeship training will be part of the strategy to improve the employment and earning of those in the informal sector. Chapter 3 pointed out that the introduction of the dual system in the Benin crafts sector was adapted a little, to the traditional apprenticeship. Moreover, the training process combines vocational education with traditional apprenticeship. This traditional apprenticeship is also upgraded through the elaboration of the competency profile chart whose standards master craftsmen must follow in the workshops. Hence, there are written standards for the training in workshops. In addition, while apprentices receive pocket money for transportation and daily allowance to go to the training centres, master craftsmen sometimes train for their capacity building. It is also craftsmen who mostly offer vocational education in the training centres. As trainers, they earn annual wage from this dual system.

An impact evaluation conducted by Toassa (2017) on dual apprenticeship in Côte d'Ivoire showed significant, but low observable effects on apprentices and firms. The report illustrated that apprentices who graduate from this program experience smooth labour market integration and develop strategies to save more money than other apprentices. It is also found that the contribution of apprentices to firm productivity is also important. In the Benin case, important transformations are occurring in the apprenticeship system and in the crafts labour market competition of the CQP graduates (chapter 7). Apart from the skills developed through this program, it is also revealed that CQP graduates are able to stand out the labour market. Such a

result shows that even dual apprenticeship as an educational model transferred from foreign donors generates positive and significant changes in the apprenticeship system. The related challenge may be how to improve the commitment of the master craftsmen in order to lead more of them to participate in the program.

## 3. Community participation in the context of development interventions

The social or community participation to development has become an important challenge for successful interventions. de Almeida & Costa e Silva (2017) argued that the concept of participation is frequently used in a populist way rather than public significant. The authors claim that participation in social intervention aims to increase individuals' power and collective decision-making. In their paper, Sakyi-Darko & Mensah (2020) highlight the importance of community participation in a development project in Ghana. By examining community participation in the project design and implementation, the authors found that only development agents and assembly members were greatly involved in the apraisal, the implementation and the monitoring and evaluation. However, it is revealed that community was more involved in the identification, preparation and to some extent in implementation phases. Thereby, even though communities are involved in the process of project development, they are not committed in the implementation and the monitoring and evaluation. Sakyi-Darko & Mensah (2020) mentioned that beneficiaries from the community of their study contributed in providing some materials. This contribution was very a significant strategy for community participation.

Since the master craftsmen participation in dual apprenticeship may increase their individuals power and collective deision-making in the management of the program. The research results (chapter 3) showed that master craftsmen

are aware of the importance of their involvement in the governance and manegement of the program due to their role. The fact that the program is esssentially managed by public institutions means that master craftsmen and professional associations do not have large influence on decision-making (chapter 5). Even though craftsmen show positive percption of dual apprenticeship, it appears very important for them to be more involved in the governance and the mangement of the program. This can be another source of motivation to contribute to the financing of the program.

The results of chapter 6 regarding the reason why craftsmen train apprentices in dual apprenticeship, illustrate some collective initiatives undertaken to resolve the money issue. As examples, many vocational training centres set a return on wage of 10 percent in order to support the training centres in covering some operating expenses. All of the trainers agreed with and apply it to support the business of the training centres. Such an initiative may foster the master craftsmen participation in dual apprenticeship. Social or community particpation can be considered as a decisive factor to strengthen the power of individuals and collective decision-making and to diversify the financial resources supporting the program.

## 4. Thesis statement and justification

Through this research, we finally postulate that the increased propensity of CQP strategic actors/institutions to interests affects the appropriation of dual apprenticeship in Benin. We claim this for two reasons. First, even though the literature and the empirical findings attest that dual apprenticeship is a training program that was transferred, it was designed according to the context of apprenticeship system in Benin. Master craftsmen have worked with DACUM facilitators in order to define the competence profile chart for each occupation introduced in the program. However, the adaptation of the

program did not meet the social and cultural aspects of apprenticeship system. Traditional apprenticeship was been essentially directed by the master craftsmen and their associations. In the introduction of the reforms, only public institutions govern and manage it in collaboration with craftsmen and their professional associations. Nevertheless, graduates from this program contribute to improvement of traditional apprenticeship through the competence-based approach. Secondly, in the process of dual apprenticeship, the actors participate in the curriculum design primarily because opportunity to profit. The skills development has become a great business for DACUM facilitators and experts. It is the same remark for vocational training centres in the curriculum application of dual apprenticeship. In the curriculum feedback/evaluation of dual apprenticeship, while public institutions are subject to prejudice in the composition of the examination boards, the research revealed the persistence of the graduation ceremony.

# General conclusion

This research was undertaken to study the educational transfer in developing countries. Since the 1990s, many countries in sub-Saharan Africa received technical and financial support from donors to introduce the dual system in informal education, especially in the form of an apprenticeship system that remains an alternative option for early school leavers and youth with no prior education. In Benin, the dual system was introduced in apprenticeship in 2005 within accreditation that included the apprenticeship system in the education system as a component of technical vocational and training (TVET). Considered as an innovation due to its duality principle, dual apprenticeship, or certificate of professional qualification (CQP), was introduced in collaboration with professional associations. It has also let to the public institutions' commitment to its governance and its management. After 15 years of implementation, the program remains very limited to about 13 out of 311 occupations. Moreover, the estimated number of apprentices who have been enrolled by the program is 16,553 in the period of 2007-2015, while the total number of apprentices is supposed to be 800,000 (Davodoun, 2014). Considering this, the research postulated that there is low appropriation of the dual system in the apprenticeship system in Benin. The general aim of this research is to study the participation and commitment of the dual apprenticeship stakeholders in Benin.

To conduct this research, Cotonou, Abomey-Calavi and Parakou were selected for the field research. Cotonou and Abomey-Calavi, northern Benin, were chosen due to the fact that most of the public and private institutions that are in charge of the program are located there. Parakou was taken into account in order to know whether results will be different further way from the centre of decision-making. A qualitative approach was applied to collect and analyse the data. The respondents are from public and private institutions that are in charge of the training program, donors, master craftsmen/women,

trainers and heads of vocational training centres, CQP apprentices and members of academia.

The research results have been developed in four papers. First, the Benin dual system is a specific program which involves vocational training centres and masters' workshops or firms. The program has introduced skills development for craft occupations through performance-based training using the DACUM method. However, the program is not implemented on an executor framework. Moreover, the program has not received a global consultation the craftsmen and community for its acceptance. Therefore, in the implementation of the program, apprentices develop cognitive capacities through the training received in the VTCs with modern equipment and materials. However, the adoption of many practices, such as low literacy level, the intensive training sessions, low collaboration between training providers (VTC and companies), and the expensive cost of the dual training, do not favour the sustainability of the self-development of the apprentices and graduates.

Second, we classified the CQP adopters into categories. The early adopters include staff members of professional associations. Early majority and late majority adopters take into account members of professional associations, especially leaders from associations in the local community. Laggards are those who remain connected to their traditional customs of apprenticeship. In addition to these five categories, the results revealed another category we named business users. Business users' category is used to name vocational training centres that recruit their own apprentices for the CQP entrance test in order to maximise their training contract with FODEFCA. Although the introduction of dual apprenticeship was supported more by donors, the research showed that it has improved the traditional apprenticeship and its accreditation. There are two important points which highlight the positive

perception of the program by master craftsmen. CQP apprentices who participate in the program are motivated by curiosity and explicit knowledge. The literacy conditions to applying for CQP exclude many young people with no prior education. Nevertheless, the results show that the governance of the program and its management are essentially held by public institutions, whereas the financing is supported by donors.

Third, the results focussed on the CQP actors/institutions and their roles. Chapter 5 reviewed the context of the introduction of dual apprenticeship in Benin. Both official and empirical sources support the idea that the introduction of the program is supported by donors. The results regarding the role of actors/institutions involved revealed that the key public institutions are: DETFP, DEC, FODEFCA, DIPIQ and INIFRCF. In the private sector, there are: local and national organizations of craftsmen (associations, collectives and CNAB), training providers and apprentices with their parents. In another category, we have donors (Swisscontact, SDC, World Bank, AFD) and academia or consultants. A positive collaboration between public organizations and donors to mobilise resources (technical and financial support) is found. However, the level of cooperation between training providers has been low. In the CVC of dual apprenticeship, the research figured out in chapter 6, that skills development and the implementation of the training program are sources of business. In the evaluation and certification of the CQP competence qualification, while public institutions are subject to prejudice in the composition of the examination boards, the research revealed the persistence of the graduation ceremony.

Fourth, the research highlights the transformation patterns (chapter 7), which have occurred in the Benin crafts sector during the implementation of dual apprenticeship. The introduction of the dual system in apprenticeship is an innovative training model which aims to upgrade the traditional

apprenticeship. The research has led to three important outcomes. First, the crafts transformation withing dual apprenticeship arises from the ability of CQP graduates to perform the competence-based approach to refine the traditional apprenticeship. Second, it has been illustrated that the labour market is favourable for CQP graduates because of their high quality of service and production. Third, the results revealed that CQP graduates develop self-esteem to show satisfactory outcomes on the job. Self-esteem is considered to be an important and additional agent of social change which has contributed to the in-depth understanding of the social transformations in the crafts sector.

As recommendations, it is necessary for policy makers to reform about the roles of each of public institutions by revising the governance and management of the program in order to better involve the professional associations at the local level. The findings lead to the recommendation that the acts for regulating apprenticeship in Benin are respected. The reform should take into account the social and cultural aspects of the traditional apprenticeship to increase adaption. For inclusive financial mobilisation, it will be decisive to raise awareness regarding the program in the society at large.

To training providers, it is recommended that professional associations at the national, regional and local levels work to strengthen their institutions to increase their commitment to the program. CNAB and its associations at the local level should continue to raise awareness among master craftsmen and vocational training centres and encourage their collaboration.

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# Curriculum Vitae

Rubain Adéyèmi Bankolé was born on 27 February 1990, in Diho, district of Savè, department of Collines, Benin. He completed his general secondary education at the General Secondary School at Savalou, department of Collines, Benin. He started his tertiary education at the University of Abomey-Calavi in Benin. In 2016, he earned his advanced Master in sociology of development and had received in 2014 his Master of Arts degree in sociology and anthropology from the Faculty of Literature, Humanities and Arts of the University of Abomey-Calavi, Benin. He stayed at *Laboratoire de d'Analyse et de Recherche Religions, Espaces et Développement* (LARRED) at the University of Abomey-Calavi for a volunteer internship from 2014 till 2017. Since October 2017, he is participating in the international research project LELAM TVET4INCOME, as a research assistant. Under LELAM TVET4INCOME project, he is interested in the modernization of traditional apprenticeship in Benin through dual system. In the same period, he started his PhD research at the Graduate School of Agricultural Sciences and Water of the University of Parakou, Benin. His research interests lie in education, culture, religion and development.

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# Publications

- **Publications from the thesis**

**Rubain Adeyemi Bankole**, Guy Sourou Nouatin. 2021. Craftsmen Perception of the Dual Apprenticeship in Benin. International Journal of Social Science Research Vol. 9(1), pp. 77-92. DOI: 10.5296/IJSSR.V9I1.17905. ISSN : 2327-5510. http://dx.doi.org/10.5296/ijssr.v9i1.17905

**Bankolé, R. A.**, and Nouatin, G. S. (2020). Dual apprenticeship in Benin: Between theory and practice. African Educational Research Journal, 8(1): 46-56.

**Bankolé Adéyèmi Rubain**, Guy Sourou Nouatin and Esaïe Gandonou, (2019). "The dual apprenticeship in Benin: Strategic actors and roles". *Mélanges en l'honneur du Professeur Titulaire Emérite Albert J. NOUHOUAYI, LARRED*. ISBN : 978-99982-0-229-0. pp. 537-557.

- **Other publications**

Guy Nouatin, **Rubain Bankole**, Esaie Gandonou, Johanna M. Kemper, Karina Maldonado-Mariscal. (2019). Country Case Study on Technical Vocational Education and Training (TVET) in Benin. LELAM Working Papers, vol. 9, Zurich, KOF Swiss Economic Institute, ETH Zurich, 77p.

Bartlomiej Kudrzycki, Isabel Günther, Sylvain Kpenavoun Chogou, **Rubain Bankolé**. (2020). The Working Lives of 1250 Urban Youth in Benin. LELAM Working Papers, vol. 14, Zurich: KOF Swiss Economic Institute, ETH Zurich, 18p.

Ilyass SINA D. and **Rubain BANKOLE**. (2019). « Quand l'argent et les référents culturels déterminent les pratiques corruptives dans les services de maternité à Cotonou ». *In Mélanges en l'honneur du Professeur Titulaire Emérite Albert J. NOUHOUAYI*. ISBN : 978-99982-0-229-0. pp. 441-458.

Biaou Boni Isaac, **Bankole Rubain** & Doha Maxime, (2019). « Dynamiques sociales autour de l'attente chez les Babalawo à Savè au Bénin ». *In Attanasso Marie-Odile (ed) Les actes du colloque international sur La sociologie et l'Anthropologie au cœur du développement*. Volume 1 - Axe 1 Endogénéité et développement en Afrique, Abomey-Calavi, pp.67-82. Abomey-Calavi (Bénin), 10, 11-12 avril 2019.

- **Participation in scientific events**

**November 26th, 2020:** I participated in an academic activity on "Principles and theories of work and education" at Kathmandu University School of Education, Nepal. I provided a virtual lecture on "**Appropriateness of dual TVET in the underdeveloped context: Case study of Benin**".

**November 11-13th, 2020:** I participated in the 1st international conference of the Faculty of the Faculty of Literature, Humanities and Arts of the University of Parakou, Benin. I presented a communication on "**Social transformations in Benin crafts sector through the competence-based approach of dual apprenticeship**".

**October 19-22nd, 2020:** I participated in the 5th international conference of the University of Parakou on the topic "**Dual apprenticeship in Benin: Analysis of the craftsmen perception**".

**November 4-6th, 2019:** I participated, as conference organizing committee member for the 2nd international PhD conference of the Graduate School of Agricultural Sciences and Water, Faculty of Agronomy, University of Parakou, Benin. I also participated by presenting a communication on "**Dual apprenticeship in Benin: Between theory and practice**".

**September 11-12th, 2019:** I participated in the international conference on technical vocational education and training at Kathmandu University, Nepal

on the topic "**Reform of Vocational Education and Training system in Benin: An Exploration of Social Anthropological Field**".

**September 9-10th, 2019:** I participated in a PhD workshop, Kathmandu University, Nepal on "**Research Design and Qualitative Research in the Social Sciences**".

**May 22-24th, 2019:** I participated in a Doctoral Seminar on "**Research Design and Methods**", University of Parakou, Benin.

**November 28-30th, 2018:** I participated in the 4th international conference of the University of Parakou, Benin on the topic "**The dual apprenticeship in Benin: Strategic actors and roles**".

**April 28- June 1st, 2018:** I participated in the Swiss Leading House on the Economics of Education Firm Behaviour and Training Policies. During the course, I participated with a presentation on "**Does product market competition encourage or discourage a firm's investment in apprenticeship training**?".

**June 4-7th, 2018:** I participated in a PhD workshop at NADEL Center for Development Cooperation, ETH Zürich, Zürich, Switzerland. Throughout this workshop I presented two communications "my thesis research proposal" and "qualitative methods in social sciences" and one poster on "Benin TVET system".

**September 25-30th, 2017:** I participated in the 6th conference of the University of Abomey-Calavi on "**Pratiques corruptives à la maternité du centre de santé de Gbegamè (Cotonou): éléments pour une construction sociologique de la corruption**".

# Attestation de validation du plan de formation

REPUBLIQUE DU BENIN

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UNIVERSITE DE PARAKOU

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ECOLE DOCTORALE

"SCIENCES AGRONOMIQUES ET EAU"

Sur la base des activités énumérées ci-dessous, **M BANKOLE Adéyèmi Rubain** a satisfait aux exigences de la formation doctorale à l'Ecole Doctorale des Sciences Agronomiques et de l'Eau (EDSAE), et totalise le minimum de 180 crédits requis (= 6 semestres d'activités).

**1. Séjours scientifiques, formations et activités pédagogiques (sous-total = 60 crédits)**

**1.1. Séjours scientifiques effectués dans des Laboratoires ou instituts de recherche**

- Laboratoire de Recherche sur l'Innovation pour le Développement Agricole-LRIDA (Janvier 2018-date) ;
- NADEL Centre for Development Coorperation, Ecole polytechnique Fédérale de Zurich (ETH-Zurïch), Suisse, Mai-Juin, 2018;
- Laboratoire d'Analyse et de Recherche Religions, Espaces et Développement-LARRED (Octobre 2014-date).

**1.2. Cours et formations théoriques, méthodologiques et pratiques suivis**

- Séminaire méthodologie "LELAM PhD students' workshop", NADEL, ETH, Suisse (juin 2018).
- Séminaire méthodologique de l'EDSAE, Université de Parakou (mai 2019).

**1.3. Contribution à l'organisation d'activités pédagogiques à l'université**

- Travaux pratiques / Travaux dirigés d'encadrement des étudiants en licence et master à la Faculté d'Agronomie et à la Faculté des Lettres, Arts et Sciences Humaines, sous la responsabilité de Dr. Ir. Guy Sourou Nouatin, Université de Parakou (décembre 2018-date) ;
- Travaux pratiques / Travaux dirigés d'encadrement des étudiants en licence et master Faculté des Lettres, Arts et Sciences Humaines, sous la responsabilité de Dr. Fabien Affo, Université de Parakou (janvier 2019-date)
- Travaux pratiques / Travaux dirigés de « Médiation sociale dans les politiques publiques » en Master professionnel à la Faculté des Lettres, Arts et Sciences Humaines, sous la responsabilité de Dr. Ir. Guy Sourou Nouatin, Université de Parakou (Juin 2020) ;
- Travaux pratiques / Travaux dirigés de « Introduction à la facilitation et médiation en développement » en Master professionnel à la Faculté des Lettres, Arts et Sciences Humaines, sous la responsabilité de Dr. Ir. Guy Sourou Nouatin, Université de Parakou (janvier 2020) ;
- Travaux pratiques / Travaux dirigés de « l'Evaluation des impacts sociaux des projets et programmes en milieu rural » en Master à la Faculté d'Agronomie, sous la responsabilité de Dr. Ir. Guy Sourou Nouatin, Université de Parakou (novembre 2019) ;
- Travaux pratiques / Travaux dirigés de « l'Evaluation des impacts sociaux des innovations dans les systèmes d'intervention » avec les étudiants en master CePESA à la Faculté d'Agronomie, sous la responsabilité de Dr. Ir. Guy Sourou Nouatin, Université de Parakou (septembre 2019) ;
- Travaux pratiques / Travaux dirigés de « Durabilité sociale des interventions en milieu rural » avec les étudiants en master CePESA à la Faculté d'Agronomie, sous la responsabilité de Dr. Ir. Guy Sourou Nouatin, Université de Parakou (septembre 2019)

**2. Activités de recherche partie I : Communication scientifique (sous-total = 30 crédits)**

**2.1. Participation ou présentation aux colloques, symposium ou conférences**

- Colloque ou conférence sur « Formation et recherche en lettres, sciences humaines et sociales », Université de Parakou, Bénin (novembre 2020) ;
- Colloque ou conférence sur « Quelle université pour quelles transformations structurelles des économies africaines ? », Université de Parakou (octobre 2020) ;
- Colloque ou conférence sur « International conference on TVET for Employment, Income, and Job Quality » Kathmandu University, Népal (sepembre 2019);
- Colloque ou conférence sur « La Recherche Universitaire, Pilier Fondamental de La responsabilité Sociale des Universités », Université de Parakou, Bénin (novembre 2018) ;
- Colloque ou conférence sur « Arts, Sciences et Technologies pour le Développement Socio-économique des Nations », Université d'Abomey-Calavi, Bénin (septembre 2017).

**2.2. Participation à des groupes de discussion et séminaires de Laboratoires**

- Groupe de discussion « Les doctoriales du LARRED », Université d'Abomey-Calavi (avril 2018 ; juillet 2019 et septembre 2020).

- Groupe de discussion sur les politiques publiques et le développement local avec Dr. Fabien AFFO, Département de Sociologie anthropologie, Faculté des Lettres, Arts et Sciences Humaines, Université de Parakou (avril 2020).

**2.3. Participation aux Journées doctorales de l'EDSAE**

- Journée doctorale de l'EDSAE, Université de Parakou (Novembre 2019)

**3. Activités de recherche partie II : Thèse (sous-total = 90 crédits)**

- Trois points de thèse effectués: Décembre 2018, Janvier 2019, et Août 2020
- Trois (03) articles scientifiques parus dans deux revues internationales « African Educational Research Journal » ; International Journal of Social Science Research et une revue nationale « Mélanges en l'honneur du Professeur Titulaire Emérite Albert J. NOUHOUAYI, ISBN : 978-99982-0-229-0 ».
- Thèse intitulée « Appropriating of dual apprenticeship in Benin: An empirical analysis in the (in)formal sector ".

**Le Directeur de l'EDSAE**

UNIVERSITE DE PARAKOU
EDSAE
Le Directeur
Ecole Doc Sc. Agr.

**Prof. Dr. Ir. YABI A. Jacob**
*Professeur Titulaire / CAMES*

# Appendix

*Appendix 1: Interview guidelines*

- **Guideline addressed to CQP master craftsmen**

**A- Caractéristiques sociodémographiques des enquêtés**

Nom et prénoms :

Sexe (sex) : Age (Age) :

Situation Matrimoniale (SML) : 1) Célibataire 2) Marié(e) 3) Veuf/veuve 4) Divorcé(e)

Niveau d'instruction (NINST) : 1) Aucun 2) Primaire partiel 3) Primaire complet 4) secondaire premier cycle 5) Secondaire second cycle

Diplôme(s) obtenu(s) : 1) Diplôme traditionnel 2) EFAT 3) CQP 4) CQM 5) CAP 6) DTI 7) Autres (A préciser)

Type de famille (TYFA) : 1) Monogamique 2) Polygamique

Nombre d'enfants (NENF) : … Filles … Garçons

Métier(s) exercé(s) (MET) :

Si plus d'un métier, veuillez indiquer le métier prioritaire :

Pendant combien d'années aviez-vous appris le métier ? 1) 1-3 ans ; 2) 1-5 ans ; 3) plus de 5 ans

Comment avez-vous ouvert votre premier atelier ?

**Participation à la formation duale ou au CQP : motivation et perception**

Comment aviez-vous connu le programme de la formation duale ou le CQP ?

Quels étaient les messages de sensibilisation autour de la formation duale ou du CQP ?

Depuis quand envoyez-vous vos apprentis au CQP ?

Combien d'apprentis avez-vous actuellement dans votre atelier ?

Parmi ce nombre, combien d'apprentis font la formation duale ou le CQP ?

Si tous les apprentis ne vont pas au CQP, pourquoi les autres ne font pas la formation duale ?

Pourquoi avez-vous choisi envoyer vos apprentis pour suivre cette formation ?

Dans quel(s) centre(s) vont-ils ?

Vos apprentis vont-ils une fois par semaine dans les centres de formation ou c'est la formation se déroule-t-elle par regroupement ?

Quels sont les avantages et inconvénients de la formation par alternance d'un jour par semaine et du regroupement ?

Quelle est l'utilité de la formation duale pour vos apprentis ?

La durée de formation duale ou le CQP est-elle bénéfique pour les artisans ? Justifiez votre réponse ?

Quels avantages (facilité et renforcement des capacités, opportunités) tirent les patrons CQP de la formation duale ou le CQP ?

Qu'est-ce que la formation duale ou le CQP a amélioré l'apprentissage traditionnel ? Justifiez votre réponse ?

Quelles sont les difficultés que rencontrez-vous dans l'application de la formation duale ou le CQP ?

Que doit-on améliorer dans l'application de la formation duale ou le CQP (critères et conditions de recrutement, quels contenus de formation dans le métier, méthode d'enseignement, évaluation des apprenants) ?

**La formation duale : intérêts en jeu et stratégies développées par les acteurs**

Quelles sont les structures publics et privées que vous connaissez autour de l'application de la formation duale ou du CQP ?

Quels rôles jouent les associations artisanes dans le recrutement des apprenants CQP ?

Que pensez-vous de la formation donnée par les centres de formation pour les apprenants ?

Que Gagnez-vous en amenant vos apprenants à faire l'apprentissage dual ?

Quels rôles jouent les associations artisanes dans la mise en œuvre des formations dans les centres et même en ateliers ?

Ces rôles sont-ils bien joués ? Sinon, quels sont les rôles qui ne sont pas bien joués ? Si oui, êtes-vous satisfait(e) du travail des responsables de vos associations dans l'application de la formation duale ?

Vos apprentis reçoivent avec le CQP un certificat officiel délivré par l'Etat. Selon l'Etat, les personnes détenteurs du CQP peuvent travailler pour les services de l'Etat et même les entreprises à l'extérieur. Ce qui n'est pas le cas pour les patrons qui n'ont pas le CQP. Pensez-vous que les patrons doivent également passer l'examen du CQP ?

Les apprentis sélectionnés bénéficient d'une bourse leur permettant de suivre la formation dans un centre. Les patrons artisans reçoivent-ils aussi des aides de la part de l'Etat ? Si oui, combien et à quelle occasion ?

Pendant, l'application de la formation duale, les apprentis doivent aller au centre et doivent aidez leurs patrons en ateliers ou en chantiers. Comment gérez-vous les deux pour que les apprentis travaillent pour vous ?

Pour le CQP, les apprentis sont testés dans les centres par des petits examens ou compositions. Comment les évaluez-vous en atelier ?

L'examen du CQP prend-il en compte vos évaluations en atelier ? Sinon, Pourquoi ?

Et que font les associations pour que cela puisse être pris en compte ?

Quels sont les rôles des artisans ou de leurs associations à l'examen final du CQP ?

Sont-ils payés pour les services ? Sinon, Pourquoi ne sont-ils pas payés ? Si oui, comment sont-ils payés ?

**Introduction de la formation duale au Bénin et transformations du milieu artisan**

Les nouveautés observées dans votre métier sont-elles liées à l'arrivée de la formation duale ?

Qu'est-ce que la formation duale ou le CQP a apporté comme nouvelles pratiques dans la méthode de formation des apprentis en atelier ?

En quoi la formation duale ou le CQP vous a-t-il aidé à mieux gérer votre l'atelier ?

Qu'est-ce que la formation duale vous a aidé à faire et que vous n'arriviez pas à faire avant son introduction (Ex : Réalisation de certains ouvrages ou services) ?

Lorsque vous confiez un travail à vos apprentis, existe-t-il une différence entre le travail d'un apprenti CQP et un autre qui ne fait pas le CQP ? Justifiez votre réponse ?

Que pensez-vous des jeunes diplômés du CQP par rapport aux autres diplômés du CQM ou du CAP ?

- **Guideline for trainers from vocational training centres**

I- Description du profil sociologique de l'intéressé

Nom et prénom

Sexe Age niveau d'instruction Diplôme(s) de formation professionnelle obtenu(s)

Situation matrimoniale nombre d'année d'expérience

Occupation actuelle

II- Généralités sur le système dual

2.1. Comment avez-vous connu le système dual ?

2.2. Qui étaient les acteurs avec qui vous aviez commencé ?

2.3. Sont-ils encore dans le système de nos jours ? sinon pourquoi ?

2.4. En quoi consiste la formation duale ?

2.5. Ce principe est-il toujours respecté ? Sinon pourquoi y a-t-il des changements du principe du système dual ?

2.6. Ces changements de principes ont-ils apporté de bonnes choses au système ?

2.7. Quels sont les problèmes enregistrés au cours de ce système dual ?

2.8. Quelles en sont les causes ?

2.9. Quelles en sont les conséquences ?

III- Participation des apprentis

3.1. Qu'est-ce qui motivait, selon vous les apprentis à aller au centre ?

3.2. Qu'est-ce qu'on apprend aux apprentis dans le système dual ?

3.3. Avant qu'un apprenti ne se rende au centre il faut l'autorisation de son patron. Comment les patrons apprécient-ils ce système dual ?

3.4. Que reprochent les patrons au dispositif ?

3.5. Dans quelle mesure prenez-vous en compte leurs recommandations ?

IV- Effets et impacts de la formation sur les apprentis

4.1. Y a-t-il de différence entre un apprenti CQP et non CQP ? Si oui, comment faites-vous les différences entre les deux ?

4.2. Quels sont les avantages du système pour les apprentis ?

4.3. Ce système n'est-il pas marginal aux apprentis non CQP ?

4.4. Quelles sont les difficultés soulevées par les apprentis CQP ?

4.5. Autrefois, les apprentis doivent savoir observer son patron, ils ne posent pas de questions, ils ne peuvent pas faire d'erreur… Selon vous, le système dual a-t-il changé les anciennes habitudes ou pratiques ?

V- Rôle de formateurs

5.1. Comment êtes-vous devenu formateur dans le système dual ?

5.2. Dans quel(s) centre(s) intervenez-vous ?

5.3. Comment procédez-vous ? (votre démarche)

5.4. Que gagnez-vous en tant que formateur ?

5.5. Il est dit que les formateurs reversent une part de 10% aux centres. En quoi cela se justifie-t-il ? Etes-vous obligé de vous acquitter de cela ?

- **Guideline for CQP apprentices/graduates**

I- Description du profil sociologique de l'intéressé

Nom et prénom

Sexe Age niveau d'instruction Diplôme(s) de formation professionnelle obtenu(s)

Situation matrimoniale nombre d'année d'expérience

Occupation actuelle

II- Généralité sur la formation suivie

Quand avez-vous commencé l'apprentissage ?

Comment étiez-vous entrée dans l'apprentissage ?

Aviez-vous fait un contrat d'apprentissage avec votre patron ?

Comment aviez-vous connu le programme du CQP ou formation duale ?

Etiez-vous le seul apprenti à faire la formation duale ?

Quelle était la fréquence de formation au centre ?

Qu'est-ce qu'on vous apprenait au centre qu'on ne vous apprend pas en atelier?

III- Motivation à la formation

Qu'est-ce qui vous motivait à aller au centre ?

Quels étaient les avantages de la formation que vous recevez dans les centres ? en quoi est-elle différente de la formation en atelier ?

Quelles sont les difficultés rencontrées dans le suivi de la formation dans les centres ?

IV- Changements intervenus et perspectives

Qu'est-ce qui fait la différence entre vous qui avez fait le CQP et les autres ?

Vous êtes devenue patronne avec deux apprenties. Comment enseignez-vous le métier à vos apprenties ? Votre méthode est-elle différente de ce que votre patronne faisait ?

Selon vous, est-il possible que les apprentis et leurs parents prennent en charge la formation duale ?

*Appendix 2: Press releases*

MINISTÈRE DES ENSEIGNEMENTS SECONDAIRE, TECHNIQUE ET DE LA FORMATION PROFESSIONNELLE
RÉPUBLIQUE DU BÉNIN

DIRECTION DE L'ENSEIGNEMENT TECHNIQUE ET DE LA FORMATION PROFESSIONNELLE

Route de l'aéroport
10BP 250 Cotonou
(229) 21 32 38 43 ; Fax : 21 32 41 88
Web : www.enseignementsecondaire.gouv.bj

*Cotonou, le* 23 juillet 2020

N° 015 /MESTFP/DC/SGM/DPP/DETFP/SA

# COMMUNIQUE RADIO

(*A diffuser matin et soir pendant dix jours*)

**Objet :** Ouverture des registres d'inscription à l'obtention du Certificat de Qualification Professionnelle (CQP) de mille (1.000) maîtres artisans par procédure exceptionnelle.

Dans le but de fournir de la main-d'œuvre qualifiée aux entreprises nationales et internationales intervenant dans la réalisation des grands travaux du PAG, le Gouvernement a élaboré la Stratégie Nationale de l'Enseignement et la Formation Techniques et Professionnels. La formation doit aujourd'hui être pratique et conduire le bénéficiaire à l'obtention d'une certification socialement reconnue. Dans ce cadre, le Ministère des Enseignements Secondaire, Technique et de la Formation Professionnelle en collaboration avec les ministères sectoriels concernés, organise une formation pour l'obtention du Certificat de Qualification Professionnelle au profit de 1.000 artisans et maîtres-artisans.

A cet effet, le Ministre des Enseignements Secondaire Technique et de la Formation Professionnelle informe le public que les registres d'inscription sont ouverts pour les postulants du **28 juillet au 11 août 2020.**

Le nombre de places par métier concerné pour cette première phase se présente comme suit :

| Métiers | Nombre de places |
|---|---|
| Carreleur | 120 |
| Electricien bâtiment | 100 |
| Installateur énergie photovoltaïque | 120 |
| Froid et Climatisation | 100 |
| Maçon | 145 |
| Mécanicien auto | 100 |
| Menuisier bois | 90 |
| Plombier | 100 |
| Soudeur/Constructeur métallique | 75 |
| Tisserand | 50 |

Peuvent faire acte de candidature, les artisans et maîtres artisans remplissant les conditions ci-après :

- **savoir lire et écrire ;**
- **être en exercice dans le métier choisi ;**
- **être titulaire du diplôme de fin d'apprentissage dans le métier choisi datant d'au moins cinq (5) ans sauf pour le métier d'Installateur énergie photovoltaïque ;**
- **avoir formé des apprentis pour le CQP sauf pour le métier d'Installateur énergie photovoltaïque.**

Les candidatures féminines et celles des personnes handicapées dans les métiers sus cités sont encouragées.

La liste des pièces constitutives du dossier de candidature se présente comme suit :

- **une (1) fiche d'inscription à retirer gratuitement auprès des faîtières (UCIMB, CNAB) ou de leurs démembrements ;**
- **une (1) copie légalisée du Diplôme de Fin d'Apprentissage ;**
- **une (1) attestation d'appartenance à une association de métier datant de moins de trois (3) mois et précisant que l'intéressé est toujours en activité. Cette attestation doit être gratuitement délivrée par l'Organisation Professionnelle d'Artisans ;**
- **une (1) copie d'acte de naissance ou toute autre pièce qui renseigne sur l'identité réelle du candidat ;**
- **une (1) photo d'identité à coller sur la fiche d'inscription ;**
- **les copies de trois (3) contrats d'apprentis ayant été formés pour le CQP sauf pour le métier d'Installateur énergie photovoltaïque.**

Les Associations Professionnelles des Artisans sont chargées de collecter les dossiers de candidature et de les déposer dans les Directions Départementales des Enseignements Secondaire, Technique et de la Formation Professionnelle (DDESTFP) de leur ressort territorial.

Pour tout renseignement complémentaire, s'adresser à la Direction de l'Enseignement Technique et de la Formation Professionnelle (DETFP), à la CNAB et à l'UCIMB.

**Professeur Mahougnon KAKPO**
Ministre des Enseignements Secondaire,
Technique et de la Formation Professionnelle

REPUBLIQUE DU BENIN

DIRECTION DEPARTEMENTALE DES ENSEIGNEMENTS SECONDAIRE, TECHNIQUE ET DE LA FORMATION PROFESSIONNELLE DE L'OUEME

Quartier OGANLA
01 BP 97 Porto-Novo
(229) 20 22 45 36
Courriel ddesftpri_op @ yahoo fr

N°1151/DD-Ouémé/MESTFP/SEC/SA

Porto-Novo, le ...02...septembre 2020

*Le Directeur Départemental de l'Ouémé*

*Aux*

Chefs d'Etablissements Publics et Privés.

**Objet** : recrutement de mille (1000) apprentis pour le CQP rénové

Mesdames et Messieurs,

Dans le cadre de la mise en œuvre du Plan d'Urgence de l'Enseignement et de la Formation Techniques et Professionnels, et dans le souci de constituer un vivier de compétences dans les secteurs prioritaires de l'économie sur une période dix (10) ans, de 2020 à 2030, il est organisé le jeudi 1er Octobre 2020, un test de recrutement pour la mise en formation de mille (1000) apprentis au CQP rénové.

En attendant que les centres de composition ne vous soient communiqués, les dossiers de candidatures seront reçus, du **26 août au 18 septembre 2020**, au Service des Examens et Concours de la Direction Départementale des Enseignements Secondaire, Technique et de la Formation Professionnelle de l'Ouémé (SEC/DDESTFP-O).

Les critères d'éligibilité, la liste des pièces constitutives des dossiers de candidatures et le nombre de places disponibles par métier concerné, sont portés en annexe.

Les candidats composeront en Mathématiques et en Français.

Les candidatures féminines et celles des personnes en situation de handicap sont vivement encouragées.

Je compte sur votre diligence habituelle.

(DDESTFP/O) Le Directeur

**Dr Bertin Y. DANSOU**
Directeur Départemental des Enseignements Secondaire, Technique et de la Formation Professionnelle de l'Ouémé

## CRITERES D'ELIGIBILITE

- Etre âgé de 18 ans au moins au 31 décembre 2020 ;
- être apprenti(e) titulaire d'un contrat d'apprentissage d'une durée de six mois au moins à la date du dépôt des dossiers ;
- avoir le niveau minimum de la classe de 5ème de l'Enseignement Secondaire Général ;
- être Candidat à l'apprentissage dual et se faire inscrire pour le recrutement, par son patron ou sa patronne, ou par CFPA ;

## LISTE DES PIECES A FOURNIR

- Une fiche d'inscription à télécharger gratuitement sur le site de la plateforme www.eresultats.bj ou sur le site www.educmaster.com;
- une copie du contrat d'apprentissage signé avec la patronne ou le patron, ou à défaut l'attestation d'apprentissage à retirer auprès des collectifs des artisans ;
- une copie de l'acte de naissance ou toute autre pièce tenant lieu qui renseigne sur l'identité réelle du candidat ;
- une photo d'identité du candidat à coller sur la fiche d'inscription ;

## NOMBRE DE PLACES PAR METIER CONCERNE

| Métiers | Nombre de places |
|---|---|
| Constructeur Métallique (soudeur) | 100 |
| Electricien Bâtiment | 150 |
| Froid et Climatisation | 100 |
| Installateur et Maintenancier des Panneaux Solaires | 150 |
| Constructeur Bâtiment (Maçon) | 150 |
| Mécanicien Automobile | 100 |
| Mécanicien d'engin à deux roues | 100 |
| Menuisier Bois | 50 |
| Plombier | 50 |
| Revêtement (Carreleur) | 50 |

NB : Les candidats pourront s'inscrire dans les centres de Formation Professionnelle et d'apprentissage publics et privés de leur choix, mais par le biais des démembrements de l'Union des Chambres Interdépartementales des Métiers du Bénin (UCIMB) et de la Confédération Nationale des Artisans du Bénin (Bénin).

*Appendix 3: Synergy.net report*

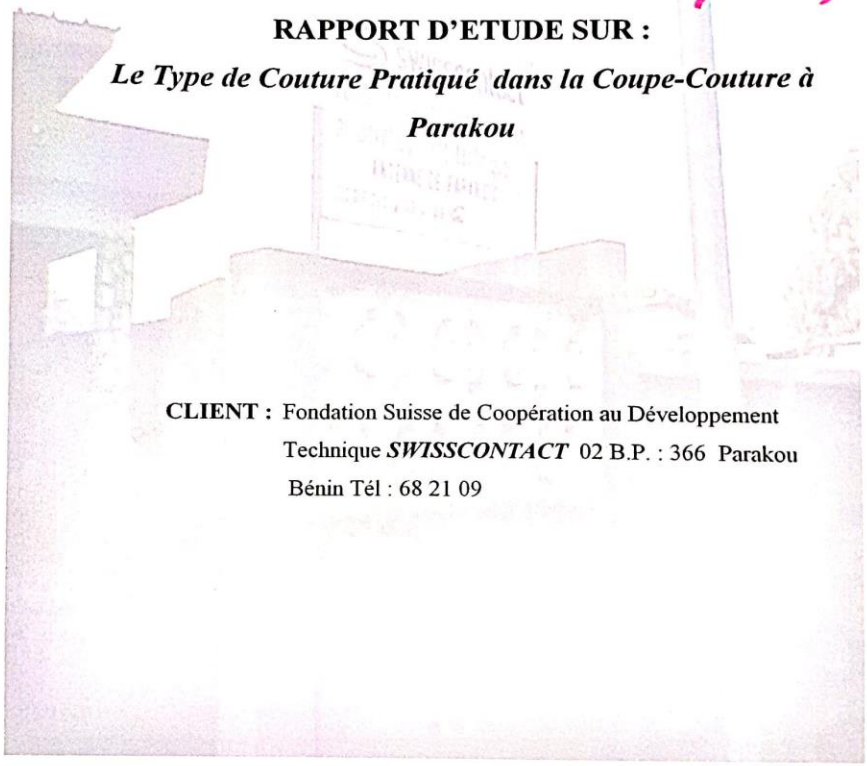
**CYNERGIE.NET**
Agence de Marketing et de Multimédias
B.P. 673 Parakou Tél : 61 30 21 E-mail : morettifr@cooperation.net /
www.cooperation.net/morettifr

A4

B/RAPPORT D'ETUDE/02
/CY

# RAPPORT D'ETUDE SUR :

## *Le Type de Couture Pratiqué dans la Coupe-Couture à Parakou*



**CLIENT :** Fondation Suisse de Coopération au Développement
Technique ***SWISSCONTACT*** 02 B.P. : 366 Parakou
Bénin Tél : 68 21 09

ANNEE : Janvier 2004

## *SOMMAIRE*

## I - Introduction

Le projet Swisscontact en vue de réaliser un programme de formation adéquat d'apprentissage de type dual à parakou, a mandaté l'Agence CYNERGIE.NET pour approfondir le premier thème d'étude dans ce secteur.

Le présent thème de cette étude est :

Le Type de Couture Pratiquer dans la Coupe-Couture à Parakou au Bénin.

Le présent rapport restitue le travail de collecte de données qui a été réalisé pour le compte du projet Swisscontact. Ce travail s'est effectué du 25 au 29 janvier 2004 et s'articule autour des points suivants :

1.. Objectifs de l'étude, 2.. La méthode de transmission de connaissance, 3.. Identification du type de programmes de formation d'apprentissage, 4.. Le type de couture le plus pratiquer, 5.. Stratégies de mis en œuvre du programme.

## II - Objectif de l'étude

Swisscontact et les acteurs impliqués dans la planification de réalisation du programme de formation des apprentis dans le système dual doivent connaître la méthode de transmission et de programme de formation des apprentis dans les ateliers par les patrons et dans les centres par les formateurs. pour avoir un meilleur contact avec ses partenaires, ils ont besoin de les connaître. Ces données sont souvent recherchées au moyen d'une collecte et d'une analyse de données fiables auprès des patrons du métier.

Ainsi, la collecte des données utiles va contribuer à éclairer le projet SWISSCONTACT par rapport à son intervention.

### 1.. Questions et Hypothèses de travail

#### a- Question de l'étude

Au regard du terme de référence, nous avions réalisé un questionnaire de recueil d'informations à savoir :

- Fiche de recueil d'informations sur le type de couture pratiqué dans la coupe couture à Parakou avec des questions sur :

1) Identification de l'Atelier,
2) Méthode de transmission
3) Module de Formation,
4) Divers

**2.. Méthodologie**

L'étude a été réalisée pendant cinq (5) jours du 25 au 29 janvier 2004 en trois phases.

La première phase a consisté à l'organisation et à la réalisation du questionnaire..

La deuxième phase a consisté à la collecte des informations nécessaires au diagnostique.

Pour des raisons de couverture du terrain nous avions utilisé le système de diagnostic exploratoire basé sur la méthode de l'interrogation.

La troisième phase a consisté au dépouillement, au traitement, et à l'analyse des questions.

Le dépouillement et l'analyse des données et informations ont été faits à l'aide des logiciels Access, Excel.

## III.. La méthode de transmission de connaissance

### 1.. Alphabète

Il faut rappeler que le premier rapport de consultation oriente le principe de type d'apprentissage qui n'est autre que l'appropriation progressive des connaissances par voie orale et l'observation par l'apprenti. La collecte et le dépouillement des informations révèlent que la transmission de connaissance se fait sur la base orale, l'observation des gestes de travail du patron, la pratique sur papier ou tissus et en des cas très rares, la théorie.

Seulement 5% des patrons tentent de donner des cours pratiques, assemblages de cours théorique qui ne sont pas souvent un programme d'année. Mais des théories à la volet basées sur des modèles types.

### 2.. Analphabète :

Le domaine des apprentis analphabètes est très sensible et doit mener à une réflexion sur le développement du métier de couture à Parakou, car plus de 50% des apprentis en coupe couture non pas mi-pieds à l'école.

Ce pendant, la plupart de ces apprentis (35%) parlent le français fonctionnel, du fait qu'ils sont en contact avec des personnes parlant le français ou ayant un parent ou une sœur qui communiquent avec eux en français.

La méthode de transmission est la même, seulement l'aspect théorique ne peut être soulevé avec eux.

Le constat, est que dans les ateliers d'apprentissages, les apprentis analphabètes et alphabets sont ensemble et pour ne pas faire de jaloux, les patrons ou patronnes préfèrent transmettre la connaissance oralement et par la pratique sur papier ou tissus.

## IV- Identification du type de programmes de formation d'apprentissage.

Cette consultation à mis plusieurs patrons et patronnes dans l'embarras, du fait qu'il n'existe pratiquement pas de programme définit dans la plupart des ateliers ciblés.

Tandis que dans les centres la question rime à une enquête voulant dépo[illegible] leur connaissance en faveur d'autres tiers en vue de se faire une belle taille d[illegible] l'accumulation d'Apprentis et de clients.

Au cours de nos échanges de dépouillement avec les deux consultants juniors, nous avions soulevé la question de comprendre :

Ce que sont la COUTURE, la couture Dame, le stylisme, la couture classique etc.

Nous pensons qu'il est bon de définir ces notions pour une présentation du programme de formation d'apprentis dans les centres.

Revenons à notre quête d'information sur les modules de formation dans les ateliers. Nous présentons un tableau de synthèse des informations par cible :

### 1.. Les ateliers de coupe couture

Seulement 10% des patrons de métier de couture ont un programme établit de modules à transmettre aux apprentis. ci - dessous le tableau de synthèse :

| Pre[illegible] année | Deuxième année | Troisième année |
|---|---|---|
| Les différents points de couture<br>Chemises manche courte<br>Bomba complet<br>Placement des cols- ourlet- faufilage.<br>Attaque des pinces pantalon, corsage, jupe…<br>La placage des poches de pantalon, jupe<br>Pédale machine<br>Précision dans la couture<br>Repassage | Renforcement des acquis de la première année,<br>Montage d'un pantalon complet, d'un chemiser,<br>d'une manche longue, chemise d'été……<br>Doublage des tenues…. | Renforcement des acquis de la deuxième année.<br>Confectionnement et montage des modèles |

**2.. Les centres de formation en coupe couture**

Il existe des centres qui ont un programme défini de formation pour les apprentis et la synthèse est :

| Première année | Deuxième année | Troisième année |
|---|---|---|
| Tracés simple<br>Coupe couture<br>Tenue traditionnelle ( bomba, djaba, dansiqui ) | Coupe pantalon<br>Coupe couture<br>Coupe chemise | Coupe et couture veste<br>Tailleur<br>Robe du soir<br>Application<br>Recyclage |

| Première année | Deuxième année | Troisième année |
|---|---|---|
| 1er trimestre :<br>- Initiation en point de couture à la main<br>- Apprentissage de pédale à machine<br>- Apprentissage du début de piqûre à la machine<br><br>2ème trimestre :<br>- Révision du 1èr trimestre<br>- Apprentissage des différentes jupes<br><br>3ème trimestre :<br>- Confection des coupes supplémentaires<br>- Finition sur les tenus<br>- Révision générale | 1er trimestre :<br>- Révision de quelque point de la 1ère année<br>- exercice de quelques modèles et coupes<br><br>2er trimestre :<br>- Coupe secondaire + couture<br>- Révision des tenus française<br><br>3er trimestre :<br>- Révision générale des différentes coupes et modèles<br>- Des coupes supplémentaires | 1er trimestre :<br>- Révision de1ère et 2ème année<br>- Confection des modèles et montage<br><br>2er trimestre :<br>- Mise au point de tous les modèles<br>- Finition des tenus<br><br>3er trimestre :<br>- Coupe et couture des différentes modèle<br>- Révision générale<br>- Préparation des examens |

**1- Stratégie de réussite du programme**

Au terme de cette étude, nous proposons trois (3) étapes à suivre pour la réussite du programme d'apprentissage dual des apprentis en coupe couture à parakou à savoir :

- Renforcement des connaissances des formateurs des formateurs
- Implication formelle des formateurs des formateurs au programme par une définition du cahier de charge.
- Information et Implication des différents membres des associations au programme
- Suivi et évaluation périodique.

*Appendix 4: Statistics Data*

| Variable\Statistique | Nb. d'observations | Nb. de valeurs manquantes | Somme des poids | Nb. de modalités | Mode | Mode (effectif) | Modalités | Effectif par modalité | Fréquence par modalité (%) | Borne inf. des freq. (95 %) | Borne sup. des freq. (95 %) | Proportion par modalité | Borne inf. des proportions (95 %) | Borne sup. des proportions (95 %) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Comment aviez-vous connu le programme du CQP ou formation duale ? | 30 | 0 | 30 | 2 | 1 | 28 | Par Mon patron | 28,000 | 93,333 | 84,407 | 100,000 | 0,933 | 0,844 | 1,000 |
| | | | | | | | Une connaissance | 2,000 | 6,667 | 0,000 | 15,593 | 0,067 | 0,000 | 0,156 |
| Qu'est-ce qui vous motivait à aller au centre ? | 30 | 0 | 30 | 4 | 5 | 15 | Se libérer des exigences de l'atelier | 2,000 | 6,667 | 0,000 | 15,593 | 0,067 | 0,000 | 0,156 |
| | | | | | | | Connaissance explicite | 2,000 | 6,667 | 0,000 | 15,593 | 0,067 | 0,000 | 0,156 |
| | | | | | | | Curiosité et connaissance explicite | 15,000 | 50,000 | 32,108 | 67,892 | 0,500 | 0,321 | 0,679 |
| | | | | | | | Curiosité - connaissance explicite et soutien du patron | 11,000 | 36,667 | 19,423 | 53,911 | 0,367 | 0,194 | 0,539 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Quels étaient les avantages de la formation que vous recevez dans les centres ? en quoi est-elle différente de la formation en atelier ? | 30 | 0 | 30 | 4 | 4 | 20 | Conditions de travail très favorables | 2,000 | 6,667 | 0,000 | 15,50 | 0,00 | 0,00 | 0,156 |
| | | | | | | | Apprendre de nouvelles pratiques | 4,000 | 13,333 | 1,000 | 25,49 | 0,13 | 0,01 | 0,255 |
| | | | | | | | Conditions de travail très favorables et apprentissage de nouvelles pratiques | 20,000 | 66,667 | 49,00 | 83,75 | 0,67 | 0,49 | 0,835 |
| | | | | | | | Conditions de travail très favorables - apprentissage de nouvelles pratiques et travail en groupe | 4,000 | 13,333 | 1,000 | 25,49 | 0,13 | 0,01 | 0,255 |
| Comment enseignez-vous le métier à vos apprenties ? Votre méthode est-elle différente de ce que votre patronne faisait ? | 30 | 0 | 30 | 2 | 1 | 19 | Oui | 19,000 | 63,333 | 46,00 | 80,75 | 0,67 | 0,49 | 0,835 |
| | | | | | | | N'a pas encore d'apprentis | 11,000 | 36,667 | 19,23 | 53,49 | 0,37 | 0,19 | 0,556 |

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