### Journal of International Agricultural and Extension Education

Volume 27 Issue 2 <i>27(2)</i>	Article 4
-----------------------------------	-----------

4-1-2020

# Understanding the Context for Agricultural Technical, Vocational, Education and Training in Haiti

M. Christelle Calixte University of Florida

T. Grady Roberts University of Florida

J. C. Bunch University of Florida

Follow this and additional works at: https://newprairiepress.org/jiaee

Part of the Growth and Development Commons, and the University Extension Commons

#### **Recommended Citation**

Calixte, M. C., Roberts, T. G., & Bunch, J. C. (2020). Understanding the Context for Agricultural Technical, Vocational, Education and Training in Haiti. *Journal of International Agricultural and Extension Education*, 27(2), 36-48. DOI: https://doi.org/10.5191/jiaee.2020.27236

This Research Article is brought to you for free and open access by New Prairie Press. It has been accepted for inclusion in Journal of International Agricultural and Extension Education by an authorized administrator of New Prairie Press. For more information, please contact cads@k-state.edu.

## Understanding the Context for Agricultural Technical, Vocational, Education and Training in Haiti

#### Abstract

Agricultural activities in developing countries are critical for the future of the world's food security. These countries have the lowest agricultural productivity and dissemination of agricultural technologies are often insufficient. Extension has a vital role in improving agricultural productivity. The Caribbean country of Haiti is one such case. In Haiti, agricultural technicians perform much of the extension field work. Agricultural technicians often have a diploma earned at a Technical, Vocational, Education and Training (TVET) school. However, not much is known about Haitian TVET schools, as little research has been conducted. This study explored the context for Haitian agricultural TVET. Individual interviews with four school directors and three teachers per school (12 total), as well as a student focus group in each school allowed to identify the ambiguous cultural value of agricultural TVET in Haiti. Results identified the cultural disregard for TVET through its stakeholders' contempt for this sector as well as the government's failure to support it appropriately. However, it was also found that TVET added value to the agricultural system both for its inherent qualities, and because of the reputation, competitiveness it creates for the graduates through the schools' curricula, INFP recognition, and the networking experiences it facilitates notably with internships.

#### Keywords

TVET, Haitian, agriculture

#### Understanding the Context for Agricultural Technical, Vocational, Education and Training in Haiti

M. Christelle Calixte University of Florida

T. Grady Roberts University of Florida

J. C. Bunch University of Florida

#### Abstract

Agricultural activities in developing countries are critical for the future of the world's food security. These countries have the lowest agricultural productivity and dissemination of agricultural technologies are often insufficient. Extension has a vital role in improving agricultural productivity. The Caribbean country of Haiti is one such case. In Haiti, agricultural technicians perform much of the extension field work. Agricultural technicians often have a diploma earned at a Technical, Vocational, Education and Training (TVET) school. However, not much is known about Haitian TVET schools, as little research has been conducted. This study explored the context for Haitian agricultural TVET. Individual interviews with four school directors and three teachers per school (12 total), as well as a student focus group in each school allowed to identify the ambiguous cultural value of agricultural TVET in Haiti. Results identified the cultural disregard for TVET through its stakeholders' contempt for this sector as well as the government's failure to support it appropriately. However, it was also found that TVET added value to the agricultural system both for its inherent qualities, and because of the reputation, competitiveness it creates for the graduates through the schools' curricula, INFP recognition, and the networking experiences it facilitates notably with internships.

Keywords: TVET, Haitian, agriculture

#### Introduction

Developing countries view agricultural activities as routine (Wilkin, 1997), but agricultural production is often inferior in these countries (Fuglie & Wang, 2012). This situation likely contributes to the critical food insecurity status in some of these nations (FAO, 2006). This, coupled with the fact that 70 to 75% of the poverty worldwide is found in the rural communities (FAO, 2002) suggests that developing countries are key to reducing the food insecurity crisis in the world (Fuglie & Wang, 2012).

Many developing countries (30 out of 68) have experienced agricultural productivity increase which has allowed more than 30% GDP growth per year as a consequence (Atchoarena & Sedel, 2003). However, Haiti is one of those countries whose GDP has been fluctuating but mostly trending down since the beginning of the new millennium (FAOSTAT, 2018). Haiti also registers an alarming hunger index severity, the worst of the Latin American and Caribbean (LAC) region (von Grebmer et al., 2016). Haiti was also the main reason for LAC's failure to attain the First Millennium Development Goal (MDG1) against hunger (FAO, IFAD, & WFP, 2015). This situation suggests a critical need for addressing agricultural issues in Haiti in order to tackle the food insecurity status of its population.

Improving agricultural productivity requires new technologies and new practices (Fuglie & Wang, 2012). Extension can play a key role in working with farmers to make changes. Previous research in the Centre department of Haiti has revealed that extension activities have doubled farmers' income and improved their food security status (Maxime & Paul, 2017). In Haiti, agricultural technicians perform much of the extension field work (GFRAS, 2017). Agricultural technicians often have a diploma earned at a Technical, Vocational, Education and Training (TVET) school (GFRAS, 2017). Therefore, making improvements in TVET has the potential for improving the larger agricultural situation (Basu & Majumdar, 2009). However, not much is empirically known about Haitian TVET schools. Anecdotal and indigenous knowledge most certainly exists. This study will fill a need by moving some of this knowledge into the literature so it can be discoverable by others.

#### **Theoretical Framework**

We approached this research using social constructivism as a lens (Doolittle & Camp, 1999). This allowed us to examine the larger phenomena from the individual perspectives of people who are most familiar with TVET in Haiti. It also allowed us to recognize that learning occurs within a culture and is socially constructed by people who work together (Lave, 1991). Operationally, this allowed us to answer the question of how do directors, teachers, and students believe TVET fits within the larger socio-cultural context of Haiti.

#### Literature Review

According to UNESCO (2017b, p. 1) TVET can be defined as "those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding, and knowledge relating to occupation in various sectors of economic life." UNESCO also documented TVET's role in tackling various social inequalities, such as unemployment, and also in contributing to sustainable development (UNESCO, 2017a). Therefore, market demands determine the skills that must be part of the curricula, particularly those pertaining to specific technical expertise, scientific and information technology, as well as the ability to transfer those skills from the school to home and to the workplace (King, 1993; Mouzakitis, 2010). Many TVETs only

provide terminal degrees focused on technical skills. However, in LAC many TVETs are nonterminal and they may allow for higher degrees as much as they provide a technical diploma (King, 1993). TVET has been found to contribute to sustainability, growth, equity, employability, decent work, and lifelong learning (UNESCO, 2015). However, in developing countries TVET is often regarded as having low prestige because it is reserved for people from a certain social class and those who cannot get into universities (King, 1993). In Ghana for example, TVET is believed to be for people with poor academic performance, and results in less vertical mobility, growth, and salary (Darvas & Palmer, 2014).

TVET schools vary greatly due to a variety of historical and cultural influences. They offer an array of curricula and focus on diverse employment opportunities (King, 1993). In Europe, three models have been identified: the market model, the state-controlled model, and the cooperative or dual model (Koudahl, 2010). The dual model is an integration of both the market and the state-controlled model and it provides the combined benefits of easy and fast employment of market model, as well as the excellent and broad training found in the state-controlled model (Koudahl, 2010). The cooperative model is operationalized through the formal training in school settings followed by placement in the workplace to learn the intricacies of the trade (Koudahl, 2010). This diversity is also found in the various locations where TVET is conducted, specifically school-based or post-school programs (King, 1993). Apprenticeships have been prevalent in the past, and work-based trainings are increasing in more recent years (King, 1993). National public agencies usually finance these programs in LAC (King, 1993). Whereas in Africa, enrollment in private TVET remains two-times more than the public TVET (Darvas & Palmer, 2014).

Post-secondary TVET must focus on six critical areas: institutional linkages, government support, physical infrastructure, human capacity building, and curriculum development (Rivera, 2006). Various types of TVET institutions, curricula, and outcomes mean that there is not a single best approach to TVET. Rather, TVET must build upon the cultural context already prevalent in the society (King, 1993).

In Haiti, not much is empirically known about agricultural TVET schools. Related work by the same research team has recently begun describing agricultural TVET in Haiti. Calixte et al. (2019a) found that agricultural TVET schools improved the social mobility of students, improved local communities, and enhanced extension activities. We also studied the curricular balance of theory and practical skills and found that the schools desired a balance of theory and practice, but many barriers prevented this from happening (Calixte et al., 2019b). In a third article (Calixte et al., 2019c), we examined employment opportunities for graduates from the TVET schools. Most graduates were either (a) working as extension technicians in the public sector or for NGOs; or (b) entrepreneurs. The existing research has not examined how agricultural TVET schools fit within the socio-cultural context of Haiti. The current study will examine this phenomenon.

#### Purpose

This study's purpose was to gain a better understanding of the context for agricultural TVET schools in Haiti. A single research question guided our inquiry. How do directors, teachers, and students believe TVET fits within the larger socio-cultural context of Haiti?

#### Methodology

The study used a phenomenological qualitative design (Ary, Cheser Jacobs, Sorensen, & Walker, 2012; Creswell & Roth, 2018). Based on our theoretical lens, we began the study seeking to understand the phenomena based on the lived experiences of the people most familiar with agricultural TVET in Haiti. This study was conducted in conjunction with additional research on TVET in Haiti (see Calixte et al., 2019a; 2019b; and 2019c).

The target population was agricultural TVET schools in the Ouest (West) Department of Haiti. This resulted in four schools, three schools in Petit-Goave (schools 01, 02, and 03) and one in Montrouis (school 04). These were all of the TVET schools identified in the department. These schools were considered typical cases (Miles, Huberman, & Saldaña, 2014), with the exception of the school in Montrouis, which was affiliated with a university and operated differently than the others. Within each school, stratified sampling (Ary et al., 2012) was used to provide a diversity of perspectives. This resulted in interviews with the director (noted as D-01, D-02, D-03, and D-04, so D-01 was the director at school 1), interviews with three teachers (noted by the school and teacher number, so 01-T1 was the first teacher interviewed at school 1), and a focus group of nine students to occur (noted by FG, so FG-01 was the focus group conducted at school 01). Accessibility to students in the school in Montrouis was limited, so only one student was interviewed.

The interview and focus group guides were written in English then translated in French and Haitian creole. Interview and focus group questions were developed based on a review of the literature and reviewed by experts in the field, including Haitian researchers. The interview guides were semi-structured and the researcher who conducted the interviews and focused groups expanded and asked probing questions based on participant responses.

The interviews occurred in creole at the respondents' office, campus, or home. The focus groups occurred on each campus. Interviews and focus groups were conducted by the lead researcher, who is Haitian. The interviews and focus groups were audio recorded and the researcher kept a journal (Yin, 2016). The researcher also made general observations of the facilities on each campus in her journal.

Data analysis was conducted using the constant comparative method to identify emergent codes. Codes were grouped into themes and sub-themes using open and axial coding (Saldaña, 2016). The initial codes were in English, emerging directly from the audio recordings (Ary et al., 2012; Miles et al., 2014) rather than a transcription (Green, Franquiz, & Dixon, 1997). This was deemed appropriate since part of the research team could read and write French and Haitian Creole and part of the team could not. The same process was used in the related research (Calixte et al., 2019a; 2019b; and 2019c).

Peer-reviewing was also used to ensure trustworthiness by two peers fluent in English and Creole who reviewed a randomly selected report of a teacher interview (Creswell & Miller, 2000). Representative quotes were pulled directly from audio recordings. Trustworthiness was further established by using member-checking with the directors by sending them synthesized versions of their interviews (Cho & Trent, 2006; Hoffart, 1991). Three of the four directors responded. For further rigor, data were triangulated occurred by using multiple sources (directors, teachers, and students), as well as data collection methods (interviews, field notes, and observations) (Carter, Bryant-Lukosius, DiCenso, Blythe, & Neville, 2014).

#### **Demographics**

The directors and teachers were all male and most were agronomists. Three of them had earned graduate degrees. The same three worked fulltime at their schools. The others worked part time at the schools and either taught in other schools or had other businesses. A few also worked as agriculture technicians. The students were mostly from rural communities, with personal of family activities in agriculture and commerce. There were nine women among 28 students in total, and the age range seemed wide, not just students who had recently finished secondary school. Many of the students also had worked or studied elsewhere before beginning the TVET school.

Schools 01 and 02 only offered the agriculture technical option. School 03 also offered other technical options. School 04 was a university delivering both a technical diploma and a bachelor's degree. Directors reported that their program of study lasted between 2 and 3 years. School 04 used a credit system, which allowed matriculation to the university. The minimum entry level requirements varied across schools. School 04 required philo, school 03 required 2e, and schools 01 and 02 required 3e. In terms of accreditation, only school 02 reported having INFP (government) recognition and school 04 was an accredited university.

#### Findings

Overall, two major themes emerged, each with several sub-themes. First, there was cultural regard for agriculture and TVET. Second, the value of TVET in the Haitian agricultural system. Each theme and sub-them is expanded below.

#### **Cultural Disregard for Agriculture and TVET**

Overall, participants revealed that the agricultural community did not believe in a future in agriculture or the value of TVET. They preferred other modes of development for the next generation, partly due to the lack of investment in the agriculture sector. The government was also sending mixed signals when it did not address the challenges faced in the sector, despite the importance of the agriculture sector for development of the country.

**Stakeholders' contempt for agriculture and TVET.** This contempt for agriculture, which was reported in FG-01, sometimes came from the farmers themselves "some people say they would rather beg than do agriculture." Farmers were giving up on agriculture as 01-T2 explained, "the way Haitian parents think, they send kids to school, so they may not have to farm like them." Since the technician is involved closely in agriculture, this may be a reason why the population does not consider a technical diploma as a desirable product. D-02 claimed that "in Haiti, all the kids only focus on university studies but disregard professional studies which are the most important" for the rural communities.

Students were also aware of this situation. According to some of them in FG-01, "in our country, an agricultural technician does not have much importance [...]; an agricultural technician should be important but from now on in our country they are the people who struggle the most." The struggling comes from the fact that "the state does not give importance to agriculture" (FG-01). The same frustration was expressed about the private sector, " [...] even if you go to the bank for a loan if it is an agricultural project it's very difficult, because the sector is looked down upon" (FG-01).

**State's failure.** Many participants highlighted the government's failure to support TVET, even though it is an important link in the human capacity development chain. As this teacher explained "the Haitian state [government] does not accentuate on agriculture" (03-T1) when

referring to training. 01-T3 hoped that "the state will take its responsibility one day and give the country's education the value it deserves." Teacher 01-T2 felt like "our state doesn't support our trained people," they could "come to the schools and give the best students support," referring to the potential for providing scholarships. D-01 had a dream that "if the state gave the possibility I would do an agricultural institution." He believed this was a prime example of how the government is failing agricultural TVET. Even students were aware of the fact that one of the "issue[s] is that there may be technicians, but the state doesn't take charge of them." The biggest failure reported may be from 04-T3 when he reflected on how agricultural TVET "used to happen before, which is important but is neglected now;" "in the past, the state had many EMAs, technical schools in many cities in the country."

#### Value of TVET in the Haitian Agricultural System

In contrast, despite the disregard for TVET, it was reported that agriculture and TVET schools help those vulnerable communities and their youth by making graduates competitive on the job market, providing networking opportunities, giving a solid reputation, and providing the diploma which can allow the student to continue towards higher education.

**Inherent value.** The duality of roles between agronomists and technicians within the agricultural system was brought up many times but may be summed up by teacher 01-T3, "to solve Haiti's many issues we need agronomists for some determined parameters, and we need technicians for other parameters." The "parameters" which seem to fall under technicians' responsibility are to "just accompany them [the farmers] in that sense and bring technical knowledge to them" as a student during FG-03 commented. Director D-01 agreed that "technic[ian] is science and knowledge; whenever science is applied in any field you will get results." Therefore, according to 03-T2, "no country can pretend to create emergence in the agricultural sector without emphasizing on technicians." He went further to say that "the technician goes onsite to execute the study conducted by the agronomist." According to 01-T2, this situation is due to the fact that the technician's relationship with agriculture is "in terms of hands-on." This explains their importance, because agriculture is a practice. D-02 proposed, "technicians are masters in the subject" of agriculture, "technicians are the main authors of the work," which is why they are important, as compared to agronomists who have other roles within the system. 01-T1 sustained that the practical "things must be done by technicians, and agronomists are there to supervise." Therefore, D-03 concluded, "if we do not have them [the technicians], we will not be able to do agriculture in the country and there will be no one to help do agriculture in the country." This idea was supported by teacher 01-T3 "even if s/he [the agronomist] has a personal project or one for the state or NGOs particularly [...] they recruit technicians as well." As 04-T1 put it the "technician is the base; a motor of society." Students went as far as to suggest that the intergenerational return to agriculture from people who want to abandon it was incumbent to them. "People say this [they would rather beg than do agriculture] because they lack knowledge about what agriculture is; so, they really do not have enough training on the subject and it should be a technician's role" (FG-01).

**School curriculum and network/internship.** 04-T2 thought that "the academic aspect counts but also you enter the market in competition" with others "so then you have to be looking for new elements to add [to the curriculum] to make students competitive." Someone in FG-02 was "just waiting for my diploma and I fly away." According to D-02, "an advantage that a school has, which makes students like and attend it is to know that the school is of quality and when they come, they'll find what they were looking for. And when they finish with their

studies, they won't have a hard time finding their legal paper [diploma with INFP recognition], and wherever they go they'll be able to work with it."

There are [soft] skills which also complement graduates from technical schools. For instance, communication skills. Many of these schools offered language courses or communication-related courses. 04-T1 was one of them and said, "I'm preparing a group of students not to be afraid to speak." This is particularly important during interviews for jobs. Written communication is also crucial. 03-T2 described it well, "NGOs working in soil and water conservation require a daily report; some technicians who go work in these types of organizations but simply because they don't have the ability to write these reports, they let go of them in the jobs." Teacher 02-T3 targeted their computer competencies as well; "then they have an obligation; whatever institution they're in, they'll function [like that]. They will not hand over handwritten papers anymore," speaking about typed assignments he forced his students to submit.

School's curriculum also intentionally integrates a networking experience. The schools can and did try to find internship opportunities to students in places that may become employers of graduates. 01-T3 clarified, after "we sent some graduates to do internships in the BAC," the director of the BAC got promoted and took some of the best in the group with him to Leogane; then from there the best amongst that group followed some of officials from the ministry to Damien to work. Obviously, the students have to perform in these organizations but the school's effort to place some of them, are the networking nudge they may need. D-02 explained "while the person is there on an internship, the NGO sees that the person is capable, and recruit him." Students desired even more formal internships during their studies. Like FG/E-04, "if while I'm taking courses, I could have internships as practices, this would have allowed me to have more experience but also have more assets to compete or as a candidate for a job." Apart from the internships, some teachers intentionally take students to the field in areas where the probability of encountering organizations is high. 03-T2 teacher took his students where "there are always interventions in the area like surveys" or "on soil and water conservation," because according to him, "this can allow the students to participate in this kind of programs (...) when there are calls for recruitment" from these NGOs working in the area. This other teacher 02-T1 said his practicums are conducted on land owned by farmers or other organizations. It is surely beneficial to create a relationship between the school and these organizations, so that when graduates apply, it is easier because there is familiarity with the school. D-03 admitted, "relative to technic or practices in the field, there are places we especially go to with the students where we estimate that, after their training they could go work to these places." 03-T2 also took students to businesses, and "work[s] in agreement with" important people in the sector they need to know, such as "a coordinator of a peasants' association." He also brought them to people in the community whose knowledge and connections will be useful to someone wanting to start a business in the community. All of these efforts ultimately pointed at increasing the school's reputation and subsequently its graduates' competitiveness in the job market.

**Reputation.** A TVET schools' reputation is critical for it to be able to create networks, it has to be esteemed in the community. 02-T2 admitted, "my pride is when the student goes to work in an organization and they see he has qualities and knows what he's doing; so, then the school is renowned, and the teacher is also renowned for the course he teaches." A good reputation opens doors for other graduates from the school and to other organizations in the community. D-02 explained that there are many other schools in the city, many of which had opened at the same time as theirs and they are now closed. Former teachers had decided to open

their own school and failed. "It's a lot of steps towards INFP recognition," which is a competitive factor for a school to have, and it contributes to their reputation amongst students. The reputation of the school also opens doors to continuing education for those students who desire it. Some students enter TVET as a step towards the bachelor's degree. "We can get a paper [diploma] for us to function either on the job market or other, if we wanted to continue" our studies (FG-03). They added, "the diploma will help us work and add more superior studies" (FG-03). With the technical diploma, they hoped to find a job or create their own job in order to finance their bachelor's degree. Some teachers and directors even approved of this situation. 04-T1 thought "it is interesting [a diploma in agronomy] because first the kids have a basic training that will allow them to enter the job market all the while pursuing more studies towards a license." D-04 managed an institution which also offers higher studies degrees. He confirmed, "we receive students from these schools who want to pursue a license [bachelor] with us." However, very few schools allow students to get credits for courses they have already completed. It is closely related to the school's reputation according to D-04, whether or not students will be given credit for courses.

**INFP recognition.** INFP recognition from the government was a recurring theme. "We're the only agricultural technical school in Petit-Goâve with a paper [INFP permit]" coined D-02. INFP recognition and reputation of the school are somewhat related. D-02 recognized this situation "it is a technical school that many give credit to because of cohorts' results and INFP calendar." This idea was supported by his students during FG-02, many of whom were studying at another technical school and decided all together to come to this one, because it would allow them to have a diploma with INFP recognition. Another student from FG-03 also previously attended another school and said he "didn't like the way it was functioning," he realized that he "will have difficulty finding a paper [diploma]." He actually knew about "students before me who finished and couldn't get a paper [diploma]." So, he switched to the school (school 03) where he is currently enrolled. According to D-01, school 01 did not have INFP certification because there was not enough money and the requirements are very tedious. Nonetheless, they still used the INFP curriculum for their courses because they were in the process of being certified. D-02 confirmed that the steps to certification are tedious and that there is small success rate for obtaining INFP recognition. Therefore, it is a competitive factor. D-02 explained that students come from afar to be able to attend this school because they know they will be able to get a diploma and work as soon as they graduate. Since D-04's school was different, it was important to understand the process his graduates need to go through to get their certified diploma. He explained that "they need to legalize their papers in the ministry of education" then "the ministry sends a form and a letter to us for us to fill about what was the condition for awarding the degree, whether the engineering or technical, to the student." This reaffirms that state recognition is essential to these students. INFP recognition means the graduates from the school, on average, are qualified to do the job they have been trained to do. INFP publishes a list of required courses, but directors acknowledge that it is a minimum, and they all add many more courses to it. Therefore, INFP recognition is important, but so is a solid curriculum.

**Competitiveness.** In the curriculum, the competitive advantage is in the details. For example, D-04 argued that their technicians are different from the others in that they may "have the same title but they are not the same" because "they have the same basic courses" with agronomists. Also, the teachers at school 04 made no difference between students pursuing a diploma and a technical degree. However, this idea was contradicted by the student interviewed who claimed that his teachers gave him more practices than his peers. 04-T1 acknowledged that

it is difficult to stand out, "especially the technician in 2 years will have to face a market; it is a very competitive market. I need to prepare mine to be better, so my students make the difference." Many teachers and directors have spoken about strategies they used to make their graduates more competitive on the job market. Practical experience is one competitive factor that works in favor of technicians. A perfect example of this situation is a student's statement during FG-03, "the agronomist who is an engineer doesn't practice as much according to information I have. An agronomist told me that sometimes in exams, a technician goes competing against agronomists and the technician wins because of practice." An idea that was backed up by 01-T2, who knew of a former student who got a job alongside three agronomists He is employed with them doing the same job and having the "same respect." There is even a perceptible competitive nature in a few of them, like D-02 who recounted when ODVA came to the city, did an exam back when he was a student, their school scored highest. He continued to say that "we're credible and we're the only ones giving [releasing] good products on the market." As a result, "our graduates, when we send them to a project, sometimes they're not tested because they know they're qualified, and they can do what they're doing." This is an incredible advantage to skip entrance exams, which the school's positioning may obtain for their graduates.

#### **Conclusions, Recommendations, and Implications**

Overall, this group of participants had mixed feelings about how agricultural TVET schools fit in the larger socio-cultural context in Haiti. Respondents believed agricultural TVET in Haiti was not always as valued as it should be, even by people who are active members of the agricultural community. Participants specifically noted that parents, students, and the government did not realize the value of attending a TVET school. In contrast, participants recognized the important roles that agricultural TVET schools are playing in Haiti.

The TVET schools had the ability to influence employment opportunities for their graduates by positioning themselves in the system as institutions delivering quality training. As also suggested by UNESCO (2016), TVET can only achieve these ambitious goals through the relevance of its curriculum to the labor market and the proper management of TVET institutions.

One of the ways to achieve that position in Haiti was to get INFP certification, which ensured the authentication of the diploma and became a decisive factor for students when choosing amongst competing schools. Although INFP certification was reported to be extremely difficult to get from the ministry of education.

At the course level, many teachers helped students with employment, through the networking they facilitated during practicums. Teachers often set up the practicums in area where organizations were present and introduced to people whom are important stakeholders in the communities. This often led to internships, which are valuable in agricultural-related studies (Roberts, 2006). These internships were ultimately the most efficacious at connecting employers with graduates, as many of the interns ended up being employed by the organizations where they interned. In general, UNESCO (2017a) reported that TVET is thought to help tackle various social inequalities, provide employment and contribute to sustainable development.

Despite this situation, many parents and students seemed to avoid agriculture and TVET. They were not highly regarded. Rather, people would prefer to enroll in science or avoid agricultural activities altogether. This was consistent with previous research which showed people in developing countries were reluctant to enroll in TVET because there is a perception that it is reserved for youth from a certain economic status and were not expected to continue to higher education (King, 1993). Moreover, students and educators agreed that the government had

a role to fulfill to help TVET and ensure success of young people, especially when it comes to agrarian policy decisions and even the training itself. Students in the current study were having difficulty paying the tuition and often did not pay it. Therefore, some participants suggested government scholarships for the most capable students. This is complicated because the interplay between two government ministries. The Ministry of Agriculture which sets regulates agriculture and the Ministry of Education which regulates schools. King (1993) recommended that government intervention in TVET should be individualized based on the context of each individual country, particularly when taking into account the government's concern for equity among the population, the capacity of the private sector to deliver quality training and the market demands. Government interventions were also mentioned because of lack of infrastructure, agrarian policy, and credit, which made it difficult to start or maintain a business. There have been discussions about "the extent to which the character and provision of TVET are actually affected by the broad economic policy of the state" (King, 1993, p. 213). "The more appropriate course may be to build upon the culture of TVET that has already been long established in a particular country" (King, 1993, p. 214). In this case, it may be that the Haitian government was expected to intervene in the realities of agricultural TVET.

Recommendations for research would be to investigate other cultural implications for agricultural TVET such as the position of the ministry of agriculture on private TVETs, the farmers, and rural communities' perception of technicians. It would also be important to compare the findings in other geographic departments of the country so as to determine the regional subcultures around agricultural TVET. This study also suggested that there were other cultural elements that play a role in TVET in Haiti such as trainings as currency and students not paying tuition.

Recommendations for practice would be to consider including elements of the importance and purpose of technical studies in trainings targeted to technicians, agronomists, farmers, extensions agents going in the communities, and ministry staff. Agricultural TVET schools can develop practicums in the rural communities through which students and farmers get acquainted in order to change the perception of these communities on the sector. TVET also needs more exposure in the media, particularly on the radio, most used in the rural communities, but also more mainstream media which can change their image with economic forces. Changing the image of TVET has the potential to attract even more students to these schools.

#### References

- Ary, D., Cheser Jacobs, L., Sorensen, L. K., & Walker, D. A. (2012). *Introduction to research in education* (9th ed.). Belmont, CA: Wadsworth CENGAGE Learning.
- Atchoarena, D., & Sedel, C. (2003). Education and rural development: Setting the framework. In D. Atchoarena & L. Gasperini (Eds.), *Education for rural development: Towards new policy responses. A joint study conducted by FAO and UNESCO* (pp. 35-68). Paris, France: IIEP. Retrieved from http://unesdoc.unesco.org/images/0013/001329/132994e.pdf
- Basu, C. K., & Majumdar, S. (2009). The role of ICTs and TVET in rural development and poverty alleviation. In R. Maclean, D. N. Wilson (Eds.), *International handbook of education for the changing world of work* (pp. 1923-1933). Dordrecht, The Netherlands: Springer-Science Business Media. https://doi.org/10.1007/978-1-4020-5281-1\_130
- Calixte, M. C., Roberts, T. G., & Bunch, J. C. (2019a). Exploring the purpose of agricultural technical schools in Haiti. *Journal of International Agricultural and Extension Education*, 26(2), 121-137. https://doi.org/10.5191/jiaee.2019.26209
- Calixte, M. C., Roberts, T. G., & Bunch, J. C. (2019b). The balance of theoretical and practical skills in agricultural technical schools in Haiti: An exploration of the curriculum. *Journal of International Agricultural and Extension Education*, 26(2), 14-28. https://doi.org/10.5191/jiaee.2019.26202
- Calixte, M. C., Roberts, T. G., & Bunch, J. C. (2019c). Employment opportunities for graduates of agricultural TVET schools in Haiti. *Journal of International Agricultural and Extension Education*, *26*(3), 43-57. https://doi.org/10.5191/jiaee.2019.26303
- Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum*, 41(5), 545-547. https://doi.org/10.1188/14.ONF.545-547
- Cho, J., & Trent, A. (2006). Validity in qualitative research revisited. *Qualitative Research*, 6(3), 319–340. https://doi.org/10.1177/1468794106065006
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory Into Practice*, *39*(3), 124-130. https://doi.org/10.1207/s15430421tip3903\_2
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design* (4th ed.). Thousand Oaks, CA: Sage.
- Darvas, P., & Palmer, R. (2014). *Demand and supply of skills in Ghana: How can training programs improve employment and productivity?* Washington, DC: World Bank Study. Retrieved from https://openknowledge.worldbank.org/handle/10986/18866
- Doolittle, P. E., & Camp, W. G. (1999). Constructivism: the career and technical education perspective. *Journal of Career and Technical Education*, *16*(1). Retrieved from https://ejournals.lib.vt.edu/JCTE/article/view/706/1017
- FAOSTAT. (2018). Haiti. Retrieved from http://www.fao.org/faostat/en/#country/93
- Food and Agriculture Organization. (2002). *Anti-Hunger Programme: Reducing hunger through agriculture and rural development and wider access to food* [PDF file]. Rome, Italy: FAO. Retrieved from ftp://ftp.fao.org/docrep/fao/004/y7151e/y7151e00.pdf
- Food and Agriculture Organization. (2006). Food security [PDF file]. *Policy Brief*, (2). Retrieved from http://www.fao.org/forestry/13128-0e6f36f27e0091055bec28ebe830f46b3.pdf
- Food and Agriculture Organization, International Fund for Agricultural Development, & World Food Program. (2015). *The state of food insecurity in the world. Meeting the 2015*

*international hunger targets: Taking stock of uneven progress* [PDF file]. Rome, Italy: FAO. Retrieved from http://www.fao.org/3/a-i4646e.pdf

- Fuglie, K., & Wang, S. L (2012). Productivity growth in global agriculture shifting to developing countries [PDF file]. *Choices: The Magazine of Food, Farm and Resource Issues*, 27(4). Retrieved from http://www.choicesmagazine.org/UserFiles/file/cmsarticle\_273.pdf
- Global Forum For Rural Advisory Services. (2017). *Haiti*. Retrieved from http://www.gfras.org/en/world-wide-extension-study/central-america-and-thecaribbean/caribbean/haiti.html#extension-providers
- Green, J., Franquiz, M., & Dixon, C. (1997). The myth of the objective transcript: Transcribing as a situated act. *TESOL Quarterly*, *31*(1), 172-176. https://doi.org/10.2307/3587984
- Hoffart, N. (1991). A member check procedure to enhance rigor in naturalistic research. *Western Journal of Nursing Research*, *13*(4), 522-534. https://doi.org/10.1177/019394599101300408
- King, K. (1993). Technical and vocational education and training in an international context. *The Vocational Aspect of Education*, 45(3), 201-216. https://doi.org/10.1080/0305787930450302
- Koudahl, P. D. (2010). Vocational education and training: Dual education and economic crises. *Procedia Social and Behavioral Sciences*, 9, 1900–1905. https://doi.org/10.1016/j.sbspro.2010.12.421.
- Lave, J. (1991). Situated Learning in communities of practice. In L. B. Resnick, J. M. Levine & S. D. Teasley (Eds.), *Perspectives on Socially Shared Cognition* (chap. 4). Washington, DC: American Psychological Association. Retrieved from https://www.ecologyofdesigninhumansystems.com/wp-content/uploads/2012/12/Lave-Situating-learning-in-communities-of-practice.pdf
- Maxime, J. J., & Paul, B. (2017). La vulgarisation agricole : Un outil de réduction de l'insécurité alimentaire en Haïti ? *Haïti Perspectives*, 5(4), 25-30. Retrieved from https://www.researchgate.net/publication/318216703\_La\_vulgarisation\_agricole\_un\_outi 1 de reduction de l'insecurite alimentaire en Haiti
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Los Angeles, CA: SAGE Publications
- Mouzakitis, G. S. (2010). The role of vocational education and training curricula in economic development. *Procedia Social and Behavioral Sciences*, 2, 3914–3920. https://doi.or/10.1016/j.sbspro.2010.03.616
- Rivera, W. M. (2006). *Transforming post-secondary agricultural education and training by design: Solutions for Sub-Saharan Africa* [PDF file]. Retrieved from http://siteresources.worldbank.org/INTAFRREGTOPTEIA/Resources/Post\_Secondary\_ Ag\_Ed\_final.pdf
- Roberts, T. G. (2006). A philosophical examination of experiential learning theory for agricultural educators. *Journal of Agricultural Education*, 47(1), 17–29. https://doi.org/10.5032/jae.2006.01017
- Saldaña, J. (2016). *The coding manual for qualitative researchers*. London, England: SAGE Publications.
- The United Nations Educational, Scientific and Cultural Organization. (2015). UNESCO TVET strategy 2016-2021: Report of the UNESCO-UNEVOC virtual conference [pdf file]. Retrieved from http://unesdoc.unesco.org/images/0024/002439/243932e.pdf

The United Nations Educational, Scientific and Cultural Organization. (2016). *Recommendation concerning technical and vocational education and training (TVET)* [PDF file]. Paris, France: UNESCO. Retrieved from

http://unesdoc.unesco.org/images/0024/002451/245118M.pdf

- The United Nations Educational, Scientific and Cultural Organization. (2017a). *Skills on the move: Global trends, local resonances. International conference on Technical and Vocational Education and Training*. Retrieved from https://en.unesco.org/international-conference-tvet-2017
- The United Nations Educational, Scientific and Cultural Organization. (2017b). *Technical Vocational Education and Training. New Delhi Office.* Retrieved from http://www.unesco.org/new/en/newdelhi/areas-of-action/education/technical-vocationaleducation-and-training-tvet/
- Von Grebmer, K., Bernstein, J., Prasai, N., Amin, S., Yohannes, Y., Nabarro, D., Towey, O., Thompson, J., Sonntag, A., & Patterson, F. (2016). *Synopsis: Global hunger index, Getting to zero hunger*. Washington, DC: IFPRI. https://doi.org/10.2499/9780896292284
- Wilkin, J. (1997). The role of agriculture in the economy and society: Group discussion and a commentary. In K. Hathaway & D. Hathaway (Eds.), *Searching for common ground*. *European Union enlargement and agricultural policy*. Rome, Italy: FAO Agricultural Policy and Economic Development Series.
- Yin, R. K. (2016). *Qualitative research from start to finish* (2nd ed.). New York, NY: The Guilford Press.