

History of Vietnamese Vocational Education and Training since

1954

By

Song Hien Nguyen

BA (TESOL); M.A. Educational Management

A thesis

submitted in fulfilment of the requirements for

the Degree of Master of Philosophy in Education

School of Education

Faculty of Education and Arts

University of Newcastle, Australia

May, 2020

Statement of Originality

I hereby certify that the work embodied in the thesis is my own work, conducted under normal supervision. The thesis contains no materials which have been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to the final version of my thesis being made available worldwide when deposited in the University's Digital Repository, subject to the provisions of the Copyright Act 1968.

.....

Song Hien Nguyen

May, 2020

Acknowledgements

I come from a working – class family. My parents only graduated from primary school and then were called to take part in North Vietnam’ army to fight in the civil war against South Vietnam. After unification of the country in 1975, my father applied for a short-term vocational course to become a builder and my mother trained to become a typist. After graduating, they both worked in state -run factories.

When I was a child, my parents often told me about their daily work at the workplace, and these stories made me curious about their jobs and fellow workers. What I felt from their stories was their love for work and this motivated me to become a vocational teacher.

During 5 years of working as a teacher at Vocational Middle School of Vinh city, my biggest desire became how to contribute my knowledge and skill for the development to Vietnamese vocational education, this is the reason why I left Vietnam to Australia to complete my further studies. My parents were very proud of me when I was accepted to enrol into the School of Arts and Education at University of Newcastle as a MPhil candidate because I would be completing their dream, which they desired me to achieve a higher qualification.

Sadly, as I am writing these words for my thesis, my father has just passed away, and I could not return to Vietnam to see him one last time because of Australian travel restrictions in the context of the terrible COVID 19 pandemic. I hope that my thesis will be successful so my most significant gift will be sent to him in heaven.

It would have been impossible for me to write this thesis without the enthusiastic help and support of the great people around me. First and foremost, I would like to express my deepest gratitude to my principal supervisor, Professor James Albright and co-supervisor Doctor Maura Sellars for their persistent guidance, monitoring and constant encouragement during

my candidature. This study would never have been possible without their help, guidance, and supervision.

Next I thank my extended family, who supported me throughout the study on a personal and spiritual basis by their prayers, and encouragement. A special gratitude to my parents, who looked after my poorly disabled wife, and my son during my study journey.

In addition, I give my thanks to the officials of MOLISA, the principals and head teachers of VET institutions in Vietnam, who voluntarily participated in the study. A particular thank also goes to the Dean of the Faculty of Education & Arts, who gave me an opportunity to submit my thesis and the School of Education & Arts at the University of Newcastle for the direct financial aid available throughout my field work.

I am also deeply indebted to GOD, who has always been close to me and provided all my spiritual and physical needs including; peace, good health, knowledge, wisdom and understanding. Thanks all.

Abstract

This research explores the “ History of Vietnamese Vocational Educational and Training (VET) since 1954”. It provides policymakers, educators, and administrators with a review of Vietnam’s VET models through three significant periods, 1954 to 1975, 1976 to 1985, and 1986 to the present. The research was conducted at 13 vocational schools of 13 provinces and cities in Vietnam. Data were collected from documentary and interview data. Participants were former and current MOLISA policymakers and managers, current and former DOLISA officials, former and current principals and head teachers of vocational schools from 13 provinces and cities of Vietnam. They were selected using the snowball method, where initial participants recommend the potential subsequent participants. Findings show that the informal VET model originating from the ancient past in the form of the traditional vocational village undeveloped to establish the formal VET model in Vietnam. It was not until the beginning of the 19th century when the French invaded Vietnam and set up the first vocational school system, that the formal VET model was formed. Since 1954 Vietnamese VET has experienced three different models. From 1955 to 1975 Vietnam was divided into two different political areas: in South Vietnam, the VET system was based on the French VET model. Whereas, the VET system of North Vietnam followed the model of the Union of Soviet Socialist Republic (USSR). After Vietnam was unified in 1975, the VET model of North Vietnam was applied across the country and the VET model of South Vietnam was replaced. Since 1986, the Vietnamese government has implemented a Doi Moi policy (the renewal policy), and the Vietnamese VET system has transferred from the USSR’s VET model to the German dual model.

The Vietnam government has been faced challenges in implementing this model. Findings show that these challenges partially came from the history of the Vietnamese VET development. It was not until 1969 when the Vietnamese government established the General Department of Technical Workers Training (GDTWT) to design and manage the VET system, that the public VET system in Vietnam was officially founded. During the period of 1975 to 1986, under the support of the USSR, the Vietnamese VET system was influenced by the USSR's VET style, which was subsidised and attached to the plans of the state economy. Although the Vietnamese government implemented a Doi Moi policy (the renewal policy) in 1986, which transitioned from a subsidised to market economy, the VET system was not reformed to meet the demands of market economy. It was not until 1991, the Vietnamese government VET policies aimed to modernise its VET system to meet the needs of a market economy. It was further delayed until 2006 when the law of VET was issued, and the public VET system in Vietnam was standardised. Since 2016, to modernise the VET system, the Vietnamese government has cooperated with the Australian government to develop a dual model in Vietnam.

This study provides an overall look of Vietnamese VET development through its three historical periods, 1954 to 1975, 1976 to 1985, 1986 to the present.

List of Abbreviations

DOLISA	Department of Labour, Invalid and Social Affairs
DVET	Directorate of Vocational Education and Training
GDTWT	General Department of Technical Workers Training
GE	General Education
MOE	Ministry of Education
MOL:	Ministry of Labour
MONE	Ministry of National Education
MOET	Ministry of Education and Training
MOLISA	Ministry of Labour, Invalid and Social Affairs
MHESTS	Ministry of Higher Education and Secondary Technical School
NQF	National Qualification Framework
UK	United Kingdom
USA	United States of America
USSR	Union of Soviet Socialist Republic
VET	Vocational Education and Training
VSSS	Vocational Secondary School System

List of Tables

Table 2.1. <i>International VET Models.</i>	122
Table 7.1. <i>Vietnamese National Qualification Framework (X. P. Nguyen, 2016).</i>	125
Table 8.1. <i>Characteristics of the Vietnamese VET Models Since 1954</i>	148

List of Figures

<i>Figure 3.1.</i> Descriptive framework.	49
<i>Figure 3.2.</i> Steps of research.	49
<i>Figure 6.1.</i> Vocational education in the National Education System	104
<i>Figure 6.2.</i> Administration of VET in the period of 1976 to 1985.	107
<i>Figure 7.1.</i> VET in the national educational system	134

Table of Contents

Statement of Originality.....	ii
Acknowledgements.....	iii
Abstract.....	v
List of Abbreviations.....	vii
List of Tables.....	viii
List of Figures.....	viii
Table of Contents.....	ix
Chapter1: Introduction.....	1
1.1. Background.....	1
1.2. Purpose and Significance of the Research.....	2
1.3. Vietnamese Recent History.....	3
1.4. Vietnamese Education Since 1954.....	8
1.5. Outline of the Research.....	16
Chapter 2: Literature Review.....	17
2.1. Development of VET.....	17
2.2. VET and General Education.....	20
2.3. International Models of VET.....	20
2.4. Advantages and Disadvantages of VET Models.....	27
2.5. Studies of Vocational Education History in the World.....	34
2.6. VET in Developed Countries.....	35

2.7. VET in Developing Countries.....	39
2.8. Studies of Vietnamese VET History.....	42
2.9. Summary of Chapter	43
Chapter 3. Methodology	45
3.1 Historical Research Methodology.....	45
3.2. Research Design.....	47
3.3. Ensuring Credibility and Trustworthiness	53
3.4. Ethical Considerations	53
3.5. Experiences of fieldwork in Vietnam	54
3.6. Summary of Chapter	55
Chapter 4: History of Vietnamese VET before 1954.....	57
4.1. VET under the Feudal Regime.....	57
4.2. VET under the French Colonial Government.....	60
4.3. VET from 1945 to 1954.....	65
4.4. Summary of Chapter	69
Chapter 5: Vietnamese Vocational Education 1954-1975	71
5.1. South Vietnam’s VET Model under the Republican Government	72
5.2. North Vietnam’s VET under the Democratic-Republican Government.....	85
5.3. Summary of Chapter	95
Chapter 6: History of Vietnamese VET from 1976 to 1985	98
6.1. VET policy.....	100
6.2. Administration and Funding	107

6.3. Curriculum	112
6.4. Summary of Chapter	117
Chapter 7: History of VET from 1986 to the Present	119
7.1. Policy	120
7.2. Administration	130
7.3. Funding	136
7.4. Curriculum	138
7.5. Summary	144
Chapter 8. Findings	146
8.1. Findings.....	146
8.2. The challenges of VET in Vietnam.....	150
8.3. Visions of the Vietnamese VET in the future.	153
Chapter 9. Conclusions and Recommendations.....	161
9.1 Summary of Conclusions.....	161
9.2. Research Limitations and Further Research.	164
9.3. Conclusions.....	165
References	167
Appendix A.....	181
Consent Form for Organization	181
Appendix B	182
Appendix C	185
Appendix E	190

Appendix F.....194

Appendix G.....200

Appendix H.....205

Appendix K.....214

Appendix L215

Chapter1: Introduction

1.1. Background

Although the Vietnamese government has made many efforts to reform its vocational education and training (VET) system, educators, scholars and policymakers have criticized it for not meeting the needs of the domestic labour market and international economic integration goals. They argue that Vietnam needs a modern VET system for a dynamic economy to meet changes in the global labour market (N. Hoang, 2015; N. V. Hoang, 2018; T. T. Le, 2015; V. Le, 2018; V. H. Nguyen, 2002). The current VET system has suffered from its poor quality, complicated administration, lack of funding, old curriculum and an unrecognized qualification system that fails to meet international standards (N. Hoang, 2015; N. V. Hoang, 2018; T. Le, 2015; Minh, 2017; H. M. Nguyen, 2018). The provision of VET across Vietnam's provinces is imbalanced (Minh, 2017; MOLISA, 2017). The Ministry of Labour, Invalid, and Social Affairs (MOLISA) has noted that the network of vocational institutions is not yet rationally distributed across localities and regions (MOLISA, 2017). Facilities and equipment in many institutions do not meet teaching and learning requirements (N. V. Hoang, 2018). The VET curriculum still focuses on theory with little practical training (N. Hoang, 2015). The quality and efficiency of training in many vocational institutions are still low, and VET is not yet closely aligned with the local human resources' needs (N. V. Hoang, 2018; V. Le, 2018). In decentralising administration of the VET system, although the government requires increasing the autonomy of VET institutions in their activities, many institutions want to maintain the subsidised mechanism, where they are funded by the state (N.V. Hoang, 2018).

The relationship between vocational institutions, industries and businesses are still under development (V. Le, 2018; H. M. Nguyen, 2018). The Vietnamese government has only recently issued a National Qualification Framework. Vocational students are weak in

professional skills and attitudes (Minh, 2017; MOLISA, 2017) resulting in the need for enterprises to provide further training for approximately 70% of the VET graduates that they hire (Q. Nguyen, 2018). Only 49.3% of the VET graduates met the required foreign language standards when interviewed by employers (Moc, 2017). Fewer students enrol into vocational schools because of the poor quality of the facilities, equipment, materials, and practical training (Minh, 2017; Vnexpress, 2015). Many students consider vocational education as their last choice (T. Le, 2015). Parents believe that a university education opens more doors to a better life for their children (H. Le, 2017; T. Le, 2015). Students do not pursue vocational training in favour of a college or university education, even though unemployment among those graduates is exceptionally high (N. Hoang, 2015; T. Le, 2015) Vietnam's VET system requires a renewal to meet its goals of industrializing and modernizing the country. Understanding how VET policy and provision have developed in the past may assist in responding to this urgent problem more effectively.

1.2. Purpose and Significance of the Research

My history of Vietnam's VET since 1954 investigates how VET policy and provision within its education system have changed over time. It also discusses current challenges to Vietnam's VET system. My research provides policymakers, educators, and administrators with a review of Vietnam's VET history through three significant periods, 1954 to 1975, 1976 to 1985, and 1986 to the present. The period of 1954 to 1975 corresponds with Vietnamese independence from France and the subsequent civil war, which lasted until 1975. The period of 1976 to 1985 parallels Vietnamese unification and its close affiliation with the Union of Soviet Socialist Republic (USSR), and from 1986 to the present, when Vietnam's economic development accelerated after the Doi Moi of 1986. To contextualise my history of Vietnam's VET system development since 1954, I provide a short description of its recent history.

1.3. Vietnamese Recent History

1.3.1. A recent history of South Vietnam.

On 25 May 1954, France lost at the battle of Dien Bien Phu and was forced to accept the Geneva Accord, which recognized the independence of North Vietnam (Trinh, 2016). The Geneva Accord was intended to temporarily divide Vietnam into two administrative regions with two separate governments. In South Vietnam, the Vietnamese National government initially was a constitutional monarchy under the Chief of State, Bao Dai who appointed a Prime Minister (B. S. Tran, 2010; V. C. Tran, 2017).

In 1955, in a referendum, supported by the United States of America, Prime Minister Ngo Dinh Diem, deposed Chief of State Bao Dai and established the First Republican government of South Vietnam (V. C. Tran, 2017). His new government issued a new constitution in 1956 which regulated the division between executive, legislative, and judicial powers. The Republican government was a multi-party state with a capitalist economy. The United States of America supported South Vietnam financially and militarily against the Democratic-Republican government of North Vietnam as well as the National Liberation Front (Luong, 2000).

From 1955-1963 under the First Republican government, South Vietnam implemented mixed economic policies (Dang, 2004). In 1963, Lieutenant General Duong Van Minh overthrew the First Republican government. During the period (1963-1967), South Vietnam experienced a series of subsequent coups which ended with the establishment of the Second Republican government headed by President Nguyen Van Thieu (B. S. Tran, 2010). A general election took place on 3 September 1967 (Dang, 2004; Luong, 2000) and the Second Republican government shifted to a free market economy, in which the state took a less interventionist role (Dang, 2004).

The National Assembly approved the Constitution of the Second Republican government on 8 March 1967 in Saigon (Luong, 2000; V. C. Tran, 2017). The Constitution established the administrative structure of the Second Republic, basing it on individual rights following the model of democratically developed countries. This Constitution stated that the Second Republican government was intended to build South Vietnam to become a civilised and progressive nation (B. S. Tran, 2010; V. C. Tran, 2017).

In 1973 under the Paris Treaty, American troops withdrew from South Vietnam and cut its aid. The Republican government of South Vietnam was unable to continue its civil war with North Vietnam and unconditionally surrendered (B. S. Tran, 2010; V. C. Tran, 2017).

On 30 April 1975, the Republican government of South Vietnam officially dissolved (Truong, 2008).

1.3.2. A recent history of North Vietnam.

When in May 1955, the French army withdrew from North Vietnam, the Democratic-Republican government charted its economic recovery to heal the wounds of war (Dang, 2004; Luong, 2000). In early 1955, the Party Central Committee issued the first 3-year economic recovery plan (1955-1957) aiming to return to the pre-war economic level (Luong, 2000).

In the second 3-year plan (1957-1960), the Democratic-Republican government of North Vietnam reorganized farmers into socialist collectives (V. T. Le, 2000; Luong, 2000). State-owned factories and companies were given priority and some state-owned industrial zones were established in some provinces, such as Thuong Dinh, Thai Nguyen, Nam Dinh, Hai Duong, Quang Ninh and Hai Phong (Luong, 2000). Thousands of technical staff and skilled workers were trained to serve agricultural and industrial production (Luong, 2000).

In 1961, North Vietnam's government adopted the first 5-year plan (1961-1965) (V. T. Le, 2000; Luong, 2000). During this period, North Vietnam strove to develop its industry and agriculture and continued its socialist reforms. State-owned economic sectors were

consolidated and strengthened, which accounted for 93% of its total output value. Light industry and handicraft provided 80% of consumer goods (Luu, 2006). In agriculture, the majority of farmers participated in agricultural cooperatives (Luong, 2000; Luu, 2006). In this period, with the support of the USSR, more factories were established in North Vietnam.

After the unification of Vietnam in 1975, the Democratic-Republican government of North Vietnam was renamed the Socialist-Republican government of Vietnam (Q. N. Nguyen, 2006). At the 4th National Congress in 1976, Le Duan, General Secretary of the Party Central Committee, stated that the government prioritized the development of heavy industry (The Vietnamese Party's Central Committee, 1976). The government forbade nonsocialist economic sectors to run and considered state-owned commercial enterprises as critical in the national economy (Doan, 2010a; The Vietnamese government, 1981b). The Vietnamese government encouraged farmers to participate in socialist collectives following a unified state plan. International economic integration was implemented through cooperative agreements with socialist block countries through the Council for Economic Assistance, which took effect in 1978 (Q. N. Nguyen, 2006).

From 1975 to 1986, the Socialist-Republican government of Vietnam eliminated the market economy of South Vietnam and set up a planned economy following the USSR's model across the country (Pike, 1977). The government set ambitious targets for recovering the post-war economy. After the war, the Socialist-Republican government of Vietnam faced high rates of illiteracy, weak management of the economy and poor economic development (Q. N. Nguyen, 2006; Pike, 1977).

In 1976, the Vietnamese government established the second 5-year plan (1976-1980) to "implement the industrialization of the country and construct a technical and material basis for the Vietnamese socialist economy", (Q.N.Nguyen, 2006, p.365). This plan aimed at "forming a new economic and industrial structure as well as restoring and developing industrial production to meet the needs of consumer goods for the people parallel to

implementing socialist reform for the South" (Q.N.Nguyen, 2006, p.365). The plan also unified management and organization of the industrial economy across the country. Despite these efforts, Vietnam's economy grew slowly (P. L. Huong & Fry, 2004). At the end of the second 5-year plan period of 1979-1980, industrial production had stagnated, and output was at a low level (P. L. Huong & Fry, 2004).

In 1981, Vietnam released its third 5-year plan (1981-1985) (Q. N. Nguyen, 2006). The government set new targets for the development of industry and agriculture, particularly in heavy and light industry. The Vietnamese government paid much attention to industrial management, in which state-run enterprises and cooperatives were given greater autonomy (The Vietnamese government, 1981b). However, the state retained centralized bureaucratic planning.

By the middle of the 1980s, the Vietnamese economy suffered a severe crisis (P. L. Huong & Fry, 2004). In 1986, the Vietnamese Communist Party initiated a period of renovation, which was called the Doi Moi policy. This policy aimed to shift its planned economy to a market economy (Kien & Heo, 2008). In 1991, the Congress of the Party Central Committee introduced the fourth 5-year plan (1991-1995) (V. L. Nguyen, 1991), which continued to implement the Doi Moi policy. Diplomatic relationships with other countries in South Asia, South Pacific, Middle East, Africa and Latin America were expanded (Truong, 2003). By 2012, Vietnam had diplomatic relations with more than 180 countries, and trade relationships with over 100 companies from 50 countries (B. M. Pham, 2012).

In 1996, the Vietnamese Communist Party's fifth 5-year plan (1996-2000) (The Vietnamese Communist Party 's Central Committee, 1996), aimed to "build socialism and industrialize the country"(The Vietnamese Congress, 1996, pp.3-4). Vietnam strove to become a "Developed country with modern facilities, a strong economy, and progressive education" (The Vietnamese Congress, 1996, p.4). This plan was to transform Vietnam into

an industrial country by 2020 (The Vietnamese Communist Party 's Central Committee, 1996). Vietnam began to actively take part in the world economy (Pham & Pham, 2006). The law on foreign investment was promulgated to make the Vietnamese economy more free and favourable to foreign investors. Diplomatic relations between Vietnam and the United States of America were normalized in 1995 and the two countries signed a Trade Agreement in July 2000 (Pham & Pham, 2006).

In 2006, the Party Central Committee's sixth 5-year plan (2006-2010) continued to industrialize, and modernise the country with an emphasis on developing a knowledge economy (The Vietnamese Party Central Committee, 2006). The Congress of Party Central Committee in 2011 focussed on improving the quality of human resources to meet the requirements for modernizing the country and international economic integration targets (The Vietnamese Party Central Committee, 2011). Developing groups of leading experts in all fields to catch up with developed countries were specified in the policy of developing human resource by 2020 (T. D. Nguyen, 2011). The state was responsible for "issuing legal policies to encourage human resource development and ensure fairness in developing human resources at all level across the country" (The Vietnamese government, 2011, p.1).

In September 2019, the Vietnamese government issued a new policy of economic development, whereby the economy will shift to a digital economy to meet the requirements of the fourth industrial revolution (P. T. Nguyen, 2019). This policy states that Vietnam will become one of the leading economies in Asia by 2045.

Since 1954, in response to economic and politic changes, Vietnamese education has experienced three corresponding stages of development. Clarifying the stages of Vietnamese education development during these historical periods may help readers to understand better Vietnamese VET since 1954.

1.4. Vietnamese Education Since 1954

1.4.1. South Vietnam's education.

South Vietnam's education from 1954-1975 was established in the spirit of approaching the advanced education of developed countries in the world (T. L. Nguyen, 2018; V. B. Nguyen, 2014). Mainly, it was influenced by the French education model (T. L. Nguyen, 2018; V. B. Nguyen, 2014). Its education system was a 5-4-3 structure, with 12 school years, from Grade 1 to Grade 12. This system consisted of primary education (5 years), secondary education (4 years), and upper secondary education (3 years) (T. L. Nguyen, 2018; B. S. Tran, 2010).

After the establishment of the First Republican government (1955-1963), South Vietnam's education leaders enjoyed relative autonomy in building the national education system (B. S. Tran, 2010; V. C. Tran, 2017). They tried to establish a national school system to meet the needs of socio-economic development in the South. They absorbed the previous French colonial education into South Vietnam's education system (V. B. Nguyen, 2014; B. S. Tran, 2010). It was a selective inheritance of educational models: Confucianism and French colonial education (B. S. Tran, 2010).

In the period 1955 to 1963, despite being politically dominated by the United States of America (USA), South Vietnam's new education was autonomous and independent from elementary to university level (T. L. Nguyen, 2018; V. C. Tran, 2017). From the beginning of the First Republican government, South Vietnam's educational managers and leaders attempted to build the essential foundations as well as core policies for its national education (T. L. Nguyen, 2018; B. S. Tran, 2010; V. C. Tran, 2017).

Differing from Confucian education, which emphasized moral education, South Vietnam's new education aimed to train children for a career. (H. L. Nguyen, 1952; Thai, 1941). Its educational purpose aimed to:

Develop individuals as the whole and bring happiness for themselves. To achieve these educational goals, teachers must guide them to choose a career and train them in at least one vocation to match their talents.

(H.L.Nguyen,1952,pp.20-21)

In 1952, the National Ministry of Education issued Circular No. 843 GD to disseminate these new conceptions of education in schools across South Vietnam (B. S. Tran, 2010; V. C. Tran, 2017). South Vietnam's government implemented new pedagogical methods in their schools to replace the old Confucian teaching style (T. L. Nguyen, 2018; V. C. Tran, 2017). The new education was organized in the spirit of respect for humanity and based on advanced psychological theories (Lam, 1956).

South Vietnam's government clarified the functions, tasks and purposes of the new education (Lam, 1956). Specifically, the new education did not impose adult thoughts on children and the teaching did not:

Impose the spiritual and moral knowledge of the holy saints on the children, to make them become wiser and then get a higher degree, and does not promote getting a higher position in the society, which only satisfies the ambitions of their parents. (Lam, 1956, p.11)

The new education's ideas were promulgated at the first National Education Congress in 1958, which attracted the participation of many parents, staff, scholars, military representatives, authorities and other mass organizations, educators from primary to technological schools (T. L. Nguyen, 2018). At this Congress, three basic educational principles which included "humanity", "ethnicity" and "liberality" (T. L. Nguyen, 2018; B. S. Tran, 2010) became basic guidelines for South Vietnam's new education. They served as the basis for South Vietnam's education philosophy and were specified in the first volume of the High School Program which was designed by the Ministry of National Education in

1960 (Ministry of National Education, 1960). This policy stated that South Vietnam's new education respected traditional values, ensured effective national economic development, and promoted a democratic society (T. L. Nguyen, 2018).

In 1967, the Republican government's Constitution in 1967 stated that "Culture and education must be prioritized in the national development policy and based on nationality, science and humanity" (Tran, 2017, p.3). South Vietnam's government provided educational conditions for all citizens to develop according to their abilities and characteristics and encouraged VET to meet the demand of a skilled workforce for the market economy (T. L. Nguyen, 2018; B. S. Tran, 2010). It emphasised that:

Due to the lack of technical experts, an urgent need is to train a critical skilled human force for national economic development. The current education purpose is to enhance the quality of professional and technical education. (T.L, Nguyen, 2006, pp.19-21).

In 1972, the South Vietnam Republican government issued a new educational and cultural policy (T. L. Nguyen, 2018), which stated that the citizens had the right to choose courses that they wanted. The government provided equal opportunities for its citizens to pursue their education following their abilities and direction. The government provided funding for educational development with 10% of the national budget (T. L. Nguyen, 2018).

Training skilled human resources at the secondary level were paid attention. After graduating, students were employed by enterprises (T. L. Nguyen, 2018; B. S. Tran, 2010; V. C. Tran, 2017). The fundamental purpose of VET was to help individuals pursue a suitable career which could ensure the support of their lives and families and thereby serve the country effectively (B. S. Tran, 2010; V. C. Tran, 2017).

Administratively, South Vietnam's education was headed by a Minister appointed by the president. The Minister was responsible for managing all activities of the national education

system (B. S. Tran, 2010; V. C. Tran, 2017). Educational management at local levels was delivered to directorate or directors who managed professional or educational departments (V. C. Tran, 2017). In 1964, Prime Minister Nguyen Khanh established a National Education Council under Decree 1302/GD on 2 July 1964 (T. L. Nguyen, 2018; B. S. Tran, 2010; V. C. Tran, 2017). This council was in charge of building a national, human and scientific education. This organisation later changed its name to the National Council for Educational Culture and its role was to assist the government in drafting and implementing the educational and cultural policy (V. C. Tran, 2017). In 1969, the structure and administration of the National Education and Culture Council were regulated by Decree No. 05/69 under the Second Republican Government (B. S. Tran, 2010; V. C. Tran, 2017).

At the beginning of the 1970s, South Vietnam's education strove to separate from the influence of the French education, which focused on training a few elite individuals in society in order to accept the USA's educational ideas which were less elitist and more realistic (V. B. Nguyen, 2014; B. S. Tran, 2010; V. C. Tran, 2017). From 1970, South Vietnam's educational system consisted of primary, secondary and tertiary education, along with a network of public, people-founded and private educational institutions at all three levels (T. L. Nguyen, 2018; B. S. Tran, 2010). After 1975, South Vietnam's education system was replaced by North Vietnam's education model, which followed the USSR's model.

1.4.2. North Vietnam's education.

At the same time, North Vietnam's Democratic-Republican government based on Marxism and Leninism to implement its first education reform (Bryant, 1998; B. S. Tran, 2004). In accordance with the USSR's education model, to politicise its education, North Vietnam's government stated that education must serve political purposes (B. S. Tran, 2004). In 1950, North Vietnam's government applied the 10-year education system following the USSR's model, which consisted of three main levels: primary education, secondary education and

higher education (G. P. Nguyen, 1999; Q. T. Nguyen, 1998). In the period of 1954 to 1975, North Vietnam's government sent students to study abroad in the USSR (V. T. Le, 2016).

North Vietnam's education was politically oriented (Bryant, 1998; B. S. Tran, 2004). Ideas from the USSR's education, which were represented in books such as "The New Democratic Education" (1948) and "Educational Issues" (1950) written by Nguyen Khanh Toan, the Deputy Minister of Education, were used as the basis for North Vietnam's education reforms (B. S. Tran, 2004).

North Vietnam's new educational program focused on literature, history, politics and Vietnamese revolutionary education (B. S. Tran, 2004). Teachers were directed to conceive that education was a social phenomenon and not a natural phenomenon. Education and politics were not two separate issues, so therefore education must serve political purposes (P. L. Huong & Fry, 2004). The purpose of North Vietnam's education was to provide a skilled communist workforce to serve the socialist economy in the context of the war against South Vietnam's government (P. L. Huong & Fry, 2004; B. S. Tran, 2004).

The educational purpose was clarified at the National General Education Conference in 1956:

Education is to provide human resources for the national economy. If education develops, the economy grows. If education does not develop, there is not enough staff to boost economic growth. Education has to provide enough human resource for developing the agriculture, industry, and economy. (V.T, Le,2000,pp.38-39)

North Vietnam's government stated that "to build socialism, there must be socialist people, and these new socialist citizens have to be both 'pink' (communist personalities) and 'professional' (skilled labourers) (Le, 2000, p.39). Citizens had the right to study (The North Vietnamese National Assembly, 1959) and the State decreed compulsory education. The government provided technical, professional and supplementary education from central to

local levels to ensure that citizens were equal in their studying (The North Vietnamese National Assembly, 1959). North Vietnam's Ministry of Education was established in 1945 under the first minister, Vu Dinh Hoe (MOET, 2017; B. S. Tran, 2004). The Ministry of Education (MOE) consisted of offices, and departments such as the Department of High School, Department of Primary School, or Department of Universities (MOET, 2017).

In 1976, the Fourth National Congress of the Vietnamese Communist Party determined that it would build Vietnam into a socialist country. In January 1979, the Communist Party's Central Committee issued the Resolution on the second education reform, which aimed to remodel its education system following the USSR's education system (V. D. Pham, 1979a). Education on communist values was given top priority (B. S. Tran, 2004). The educational principle was a combination of learning with production (V. D. Pham, 1979).

The educational reforms in this period of 1975 to 1986 focussed on providing "Builders of Communism" (Tomiak, 1983). Private schools were not permitted

(National Office of Overseas Skills Recognition, 1996b).

Since 1986, the Vietnam government has striven to innovate its education system to meet the demands of the market economy and international integration. The Congress of the Seventh Vietnamese Communist Party in 1991 stated that education and training must be attached to economic development and was considered as the top national policy (V. L. Nguyen, 1991). The educational objectives were to:

Improve the quality of the human resource, nurture talents, and develop a contingent of skilled workers with qualities such as autonomy, dynamism and creativity. Schools take responsibility for providing a large force of skilled labour which meets the requirements of a market economy. (The Vietnamese Party Central Committee, 1991, p.3)

The 5-year education plan (1991 1995) committed to:

Improve the quality of education, modernise curriculum, democratise the school and education management, diversify the types of school, and encourage the development of semi-public, people-founded, private schools. (The Vietnamese Party Central Committee, 1991,pp.4-5)

The new Constitution in 1992 declared that "the state uniformly manages its national education system including objectives, curriculum, content, education plan, teacher standards, and examination regulations" (The Vietnamese Assembly, 1992,p.2). In 2000, the Education Development Strategy for the stage of 2001-2010 reconfirmed that education was the top national policy. This strategy aimed at building a scientific, modern, and international education, which was based on Marxism-Leninism and Ho Chi Minh's ideologies (The Vietnamese government, 2001a). The new Education Law 2005 stated that the state took responsibility for planning, developing and directing educational strategies and policies. The state regulated educational objectives, curriculum, and administration (The Vietnamese National Assembly, 2005).

Under this law, Vietnam's national education system was restructured, including preschool education, general education consisting of primary, secondary and high schools, vocational education consisting professional secondary and vocational training schools, higher and postgraduate education (The Vietnamese National Assembly, 2005). In this national education system, there were two main types of schools. Public schools were established, funded, operated and managed by the state, and private schools were established, funded, and regulated by individual organizations.

In 2013, the 8th Politburo of the 11th Central Executive Committee issued Resolution 29NQ/TW, which is:

Radically and fundamentally reforming education aims to meet the requirements of industrializing and modernizing the country in the context of

the socialist-oriented market economy and international integration. (The Vietnamese Party Central Committee, 2013,p.3).

The Vietnamese government's vision by 2045 reconfirms that "education and training must be the nation's top priority policy" and emphasises that "investing education is to develop its national economy"(P. T. Nguyen, 2013). Thus, education should be "paid special attention among other socio-economic developing policies" (The Vietnamese Party Central committee,2013, p.2).

In 2014, the Vietnamese assembly issued the new Law of Education and Vocational Training, which was amended from the Law of Education 2005, and Law of Vocational Education 2006. This law emphasizes the critical role of VET in economic development and states that "the State uniformly manages the national education system on the educational objectives, curriculums and qualifications" (The Vietnamese National Assembly, 2014, p.5). This law decentralised education management, and strengthened autonomy and selfresponsibility of education institutions (The Vietnamese National Assembly, 2014). At the same time, the government merged the vocational and professional education system into a vocational education and training system. The types of school were diversified. In 2016, the Vietnamese government issued the National Qualification Framework, which was based on the Australian National Qualification Framework to standardise outcomes of educational levels (X. P. Nguyen, 2016). In September 2019, Vietnam released the new education policy, which aims at meeting the requirements of the fourth industrial revolution (P. T. Nguyen, 2019). In relation to the development of Vietnamese education since 1954, Vietnam's VET will be examined during three corresponding historical periods, 1954- 1975, 1976- 1985, and 1986 to the present.

1.5. Outline of the Research

In this chapter, I have presented the context of research and a recent history of Vietnamese education. Chapter 2 provides a comprehensive review of related literature on the international models of VET, their characteristics, as well as the models of VET implemented in developed, and developing countries which concern Vietnam's VET. In Chapter 3, I present the research methodology, research design and steps of research, as well as consideration of research ethics. Chapter 4 presents Vietnamese VET before 1954. The history of VET in South Vietnam and North Vietnam from 1954 to 1975 is described and compared in Chapter 5. Chapter 6 explores the history of Vietnam's VET from 1975 to 1986 and a history of VET from 1986 to the present is examined in Chapter 7. In Chapter 8, I summarise findings and conclusions and recommendations from the research are included in Chapter 9.

Chapter 2: Literature Review

In Chapter 1, I presented the historical context of Vietnam in relation to changes in the Vietnamese education system before 1954. After 1954, the French army lost to Vietnam and France was asked to sign the Geneva Accord which divided Vietnam into two separate states, the Republican government of South Vietnam, supported by the American government, and the Democratic- Republican government of North Vietnam, aided by the USSR. In the years between 1954 and 1975, North Vietnam fought South Vietnam in a civil war. After 1975, North Vietnam's government unified the country and it became known as the Socialist-Republican government of Vietnam. During this period, the Vietnamese government abolished the model of the capitalist economy in South Vietnam and implemented a policy of a centrally planned economy following the USSR's model. From 1986 to the present, Vietnam has struggled to revive its economy, following a market economy directed socialism. This policy has strongly impacted on the development of Vietnamese education in general and the development of vocational education and training in particular. This chapter investigates the origins of Vocational Education and Training (VET), distinguishes VET from general education, analyses international models of VET and examines VET systems in developed and developing countries.

2.1. Development of VET

2.1.1. VET in ancient times.

Forms of Vocational Education and Training (VET) originated thousands of years ago through the transmission of knowledge and skills from one generation to the next. In the pre-historic hunting and gathering society, skills were passed from parent to child. Children learnt from their parents by watching and imitating the process of making tools until an exact product could be reproduced. Development of tools for labour in the Bronze and Iron

Age, which appeared around 1000 to 4000 BCE led to an increase of production efficiency in agriculture, so people became more specialized in their work rather than simply cultivating, hunting or gathering. Historical research shows that Bronze Age tools such as jars, bottles, drums, agricultural tools and weapons emerged in China, Thailand, and Vietnam around 2000- 3000 BCE. These hand-made tools are referred to as handicrafts and were transferred to the next generation via the father-son relationship.

A form of apprenticeship system may have appeared around 2000 BCE. The Code of Hammurabi required artisans to teach their crafts to the next generation in order to maintain an adequate number of craftsmen (Prince, 1904). The development of Athens, which was accompanied by an increase in the practice of trades, required definite occupational classification, which regulated various workers into a caste system (Pautler, J 1990).

2.1.2. Middle ages.

This period was from the 5th century to the 14th century. At this time, a formal apprenticeship, which was a contractual agreement between the master and apprentice in a few trades, existed in England, German and France (Deissinger, 2004). In this legal agreement, the master or employer took the responsibility for training the apprentice in the skills of the trade while the apprentice had to agree to work for the master for a definite time at a training wage (Lane, 2005). The length of time of apprenticeships was from 2 to 7 years, depending on the particular trade and after completing the apprenticeship, an apprentice became a journeyman.

Journeyman, who worked in the same trade or craft, joined together to form craft guilds in each town or city. These craft guilds established their laws, and rules that all members had to follow to maintain the standards in their fields (Epstein, 1998). By the 13th century, a formal system of apprenticeship had developed in Western Europe under the supervision of the craft guilds (Steedman, Gospel, & Ryan, 1998). Masters and artisans controlled these

craft guilds (Steedman, 2005) supervising the product quality, methods of production, and work conditions for each occupational group (Dunlop, 1911).

During the peak of the apprenticeship system, which occurred between the 15th and 16th centuries, these guilds established strict regulations of hours, tools, prices, and wages to protect artisans (Wallis, 2008, pp. 835-836).

2.1.3. Industrial age.

The Industrial Revolution in England around 1760 led to a decline of the traditional apprenticeship system (L. W. Clarke, Christopher, 2007; Gospel, 1995). Under the influence of the Industrial Revolution in the 18th century, the traditional VET system could not keep up with the fast development of industrial, technological and scientific advances. The Industrial Revolution together with educational reforms of the 18th and 19th centuries led to a form of modern vocational education.

Combining school with workshop learning, whereby learners received vocational knowledge in the classroom, and the practical training in the workshop emerged at the end of the 18th century (J.Pautler, 1990). In the 1800s, to meet the immediate demand of a skilled workforce for factories, the factory schools, in which workers were trained in classrooms within factory walls, were established in Europe and the United States of America (Sanderson, 1967). In the 1880s, the idea of “combining vocational training and academic education in the school was tried seriously” (J.Pautler, 1990, p.8). At the same time, a production school system, which provided general education in school and practical training at the workplace appeared in Europe (Greinert, 2004). By the early 20th century, together with an enterprise-based vocational training system, a school-based vocational training system, and a dual vocational training system, which combined school and enterprise to provide VET were widespread in Europe (Heikkinen, 2004).

Many current VET systems originated from models of VET in this period. In Vietnam, at the beginning of the 20th century, a formal vocational school system was officially established by the French colonial government.

2.2. VET and General Education

In some countries, VET is a part of the general education system, but in others, VET exists independently. VET is distinguished from General Education (GE) in terms of aims, means, methods of instruction as well as administrative agencies (Snedden, 1910), or between means and ends (Papong, 2014).

VET prepares entrants for future employment, through a process of technical and practical education (Clarke, L & Winch, 2012) and GE provides a way into higher education (Frommberger & Krichewsky, 2011). VET is skills-based, comprising practical training while GE is a concept-based and academically-oriented (Hanushek, Schwerdt, Woessmann, & Zhang, 2017, pp.4-5). VET develops specific job-related skills in order to prepare students to work in specific occupations, while general education provides students with broad knowledge and basic skills in mathematics and communication and serves as the foundation for further learning and training (Hanushek, Schwerdt, Woessmann, & Zhang, 2017). In conclusion, VET may be distinguished by GE in terms of aims, means, and methods of teaching. VET is the development and application of knowledge and skills into practical work (Gavin, 2002).

2.3. International Models of VET

During the early 19th century, the Industrial Revolution brought about a massive demand for skilled workers, which the traditional apprenticeship system could not meet and consequently promoted the development of new VET models. By the first half of the 20th century, three international models of VET were formed in response to the erosion of the craft-based system in order to meet the requirements of industrial expansion (Heikkinen,

2004). They included the market-based model, state-based model and dual model as shown in Table 2.1 (p.23). In the market-based model, enterprises provide vocational training, whereas, schools deliver it in the state-based model. The provision of VET in the dual model is based on the combination of enterprise and school. These VET models are different in the way they are regulated, managed and administered (Green, Leney, & Wolf, 1999) as defined in policy, administration, funding, curriculum, and qualification.

2.3.1. Market-based model.

Enterprises organize and direct the VET system in this model (Deissinger, 2004; Heikkinen, 2004; Laczik & Mayhew, 2015). The market-based model may be found in the United Kingdom, Italy, and the United States of America.

This VET model is separate from the general educational system and enterprises take the key responsibility for its provision (Campbell, Thomson, & Pautz, 2011; Deissinger, 2004; Winterton, 2000). In this model, the role of trainees is stressed rather than teachers, government or employers. The outcome of learners is determined by practical training results not based on examinations (Deissinger, 1994; Heikkinen, 2004). State or social partners do not control the quality of the training process, and there are no formal examinations except assessment at the workplace (Elias, Hernaes, & Baker, 1994). This market-based model is dependent on the enterprises' needs to recruit new apprentices (F.Silberman, 1982; Winterton, 2000).

The state makes a few interventions in this VET model (Laczik & Mayhew, 2015). The curriculum, contents and methods of training are regulated by employers. VET is not formally integrated into the school system and the state acts mainly as a contractor for offsite training (Elias et al., 1994). Funding is decided by individual employers through a contract between employer and trainees (Greinert, 2004; Heikkinen, 2004).

The curriculum is driven by the short-term employment needs of enterprises and is practically oriented (Deissinger, 2004; Greinert, 2004; Parkes, 1993; Steedman, 1988) so that it can be applied immediately at the workplace. The curriculum emphasises practical skills related to a specific occupation available at the enterprises and provides learners with little theoretical knowledge. The curriculum does not aim to develop critical thinking, and independent thought (Brockmann, Clarke, Méhaut, & Winch, 2008). Training practices are not standardised because of the lack of a unified statutory framework to manage and regulate the roles, rights and responsibilities of different VET partners (Flude & Sieminski, 1999).

The VET qualification system focusses on the performance of specific tasks required by employers and does not develop competencies, which are based on the integration of theoretical and practical knowledge (L. W. Clarke, Christopher, 2007). The transferability of vocational qualifications between companies varies according to the market, so its qualifications are widely recognized by other enterprises (Varsori, 2004).

The different types of vocational qualifications, determined by the labour market, are offered by different enterprises (Laczik & Mayhew, 2015). The qualifications are to help

Table 2.1. *International VET Models.*

Characteristics					
Models	Policy	Administration	Funding	Curriculum	Qualification
Market-based model	Market-oriented Enterprise-based Not a part of the general education system VET is provided by enterprises	Decentralizing Less intervention of the State Individual enterprises/employers take key responsibility for VET	Individual agreement between employers and trainees	Not standardized - Employability and skillbased Enterprise's needs-based	Not standardized Basing on specific job Not linked with general education Designed by employers - Not move up to higher education
State-based model	State-based A part of the general education system/ VET is provided by schools Not connected with enterprise and labour market	State takes key responsibility for making decisions relating to VET.	State funding public vocational schools Fees required by private schools	Standardized and designed by State Knowledge-based/schoolbased/	Standardized and designed By the state Basing on levels Academic oriented Moving up higher education
Dual model	Basing on Social partners Agreement of social partners and State - VET is provided by the combination of school and enterprises VET connects with enterprise and labour market	Social partners take a key role in making decisions relating to VET	Social partners, employers, and State	Standardized and designed by social partners and State Occupation-based - Combine vocational knowledge and practical training	Standardized and designed by social partners and State - Broad occupation-based

learners enhance their employability through certification of competencies through practical work experience, and hence do not provide a path to higher education (Blanchflower & Lynch, 1994).

This market-based model has no general regulations that determine the qualifications of trainees, the content of training, curriculum or assessment (Brockmann, Clarke, Méhaut, et al., 2008; Deissinger, 2004; Howieson, Raffe, Spours, & Young, 1997). There are no nationally recognized standards for a qualification framework or curriculum. In this model, VET and GE are distinguished in both policy and within educational institutions (Deissinger, 2004; Greinert, 2004).

2.3.2 State-based model.

In this model, the State takes the main role in designing and regulating the VET system (A.Lauwerys, 1968; Brauns, 1998; Heikkinen, 2004; Méhaut, 2006). VET is integrated with the general educational system and enrolment depends on the learner's ability to meet traditional school-based education requirements (Day, 2001). Linking general education with vocational education organizes the educational process, which is based on successive levels (Bouder & Kirsch, 2007). In that sense, this model tends to become academically elitist and exclusive. France and the USSR's VET systems are examples of this model.

This VET model is entirely controlled by the state, which takes a leading role in defining the general objectives of VET policy, for determining the curriculum, standardizing qualifications and managing staff (Greinert, 2004). This model is based on a centrally planned mechanism of administration, which is part of the state's economic policy (Tomiak, 1983). Public vocational schools are funded by the state while private vocational institutions are financed by learners fees (Adams, 2005).

The curriculum combines general education and vocational knowledge (Prais & Steedman,

1986; Steedman, 1988). General knowledge is emphasized over practical training (Frommberger & Krichewsky, 2011). Enrolment in the vocational schools depends on completing certificates from general education schools or entrance examinations (Steedman, 1988). Funding for VET in schools comes from the state budget.

The qualification system recognizes both formal education and experiential learning (Greinert, 2004). The types of occupational qualifications are less dependent on enterprises' immediate demands (Varsori, 2004). This model mainly embodies an elitist system which primarily emphasizes on providing higher-level professional qualifications such as diplomas. The courses tend to keep moving up the qualifications ladder, and new training courses or institutions must regularly upgrade the lower qualifications levels (Imdorf, Granato, Moreau, & Waardenburg, 2010).

The curriculum is designed in response to the state requirements to develop knowledge-oriented qualifications (Brockmann, Clarke, Méhaut, et al., 2008; Brockmann, Clarke, & Winch, 2008). The term “competence” in this model is underpinned by theoretical knowledge, and general education as well as social and personal abilities such as autonomous decision-making (Bouder & Kirsch, 2007; Greinert, 2004).

In conclusion, the state-based VET model is characterized by the domination of the state. VET is provided mainly by schools with a combination of general education and vocational training. Qualifications which are academically oriented are designed based on course levels.

2.3.3. Dual model.

Social partners such as employers, trade unions and state bodies take an important role in shaping this VET system (Brauns, 1998; Gonon, 2014; Heikkinen, 2004; Tremblay & Le Bot, 2000). In this style, VET is organized on the principle of dual education, in which the

enterprises provide the apprenticeships and the part-time vocational schools offer vocational knowledge (Deissinger, 2007; Gonon, 2014; Tremblay & Le Bot, 2000). The learners spend one part of their education and training time at a vocational school and another at the enterprise. This model is popular in European countries such as Germany, Denmark, and Norway.

In the dual model, social partners maintain a leading role in the activities of the dual system (Streeck, Hilbert, van Kevelaer, Maier, & Weber, 1987). VET is organized by a combination of school-based education and well-organized employers' associations and unions that are actively involved in the assurance of the quality of the training (Phillips, 1995; Streeck et al., 1987). The primary learning is linked with enterprises' working practices, and learners sign a private training contract with the enterprise as employees to be trained for a specific job (Heinz, Kelle, Witzel, & Zinn, 1998; Pool, 1992). The costs of training are shared between the social partner and the enterprises. Individual employers are responsible for the costs of enterprise training and training materials while the state funds the vocational schools (Euler, 2013; Hummelsheim & Timmermann, 2000; Phillips, 1995).

Social partners decide on career profiles and training ordinances in a regulated process (Deissinger, 2008; Streeck et al., 1987). The social partners take a critical role in making decisions regarding the qualification framework, the curriculum and the scope of an occupation (Braun, 1987; Streeck et al., 1987).

The curriculum offers a broad occupation and its purpose is to train learners to become autonomous and responsible individuals within the workplace (Brockmann, Clarke, & Winch, 2008; Cantor, 1991). In this design, competence is integrative rather than cumulative, and it consists of occupational, social and individual competence in a specific work situation.

The qualification system is designed for a broad occupational education and is nationally recognized. This qualification system creates the transferability of occupation-specific skills between enterprises (Brockmann, Clarke, & Winch, 2008; Solga, Protsch, Ebner, & Brzinsky-Fay, 2014; Tremblay & Le Bot, 2000). This broad basis of vocational qualifications supports a maximum of flexibility and mobility between different workplaces and enterprises. The assessment standards of VET are outcomes-based, which integrate the knowledge and skills based on the training regulations and the learning objectives of the general curriculum framework (Cockrill & Scott, 1997).

To summarise, it may be explained that each VET model is different in its approach. In the market-based model, the labour market determines the types of VET needed to meet the requirements of enterprises. This VET system is regulated mainly by market forces. Thus, the needs of enterprises and / or actual jobs lead the VET system. In the state-based model, the VET system is regulated by the state. Knowledge-based vocational training is a feature of this model. In the dual model, the VET system is regulated by social partners and vocational principles determine the VET orientation. The market-based, the state-based and the dual model continue to distinguish today's national VET systems (Heikkinen, 2004).

2.4. Advantages and Disadvantages of VET Models

In most countries, VET systems are organized on the basis of these three VET models (Green et al., 1999; Heikkinen, 2004). These systems have been shaped by the influence of the different industrial and socio-political history of each country and are affected by the current socio-economic context (Greinert, 2004). However, none of the models is ideal because each has its issues.

The market-based model enjoys some benefits and disadvantages. In advantages, this model is enterprise-led, so it is flexible in response to social and economic changes (Blanchflower

& Lynch, 1994). Because of the flexible structure, trainees are not so much restricted to narrowly defined occupational fields, and new trainees can flexibly be directed to new and future-oriented occupational fields (Ryan, Gospel, & Lewis, 2006).

The principle of modularisation in its qualifications allows the employer to meet needs flexibly and individually. This principle is convenient for enterprises to direct trainees to achieve competencies at various levels (Brockmann, Clarke, & Winch, 2008; Deissinger, 2004). Another advantage of this model is providing short term courses and skills, so it does not consume much time for trainees to study for a new position. Workers may easily move from one job to the next because training takes place within the workplace (Millicent, 1992). The trainee is allowed to acquire all the qualifications needed without any theoretical instruction, through real situations in a concrete workplace. The market-based model is considered advantageous for enterprises to train the human resources they need to meet their production purposes, and ensure the number of apprentices complies with the number of training places (Elbaum, 1989; Euler, 2013; Evans & Heinz, 1993).

A significant disadvantage of this model is that the apprentices only acquire narrow knowledge and skills of vocation, so they are not able to apply these within another enterprise which demands other skills. This may create a long-term disadvantage of low individual flexibility because the acquired skills are specific workplace-based and are closely tied to concrete work tasks (Bosch & Charest, 2008). Skills may become out of date due to rapidly changing occupational requirements and the shorter life-span of occupations (G. Mason, Prais, & Van Ark, 1992). This leads to a lesser degree of mobility in the labour market and the trained workers are at risk of becoming unemployed if their skills are not needed anymore or if the enterprises close or new technology is introduced (Ryan et al., 2006).

In this model, the training in enterprises is attached to real jobs at the workplace, where the training curriculum does not provide a generally recognized certificate. Because this model lacks general guidelines, it is difficult for trainees to move up to a higher level (Parkes, 1993). The quality of training is very heterogeneous because training conditions are not controlled and standardized across enterprises (Deissinger, 2004; Parkes, 1993). If employees move from one job to the next between enterprises, there are no shared rules and standards concerning skills, income, and job requirements, which employees and employers can rely on. This increases the risk that employers may recruit the wrong employees for a specific job. In this market-based model, there are no general standards for a wage which result in income inequality in the liberal market economy (Bosch & Charest, 2008).

The school to work transition in this model often takes several years and is characterized by a high level of job insecurity, caused by a regular change of workplace with a high rate of part-time employment, and unemployment (Pool, 1992). Training management is equally inadequate, with an emphasis on practical experience and generalists rather than qualifications and specialists (Brockmann, Clarke, & Winch, 2008; Pool, 1992; West & Steedman, 2003).

In conclusion, the market-based model is decentralised and extremely complicated (Deissinger, 2004). It provides only employable skills such as enterprise-specific practical knowledge, skills and attitudes, which are needed for available jobs. Students are not required to gain a particular qualification after completing their compulsory schooling (Brockmann, Clarke, Méhaut, et al., 2008; Brockmann, Clarke, & Winch, 2008;

Deissinger, 2004). The market-based model may be inadequate for meeting all skills needed for the national economy but may be a means for providing job-specific vocational skills for

enterprises (Ainley, 1990). This model is considered the best choice for low academic school leavers.

An advantage of the state-based model is the emphasis on an academic education where the trainee is not confronted with real-life occupational problems and obtains qualifications mostly based on theoretical instruction, provided by full-time vocational schools (Brnuns, Steinmann, Kieffer, & Marry, 1999). Otherwise, theoretical learning in vocational schools provides a broad theoretical understanding of occupational fields and is connected with more general education. This state-based model may enable trainees to adjust more quickly to the changing requirements of a knowledge-based economy. It is advantageous for students who may wish to continue into higher education (Bouder & Kirsch, 2007).

The curriculum is course and level-oriented with a highly standardized qualification system based on well-defined occupational titles. The acquisition of a job can be ensured by a certificate which employers can use as an indication of particular skills for employees and employees can use as a reference point in determining their social status in recruitment (L. W. Clarke, Christopher, 2007). Students do not have to decide if they want a practical or academic-based curriculum before commencing and it is easy to change their courses if they wish (Brnuns et al., 1999; Brockmann, Clarke, Méhaut, et al., 2008).

A disadvantage of this model is the curriculum. The level-based curriculum is not designed to respond to the demands of the labour market, so it lacks a match between the skills of trained labourers and the demand of the labour market (Brockmann, Clarke, Méhaut, et al., 2008; Koch, 1989). The curriculum is not linked to practical training places in firms and companies, so it is not adaptable to economic changes. The training which takes place in vocational schools emphasizes academic knowledge, so it does not provide students with real work situations. This leads to disadvantages to students when they enter the labour

market, which asks them to perform concrete tasks at a real workplace, so students may take a long time to get practical work experience (Caillods, 1994).

In countries with this model, VET is related to school failure, which means that the best pupils are directed towards general education and continue on with their higher education, while students with weaker academic performance are progressively directed towards VET (Koch, 1989; Rauner & Maclean, 2008). Countries with this model favour comprehensive and general education in preparation for academic examinations, which are the main references in the skills classification system that serves tertiary education.

The dual VET model offers numerous advantages, including the direct involvement of enterprises in setting up VET curriculum, easier entry of trainees into the labour market, and shared financial support by enterprises, and trainees. These advantages enable the expansion of the VET system without relying on state support (Streeck et al., 1987).

The dual VET learners are able to undertake both vocational theory in schools and practical training in enterprises. Learners have access to the knowledge of production methods and the work requirements of actual workplaces (Gonon, 2014; Idriss, 2002). This dual model creates the recognition of training certificates in the labour market and most graduates from the dual system are employed in the occupational field for which they were trained or in a related field (Deissinger & Gonon, 2015). It facilitates a smoother transition from school to work (Pool, 1992).

Enterprises in the dual VET model provide trainees with skills which fit their own needs. Thus, trainees are likely to adjust to technological advances more easily and meet the demand for qualified workers, thereby enabling enterprises to meet their needs for particular skills (Dougherty, 1987). Dual model learners are likely to engage in continuing training

courses at a more advanced level, such as obtaining a technician's certificate or attending short engineering courses (Li & Pilz, 2017).

The dual model provides employability because it develops practical skills, which are more relevant for enterprises, as well as assisting learners with better knowledge and networks to access a job (Lehmann, 2000). Apprentices often have a work contract with their training enterprises, so they are considered as employees. Most graduates from the dual system are employed in the occupational field for which they were trained or in a related field (Deissinger & Gonon, 2015). They are less at risk of becoming unemployed, and unemployment in the dual model countries is often lower than in those with other VET models (Tremblay & Le Bot, 2000).

With regards to the disadvantages, the dual model faces some problems. Regulation of the VET system is achieved through a collective agreement of actors such as social partners, state agencies and employers, so there is some inflexibility in response to new economic and social requirements (Tremblay & Le Bot, 2000). The dual system depends much on the economic well-being of enterprises, who have to provide training places and pay wages for trainees (Solga et al., 2014). With the mechanism of learning places which combine theoretical learning in a compulsory vocational school and practical learning in the workplace, cooperation between vocational schools and enterprises can be mismatched because enterprises tend to train students according to their standards of occupation while schools provide vocational theory based on a general national framework (Braun, 1987; Deissinger, 2004; Idriss, 2002; Solga et al., 2014).

Another problem of this model is a weakness in standards of general education. The majority of school-leavers who graduate from a lower secondary school may not be well equipped with the skills required for undertaking an apprenticeship. This model emphasizes

an occupational orientation, and being less academic, leads to disadvantages for students who want to continue their study. In countries with this model, there is often a low tertiary graduation rate, creating challenges for a knowledge-based service economy (Hummelsheim & Baur, 2014; Juul & Jørgensen, 2011).

The dual model adapts slowly to new economic conditions and qualification requirements, so there is a risk of a decline in the number of available apprenticeships (Dougherty, 1987; Idriss, 2002; Juul & Jørgensen, 2011). The combination of school-enterprise training is challenged by new and emerging fields (Braun, 1987; Juul & Jørgensen, 2011). For instance, in information technology occupations, students complain that their school teachers have a lack of knowledge about the field and that the theoretical instruction is not relevant enough for their future careers (Idriss, 2002).

Another disadvantage is that there are too many different occupations with mutually exclusive characteristics (Idriss, 2002), which lead to inflexibility and a lack of occupational mobility in the work-life (Blossfeld & Stockmann, 1998). Because this model provides a broad occupational field, it is criticized for its high number of specializations, insufficient theories, and difficulties in coordinating theoretical knowledge with practical enterprisebased training (Caillods, 1994). Some suggest the survival of this model will depend strongly on the innovative capacity of the social partners to continually modernize (Blossfeld & Stockmann, 1998).

As discussed above, there are disadvantages and advantages in the three models which apply in developed countries. While the dual model has a strong linkage with the labour market and close involvement of the social partners, these crucial factors are absent in state and market-based models. The state-based model emphasizes academic education while the market based model is practically oriented. However, in a knowledge-based economy which

requires not only specific work skills but also soft skills for life-long learning, there needs to be a strong combination between general education and VET (Bosch & Charest, 2008).

The dual, state-based and market models have their advantages and disadvantages in the process of globalisation (Hobart, 1999). Some argue the dual model is the best for developing countries to improve their VET system, but it is challenging to implement (Blossfeld & Stockmann, 1998). To apply this model successfully, some argue enterprises must commit to training as a long-term investment in developing human resources. This practical training in the enterprise needs to be well organized and taught by a qualified instructor. Many developed countries may find that it is not easy to meet all of these conditions (Caillods, 1994).

2.5. Studies of Vocational Education History in the World

As the literature review of studies relating to the history of VET found, the research by Wollschlager and Guggenheim (2004) explored the development of VET in European countries from divergence to convergence. This research examined the various VET systems in Europe by describing VET's historical development at the national and international level and revealing how VET and European integration have influenced each other. Another study provided a comparative view of the European VET systems' development and gave an insight into the concepts and challenges of these systems (Berner, 2016)

Research on VET in developing countries (Agrawal, 2013) provided an overall look at models of VET in these countries. However, the model of VET in Vietnam was not investigated in this research. In 2018, research on the historical evolution of vocational education in the Nordic countries examined the development of the VET system in these four countries before and after 1945. This research found that these systems represent

diverging VET models, in which Denmark follows the dual model and Sweden retains the state-based model. Research on the history of VET systems in Asian countries is sparse and highlighting a need for this research to be undertaken.

VET models in most countries have a long story, but all modern VET models originated from the Industrial Revolution in the 18th century and follow three basic models, the statebased, market-based and dual model. Variants of these models in every country have arisen from political, social and economic factors. In the next sections, I will consider how VET models in developed and developing countries have been formed and developed. I provide a review on the recent research relating to the history of VET in some countries and Vietnam.

2.6. VET in Developed Countries

In developed countries, the modern VET models emerged after the Industrial Revolution of the 18th century (Heikkinen, 2004). The market-based VET model evolved in countries such as the United Kingdom and the United States of America, while the state-based model appeared in France and Russia, and the dual model in Germany, Denmark and Norway (Eichhorst, Rodríguez-Planas, Schmidl, & Zimmermann, 2015; Greinert, 2004; Greinert & Hanf, 2004; Heikkinen, 2004).

In the United Kingdom (UK), VET, which is provided by enterprises, follows a marketbased model. The governments traditionally regarded VET as the responsibility of employers and enterprises, so vocational institutions linkages with enterprises are weak (Malgorzata, 2018; National Office of Overseas Skills Recognition, 1992). The UK's government policy is that employers should take the primary responsibility for VET, so VET is free from state intervention and is market-oriented (Elbaum, 1989; Ryan & Unwin, 2001).

Like the UK, VET in the United States of America (USA) follows a market-based model. Although VET is referred to as a system, the USA's VET model is not. It has no uniform standards, curriculum, or accountability measures (Hayward & Benson, 1993). The USA's VET administration has traditionally been decentralised and managed by the states and their local communities (Eichhorst et al., 2015). The Federal-state- local governments, with their distinct needs, have created a VET system where there is no formal definition of a vocational student due to the lack of a unified system (Albert, 1990; Blom, 2001). The USA's VET is offered by community colleges, and technical schools (Keating, Medrich, Volkoff, & Perry, 2002) and these schools are mostly private.

In France, the state manages its VET system, and public schools provide VET (Imdorf et al., 2010). After 7 years of general schooling, students are directed towards vocational courses lasting 2 or 3 years, leading to a Vocational Proficiency Certificate or Vocational Education Certificate and, after another 2 years of education, a Vocational Baccalaureate (National Office of Overseas Skills Recognition, 1992a). Vocational secondary schools serve two purposes: to prepare young people for work in skilled manual or white-collar jobs, and to provide places for students who have not succeeded within the general education system to pursue academic studies.

The French government has maintained the holistic principle of the traditional state VET system, in which students are positioned as individuals and citizens, as well as employees. The French VET system has established its evaluation systems independent of the labour market and serves "a lofty concept of man, the worker and the citizen" (Bouder & Kirsch, 2007, p.505). A vocational student therefore not only can work but is also capable of developing, learning and passing on knowledge that is integrated with individual, social and technical competences (Bouder & Kirsch, 2007; Brockmann, Clarke, & Winch, 2008).

The French VET system favours comprehensive and general studies in preparation for the academic Baccalaureate examination, which is the primary reference of the skills classification system or tertiary education (Bouder & Kirsch, 2007; Frommberger & Krichewsky, 2011). Students who are directed towards vocational studies are mostly those who have failed in their general academic education (Koch, 1989).

Like France, the Russian VET system following the USSR's VET system is state-based. The state plays a crucial role in all VET activities and is characterised by the division of labour (National Office of Overseas Skills Recognition, 1992b), which consists of workers, technicians and engineers (Tomiak, 1983). Workers is classified as lower standard while technicians and engineers were expected higher. Under the Soviet government, the system of vocational schools was divided into tertiary education which trained engineers, secondary technical schools which trained technicians, and vocational schools which trained workers (I.Zajda, 1980; Tomiak, 1983).

Training of workers consisted of three stages consisting of elementary, middle and the highest level (A.Lauwerys, 1968). The USSR's government established factory schools within the State enterprises, which aimed to combine training and production, which served as a means for raising productivity as well as providing a socialist education (National Office of Overseas Skills Recognition, 1992b).

Enrolment in public vocational-technical schools was managed under a 5-year plan which served the interest of the national economy (I.Zajda, 1980; Tomiak, 1983). The 5-year plan to set a target for the number of graduates to be sent to state-run enterprises according to the needs of the national economy. The curriculum, qualifications, and output standards of VET were centrally set by the Ministry of Higher and Special Secondary Education (National Office of Overseas Skills Recognition, 1992b).

The 10 years of compulsory school education was designed to create a communist society, so VET was viewed as a political and economic tool for the sake of the State. Socialist ideology and moral education were important and expected in the USSR's VET system (I.Zajda, 1980). The outstanding feature of the USSR's VET model was its tight control by the state and uniformity of schooling (I.Zajda, 1980; National Office of Overseas Skills Recognition, 1992b; Tomiak, 1983). The public vocational schools were administrated in a pyramid-like highly centralised bureaucratic structure (Tomiak, 1983).

The German VET system, which originated from a longstanding tradition of apprenticeship, is a dual model, in which VET is provided by the enterprises and part-time vocational schools (Deissinger, 2004). Trainees take vocational theory at public vocational schools (Berufsschule) 1–2 days per week and practical training with enterprises 3–4 days per week (Deissinger, 2007; Korpi & Mertens, 2003). The individual enterprises provide a salary for trainees (Hummelsheim & Timmermann, 2000).

Social partners in the German VET model take an essential role in connecting VET provision with the labour market. Employers, employees, instructors, and colleges share a crucial role in making decisions concerning finance, administration, assessment, standards and regulations of the VET system (Cockrill & Scott, 1997; Flude & Sieminski, 1999; Streeck et al., 1987).

The Norwegian VET system follows the dual model, in which vocational knowledge is offered by public vocational schools and practical training is provided by enterprises (Michelsen, Olsen, & Høst, 2014; Olsen, Høst, & Tønder, 2014). Norwegian VET is segmented, and heavily structured by the diversity of occupational classification through recruitment from different sectors of the economy (Elias et al., 1994; Michelsen et al., 2014).

The Norwegian VET system has a mixed governance structure, including social partners and the state (Nyen & Tonder, 2016). The state and the regional authorities play a leading role in the formal VET system as a whole and especially in the vocational school system. The social partners have a significant role in the structure and content of the training occupations and the apprenticeship system in particular. Norwegian VET is financed privately and by the state (Elias et al., 1994).

To conclude, VET in developed countries follows three basic models of VET including the market-based, the state-based model and the dual model. Under the influence of political, social and economic factors, these VET models are adopted by governments to match the context of the country.

2.7. VET in Developing Countries

Most of the modern VET systems in developing countries such as China, Indonesia, and Malaysia came from Western countries. These modern VET models were initially imported, with a little adjustment, from former colonial powers to match the context of these countries (Agrawal, 2013).

In China, by the middle of the 19th century, vocational schools following the Western VET model were established to provide skilled workers for its new Western-style industries, but it was not until the end of the 19th century that China's public VET system emerged (Cooke, 2005; Keating et al., 2002). Since 1949, under the Republican government of China, VET was provided by three types of VET schools, including vocational schools under the management of the Ministry of Education, skilled workers schools under the Ministry of Labour and Social Security (MOLSS), and technical schools under the control of various departments and ministries (Wu & Ye, 2018). Between the years 1950 to 1958, following the USSR VET model, the Chinese government nationalized private schools to

train skilled workers for the socialist industry. Workers schools, which were attached to factories and communes, became popular (Cooke, 2005; Keating et al., 2002). Russian was taught as the second language and students were sent to the USSR and other communist countries for further study.

Since the early 1980s, the Chinese government has continued to develop VET to meet the demands of developing its market economy (Zhang, Hu, & Pope, 2002). In May 2015, the Chinese government set out a strategy to “make China an Industrial Superpower” by 2049 (Klorer & Stepan, 2015). To realize this ambition, the Chinese government issued policies that aimed to transit its VET system to a dual model (Stewart, 2015; Wu & Ye, 2018).

Malaysia’s VET is another example of a Western VET model. The modern vocational training in Malaysia was first introduced by the UK in 1897 to train Malay mechanics or fitters for managing the railway lines (Mustapha & Abdullah, 2004; National Office of Overseas Skills Recognition, 1996a). In 1906, the first public vocational schools system was established to provide skilled workers for various government departments. These vocational schools offered courses such as fitters, electricians, carpenters, bricklayers, and tailors. In 1965, Malaysia’s VET system was expanded, and the range of vocational courses was diversified (Zain, 2008). Students took general education with a vocational or technical emphasis in industrial fields such as woodwork, metalwork, electricity, and power mechanics (Yunos, Ahmad, Kaprawi, Razally, & Onn, 2006).

In 1987, the Malay government introduced a new VET system with two streams which vocational students could choose (Rasul, Ashari, Azman, & Abdul Rauf, 2015; Yunos et al., 2006). They either entered a vocational program after high schools, whereby students took the Malaysian Certificate of Vocational Education examination at the end of the 2-year course or they took a vocational skills course (National Office of Overseas Skills

Recognition, 1996a; Rasul et al., 2015). In the skills training stream, the emphasis was on skills training as required by enterprises (Zain, 2008). Since 2005, the Malaysian government has moved forward in developing a dual VET model to meet the demands of the global economy (Rasul et al., 2015).

Other evidence that the modern VET system of developing countries came from the Western countries is found in Indonesia. VET in Indonesia originated from Dutch mission schools (Frankema, 2013). At the beginning of the 20th century, a dual system of public education appeared which combined the mission schools and the Islamic schools. These schools offered the standard Dutch curriculum which prepared children for a career in the colonial administration and offered access to higher education in the Netherlands (Frankema, 2013). At present, VET in Indonesia is provided by senior secondary schools and is controlled by the state. These senior secondary schools offer four main types of schools including Academic Senior Secondary School, Technical Senior Secondary School, Commercial/Business Home Economics Teacher Training School and Sport Teacher Training School (Newhouse & Suryadarma, 2009). After graduating from junior high schools, students have to choose either a vocational or general high school. Each vocational school usually focusses on just one or two majors. The Department of Education and Culture takes responsibility for making policy, planning, funding, developing curriculum, granting qualifications, preparing and distributing textbook, and organizing examinations. Most private schools are managed by non-profit foundations (Australia Department of Employment, 1991).

In summary, the modern VET systems in developing countries originates from Western countries. These countries shares common features in that the VET is provided by the government, and mainly offered in vocational secondary schools. In meeting the demands of

the global economy, most of these countries have reformed their VET system into a dual model.

From the examples given above, it is evident that three basic VET models, the statebased, market- based, and dual models, have been implemented in countries all over the world. In developing countries, their governments have recently issued VET policies to adopt the dual model, which may better meet the demands of the global economy.

2.8. Studies of Vietnamese VET History

Although the Vietnamese modern VET system was established at the beginning of the 20th century, there are few studies in this field. In researching the history of Vietnamese tertiary education in the periods of French occupation and that of the USSR, it was found that despite significant philosophical influences of France and the USSR, Vietnamese tertiary education has not been a copy of those models (Ho & Reich, 2014). Vietnam adopted some aspects of these models that fit its context at the time. A research study in 2002 explored the changes of Vietnamese vocational education, and it showed that the Vietnamese government's VET policy strongly impacted its development of the VET system (V. H. Nguyen, 2002). The research was limited in that the research data were mainly based on documents available.

In 2014, the influences of history on Vietnamese education indicated that Vietnamese education has been influenced by Confucian education concerning pedagogical practices from teaching and learning which is teacher-centred education. Interestingly, the Vietnamese education followed the French as well as the USSR's model in an arrangement of institutions and curriculum (Ho & Reich, 2014).

Some research has focussed on operational issues of VET relating to the effective management of vocational institutions (Thuy, 2012; Tuan, 2010; Hang, 2013); the improvement of VET quality (Tien, 2010; Hieu, 2010); the professional development of VET teachers (Tri, 2011; Kha, 2012); the relationship between VET and industry (Tuan, 2009; Tien, 2009; Mori, Nguyen & Pham, 2009); and challenges for VET to provide highly skilled labour for industrial zones (Pham, 2009). However, these studies were generally restricted to providing an overall view of the VET system during historical periods.

In summary, there is little research on vocational education relating to the history of VET and it is limited in the data and/or the scope of research. These studies have not provided an overall view of the Vietnamese VET development that could assist policymakers, and educators to accommodate its global economy changes and international integration. Thus, I have undertaken research on the history of Vietnamese VET since 1954.

2.9. Summary of Chapter

Chapter 2 provided definitions of VET and clarified dominant VET models. These VET models are distinguished by dimensions of policy, administration, funding and qualifications. I outlined the advantages and disadvantages of these three models. In the dual model, there is some inflexibility in responding to rapid economic change, but it does not ensure a low rate of unemployment. The state-based model mismatches market labour, as it emphasizes academic education resulting in the need for retraining some students when entering the labour market. The market based model is under-regulated, and the qualifications and curriculum are not standardised, which may produce a high rate of unemployment. This chapter also surveyed research relating to VET models in developed, as well as developing countries. In examining the limited VET research in Vietnam, many

gaps in the research on its history were revealed, which need to be filled in order to provide readers with a better insight into the history of Vietnamese VET.

Chapter 3. Methodology

3.1 Historical Research Methodology

3.1.1 What is historical research?

Historical research is defined as “a systematic process of searching for the facts and then using the information to describe, analyse and interpret the past” (Stephen, 2005,p.226). It studies phenomena in natural settings, often through interviewing and observing (Mc Culloch, 2000). Historians focus on:

events of the past which occur in natural rather than contrived settings and the context of the event must be emphasized in its interpretation, which is central to conducting historical research. (Stephen, 2005 p.227)

Historical research is an analytical process based on inductive logic, using evidential support to arrive at conclusions (Stephen, 2005). It is to tell a story, which is presented in an authentic and factual way (R. O. Mason, McKenney, & Copeland, 1997). Historians “attempt to see the events as they might have appeared to those who experienced them” (Mason et al, 1997, p.317).

In my research, I have attempted to provide a recount of the development of Vietnam’s VET sector. Accounts relevant to Vietnamese VET since 1954 were collected through interviews with participants, who were directly involved with its growth during this period. My participants were former and current MOLISA’s policymakers and managers in Hanoi, former and current DOLISA directors, and former and current principals as well as head teachers of vocational schools from 13 provinces and cities of Vietnam. I have organized my interview data along with relevant documentary evidence into four periods in chronological order to construct my recount.

I chose to present the historical recount of the development of Vietnam's VET sector because I felt it would be useful and valuable in identifying trends of the past and thereby to predict future patterns and implications for related trends in the present. Historical research provides an understanding of the past through accurate description to provide perspectives for decision making and policy formation. It offers a background from which to determine what is novel in the current situation and which factors serve to distinguish the present situation from any others in the past (Meroño et al., 2015). Historical research helps readers understand the sources of contemporary problems, how these arose and how their characteristics unfolded through time (R. O. Mason et al., 1997). It also identifies the solutions that worked in the past and those that did not.

I undertook to construct a history of Vietnam's VET sector to provide readers, MOLISA's policymakers and managers, educators, and principals of vocational schools with an understanding of the changes in Vietnam's VET models since 1954. My history outlines the process of establishing and developing VET models as well as their characteristics throughout four recent periods in Vietnam's VET development. My recount may clarify for readers the sources of the current problems facing Vietnam's VET sector.

3.1.2. Data in historical research.

Data in historical research are collected through documents and other sources. The most common source is types of written records of the past such as books, newspapers, materials, diaries, minutes of organizational meetings, and periodicals (Mc Culloch, 2000).

Primary sources are original materials, which present information in its original form, and describe original thinking and data. They are produced by people or witnesses directly involved in a particular historical event or issue (Mc Culloch, 2000). They include scientific

journal articles, research results, government documents, legal documents, original manuscripts, interviews, and diaries (Meroño et al., 2015). Secondary sources are interpretations of historical events (Mc Culloch, 2000). They are modified, selected, or rearranged information of primary sources for a specific purpose. Secondary sources include bibliographies, encyclopedias, review articles, and literature reviews, or works of criticism and interpretation.

In my research, the primary sources included VET policies, Prime Ministers' speeches, state formal documents, and statements relating to VET before, during and after 1954, through to the present. The interviews in which participants reflected on events in Vietnamese VET history, in which they were directly involved were another primary data source in this research. My secondary data source came from published academic research, conferences, and reports on VET.

After 1975, many historical records in South Vietnam were destroyed by the war and ruined by North Vietnam's government. There are a few records of South Vietnam's VET available at the National Library. Thus, collected data for this study mainly came from informants, websites, and profiles of vocational schools stored at the libraries of these schools.

3.2. Research Design

Stages in historical research include choosing a topic and an appropriate theoretical framework, finding and accessing the sources, and analyzing, synthesizing, interpreting, and reporting the data. (Lusk, 1997).

In my research, I chose a topic for my research and then developed a descriptive framework to organize my data. A descriptive framework provides “a language for a description of the

facts that is precise yet flexible enough to adapt to new data as they are uncovered” (Bloch, 1953, p.135, as cited by Mc Culloch & Richardson, 2000). My descriptive framework (See Figure 3.1, p.49), international models of VET, was used to organise accounts to answer my research questions. Within each model, five aspects (policy, administration, funding, curriculum, and qualification) provided a framework to answer my research questions. These assisted me in analyzing interview and documentary data through coding, which “summarises in a word or short phrase- the basic topic of a passage of qualitative data” (Saldana, 2009, p.70).

My research included four steps: developing a corpus, organising and coding the corpus of written texts, designing an interview protocol, organising and combining documentary and interview data to write an account of the Vietnamese VET (See Figure 3.2, p.50).

I began the process of constructing a corpus for analysis by broadly searching published sources before and including after Vietnam was divided into two different governments in 1954. These published sources consisted of articles, books, documents, and studies relevant to VET in Vietnam, that were generally available from libraries, online data, and data retrieval sources. These provided background and suggested outlines for my research. Based on these published sources, I established a timeline of recent critical events in Vietnam’s VET history.

Specifically, I organised data into four periods for analysing, VET before 1954, from 1954 to 1975, 1976 to 1985, and 1986 to the present. I then collected primary policy and pedagogical documents, which reflected Vietnam’s VET within these periods. This was a somewhat iterative process which grew alongside my third data set of participants interviews.

3.1. Descriptive framework

Characteristics					
Models	Policy	Administration	Funding	Curriculum	Qualification
Market-based model	<p>Market-oriented</p> <p>VET is enterprise-based</p> <p>VET is not a part of the general education system</p> <p>Enterprises provide VET</p>	<p>Decentralizing</p> <p>Less intervention of the state</p> <p>Individual enterprises lead the VET system</p> <p>Employers take principal responsibility for designing the VET system</p>	<p>Fund for training is through an individual agreement between employers and trainees</p>	<p>Not standardized</p> <p>Based on employability skills</p> <p>Designed by enterprises</p>	<p>Not standardized</p> <p>Not nationally recognized</p> <p>Not give a way to move up higher education</p>
State-based model	<p>VET is state-based</p> <p>VET is a part of the general education system.</p> <p>VET is provided by schools and not connect with enterprise and labour market</p>	<p>The state takes principal responsibility for making decisions relating to VET</p>	<p>State funds the public vocational schools</p> <p>Students pay fees for private vocational schools</p>	<p>Standardized by state</p> <p>Based on knowledge-based</p> <p>Designed by state</p>	<p>Standardized by state</p> <p>Levels based and academic-oriented</p> <p>Nationally recognized and may move up higher education</p>
Dual model	<p>VET is provided by a combination of enterprises and vocational schools and closely connect with enterprise and labour market</p> <p>Social partners play the main role in designing the VET system.</p>	<p>Social partners take a key role in making decisions relating to VET</p>	<p>Social partners and state fund training</p>	<p>Standardized by social partners</p> <p>Based on vocational knowledge and practical work</p> <p>Designed by social partners</p>	<p>Standardized by social partners/ state/</p> <p>Based on a broad occupation</p> <p>Designed by social partners and state</p> <p>May move up higher education</p>

Figure 3.2. Steps of research.

Research questions	Steps	Documentary data		Interview protocol	Descriptive framework
1. How has the Vietnamese Vocational Secondary School System (VSSS) developed since 1954?	Step 1: Developing a corpus.	Primary documents: vocational education policies, and Prime Ministers' speeches, statements, and interviews relating to VET policies prior to, during and after 1954 to present	Secondary documents: academic research, conferences, proceedings relating to VET policies prior to, during and after 1954 to the present	<p>Participants:</p> <p>The past: retired MOLISA's policymakers, and managers, retired DOLISA's officials, and retired principals as well as head teachers of vocational schools, who were relating to VET in the past.</p> <p>The present: current MOLISA's policymakers and managers, current DOLISA officials, and current principals and head teachers of vocational schools, who are relating to VET at present.</p> <p>Sample: snowball.</p>	As shown in Figure 3.1
2. What is the current policy for Vietnamese VSSS?	Step 2: Organizing the corpus				
3. What is the current provision of VSSS within the Vietnamese education system?	Step 3: Designing an interview protocol from the result of the corpus and conducting interviews				
4. What is the role of VSSS in the Vietnamese educational system?	Step 4: Organizing interview data and combining documentary and interview data to write a history of VMSS				
5. What are the current challenges facing Vietnamese VSSS?					

These were semi-structured interviews, which assisted me to place my participant's experience in context by asking them to tell as much as possible about their opinions and experiences of Vietnam's VET that they were directly involved in.

I hoped that I may better understand the lived experiences of these individuals as a powerful way to gain insight into the development of Vietnam's VET sector. I invited MOLISA's policymakers and managers, DOLISA's officials, principals and head teachers of vocational schools to recount their opinions and experiences in terms of purpose, role, position, challenges, and vision relating to Vietnamese VET over these historical periods. Nvivo 12 assisted me in understanding the data I collected within my VET model framework to answer the following questions:

1. How has the Vietnamese Vocational Secondary School system (VSSS) developed since 1954?
2. What is the current policy for the Vietnamese VSSS?
3. What is the current provision of VSSS within the Vietnamese education system?
4. What is the current role of VSSS within the Vietnamese education system?
5. What are the current challenges facing Vietnamese VSSS?

3.2.1. Corpus development and organization.

I collected primary and secondary documentary materials as shown in Appendices from E to H (pp. 194 -226). I then organised my corpus into each historical period of VET. I read each piece in detail and highlighted information relevant to my research questions. Using my descriptive framework (See Figure 3.1), passages were identified and interpreted alongside my interview data.

3.2.2. Interview participants.

I selected my participants because they had experiences relevant to Vietnam's VET. They were interested in my research and volunteered to take part in my interviews. They were former and current MOLISA policymakers and managers, current and former DOLISA officials, former and current principals and head teachers of vocational schools from 13 provinces and cities of Vietnam.

I employed a snowball approach to identify possible participants, who were relevant to Vietnam's VET in the past and at the present (Browne, 2005). Through their social networks, my initial contacts informed further participants who were invited to join my research. Those initial participants who met my eligibility criteria, in turn, invited others to contact me. My initial participants took a critical role in this approach because they were key in recruiting the next potential participants. My initial participants were publically recognised in their government positions with ready access to their organizational websites and were able to create further opportunities for me to contact my next set of potential participants. My initial participants are shown in Appendices I to L (pp.218-221)

Participants in the subsequent rounds of interviews were past and retired MOLISA policymakers and managers, DOLISA officials, principals and head teachers of vocational schools.

3.2.3. Interview design.

My interview protocol was designed in consideration of my framework and focussed on: experiences and opinions about VSSS change over time, understanding about current policies of VSSS in terms of aim, vision, and role within the Vietnamese VET system and perceptions of current challenges facing VSSS within the Vietnamese VET system.

I interviewed 54 participants from 13 provinces of three areas, the northern, central and southern. 43 participants agreed to a face to face interview, and 11 participants agreed to answer interview questions via their email.

3.3. Ensuring Credibility and Trustworthiness

I attempted to ensure credibility and trustworthiness as a key role in my research. Credibility in historical research deals with the question of how research findings match reality and transferability (Merriam & Tisdell, 2015). I understood that the historical research pays attention not only to “making value judgments about the authenticity of data sources but also the relevance of the data sources during the research process” (Mc Culloch, 2000, p.19).

I developed my research questions directly from my descriptive framework to ensure my data were relevant to my research. In issues relating to the text, four questions were examined: its authenticity- that was how this text was trustworthy to my research; its credibility-that was how appropriate this text was as a record for my research; its representativeness- how typical this text was of documents on Vietnamese VET at that time; its meaning, that was to transcribe and translate the text with understanding and fidelity to its intent. I considered who produced the work, in what circumstances and for what purpose. My initial and subsequent participants provided me with some of these documents, especially those relating to their context.

3.4. Ethical Considerations

I ensured that potential participants were informed that their contribution to my research was voluntary and entirely their choice. If they decided to participate, they could withdraw at any time without providing a reason. Also, I ensured that they were aware of my research in a

way that did not invade their privacy and did not make them feel obligated, pressured to consent to participate.

Participants in my research and their institutional location have been not identified and were allocated codes to ensure privacy. The author and organization names of government documents have not been identified as these are publicly available. Local provincial documents have not been identified because they are not publicly available. After the interview transcription was completed, participants were sent a hard copy of the interview transcript for member checking. Participants had the right to amend, clarify, change, or delete their interview transcripts.

This research was conducted in a way that protected the dignity, rights and safety of the research participants and the research design was ethically sound. This research ensured accurate and fair quoting of sources, provided full references for quoted material and other sources, and developed the research conclusions based on the evidences which were clearly explained and argued.

3.5. Experiences of fieldwork in Vietnam

I conducted this research in 13 provinces and cities of Vietnam, which is a developing country under the leadership of a single Party, the Vietnamese Communist Party. With a system of government which is hierarchically based, there are some individual observations drawn from this fieldwork.

Government agencies in Vietnam are managed by a hierarchical administration system, in which the leaders of an agency have the highest power. They decide all the activities of the agency that they manage. Thus, if any individual or organization wants to access any staff or agencies, they must be approved by their superior.

It was difficult to make an appointment with leaders, they often refused to meet me with the reason that they were busy. Officers of government agencies often did not want to provide information about their organization even though no government regulations prohibit this. Although reluctantly, they recommended that I could meet their staff. I had to reschedule my meetings because of this reason.

To get agreement for access, you must make an appointment with the head who then will provide a letter of recommendation. However, it was not easy to get the agreement without being a colleagues' or relatives' friend. In other words, if you do not have a good relationship with the head's friends or relatives, it will be difficult to get the agreement, even though the data that you want to collect do not influence either individual or organization.

Culturally, Vietnamese people are not familiar with making formal appointments at cafés, restaurants, or public places. In collecting data for the research, my meetings for interviews were often at their office or their classroom. Times of these meeting often were lunch breaks or after work. A gift or fee for each meeting was necessary.

3.6. Summary of Chapter

In this chapter, I have presented the steps of research and methods applied to collect and process data. I used the snowball approach to identify participants. Fifty-four participants took part in my research and they include former and current officials of MOLISA, former and current directors of DOLISA, former and current principals as well as head teachers of vocational schools from 13 provinces and cities in the northern, central and southern areas of Vietnam. Chapter 4 provides a description of Vietnam's VET before independence in 1954, which I have divided into three subperiods: VET under the feudal regime, the French colonial rule, and from 1945 to 1954. I felt that it was important to frame my description of recent VET history against its feudal and colonial past. In Chapter 5, I describe models of

VET after the victory of Dien Bien Phu in 1954, the French army withdrawal from Vietnam. In this period, Vietnam was divided between the Democratic-Republican government, which followed the socialist VET model of the USSR and the Republican government, which was supported by the United States of America and retained the French VET model. In Chapter 6, I describe VET from 1976 to 1985, after the unification of Vietnam, when South Vietnam's VET model was abolished and nationalised under the control of Vietnam's Communist Party. The VET system was designed to provide skilled workers for a socialist economy, which was based on State plans. In the middle of the 1980s, Vietnam fell into an economic crisis and the quality of VET declined. In Chapter 7, I outline the change of the VET models from 1986 to the present as a consequence of the Doi Moi policy, which transitioned from a socialist to market economy. Since 1991 Vietnam has enacted policies to boost international contracts with developed countries. In responding to international integration, Vietnam has developed a dual VET model, which may provide a highly-skilled workforce to meet the demands of the global economy and international integration. However, in moving to the dual model, Vietnam's VET system has faced challenges which I analyse in Chapter 8.

Chapter 4: History of Vietnamese VET before 1954

In Chapter 3, I described the historical research method and clarified the four steps of my research. Specifically, I developed a corpus of documentary data to analyse. From my analysis of the corpus, I designed an interview protocol relating to my research questions. I used a snowball approach whereby initial participants were recruited who then recommended potential participants. I collected interview data from 54 participants including MOLISA's policymakers and managers, DOLISA's officials, principals and head teachers of vocational schools from 13 provinces and cities across Vietnam. I organised interview data and combined documentary data to write my history of Vietnam's VET.

In this chapter, I present the models of VET before 1954. This history consists of three subperiods: VET under the feudal regime, during the French colonial rule and from 1945 to 1954. It is important to understand VET's prior history to appreciate the development of Vietnam's VET models in recent times.

4.1. VET under the Feudal Regime

Although informal vocational education, which was associated with the emergence and existence of wet rice civilization and traditional craft villages, existed in the ancient ages (Gough & Rigg, 2012), Vietnamese feudal governments paid little attention to vocational training, which often took the form of handicraft villages. This model of craft production was maintained and developed during the feudal dynasties and continues to be retained as an informal model of VET alongside the current formal VET system.

In ancient society, Vietnamese people mainly relied on agricultural cultivation, so together with farm work, making handmade products with materials from rattan and bamboo, iron, and copper was an aspect of their daily life (Gough & Rigg, 2012; C. S. Pham, 2004). Over time, the handicraft production developed and gradually formed into a specialised craft

community, which was called a handicraft village. The handicraft village was defined as an ancient administrative unit, which was a community of artisans who specialised in a trade (Diep, 2006, p.1). These were villages specialising in pottery making, mat weaving, silk weaving, wood carving, or bronze casting (Luu, 2006). The ancient Vietnamese passed their skills from parent to child to produce their goods and maintain their way of life. The solid foundation of the handicraft villages enabled economic development and the preservation of the national identity as well as the individual characteristics of the locality. Most of these handicraft villages were formed and concentrated in the Red River delta in the northern provinces of Hanoi (Szydlowski, 2008).

The peak of the craft production model was under the Ly dynasty in the 11th century after the Ly dynasty moved the capital from Ninh Binh province to Hanoi (C. S. Pham, 2004). Artisans relocated to Hanoi and established Hanoi's craftsmen quarter, now called Hanoi's Old Quarter, located outside the Imperial Citadel of Thang Long. This urban area concentrated on handicraft and trade activities. It comprised craft streets such as Silver Street, which produced and provided silver products and Bronze Street. Artisans from craft villages around the ancient capital of Thang Long established each field of their profession. For example, during Emperor Ly's reign, Liu Xuan Tin, a craftsman specializing in silver casting, was granted a royal licence to open a silver casting furnace to produce silver coins for the imperial court. He took his relatives and villagers from Trau Khe village (now called Thuc Khang commune, Binh Giang district, Hai Duong province) to Hanoi and established a silver casting workshop, which is now at house number 58, Silver Street.

The oldest handicraft pottery street, Bat Trang, was also established under the Ly dynasty (Ha, 1960). Five respected pottery trade families from Bo Bat village, Yen Mo District, Ninh Binh province brought their artisans and families to the new capital. Bat Trang Pottery

Street was established when these five families joined with the Nguyen family in Thang Long to open a pottery workshop, which is now called Bat Trang Pottery Street (S. L. Ngo, 1697; Truong, 2008).

During the 16th and 17th centuries, Western countries such as Portugal, Holland, England, and France established trading relationships with Asian countries including Vietnam (D. A. Dao, 2006). These countries opened companies in Asian countries to conduct various business activities. Maritime trading in Southeast Asia increased (Vuong, 2011) and led to the emergence of trading centres such as Hoi An town near Danang. Bat Trang pottery was exported to both the Western and Asian countries. At this stage, the craft production model remained in the form of a traditional handicraft village.

From the 18th to 19th centuries, the Industrial Revolution in Western countries produced new goods at a greater volume which required large markets, and they expanded through colonizing many Asian countries including Vietnam (Szydowski, 2008). However, the Trinh and Nguyen governments issued a foreign trade restriction policy, which banned the import and export of handicraft products. This led to the decline of traditional handicraft production (Truong, 2008). This handicraft production model survived mostly due to the domestic consumer market, providing household items such as worship objects, and decorations for all classes of society.

Another example of the traditional handicraft production model is the blacksmith village at My Dong, Thuy Nguyen district, Hai Phong city, which was established at the end of the 19th century (U. T. Nguyen, 2015). Blacksmithing at My Dong village provided products serving people's homes and agricultural production. Popular craft products of this village included knives, sickles, hoes, shovels, and spades. Steelmaking came later after the beginning of the 20th century when the villagers learned how to cast ploughshares from

famous artisans in the village. Since then, the steelmaking and blacksmithing profession in My Dong has grown considerably, becoming a traditional trade, and the livelihood of many households in the commune. In 1945, My Dong villagers produced weapons to serve the war against the French army. Many artisans of the village worked in the weapon factories for the Vietminh's army. Throughout the French colonial period, this traditional handicraft production model remained as an informal VET model in North Vietnam.

4.2. VET under the French colonial government

By the end of the 19th century, France ruled Vietnam (Cooper, 2001). Under the French colonial government, the modern VET model was established in Vietnam. Public vocational training schools were formed across Vietnam such as the Hue Technical School (1898), the Bien Hoa Technical School (1903), and the Cao Thang Technology School (1903) in order to meet the demand for skilled workers in the colonial economy.

Evidence of the modern VET model in Vietnam was the Hue Technical School, which was established in 1898 under the form of a vocational training camp called Cour Apprentissage (located at No 25 Red Cross Street in Hue) (Bui, 2018). The school later changed its name to the Indochina Vocational School and provided skilled workers for the French Navy in Indochina (P1). During the period from 1900 to 1945, the French colonial government focused on developing the colonial economy, which aimed to exploit the natural resources of Vietnam such as coal and wood, so a series of factories and farms were established. As a consequence, a large volume of skilled workers was required in a variety of fields. In responding to this need, vocational schools such as the Indochina Vocational School, which had specialised in training for the French Navy, reformed and renamed itself the Saigon Professional School, and diversified its courses to include vocations aiming to meet the various demands of the colonial economy. In 1942, the Saigon Professional School

continued its reform and began a 3-year program. After students graduated, they were granted a “Professional Aptitude Certificate”. In 1948, the school was upgraded and changed its name becoming the Practical Industry School. A former teacher shared:

The curriculum consisted of general subjects and vocational subjects.

Students all took the same general subjects such as algebra, geometry,

physics, national literature, and French literature. Besides this, students

had to study one of the vocations such as forging and welding (T1).

More example of the French VET model was the Bien Hoa School, established in 1903. The decision on the establishment of this school was issued on 12 August 1903 by a French governor, Chesne (College of Bien Hoa, n.d). This decision said that in the past, Vietnamese people had been directed to pursue academic education and paid less attention to VET.

Establishing the Bien Hoa Vocational Training School was to provide skilled workers for practical labour. After finishing their program, the trainees returned to their villages where they used the natural resources of their local area such as wood, rattan, bamboo, and clay to make their products (Chesne, 1903).

This decision stated that the handicraft production model was out of date because Vietnamese people mainly learnt their vocations through imitation, based on the parent to child relationship, so the school aimed to train students with new training technologies via the Western VET model, not the handicraft production model. The curriculum included French conversation and vocational subjects under the supervision of the provincial school principal. Administrators emphasized practical instructions so that students could make their products as soon as they finished the course (Chesne, 1903). A teacher of the school informed me that:

The school was organised into four departments including the department of weaving, a department of carpentry, a department of copper casting and a department of drawing. Provinces and villages set up corresponding budgets for scholarships, with the actual rate of 4,5 VND per month. The school recruited students from all provinces, between 12 and 18 years old. (T8)

In 1913, the Bien Hoa Technical School was upgraded into the Bien Hoa Fine Arts School following further decision dated 11 September 1913 by the French Governor, Krautheimer (College of Bien Hoa, n.d). Further reform took place after 1916:

The length of the vocational program was changed from 4 years to 3 years. In 1918, A. Joyeux, the French principal, was busy, so he quit and Serré, the ceramic teacher, replaced him as a principal. In 1923, the French government appointed two specialists, Balick, who had graduated from Paris Decorative Arts School, served as a principal and Marrite, who had graduated from the School of Ceramic Limoges, served as an assistant. (P3)

Balick was head of the Bronze Department, in which there were three Vietnamese artisans and 21 students. A 4-year course consisted of the first 2 years of academic subjects and the last 2 years of specialized vocational training. Students entering the school had to have an Elementary Certificate. Besides learning a vocation, students had to study Mandarin, Vietnamese, French and mathematics (K. D. Dao, 2016). All students had a local scholarship from 4 to 7 VND per month. After graduating, students were employed by factories with a salary from 20 to 30 VND per month (P3). The school applied new technology to enhance the quality of products. A teacher of the school recounted:

Under the management of Balick, Marrite established the Department of Ceramis which specialised in multicoloured ceramic products with carved details of

unique patterns, and colorful glazes. Marrite and the local artisans used domestic materials, mainly straw, ash, and glass, Da Nang sand, and Can Long lime to make clay. Earth for making products was highly fire-resistant soil found in Dat Cuoc (Tan Uyen), and Chanh Luu (Thu Dau Mot). After many experiments, she finally found the right kind of ashes that pottery makers called yeast. (T8)

In 1925, the school was invited to attend the Paris International Fair. Balick and Marrite chose bronze products including carved and cast items such as trophies, ashtrays, paperweights, vases, figurines made of copper, and fine bronze art. The pottery chosen included many kinds of decorations such as wall hangings, water jars, all kinds of pedestals, and statues (K. D. Dao, 2016). The French government awarded the Honorary Medal, and the Organizing Committee awarded the Gold Medal for the school's products (College of Bien Hoa, n.d).

In 1932, the school attended the second Paris International Exhibition Fair (Szydlowski, 2008). The school was again awarded the Gold Medal and Honorary Degree. In order to encourage and reward the school for its training and production, the French government presented an experimental electric furnace, a canopy crusher and other equipment to the school. A principal of the school recalled:

From 1938, the school added subjects such as painting, and mechanical drawing. In 1944, the school changed its name to the Fine Art School of Bien Hoa. Balick and Marrite returned to France, so Tran Van An, a teacher, became a principal. In 1944, there were 75 students, and in 1955, there were 46 students. The number of staff including the principal and teachers were ten. (P8)

Further evidence for the establishment of the modern VET model at this stage was found from processed data of the Cao Thang Technical School, which was founded by the French

colonial government on 20 February 1906. Its original name was the Asian Mechanical School (K. D. Dao, 2016).

The French colonial government established this school primarily to train naval and other mechanical fields for the French army. The Asian Mechanical School started in a building with a tin roof at the corner of De Lattre de Tassigny Street (Ham Nghi Boulevard today). A former teacher of the school remembered:

In a tin-roofed house, there was only a small mechanical workshop in the East of the school near a train station running along Saigon-Cho Lon Street. A French principal, Emmanuel managed the school. (T2)

In 1907, the school was not fully equipped, so the practical training relied on the workshop of the Experiment School (now located on Red Cross Street) (K. D. Dao, 2016). In 1914, World War I broke out. During the war, the school also produced a lot of 75-mm bullets for the French army. The school recruited and trained a large number of skilled workers to serve the French army. In 1939, World War II broke out, Rosel, a French principal, who founded the Asian School, was replaced by Albert Simon, a Navy Air Captain. At this time, the school was given the title of the "Rosel School" (Ecole des mechanics-Ecole Rosel). In 1940, proposed by the principal Albert Simon, the Rosel School changed its name to the Professional Technical School. In 1941, the Professional Technical School was occupied by the Japanese troops under the management of the Japanese Navy. The school began to reopen from 20 January 1942. At the same time, Albert Simon was moved to Hai Phong and replaced by Yves Germain, a French navy mechanical captain.

So by examining the history of the vocational schools, it can be seen that the modern VET model in Vietnam was established early by the French colonial government at the end of the

19th century. The first vocational schools made an essential contribution to creating the formal vocational training system in Vietnam, built upon the French VET model.

In 1945, after the Japanese army replaced the French colonial government in controlling Indochina including Vietnam, the Vietminh government (North Vietnam) headed by Ho Chi Minh declared Vietnam's independence from the French colonial government and established the Vietnamese Democratic-Republican government (Wright, 2002). Whereas, Emperor Bao Dai, who was controlled by the French colonial government, was supported by the Japanese army to establish his national government. In 1946, the Japanese army retreated from Indochina, so the French army returned to control Vietnam. At this stage, VET in Vietnam started to develop in two separate streams.

4.3. VET from 1945 to 1954

4.3.1. VET under the National government protected by the French government. The National government under the protection of the French army retained the French VET model (Wright, 2002), which was reflected in the VET policies of the National government. The National government stated that the purpose of vocational schools was to provide students with an academic and vocational knowledge, which helped them get jobs, or attend upper technical schools after graduating (The Vietnamese National Government, 1949).

Like the French VET model, a knowledge-oriented curriculum was described in statements on VET by the Minister of Education Phan Huy Quat in 1949. He determined that:

The new VET's program takes two principles. The first principle is building a national spirit and promoting a modern VET model. Secondly, Training will be based on an experimental method. (H.Q.Phan, 1949, p.40)

The Bien Hoa Technical School was a further example of retaining the French VET model.

A former teacher of the school remembered that:

In 1945, when the Japanese army came to occupy the monastery, the Bien Hoa Technical School was disbanded. In 1946, after the Japanese withdrew from Indochina, the French army returned to occupy Vietnam and formed the government of Cochinchina. The school returned to its previous position, and Yves Germain returned as a principal. In 1947, the school began to operate again as before. Yves Germain returned to France and Gérard Tabouillot, a French technology engineer replaced him as principal. (T3)

From 1947, the Board of Graduation Examination expanded the role of the province, so the Board included provincial representatives, provincial primary inspectors, principals and retired teachers (College of Bien Hoa, n.d). Moreover, the principal had to submit to the district office a summary outline of the examination program (D3). Although the Japanese army had replaced the French government in controlling Vietnam and then supported Emperor Bao Dai to establish his national government, the French VET system remained during this period.

4.3.2. VET under the Democratic-Republican government supported by the USSR.

Differing from the National government's VET, the Democratic-Republican government's VET followed the model of the USSR. This model originated from Vietminh's relationship with the USSR's communist government. At the beginning of the 20th century, the first Vietminh government's leaders such as Nguyen Ai Quoc (Ho Chi Minh), Le Hong Phong and Nguyen Khanh Toan (V. T. Le, 2017) were sent to the USSR to study Marxism,

Leninism and Socialism and then returned to build Socialism in Vietnam. As early as 1927, Ho Chi Minh planned to set up an independent education system for Vietnam, as a means of escaping the French colonial rule, which limited most people's access to schooling (Bryant, 1998). This was the first foundation of North Vietnam's State VET model.

During the period 1923 to 1950, VET focused on communist cadre subject formation. The USSR's government helped the Vietminh government train 67 communist officers, mainly political and military officials (Bryant, 1998). By 1953, the USSR's government had trained 155 Northern Vietnamese students in all fields such as light industry, mining, transportation, agriculture, hydrology, health, and finance (V. T. Le, 2017).

After the Declaration of Independence by Ho Chi Minh in August 1945, the Democratic-Republican government in North Vietnam was established. During the following 9 years of the war, the Democratic-Republican government focused less attention on the VET system (V. H. Nguyen, 2002). VET in this period only existed in the form of small, short-term and dispersed classes within factories of free zones which were controlled by the Democratic-Republican government (V. H. Nguyen, 2002). VET was attached to production following the slogan "All people are the resistance" (B. S. Tran, 2004). In 1950, the Democratic-Republican government implemented the first reform of education, which applied the general education system of 9 years from the first to ninth class (London, 2006; B. S. Tran, 2004). However, VET was not provided in this new education system.

During this stage, vocational classes were spontaneously formed in the free regions which were controlled by the Democratic-Republican government. These classes concentrated on serving the war effort against the French (Fall, 1954). A DOLISA director observed that:

What we mean by the Democratic-Republican government's VET in this period was a VET model to meet the demands of the war against the French army.

Thanks to the support of the USSR, this model developed effectively during the first stage of the war. (D3).

Making the same points, another DOLISA director remarked that:

The Democratic-Republican government's VET model was built up from the short term VET approach, which met the demand of a war economy, and it was heavily influenced by communist education. That was an incompleting VET model and based more on political will than practical training. (D5)

The Public Transport Technical School provides a good example of the characteristics of the Democratic-Republican's VET model during this period. Established according to Decree No. 2/ SL dated 1 February 1949, this school was to train the technical staff for the Ministry of Public Transportation, Architecture, Post and Irrigation. The administration was specified by Degree No.60D/SH of 24 February 1949, issued by the Ministry of Public Transport. A former teacher of the school remembered that:

In early 1949, the first Communist Party Branch of the school was established and took the leadership role in the activities of the school. In February 1949, due to the war, the school continued to be evacuated to Yen Dinh district, Thanh Hoa province and then transferred to Tho Xuan district. (T4)

The location of the school in this period changed several times but it continued under Communist Party leadership. A former principal of the school noted that:

In 1950, the school held the second graduation exam for two classes at the college-level and a middle-level class. In 1951, to ensure safety, the whole school was evacuated to Viet Bac. By the end of 1951, the school moved to

Chua village, Yen Son district, Tuyen Quang province and settled there until 1954. Although the school had to move to many places, under the leadership of the Communist Party, the school still ensured teaching and learning as well as the activities of the school. The school trained workers at the middle level and college level with a 2-year course. (P7)

In this period, the school trained 26 college students, and 14 middle-level students who were recognized as eligible to graduate by the Minister of Public Transport by Decree 275-SH / ND (N. T. Nguyen, 2002).

4.4. Summary of Chapter

In summary, VET in Vietnam before 1954 originated from ancient times where it existed in the form of the traditional handicraft village. Each handicraft village specialized in a professional field such as drum making, or blacksmithing. The training was based on a father and son relationship to maintain vocations within generations. It was not until the end of the 19th century that the modern VET model was established by the French colonial government. VET was provided by vocational schools to train skilled workers for the French colonial economy. The administration of VET was authorized to the provincial governments and these local governments provided fund for the vocational schools.

In August 1945, after the Declaration of Independence by Ho Chi Minh, some provinces in North Vietnam were under the control of the Democratic-Republican government, and the remaining provinces were occupied by the French army. At the same time, the National government under the protection of the French army was established and continued the French VET model, which was state-based. Whereas, the Democratic-Republican government was influenced by the USSR's VET system under the Communist Party leadership. The handicraft production model was maintained and contributed importantly to

the development of North Vietnam's economy. In Chapter 5, I describe VET models from 1955 to 1975, when Vietnam was divided between the Republican government in South Vietnam, supported by the United States (US) and the Democratic-Republican government in North Vietnam, aided by the USSR.

Chapter 5: Vietnamese Vocational Education 1954-1975

In Chapter 4, I examined the development of the Vietnamese VET before 1954. In this period, the Vietnamese VET development was divided into three sub-periods, comprising VET under the feudal regime, the French colonial government, and from 1945 to 1953. In Chapter 5, I present the development of the Vietnamese VET from 1954 to 1975. VET at this stage was influenced by a division of the country under two separate governments, North Vietnam's Democratic-Republican government, and South Vietnam's Republican government.

As explored in Chapter 4, South Vietnam's state-based VET model was established after the French army occupied Vietnam at the end of the 19th century. During this period, South Vietnam's vocational schools were established to provide a skilled human resource that served for the French colonial exploitation (V. H. Nguyen, 2002). In North Vietnam, although the traditional handicraft production model in the form of handicraft village came from ancient time, it was not developed further to establish North Vietnam's formal VET system.

From the years 1954 to 1975, Vietnam was divided into two separate governments. South Vietnam's Republican government was supported by the United States of America (USA), and North Vietnam's Democratic-Republican government was aided by the Union of Soviet Socialist Republic (USSR). South Vietnam's model of VET remained based around the French VET model, and North Vietnam's VET continued under the influence of the USSR's VET style. These two VET models are examined in terms of policy, administration, funding, and curriculum. Because South Vietnam's formal VET system was established earlier than the North's, I examined the model of South Vietnam's VET first, followed by North

Vietnam's VET. After analysing the features of these two VET models, I make a comparison between them and draw a general conclusion concerning these models of VET in the years of 1954 to 1975.

5.1. South Vietnam's VET Model under the Republican Government

After the establishment of the First Republican government in South Vietnam in 1955, parallel with the general education system, the Ministry of National Education (MONE) and the Department of Technological Education (DTE) under MONE retained and developed the previous French system of technical secondary schools in most provinces and cities of South Vietnam. These vocational schools were intended to train highly skilled workers that met the needs of the market-based economy alongside the state initiatives (V. B. Nguyen, 2014). For instance, in central Vietnam, the Hue Technical Secondary School, the Da Nang Technical Secondary School, the Qui Nhon Technical Secondary School, and the Nha Trang Technical Secondary School were established to meet these goals. The eastern and southern provincial governments founded technical secondary schools in Bien Hoa, Binh Duong, My Tho, Ben Tre, Vinh Long, Can Tho, An Giang, and Kien Giang provinces. The number of students enrolled in these technical secondary schools was 6,820 in 1962 and 9,165 in 1965 (P. Nguyen, 2009). In this period, South Vietnam's education system, adapted from the previous French education system, included three levels: primary education (3 years); secondary education consisting of lower secondary school (4 years) and upper secondary school (3 years); and higher education consisting of college (3 years) and university (4 years) (T. L. Nguyen, 2018). VET was provided by the secondary schools in the general education system (P. Nguyen, 2009). Processed data showed that South Vietnam's policies of VET during this period aimed at retaining and improving the VET model of the French colonial government, which had been established before 1954.

5.1.1. South Vietnam's VET policy.

5.1.1.1. VET policy concerning public education.

As had been the French colonial VET model, South Vietnam's VET was a part of the national educational system. Retaining and improving the French colonial VET system were reflected through South Vietnam's VET policies which the Republican government implemented up until the end of the 1960s when the USA's VET model began to have greater influence (Huong & Fry, 2004). South Vietnam's governments strove to develop a democratic and progressive VET model that encouraged the values of liberalism, democracy, and humanity.

In 1958, Decree No. 1286-GD / ND dated 12 August 1958, under the Minister of National Education, Tran Huu The, regulated South Vietnam's adapted VET program (Ministry of National Education, 1958). Although there were some adjustments to the curriculum, there was not much change to the previous French VET curriculum that offered both vocational and academic subjects (Tran, B.S, 2010).

The VET goals were discussed in national conferences of South Vietnam's governments. At the first national education conference in 1958, it stated that VET was to provide students with "authentic information and facts which help them make right judgments and choices, and develop a national spirit for every student as well as democracy and science in schools". (V.C, Tran, 2017, p.3). At the second national education conference in 1964, the First Republican government proposed two general goals for its VET model. These were to create suitable educational conditions for all students to develop according to their abilities and desires and to train staff at all levels of education for all fields and trades (B. S. Tran, 2010; V. C. Tran, 2017). A basic goal of VET was to train " the highly skilled workers for national economic development and enhance the quality of the professional and technical workforce"

(D10). South Vietnam's VET model was directed to train both skilled workers and free individuals who had a right to select and pursue any vocation. VET was to "encourage liberalism, respect for the scientific spirit, and promote the spirit of a democratic society"(The Second Republican Government, 1967, p.2).

The education policy document of the Educational and Cultural Council in 1972 emphasized that the critical purpose of VET was to help individuals pursue a suitable career that could secure their lives and families and then serve society as well as the country effectively (Tran, V.C, 2017). South Vietnam's VET was not a political tool for its government, which forced students to follow an ideology, but instead, Vietnam South's VET aimed to develop students to become themselves as free individuals (Tran, B.S, 2010).

An example of retaining and upgrading the French colonial vocational schools was found from the processed data of the Saigon Mechanical School, which had been founded in 1903 by the French colonial government. In 1956, this school was transformed into the Cao Thang Technical School by Decision No 199-GD dated 29 June 1956 issued by the president of South Vietnam's Republican government, Ngo Dinh Diem. This decision stated that the purpose of the school was to provide courses for training technicians at the middle level for commercial and technological fields as well as vocational courses with higher levels (D. D. Ngo, 1956). Skilled workers were trained in vocational knowledge with democratic and progressive ideologies to serve the development of a civilizing country (B. S. Tran, 2010).

5.1.1.2. VET policy concerning private education.

South Vietnam's private vocational schools existed under the French colonial government and were then encouraged to develop further under South Vietnam's Republican governments from 1954 to 1975.

After the establishment of the First Republican government in 1955, president Ngo Dinh Diem issued policies that boosted the market economy and develop private businesses (Dang, 2004). Ngo Dinh Diem and his younger brother Ngo Dinh Nhu advocated the socioeconomic development model combining the advantages of the planned economy, which was popular in socialist countries and the market economy which applied to capitalist countries (H.Nguyen, 1972, p.31-32). The role of the state in economic development was evident through the implementation of the 5-year economic plan from 1957 to 1962 (the first 5-year plan) and from 1962 to 1966 (the second 5-year plan) (H. Nguyen, 1972). South Vietnam's Republican governments established industrial zones to facilitate investment in manufacturing. Specifically, the Bien Hoa Industrial Zone was established in May 1963, and the National Company of Promoting the Industrial Zone founded in December 1963, managed and developed industrial parks. Phong Dinh Industrial Zone (Can Tho today) was formed in 1967, and An Hoa Industrial Zone-Nong Son (Quang Ngai) was established in 1968.

To encourage private investment, South Vietnam's Republican governments founded the International Business Federation in 1955 to support new businesses (today called business incubation), guide businesses in technology and finance, and lend businesses low-interest loans (Dang, 2004). In March 1957, Ngo Dinh Diem read "The First Republic's Declaration" which called for domestic and foreign private investment, commitment to their interests and investment incentives (H. Nguyen, 1972). In encouraging business development, South Vietnam's Republican governments built an Industry Innovation Centre to help start-up entrepreneurs and support businesses in technology and credit. These policies lead to the healthy development of private vocational schools such as Don Bosco Technical Upper Secondary School (now Ho Chi Minh City University of Industry), Hue Technical Upper Secondary School (now Hue Industrial School), and Hue Agriculture and Forestry

Secondary School (now Hue University of Agriculture and Forestry) (Dang, 2004).

Although private vocational schools were run by individuals, these schools followed the same curriculum as the public vocational schools which offered both vocational and academic subjects (National Office of Overseas Skills Recognition, 1996b).

5.1.1.3. Enrolment and qualifications.

Processed data from the vocational schools, which had been established by the French colonial government and were retained by the Republican governments showed that the qualification system and enrolment of VET in South Vietnam during the period of 1955 to 1975 continued to follow the French colonial VET style.

In the years from 1952 to 1959, which was a powerful transition period from the French colonial government to the First Republic government, regulations relating to enrolment and qualifications of vocational schools were the same as in the French colonial VET system.

For example, the Bien Hoa Technical Secondary School, which had been established in 1901 by the French colonial government, continued to rule that to enrol in vocational schools, students had to sit an examination. A principal of the school recounted that:

From 20 September 1955, students wishing to attend the school had to have an elementary or equivalent degree and sit an examination. In 1964, the school was upgraded to Bien Hoa Technical Secondary School, and enrolment was for students graduating lower secondary school. (P4)

In 1956, the First Republican government issued the Resolution 339-GD/ND dated 22 May 1956, which ruled the granting of technological secondary diplomas. The Department of Technology and Education (DTE) under the Ministry of National Education (MONE) took responsibility for organizing examination and granting diplomas (D. D. Ngo, 1956). On 21

March 1957, MONE authorized DTE to sign diplomas, carried out previously by the Chief of the Academic Department under the French colonial government.

A further example of adapting the French colonial qualification system was found in the processed data of the Nguyen Truong To Technical Secondary School. A principal of the school shared:

In 1957, the school changed its name to Sai Gon Factory School. In 1959, the school was renamed the Industrial Secondary School with a 4-year course. Students who graduate in the first cycle were granted a Lower Secondary Industrial Diploma. In 1962, the school changed its name to the Nguyen Truong To Technical Secondary School with a 4-year course. Graduates were granted a Lower Secondary Technical Diploma. (P12)

Students who wanted to attend technical secondary schools had to have a Lower Technical Secondary Diploma (or a French Certificate) and sit the national examination (P. Nguyen, 2009). Enrolment in vocational schools was for students aged from 11 to 17 (for boys), and 11 to 19 (for girls). Students who completed Grade 9 were admitted to Grade 10. When entering the tenth grade, students had to select a vocational division. The selection of the vocational division was voluntary and every student who wanted to choose a division could choose according to his or her abilities and desires without any guidance from the school (Bui, 2018).

In 1964, in the tenth grade of professional schools such as Agro-Forestry School or Engineering School, students had to pass an entrance exam. Le, a former student of the school shared in a book titled “Cao Thang Technical College- a history of 100 years” recalled:

Sixty-three years ago, I passed the national examination to enrol in the technical Secondary program at Cao Thang Technical Secondary School. After four years of the first cycle (lower secondary school at present), I was granted the Lower Technical Secondary Diploma of the first level at the department of mechanics and then I continued to move up the technical secondary course of the second cycle (currently relevant to upper secondary school) to gain the Upper Technical Secondary Graduation Diploma. (K.D, Dao, 2016, p.39)

The progress of students from one class to the next was determined by a highly selective system of examinations, with extremely high attrition rates (National Office of Overseas Skills Recognition, 1992a). Vo, a former student of the Cao Thang Technical Secondary School, remembered that:

I entered into Cao Thang Technical Secondary School in Grade 7. Before 1963, enrolment at technical schools of the second cycle was for students completing the seventh grade at technical secondary school of the first cycle, but after 1964, students in Grades 5, 6 or 7 could sit an examination for enrolment at technical secondary schools of the second cycle. It was a competitive examination. (Vo as cited in(P.Nguyen, 2009, p.2)

After graduating, these students were granted a Secondary Graduate Certificate (V. C. Tran, 2017). Until 1972, when finishing the second cycle of technical secondary education, students had to sit a national examination to get an Upper Secondary Technical Diploma.

After 1967, the Comprehensive Upper Secondary School following the USA's VET model was introduced (T. L. Nguyen, 2018). This school model provided a practical education program arising from the conception of the philosopher, John Dewey, a great leader and reformer of the USA's education, which later, James B. Conant systemized and applied to

the USA's high schools. This program, which had a practical and career-oriented focus, offered fields related to marketing, family economics, business, industry, and technology (National Office of Overseas Skills Recognition, 1996b). The program equipped students with practical knowledge and assisted them to get a job after leaving upper secondary school. In each locality, "parents and educators could take part in designing vocational curriculum that could meet the demands of the local labour market" (T10). However, this model was not accepted after 1975, when North Vietnam's government unified the country.

In summary, South Vietnam's governments adopted the French colonial VET model after 1954 even though it was no longer under French rule but under the control of the USA.

South Vietnam's VET policies aimed to train individuals not only as part of a skilled workforce but also as citizens of a civilizing society. The system of vocational schools made a significant contribution to the development of industry and the market economy in South Vietnam. After 1967, both vocational school models existed in which one followed the French VET model and the other was based on the USA's VET model. However, both VET models were replaced by North Vietnam's VET model after the unification of Vietnam in 1975.

5.1.2. Administration.

After 1955, the French vocational school system was not abolished, but instead, upgraded and developed further. The management of vocational schools was transferred from the Chief of Academic Department in the provinces under the French colonial government to the director of the Department of Technical Education (DTE) belonging to the Ministry of National Education (MONE). MONE took the key responsibility for designing the VET system, regulating the standards of enrolment, curriculum, examinations and scholarships as well as issuing rules of school activities while the DTE managed vocational schools and controlled the implementation of the VET policies (D. D. Ngo, 1956).

In 1956 the First Republican government implemented the reform of the French vocational school system to offer higher levels. The Bien Hoa Technical School, which originated from the French colonial period, is an example of this reform. On 7 May 1955, the Prime Minister ranked the Bien Hoa Technical Secondary School as a special technical school. A principal of the school recounted:

In 1956, the Bien Hoa Technical Secondary School was retained but under the administration of the Department of Technical Education (DTE). Nguyen Van Thau, graduated from Hanoi Fine Arts College was appointed to be the principal. In the academic year 1956-1957, the school offered more subjects on drawing, sculpture, ceramic technique, bronze casting, Angkor stone, and Vietnamese history. (P4)

The Cao Thang Technical Secondary School, which originated from the French colonial government, was another example of upgrading French colonial schools. In 1958, President Ngo Dinh Diem decided to upgrade the Cao Thang Technical School into the Cao Thang Technical Secondary School under the administration of MONE and offered courses at the secondary vocational level. A principal of the school remembered:

In 1958, Pham Xuan Do, a primary inspector, graduate of Indochina Pedagogical College and a former North Vietnamese Chief Academic Officer was selected as the first official principal of the Cao Thang Technical Secondary School. In 1967, Nguyen Hong Lam, a technological engineer, was given the position of principal. The school was managed by the Department of Technical Education under MONE. (P2)

After the establishment of the Second Republican government in 1967, the VET system continued to be under the management of MONE. In 1963, the president of the First

Republican government, Ngo Dinh Diem was killed after a coup by South Vietnam's army, South Vietnam fell into a political crisis, in which the First Republican government was controlled by the national army during the years 1963 to 1967. Under the First Republican government, the president Ngo Dinh Diem had not implemented the political changes recommended by the USA. His government wanted independence while the USA wanted to retain its control. These reasons led to conflicts with the USA's government, so the USA supported the coup generals to overthrow Ngo Dinh Diem (Thies & Thies, 1980). From 1963 to 1967, in spite of the political crisis, South Vietnam's VET system continued to be upgraded.

After 1967, the Second Republican government was established and this government entirely depended on the USA with regards to its economy and politics. Under the influence of the USA, the Second Republican government implemented a free-market economy that did not follow the state plans of the First Republican government's model. This government encouraged the development of the private sector to boost the market economy (Hy, 1991). In responding to this new model, along with the French vocational school system, the USA's Comprehensive Upper Secondary model was introduced to meet the demands of South Vietnam's market economy.

5.1.3. Funding.

Under the French colonial government, provinces took responsibility for funding and managing public vocational schools, but since the establishment of the First Republican government in 1955, funding for public VET was assigned to MONE. Students were provided scholarships when enrolling in the public schools. Whereas private schools were run by individuals, and fees for courses were required (T. L. Nguyen, 2018).

Providing information on the funding of vocational schools from 1955 to 1975, a principal said: “In private schools, students must pay fees for their courses. In public schools, no tuition fee was required because of the state-funded public schools” (P12).

A further example of the state-funded and managed VET system was found in the processed data of the Bien Hoa Technical School. From 1 July 1957, the school was directly funded by DTE. A principal of the school recalled:

In finance and administration, the school was under direct management and funding of this department but not through the Chief of Academic Officer. The province terminated its direct management role in all aspects. (P4)

5.1.4. Curriculum.

Processed data of vocational schools in South Vietnam after 1955, which originated in the French colonial period show that after the establishment of the First Republican government, although there were some changes to the content of the vocational program aiming to adapt to the market economy, the Republican governments retained and continued to reform further the French colonial VET curriculum.

The Saigon Mechanical School gives an example of retaining the French colonial VET curriculum. In 1956, under the First Republican government, this school was renamed the Cao Thang Technical Secondary School and “offered the first, second and third grades to teach a full technical baccalaureate program based on the French style” (P2). Le, a former student of the school, said that:

In the first year of the second cycle, we took practical training at workshops. In the second year, based on the results of the first year, we chose a career to pursue until graduating. In my case, I enrolled in the department of mechanics, which offered general subjects such as basic mathematics, physics, chemistry,

biology, literature, and foreign languages, and vocational subjects such as technical drawing. (K.D, Dao, 2016, p.39)

After graduating from the technical secondary school of the second cycle, most of the graduates found it “easy to get a job which was suitable for their trained vocations” (Le, cited in K.D, Dao, 2016, p.39).

The Hue Technical Secondary School, which had been founded in 1898 under the French rule, is another example of adapting the French VET curriculum. At this school, the curriculum offered technical vocations such as blacksmithing, and welding (P. Nguyen, 2009). Students of the school also studied general subjects and took practical training at workshops from divisions as follows: Division of Machine Tools specializing in freezing, turning and milling; Mechanical Division specializing in 2-stroke engines; Division of Electrical Engineering for civil power, electric motors, or electronics; Technical Division of the Wood Industry specializing in sawing, slotting and blocking; and Iron Industry Division specializing in forging, welding, and cooling.

As had been the French colonial VET style, the curriculum of vocational schools offered two levels. The first cycle was a 4-year program from the fourth grade to the seventh grade and the second cycle was a 3-year program from the first grade to the third grade (B. S. Tran, 2010). Students graduating from the first cycle were able to transfer to the second cycle through an examination. To graduate the second cycle, students had to sit a national examination organized by the Department of Technical Education (DTE) under MONE, and if students passed the examination, they were granted a Technical Secondary Diploma (P. Nguyen, 2009). Two compulsory foreign languages taught were English and French (V. B. Nguyen, 2014).

From 1967, the general subjects took fewer hours than vocational training at the professional division and more hours than vocational subjects at the technical division. The number of weekly hours for all subjects, including the practical training at workshops, was usually 42 to 44 hours, depending on whether the student was attending the Professional Technical Division or the Mathematics Technical Division (Bui, 2018). The Professional Technical Division specialized in practical training, so the general subjects were paid less attention. At this division, students took 24 hours for practical training and 20 hours for the general subjects. In contrast, the students at the Technical Mathematics Division specialized in general subjects, so practical training took less time. These students took 22 hours for the general subjects, and 20 hours for vocational subjects. The curriculum was knowledge-oriented and issued by the State (National Office of Overseas Skills Recognition, 1996b). A DOLISA director recalled:

We learned not only vocational knowledge but democratic values through general subjects such as French literature. Besides learning vocational subjects, students were asked to take academic subjects such as math, chemistry, or history. (D7)

In conclusion, after 1954, South Vietnam's governments retained and upgraded the French colonial VET system. South Vietnam's VET system was part of the general education system under MONE. This VET system was unified in management and controlled by the state and served the market economy. South Vietnam's VET curriculum offered both academic and vocational subjects. The state-funded public vocational schools existed alongside private vocational schools where students paid fees. In 1967, a new vocational school model called a Comprehensive Secondary School following the US VET style, was introduced.

5.2. North Vietnam's VET under the Democratic-Republican Government

5.2.1. North Vietnam's VET policies.

Differing from South Vietnam, after the Victory of Dien Bien Phu in 1954, the Democratic-Republican government continued to extend the USSR's VET model, which had been adapted to fit the context of the war against the French army from 1945 to 1954. In 1955, an agreement between the Democratic-Republican government and the USSR, which regulated training policies for North Vietnam's students at secondary schools and universities in the USSR, was signed. After this agreement, thousands of Vietnamese students were sent to the USSR to train in political universities and vocational schools. After graduating, they came back to Vietnam and became key leaders of North Vietnam's VET system (V. T. Le, 2016). These leaders contributed to developing the USSR's VET style in North Vietnam from 1955 to 1975.

During this period, the Vietnamese Labour Party decided to carry out two major policies: "fighting for national unification and building a socialist country" (Luong, 2000, p.28). Like the USSR's VET model, which aimed to develop the young generations to become "Builders of Communism" (Tomiak, 1983, p.106), North Vietnam's vocational schools were established to train socialist workers who had "communist ideology, a secure attachment to the socialist national benefits, and scientific and technical knowledge to serve for producing and fighting" (Luong, 2000, p.549 -553). In 1956 at the second reform of the general education system, the new education system of 10 years, based on the USSR's model was designed to replace the previous education system of 9 school years. VET was not offered in this general education system.

To meet the demands of a state-based planning economy and focused on socialist development (Shabad, 1958), North Vietnam's VET was attached to the plans of the state

economic development. In August 1956, North Vietnam's VET policy was issued and clearly defined that training the youth generation was to:

Help them become good workers and loyal citizens of the nation. VET must provide good staff for the government, and develop a skilled workforce towards building socialism and unifying the country. (H.H, Le, 2000, p.139)

At the same time, at the National General Education Conference, President Ho Chi Minh pointed out the close relationship between the national economy and VET when he stated:

VET must provide skilled human resources for the national economy. If VET develops, the economy develops, but if VET does not develop, there is not enough skilled workforce to boost the economic growth. The economy is planned, so VET must be planned. (H.H, Le, 2000, p.138)

To develop VET, he stated that "Marxism and Leninism shed light and lead us" (T.V, Le, 2000, p.56). Ho Chi Minh emphasized the role of VET in developing the national economy:

VET needs to meet the needs of the economy and serve the purposes of the nation. VET must provide enough skilled human resources for agriculture, industry, and the economy. (H.H, Le, 2000, p.139)

In 1957, the Democratic-Republican government implemented a reform of the economy and socialist development which "shifted traditional jobs from self-produced, and selfconsumption to a centrally planning mechanism" (Pham, 2004, p.6). The handicraft production model was organized into three types of collective production, which included professional handicraft cooperatives, handicraft production groups, and professional and agricultural cooperatives (Bryant, 1998). These types of handicraft production were considered as a form of informal VET even though they were managed by the state.

In Article 33 of Chapter 3, the Vietnamese Constitution in 1959 stated: “citizens of Vietnam have the right to study”(The Vietnamese National Assembly, 1959, p.3). Article 9 of Chapter 2 declared that:

The Democratic-Republican government transited from the people's democratic to the socialist regime by developing and reforming a socialist economy, which transfers an outdated economy into a socialist economy with modern industry and agriculture, as well as advanced science and technology. (The Vietnamese National Assembly, 1959,p.2)

North Vietnam’s government introduced compulsory education and provided free technical and vocational education system from urban to rural areas to ensure opportunities for all people to study (The North Vietnamese National Assembly, 1959). The VET purpose of this period was to train a young communist generation to “love their homeland and have the knowledge, revolutionary morality and good health” (T.N, Tran, 1995, p.106). These were considered as the ideal requirements for the personalities of socialist workers in building Vietnam to become a socialist country like the USSR (H. P. Tran, 2000).

Under this direction, the VET curriculum was designed to meet the legislative requirements of North Vietnam’s Democratic-Republican government. Marxism and Leninism ideologies were emphasised in VET principles based on three features including national identity, massification, and science (T. N. Tran, 2016). National identity meant that VET must help the young generations obtain ethical Vietnamese values and communist qualities.

Massification meant VET had to be available for all classes and gender. Science meant that VET should bring the nature of scientific education to bear against what was contrary to science and anti-progress.

At this stage, North Vietnam's Democratic-Republican government controlled some provinces in South Vietnam such as Tay Ninh province. From October 1962, Education Subcommittee under the Department of Education and Training was established in South Vietnam to implement North Vietnam's VET policies in these areas. The communist teachers in South Vietnam together with nearly 3,000 teachers and elite cadres who were trained in North Vietnam contracted to build a socialist education system in South Vietnam (T. N. Tran, 2016).

On 14 February 1968, the Party Central Committee's Secretariat issued Decree No. 169 CT / TW on improving the quality of VET with the general principle:

Improving the quality of VET is to meet the urgent learning needs of our people and demand for training cadres and technical workers, and actively prepare skilled workforces to develop the socialist regime better in the following years. (Le, 2000, p.137)

Series of short-term vocational courses were created to realise the above objectives, in which political education in vocational classes aimed to equip students with knowledge about socialist VET (M. C. Nguyen, 2015)

The influence of the USSR's VET model at this stage was reflected through the support and aid of the USSR (Prybyla, 1966). In the years from 1958-1960, when Vietnam implemented a 3-year plan of economic and cultural development, the USSR provided a long-term loan of 450 million rubles to implement the plan and 350 million rubles (agreement signed on 14 June 1960) to purchase equipment and construct 46 state-owned farms (V. T. Le, 2016). Most of these farms grew perennial tropical plants, such as tea, coffee, rubbers and fruit trees such as oranges, bananas, and pineapples for export. At the same time, the USSR also helped Vietnam build 21 hydro-meteorological stations, 156 hydrological stations at all levels,

mainly serving the agricultural sector. When North Vietnam's government implemented the first 5-year plan (1961-1965), the USSR signed many economic and technical assistance agreements with North Vietnam, such as the agreement on the USSR's assistance to Vietnamese economic development plans from 1961-1965 (signed on 23 December 1960), agreement on the USSR's economic and technical assistance, and a supply of equipment and materials for constructing some industrial enterprises and facilities (signed on 15 September 1962) (V. T. Le, 2016).

An example of following the USSR's VET model was found in the processed data of the Agricultural and Mechanical Workers School. In 1974, the School of Agricultural and Mechanical Workers which later changed to the School of Agricultural Mechanical Workers TW No.2 was established according to Decision No. 126 NN-CK / QD dated 26 March 1974. The school was established to train technical workers and management staff for agriculture. A teacher of the school recounted:

In that period, under the support of the USSR, the school provided courses for training mechanical and electrical engineering workers to serve state-owned farms, agricultural cooperatives, and mechanical stations in North Vietnam's provinces. The school trained 250 students each year and consisted of departments such as the department of cultivation, department of animal husbandry, veterinary, and irrigation, and department of mechanics but each department had only two teachers with a class of 30 students. The school was completely subsidized by the state. (T11)

5.2.2. Enrolment and qualifications.

There were no specific regulations for enrolment of vocational schools at this stage (National Office of Overseas Skills Recognition, 1996b). However, students who enrolled in

vocational schools originated from lower classes such as farmers, or the poor labour class, who had fewer opportunities to access to academic education. At this stage, vocational education did not connect the general education and did not provide a path to higher education. Graduates of vocational schools would be employed by the state – run factories and enterprises or state agencies.

Before 1954, only a few vocational schools, which had been established by the French colonial government, existed in North Vietnam (V. H. Nguyen, 2002). After 1954, a series of vocational schools in the form of small classes were developed to meet the needs of the war economy, especially in agriculture and industry. The whole country had 106 vocational schools in 1962 and more than 55,000 students, 75% of whom came from the peasant class were trained (MOLISA, 2014). By 1965, it increased to 112 vocational schools and half of these were established and run by the local governments. There were about 200 vocational classes and courses provided by vocational centres and factories. "Enrolment at vocational schools was 42, 000 students each year" (V.H, Nguyen, 2002, p.165). After establishing the General Department of Technical Workers Training (GDTWT), vocational schools rocketed to 158 schools (V. H. Nguyen, 2002).

Due to a severe lack of skilled human resources, most of the students graduating from these schools were employed by collective farms, state-owned enterprises or ministries, and they were called government workers. Private enterprises, as well as private schools, were not permitted at this stage (National Office of Overseas Skills Recognition, 1996b). By 1970, the number of vocational schools peaked at 213 schools with a total enrolment estimated at nearly 124,000 students. The scale of long-term training courses each year was up to 160,000 vocational students and paralleling with training workers in the country, Vietnamese government sent "42,600 students to the USSR and other socialist countries to be able to get

access the machines and equipment supported by these socialist countries” (Nguyen Van Hoang, 2002, p. 175).

As analysed above, the VET policies of North Vietnam at this stage aimed to provide a socialist workforce for meeting the demands of the war economy and building socialism. Under the influence of the USSR, North Vietnam's vocational schools were designed to train communist workers with patriotic and revolutionary ideologies. The influence of the USSR's VET ideas was found in the administration and funding of North Vietnam's VET system.

5.2.3. Administration and funding.

From 1969, the General Department of Technical Workers (GDTW) under the Ministry of Labour (MOL) took the key responsibility for developing and managing the VET system. North Vietnam's VET system was based on the “Democratic Centralism” principle (London, 2011, p.63), whereby the establishment and administration of vocational institutions were under the authority of the communist party. The VET administration was highly centralized and implemented in a top-down manner whereby the communist party issued policies, controlled and directed all activities of VET. This mechanism led to the elimination of private ownership, and the collectivizing of all production models under state ownership (London, 2011, p. 65). VET from 1955 to 1975 was subsidised by the state through ministries, state agencies and local governments.

Although on 18 May 1955, the government issued Decree No. 532 / TTG on establishing the Department of Labour Management under the Ministry of Labour (MOL) (MOLISA, 2014), this organization only functioned as a state agency in managing the general labour force of the country. It was not until 1969 when North Vietnam's government issued Decree No. 200

/ CP on the establishment of the General Department of Technical Workers Training (GDTWT) under the Ministry of Labour that North Vietnam's VET was designed as a formal VET system. The GDTWT had three departments including the Department of Technical Education, the Department of Organisation and Personnel and Policy, and the Planning Department. GDTWT took responsibility for the development of the technical and vocational schools' system in North Vietnam (MOLISA, 2014). Private VET schools were not permitted and the state took the key role in designing and funding the VET system (National Office of Overseas Skills, 1996, p.5) In the context of a civil war, vocational schools during this period were spontaneously developed and based on the short-term need of skilled human resources at state agencies, local areas, state-run factories and enterprises and ministries (V. H. Nguyen, 2002).

In each province, the local government established and managed their vocational schools and each ministry also had its type of vocational school. This led to an overlap in the administration of the vocational school system at this stage. For example, the Agriculture and Forestry School was established, managed by the Ministry of Agriculture. The Construction Secondary School was established and managed by the Ministry of Construction. In these schools, the local governments employed and paid for vocational staff and teachers while ministries established and managed the school.

An example of administration overlap was found from the processed data of the Public Transport Technical School. This school was established in 1918 by the French colonial government, and after 1945, it was run by the Democratic-Republican government. In August 1956, North Vietnam's government decided to train a large number of skilled workers to meet the demands of the war economy. The Public Transport Technical School was separated into the Transport Middle School under the administration of the Ministry of Transport, and the Irrigation and Architecture Middle School under the management of the

Ministry of Water Resources and Irrigation. These schools began operation in early 1957 and in March 1958, the Irrigation Middle School was separated into the Irrigation Middle School and the Architecture Middle School. In 1959, the government decided to establish an Irrigation Academy, which managed the Irrigation Middle School to provide electrical workers. In 1962, the Irrigation Academy established the Electrical Middle School. In 1972, the USA invaders bombed North Vietnam, and like other vocational schools, both schools evacuated to a safe place (D4).

Students who enrolled in these vocational schools did not pay their fees and were supported by living expenses during their courses. A retired teacher shared:

When I was studying at the seventh class of the secondary school, I was called to take part in the air-force of North Vietnam to fight against South Vietnam. I was selected into Battalion No.7 and then my commander sent me to the Worker Training School No.1 to take a 3-months course in nursing. My course was free and the state provided me with monthly living expenses. After graduating, I worked as a nurse at Battalion No.7 until the war finished. (T5)

As examined above, during this period, although North Vietnam's vocational schools were established and managed by ministries, state agencies, and local governments, they were under a general political organization, the Communist Party. All vocational schools belonging to ministries, state agencies and locals were led and directed by the general policies of the Communist Party based on state plans. Vocational schools were known by different names such as a Transport Middle School, a Technical Workers Training School, a Professional Secondary School, or an Agri-Forestry Intermediate School. In the context of the civil war, these schools had to move regularly, and the organizational structure of the school was unstable and followed a small class model. The state provided fees for students

of vocational schools. After 1954, the handicraft production model was organized into three types of state-run craft production including collective production, handicraft production groups, and professional and agricultural cooperatives. This handicraft production model continued to be maintained as a form of informal VET, and it played an important role in North Vietnam's industrial economy at this stage (Luu, 2006).

5.2.4. Curriculum.

There were few documents and little information available relating to the curriculum of vocations taught in vocational schools at this stage (National Office of Overseas Skills Recognition, 1996, p. 17). The vocational middle schools offered courses such as agriculture technology, teaching, engineering, fine arts, and mechanics (National Office of Overseas Skills Recognition, 1996b). Like the USSR's VET model, the vocational schools did not offer academic subjects and were separated from the general education system. Russian was provided for students sent to the USSR for further study and was the official foreign language in vocational schools.

Due to the context of the war, the VET curriculum was designed to provide mainly short term courses which were class-based besides collective farms, state-run factories and enterprises (V. H. Nguyen, 2002). Content of training related directly to the production field of collective farms, state-run factories or enterprises to meet the immediate demand of skilled workers for building the socialist regime and to assist the civil war against South Vietnam. A retired DOLISA director recounted:

In the war context, teachers and students made efforts to study and build their schools. Classrooms with blocks of cement roof tiles were built up besides factories. VET curriculum was based on the socialist education principle, in which learning was combined with production. (D6)

Under the influence of the USSR's VET style, the training emphasized Marxist and Leninist theory, which directed students to become socialist workers (Tomiak, 1983; B. S. Tran, 2004). Another DOLISA director provided me with information that:

Vocational schools were organised in the form of small-scale and short term classes at workshops, state-run factories or collective farms. Besides, facilities and teaching equipment were out of date and not enough to meet the demand of VET. Besides studying vocations, we were taught about communist ideologies and socialism. (D1)

Each vocational school designed its curriculum, which partially copied the USSR's curriculum and was not based on a general standard framework. These kinds of school offered specialized courses which could meet only the demand of its organization. For instance, in 1961, the General Department of Finance established the Intermediate Professional School, which trained only accountants. In 1967, the Ministry of Culture established the Printing Technical School, which trained printing technicians.

To provide "Builders of Communism", the curriculum of these schools emphasised training the socialist workers. A teacher of the Worker Training School No. 1 related:

The Ministry of Transport established our school on 13 August 1971 to train socialist workers with the communist qualities and morals to build a socialist regime and to unify the country. (T3)

5.3. Summary of Chapter

As examined above, although the state-based model featured in both VET systems of North and South Vietnam at this stage, there were differences in approaches to the VET model by the two governments. The VET system in South Vietnam under the Republican government

was based on the French VET model. Whereas, North Vietnam's VET under the Democratic-Republican government was influenced by the USSR's VET style. The difference between South Vietnam's and North Vietnam's VET model came from the political context which influenced each VET system. South Vietnam's VET under the Republican government was based on values of democracy, humanity, and liberalization while North Vietnam's VET under the Democratic-Republican government was designed based on the Marxist and Leninist ideologies.

South Vietnam's VET was based on principles of capitalist VET to train skilled workers who served the market economy. Whereas, North Vietnam's VET model took principles of a socialist education, which consisted of patriotism, revolutionary ethic, and communist ideology as a basis to train "Builders of Communism".

Interestingly, VET in North Vietnam, which had existed in the form of handicraft village originated from ancient times, was not developed to establish the formal VET system. It was not until 1969 when GDTW was established, the public VET system in North Vietnam was officially in place. In contrast, South Vietnam's formal VET system was early formed at the end of the 19th century when the French army controlled Vietnam completely and built up its colonial government in South Vietnam.

South Vietnam's VET system under the management of MONE was a part of the national general education system while North Vietnam's VET system under GDTWT was separated from the national education system and managed by an overlap of ministries, state agencies, and local governments. VET in South Vietnam was provided by both public and private vocational schools following the French VET model. Students received scholarships for their courses in public schools and paid their fees in private schools. Whereas, in North Vietnam, there existed only public vocational schools and private vocational schools were not

permitted. The VET system was subsidised by the state and most students of VET came from poor classes such as peasant and farmers.

South Vietnam's VET curriculum included both general and vocational subjects. Whereas, North Vietnam's VET curriculum was based on a combination of learning and production in the context of the civil war. The training focused on political subjects relating to communist moral education and socialism. South Vietnam's qualifications followed the French qualification framework, which was based on levels. In contrast, North Vietnam's qualification system in the context of the war was not standardised and confusing in determining the skills of trainees.

At this stage, the traditional handicraft model in North Vietnam was organized into three types of state-run production, collective production, handicraft production groups, and professional and agricultural cooperatives. In Chapter 6, I describe the VET model in the years of 1976 to 1986 when Vietnam was unified by North Vietnam's government.

Chapter 6: History of Vietnamese VET from 1976 to 1985

In Chapter 5, I examined the characteristics of the VET system in South Vietnam under the Republican government and North Vietnam under the Democratic-Republican government from 1955 to 1975. During this time, although South Vietnam's government was supported by the US government, its VET model remained in the French colonial VET style, which was state-based. Whereas, North Vietnam's Democratic-Republican government had designed its VET model, which took ideas from the USSR's VET model to serve the socialist economy in the context of war. The traditional handicraft model was maintained as a form of informal vocational education and organized into three types of state-run production including, collective production, handicraft production groups, and professional and agricultural cooperatives. In this chapter, I present the characteristics of the VET model after the unification of Vietnam from 1976 to 1985. To better understand the VET model in Vietnam at this stage, it is necessary to clarify further the context of Vietnam after the unification in 1975.

In December 1976, the National Congress of the Vietnamese Labour Party decided to rename the Democratic-Republic of Vietnam as the Socialist Republic of Vietnam and change the Labour Party's name to the Vietnamese Communist Party (The Vietnamese Labour Party's Central Committee, 1976). At this Congress, planning to build socialism across the country was approved to “create a large-scale socialist production model, which is based on two basic economic components: the one is state-owned (in public and commercial fields), and the other is collectively-owned (in agriculture)” (The Vietnamese National Assembly, 1976, p.14). To realize a large-scale socialist production model, Congress showed that it was necessary to simultaneously carry out extensive reforms in three areas: production, science, and culture. The socialist production reforms aimed to transfer the private into state-owned and collective sectors (The Vietnamese Party's Central Committee,

1976). At this stage, the Vietnamese government proposed a new form of state ownership (collective ownership), which was created by the Vietnamese General Secretary, Le Duan. This model involved the Communist Party taking the leadership role, the State being empowered for management, and the people as followers. In this model, the Party played a central role in all activity and all country decisions (Pike, 1977). A 5-year economic development plan, from 1976 to 1980 was issued. Heavy industry was chosen as the main means of driving economic development, and the government monopolized foreign economic relations. Although these reforms were implemented across the country, North Vietnam's economy remained unchanged from 1955 to 1975. It had “an inadequate economic infrastructure that lacked a force of managers and technicians required to establish a foundation of its economic development” (Pike, 1977, pp.35-37).

After South Vietnam’s Republican government collapsed and Vietnam was united, on 16 May 1975, the First General Secretary of the Vietnamese Labour Party, Le Duan, came directly to South Vietnam to ascertain the situation. He acknowledged the positive elements of South Vietnam’s free-market economy, so at the 24th preparatory meeting of the Vietnamese Labour Party, he stated:

In North Vietnam, we (the Vietnamese Labour Party’s Central Committee) implemented the collective economic model after 1954, but in the current context of Southern Vietnam, we should not implement this model. It is necessary to keep some private economic sectors in this early stage of restoring South Vietnam’s economy. In the past, in North Vietnam, we made some serious mistakes when we did not understand precisely the market economy’s rules. If we continue to apply North Vietnam’s economic model in South Vietnam, we will fail. (Doan, 2010, p.2)

Le Duan strived to persuade the Central Committee to keep South Vietnam's private model which existed before 1975, but the members of the Central Committee disagreed and wanted to apply North Vietnam's socialist-style to South Vietnam.

From 1976, the Vietnamese government tried to rebuild South Vietnam with three major programs, which included "the establishment of a socialist administrative system, economic reform based on the centrally planned model and nationalizing the private sectors" (Doan, 2010, p.1). The Vietnamese government positioned a force of "approximately 50,000 North Vietnam's cadres to take part in South Vietnam's new governments, from the provincial to local level" (Pike, 1977, p.38). South Vietnam's revolutionary committee, which was an organization of youth, women, students, workers, and farmers, replaced South Vietnam's social organizations and there were "around 500,000 Northerners taking part in administration, military and mass-organization work in South Vietnam during this time" (Pike, 1977, p.38-39).

Through the "bourgeoisie revolution", which meant the abolishment of capitalism in South Vietnam, the Vietnamese Communist Party eliminated South Vietnam's educational system and any previous intellectual activities involving books, music, film, and drama. To change the Southerner's perceptions, "the Party implemented campaigns to form the basis for Southerner's acceptance of the new Marxist value system" (Pike, 1977, pp. 39 - 40).

From 1976, the USSR's socialist model was applied across Vietnam. At this stage, Vietnam's VET model followed the USSR's VET model, which was reflected in policy, administration, funding, and qualification of the Vietnamese VET.

6.1. VET policy

After 1975, under the support of the USSR, Vietnam had become politically stable enough to develop a united VET system. To meet the demands for skilled labour for a socialist

economy, a series of technical worker training schools was established (V. H. Nguyen, 2002). There were “366 vocational schools and 212 vocational training centres, which provided around 176,000 students per year” (MOLISA, 2014, p.6).

After the Vietnamese government and the USSR’s government signed the Treaty of Friendship and Comprehensive Cooperation in 1978, the USSR’s government helped Vietnam to improve the quality of staff and workers (V. T. Le, 2017). In the framework of the Friendship Treaty and Comprehensive Cooperation, the two governments signed several agreements and protocols regarding VET cooperation. These included the agreements, from 1981 to 1985, on cooperation in improving the quality of the Vietnamese leaders and professional staff in the field of economic management (V. T. Le, 2017). According to these agreements, the Vietnamese students and trainees were allowed to study in institutions, universities, and colleges in the USSR. From 1980 to 1981, the USSR’s government trained “Ten deputy ministers and 70 other senior middle-ranking Vietnamese officials, with the length of courses from 4 to 22 months” (Le, 2017, p.2). This number increased over the period from 1982 to 1985. “Thirty ministers (deputy ministers or equivalent) and 300 other senior Vietnamese officials were sent to the USSR to supplement and improve their education” (DOLISA 3). This support significantly contributed to increasing the influence of the USSR’s VET model in Vietnam. The VET administrative system was based on a centralized, bureaucratic management mechanism, and VET was developed following state plans (London, 2006).

At this stage, the general trajectory of the socialist economic model determined that “VET was the foundation for developing the economy of the country” (The Vietnamese Congress, 1976, p.6). The government focussed on providing a contingent of qualified and skilled managers and technicians to develop agricultural production. VET policies were issued to strengthen and develop the USSR VET model across Vietnam. Under these policies, South

Vietnam's VET system, which followed the French VET model, was abolished. The private vocational schools in South Vietnam were nationalized to follow the USSR's VET model (The Vietnamese government, 1981a).

On 11 January 1981, the Party Central Committee issued the resolution No. 14-NQ / TW on education reform, included VET (D. T. Pham, 2013). It stated that the general education system, which was unified across the country, was a 12-year system that included secondary education from Grades 1 to 9, and upper secondary education from Grades 10 to 12 (The Vietnamese government, 1981a), in which VET was provided at secondary education level (Doan, 2010) as shown in Figure 6.1 (p.105). Under this program, the Ministry of Higher Education and Technical Secondary School "compiled and printed 20 million copies of textbooks to replace the old textbooks in South Vietnam, and vocational teachers of South Vietnam's government were re-recruited" (Doan, 2010, p.1). At the same time, the Vietnamese Communist Party "nationalised South Vietnam's private vocational schools and put them under government management" (Doan, 2010, p.2).

The primary orientation of this third educational reform (following the USSR VET model) was reflected in the goals, content, and methods of VET (The Vietnamese government, 1981b). VET aimed to "train the young generation to become socialist workers" (The Vietnamese Congress, 1981, p.184). The Vietnamese government implemented a "universal VET policy to provide the conditions for training and retraining the larger-scale skilled labour force, which can meet demands of the socialist economy" (Doan, 2010, p.3). VET was to create new classes of employees who could contribute to constructing socialism. These new employees would ideally be communist workers who had vocational skills as well as communist ideologies and ethics. VET methods were based on the combination of training and producing. On 12 March 1981, the Vietnamese government issued Resolution

No 109 to guide the development of VET with the next 5 to 10-year plan for industries and localities (The Vietnamese government, 1981b). The government stated that industries and local governments must consider VET as a part of the national education system and that VET must aim to “provide a skilled labour force for the country's industrialization” (The Vietnamese Government, 1981, p.184).

Like the USSR’s VET model, the Vietnamese government established State Planning Committees at all levels from central to locals, which coordinated with related ministries such as the Ministry of Agriculture, the Ministry of Service, or the Ministry of Industry to develop annual year VET plans for each locality or region across the country (T. N. Le, 1981d). These committees planned for labor distribution within the locality or between localities, and different economic areas in the whole country so that:

The ministries, state agencies and local governments can build a vocational training plan and mobilize graduates to build new economic zones, which are based on the collective economy model. These committees help to guide the state-run enterprises from central to locals to make a plan for managing and using appropriately the number of graduates from secondary vocational schools.
(The Vietnamese government, 1981, pp.184 - 185)

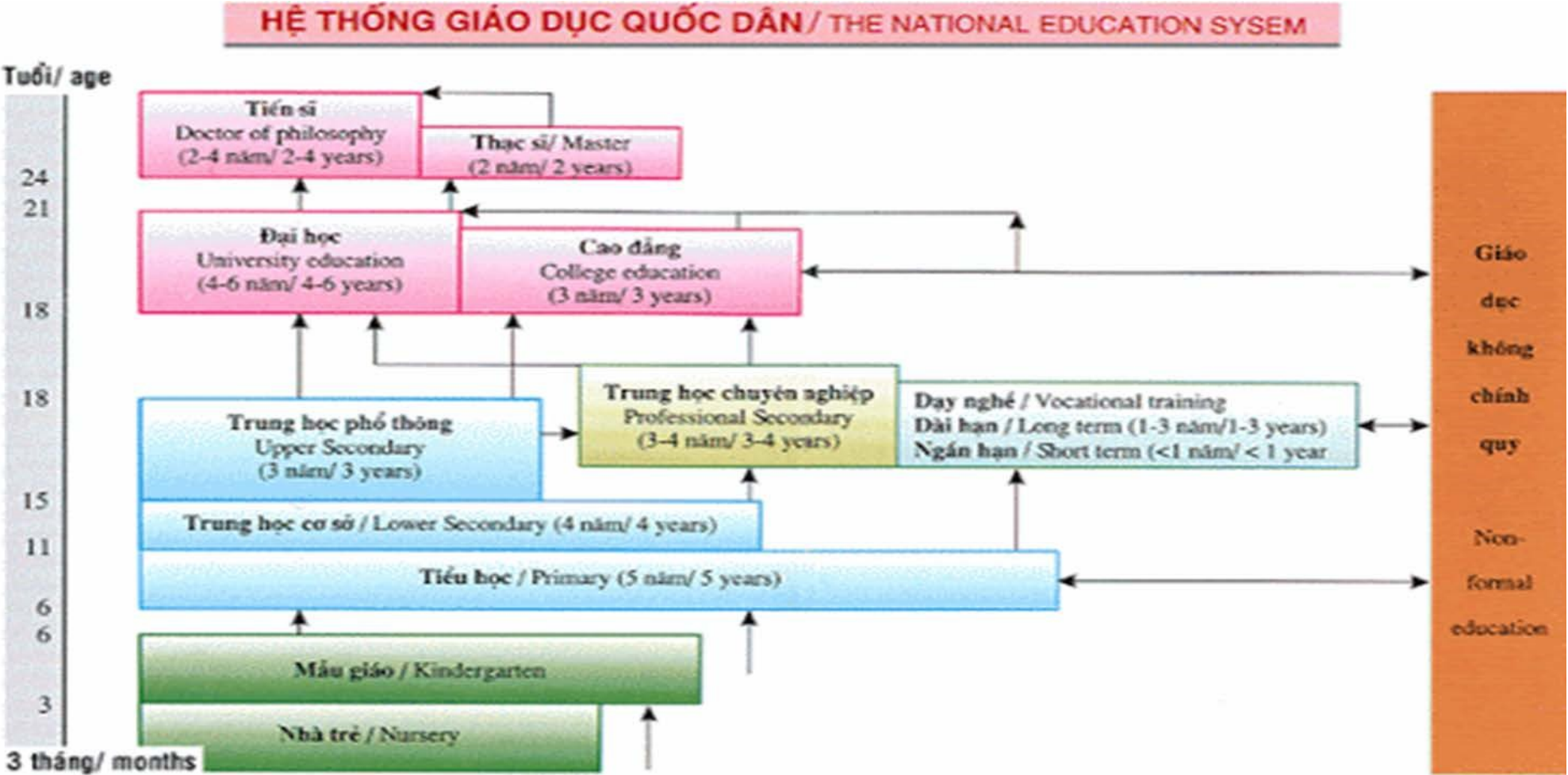
VET was designed to focus on fields such as agricultural, forestry and fishery production, consumer goods production and export, electricity, coal, petroleum, engineering, construction, and transportation (Doan, 2010a). These fields were considered as core fields necessary to recover the Vietnamese economy after the war and ensure Vietnam became an industrial socialist country in the following 5 to 10 years.

At this stage, the VET system solved the relationship between the supply and demand of VET in regions and local areas (MOLISA, 2014). It was designed to meet the requirements

of labour reallocation and the rearrangement of production in urban, rural, lowland and mountainous regions. Types of vocational training school were diversified to meet the different demands of the central and local economies, as well as state-owned and collective economies (Gates & Truong, 1993). However, in terms of a planned economy, both the supply and demand of VET were planned, controlled and subsidised by the government (Bryant, 1998). VET was to provide skilled workers for state-run companies, factories and collective farms.

The VET policies concentrated on improving the quality of VET, specified in Resolution No. 109/1981. This announced that it was essential to improve the quality of VET and to create the conditions to ensure its quality (The Vietnamese government, 1981c). In parallel with in country training, vocational schools planned to send students to study new vocations in industrial countries in the USSR's Block. To enhance the productivity of the VET system, three reforms of VET were implemented (The Vietnamese government, 1981b). Firstly, the vocational system connected with the general education system at all educational levels. Secondly, the government created the necessary conditions for students to undertake VET before participating in the labour market. Thirdly, VET aimed to provide a force of professional workers and technical staff who could meet the professional requirements for the socialist economic development, and the progress of technical science. Under these reforms, the VET system ensured favourable conditions for everyone to be apprenticed in a variety of VET forms. Vocational schools and classes were associated with the state economic zones, industrial zones, and production units.

Figure 6.1. Vocational education in the National Education System (The Vietnamese government, 1981a).



During this period, VET was separated into two systems including vocational schools under the management of the Directorate of Vocational Educational Training (DVET) and the professional technical schools under the administration of the Ministry of Higher Education and Technical Secondary School (MHETSS). At this stage, vocational education was considered a non-formal education system, and VET was provided at two levels of training, including elementary and secondary vocational education. Whereas the professional technical education was intended a formal education system, and VET was offered at the intermediate level (National Office of Overseas Skills Recognition, 1996b). Elementary vocational education for junior high school graduates trained semi-skilled workers and technical staff. The length of the course was from 3 to 12 months, depending on the requirements of each job. Secondary vocational education for students graduating from upper high school trained technically qualified workers. The length of the course was from 12 to 36 months, depending on the requirements of vocation. Vocational schools belonging to state-run factories and enterprises were responsible for both training vocations and improving the quality of workers and technical staff (The Vietnamese government, 1981b). In this period, the government encouraged handicraft cooperatives to open traditional craft schools and classes. The government allowed skilled workers to open vocational training classes under the management of the district and provincial people's committees.

Worker Training School No. 1, which was supported by the USSR's government to establish in Xuan Hoa Town, Me Linh District, Vinh Phuc, is a good example of the USSR's VET model. On 27 July 1976, the Ministry of Construction issued Decision No. 682 / BXD-TC to rename it the Construction Worker School No.1, which followed the USSR's VET standards with a training scale of 850 students each year (D3). The school focused on training technical workers in fields of mechanics and construction. A former principal of this school recalled that:

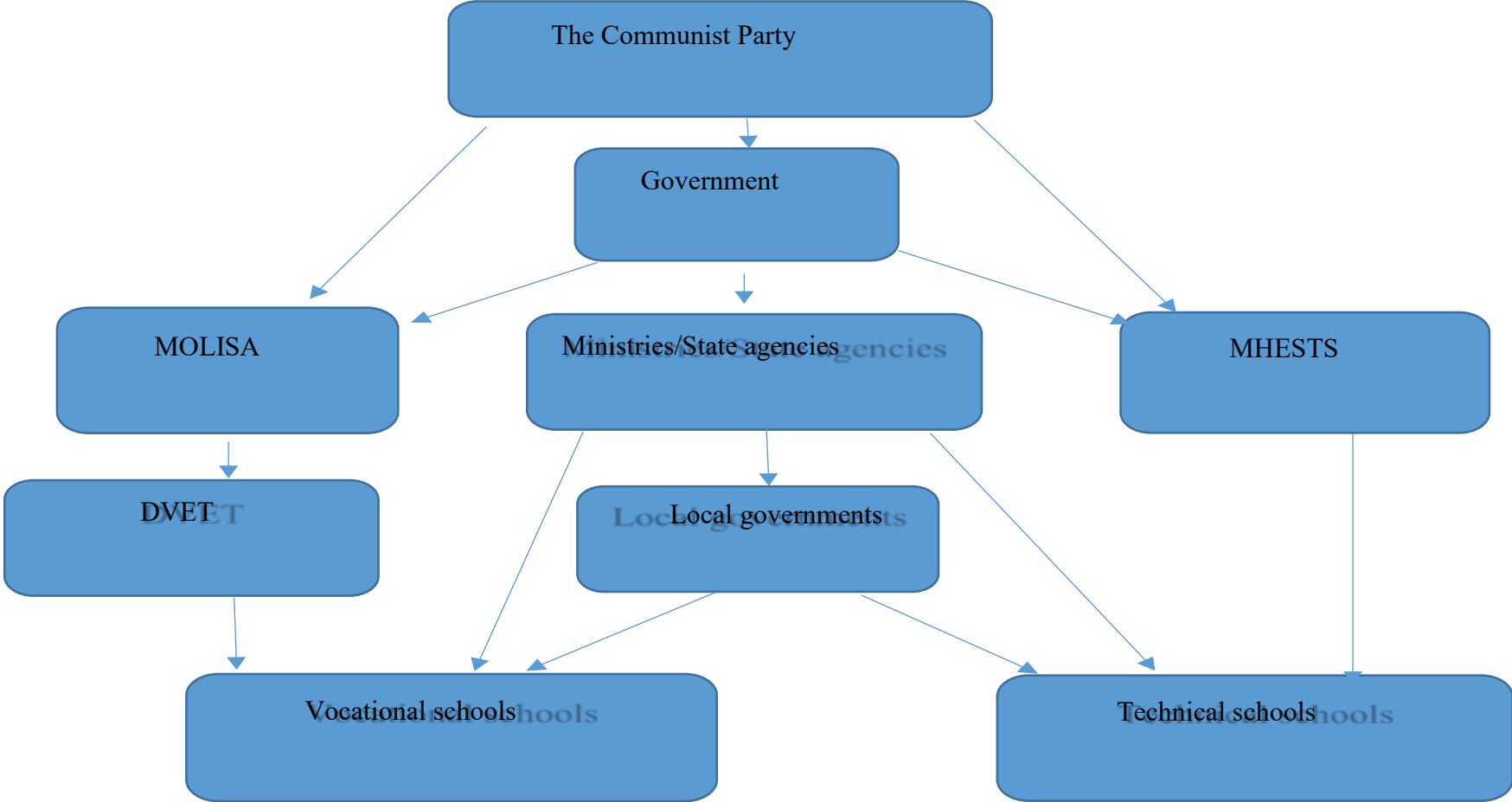
After 1975, the country was united and moved into socialism with numerous difficulties. Many places in Quang Ninh province, such as Ha Long, Cam Pha, and Uong Bi, were severely devastated during the civil war. All infrastructure, such as factories, mines, roads, and bridges, was destroyed. With the slogan 'All for production, all to build socialism, all for the richness of the country and the happiness of the people', factories, and mines urgently were recovered. A series of vocational schools following the USSR's vocational school model was established to meet the demands of recovering the economy after the war and to build socialism. (P4)

As examined above, VET policies of this period were attached to economic plans and directed to provide a skilled workforce for the demands of a socialist economy. Based on the USSR's VET model, the VET policies at this stage aimed to develop a socialist economy in Vietnam. VET was offered by two systems, vocational education under DVET and professional technical education under the Ministry of Higher Education and Technical Secondary School. The USSR's VET model was also found in the administration and funding of this period.

6.2. Administration and Funding

Although VET was provided by vocational schools under the management of DVET and professional technical schools under the administration of the Ministry of Higher Education and Technical Secondary Schools, the VET management continued to be based on a subsidised administrative mechanism, in which the state managed and funded all activities

Figure 6.2. Administration of VET in the period of 1976 to 1985.



of VET as in the stage of 1954 to 1975. The private vocational schools were nationalised under the Party leadership (Ho & Reich, 2014). The Vietnamese Communist Party played a leading role in all activities of the VET system as shown in Figure 6.2 (p.108).

On 24 June 1978, the Vietnamese government issued Decree No. 151 / ND-CP to separate the General Department of Technical Workers (GDTW) from the Ministry of Labour, renaming it as the Directorate of Vocational Educational and Training (DVET) under the Council of Ministers (MOLISA, 2014). From 1978, vocational schools were under the general management of DVET while technical secondary schools continued under the management of the Ministry of Higher Education and Technical Secondary School (MHETSS). Both types of vocational school were established and directly controlled by ministries, state agencies and local governments. The State Planning Committee and DVET were responsible for guiding and supporting the ministries and local governments to implement the VET plans, with proper assignment and decentralisation between the central and local levels, and between and within the VET sectors (The Vietnamese Communist Party, 1983). Following the USSR's administrative model, Resolution 109/1981 stated that DVET must plan to build vocational schools following government regulations. "Vocational schools' enrolment must be attached to the plan of labour distribution after graduating to meet the demands of locals" (The Vietnamese government, 1981, p.188). DVET was responsible for coordinating with the Ministry of Education to organize vocational guidance for upper secondary school students. DVET also had to "assist local governments in directing and uniformly managing the recruitment of domestic apprenticeships and organizing the selection of students for overseas training" (MOLISA, 2014, p.2). To strengthen VET management, the Vietnamese government required ministries, state agencies and people's committees in local areas to assign a leading officer in charge of VET at the local levels. There must be "an annual report which evaluates the VET activities and

set out the tasks and guidelines for the vocational education development of the next year” (The Vietnamese Congress, 1981, p.189).

In 1981, the Vietnamese government issued Decision No.124/1981 on establishing educational and training councils at local areas (The Vietnamese government, 1981e). This decision stated that it was necessary to establish educational and training councils at provinces and cities to productively manage the national education and training system. The council was responsible for encouraging, organizing, coordinating and using social resources rationally to develop education and training in the local areas under the direction of the Vietnamese Communist Party and the state guidelines (The Vietnamese government, 1981e). The council was composed of a representative of the Party Committee and representatives of local governments, educational institutions, social organizations, businesses, parents and student associations, and educators. The council members elected the chairman, vice-chairman, and commissioner of the Council. The Ministry of Higher Education and Technical Secondary Schools under the guidance of the Central Reform Commission, cooperated with the Ministry of Labour and the Directorate of Vocational Education and Training to promulgate the organizational and operational regulations of education and training (The Vietnamese government, 1981e). A DOLISA director shared:

VET at this stage marked the leadership role of the Vietnamese Communist Party. The leadership of the Party was clearly expressed through resolutions directing all activities of the vocational schools, and creating positive changes in the VET system. (D2)

In responding to the overlap of VET management, a former principal of the Mechanical Engineering School, which was set up by the Ministry of Electricity and Coal on 1 October 1977, related that:

The school was established based on merging three schools, which were managed by three different agencies including a school under the administration of local government, another under the control of the Ministry of Transport and the remaining school under management of the Uong Bi Coal Company. (P6)

Further example of VET administration overlap came from processed data of the Agricultural Materials School. This school was formerly known as the Agricultural Materials Service School under the management of the Agricultural Materials Corporation, which itself was under the Central Agriculture Committee. The school was established under Decision No. 165NN-TC / QD dated 11 May 1973, by the Central Agriculture Committee and located at Hoang Dieu, Chuong My district, Ha Tay province. It moved to Van Phu commune, Chau Giang District, Hai Hung province (now Van Giang town, Van Giang district, Hung Yen province). The school provided courses on economic management and training technical workers in agriculture. In 1981, the school was renamed the School of Agricultural Materials Management under the Agricultural Materials Corporation belonging to the Ministry of Agriculture. The school trained managerial and professional staff in three majors, accounting, mechanics, and agricultural engineering. In 1984, the school was renamed the Agricultural Materials Management Technical School under Decision No. 110NN-DT / QD dated 12 May 1984 by the Ministry of Agriculture and Rural Development.

After 1975, the French VET model in South Vietnam was replaced by North Vietnam's socialist VET model, but the staff and teachers under the Republican government of South Vietnam were retained. Evidence for this was found in the processed data of South Vietnam's vocational schools such as the Cao Thang Secondary Technical School, the Bien Hoa Arts School, and the Vinh Long Technical School. A DOLISA director, a former staff member of the Cao Thang Secondary Technical School recounted that:

After Vietnam was unified by the Democratic-Republican government, our school was transferred to the socialist school model. In 1975, Tran Huu Tam, a technical expert (the principal of the school under the Republican government at the stage of 1973-1975) was retained as a principal of the school. In 1981, Dinh Van Mong, a mechanical teacher under the Republican government, was appointed to the position of principal. In July 1982, the school was approved by the Ministry of Higher Education and Technical Secondary School and renamed the Cao Thang Technical Secondary School. (D2)

Like the USSR's VET model, the state-funded VET system was free for all students (The Vietnamese government, 1980). In 1980, the Prime Minister issued Directive No. 186 on 7 June 1980 on the living standards of students in vocational schools. Secondary technical schools, DVET, state agencies, local governments, and the school administrators coordinating with the Ho Chi Minh Communist Youth Union and the state trade union must be responsible for ensuring the welfare and living fees of vocational students (The Vietnamese government, 1980). The Ministry of Domestic Trade, the Ministry of Food, the And State Planning Committee were responsible for providing the VET budget for local areas (The Vietnamese government, 1980).

6.3. Curriculum

In utilizing the USSR's VET model to fit the Vietnamese context, the Prime Minister issued Directive No. 309 in 1979 to promote the implementation of national VET principles, which combined training and producing (V. D. Pham, 1979). This VET principle was implemented to:

Help students, cadres and teachers deeply understand working practices in the socialist regime, political views, and communist ideology, and help students to master

scientific knowledge, professional techniques and industrial working methods. (The Vietnamese Government, 1983, p.188)

The primary purpose of the Vietnamese VET during this period was to train and retrain socialist workers and technical and professional staff to meet the demands of building socialism in Vietnam. Vocational schools, state-run factories and enterprises, and scientific and technical management agencies helped students gain access to technical and professional education, which served the socialist economy (V. D. Pham, 1979). From this period onward, the government recognized the key role of VET in developing skilled human resources for the socialist economy. VET was designed to provide technical workers for state agencies and the labour market demands of local areas (T. N. Le, 1980).

The Directive No.309 set out measures to effectively implement the VET principle, which combined theoretical teaching at the school and practical training at the workplace (The Vietnamese Communist Party, 1983). The government required that state agencies, state-run enterprises and factories actively and closely cooperate with the vocational schools to successfully implement this VET principle. Vocational schools were directed to develop plans for training courses according to the levels of skills, with an appropriate training framework for each vocation (The Vietnamese Communist Party, 1983). Vocational secondary schools coordinated with state agencies and local governments to develop training plans according to the demands of localities and state agencies, as well as appropriately design programs and courses for each type of vocation (The Vietnamese government, 1981c).

With the purpose of training “Builders of Communism”, the Vietnamese government directed that vocational schools were designed to provide a socialist workforce with professional skills, political qualities, communist ethics, and industrial working style

(Woodside, 1983). These schools offered careers that could meet the requirements of the Vietnamese socialist construction and defence (The Vietnamese government, 1981c).

State-run enterprises and factories connected with vocational institutions to create conditions for students to practice their careers at the workplace. In contrast to the dual model where trainees spent most of their training time at enterprises, most of the training time in this VET model (which followed the USSR's VET style) was in school and students spent less time of training in state-run enterprises. The curriculum of VET focussed on providing vocational theory and political education (National Office of Overseas Skills Recognition, 1996b).

In the early 1980s, the Vietnamese government began to standardise the VET curriculum based on the USSR's VET curriculum framework. In 1980, the government issued Decision No. 25/1980 making a list of vocational training courses for workers and technical and professional staff to design a general VET curriculum framework for vocational schools across the country (T. N. Le, 1980). Based on the lists of occupations compiled by the ministries and state agencies, DVET was responsible for designing the national VET curriculum. (The Vietnamese government, 1981, p.2).

At this stage, VET began to approach the modern training methods of industrial countries, mainly the socialist countries in Eastern Europe. Resolution No. 109/1981 regulated that "it is necessary to research and use modern training methods to improve the efficiency and quality of VET" (The Vietnamese Congress, 1981, p.185). From 1981, the VET curriculum officially applied the USSR's framework of skills, which included seven skills, to measure the outcomes for vocational students. This framework formed the foundation for classifying the kinds of skills that workers should achieve after each course. For example, a skilled worker was considered as equivalent to a level 2/7, and a technician or practical engineer was ranked as a level 3/7, whereas a professional engineer was ranked as a level 4/7.

However, these rankings did not reflect the skill level of the qualification concerned (National Office of Overseas Skills Recognition, 1996b).

For the system of vocational education under the administration of DVET, vocations were grouped into seven fields: trades and services, communications, posts and telegraphs, mechanics and electricity, forestry and fisheries, construction, and machinery and agriculture (National Office of Overseas Skills Recognition, 1996b). These vocational schools did not offer general subjects and instead provided two types of vocational programs including elementary and secondary programs. Students graduating junior secondary schools would attend a 2 year program at the lower secondary level, which were less demanding vocations or a 3-year program for more demanding vocations. Students completing lower secondary school (Grade 9 in the unified education system in 1981) could take a 1 year program (elementary program) for simple vocations or a 2 year program (secondary program) for highly-skilled vocations, which students graduated from the upper secondary school could also undertake. Students, who graduated in the elementary program, were awarded a Vocational Certification. Students who graduated a secondary program received a Vocational Certification of Graduation. At this stage, vocational education did not offer a path to higher education and instead graduates would be employed in state- run factories, and enterprises or state agencies.

For the professional technical education system, technical secondary schools were designed to train intermediate-level technicians in seven major fields, consisting of industry, agriculture, forestry and fisheries, commerce, teaching training, allied occupations, physical education and sports, and culture and the arts. Students graduated from these schools were granted a Professional Diploma. After graduating, they could move up to higher education or apply for a position in state agencies or state-run enterprises. The local governments managed most of these schools (National Office of Overseas Skills Recognition, 1996b).

An example of following the USSR's curriculum came from the Worker Training School No

1. A principal of the school shared:

In the early days of establishment, the school had 21 teachers. The school was directed to train construction workers, and offered vocations such as carpenter, tiling worker, mason, bricklayer, ironworker, and welder. Curriculum was translated from the USSR's VET curriculum. Workshops were designed to follow the USSR's model. In March 1978, the first course was officially opened. By 1980, the Ministry of Construction decided to merge the Construction Worker School with the School of Vocational Teachers and renamed it Vietnam and Soviet (the USSR) Civil Construction Worker School. The curriculum was based on the USSR's vocational program. (P5)

Further example of adapting the USSR's curriculum was provided by a principal of the Mechanical Engineering School established in 1977. He said:

The school trained 550 students per year and provided courses such as mechanical repairman, lathe operator and driller. The USSR's VET experts supported us to design these courses. (P10)

The processed data of the School of Civil Engineering and Construction of Uong Bi provided further example of following the USSR VET model. On 3 April 1978, the Ministry of Electricity and Coal issued Decision No. 662 DT-TCCB3 on renaming the School of Civil Engineering and Construction of Uong Bi. After upgrading, under the Party leadership, the school was reorganised to provide a large force of technical workers, which could meet the demands of state-run factories and enterprises in the recovery of the economy after the civil war. A principal of the school related that:

Funded by the USSR's government, the school built seven rooms, including four working offices and three rooms for the staff and teachers who were living away from home. While teachers and students worked together to develop the school, the Northern border war took place in 1979. All cadres, the Party members and Youth Union members volunteered for the army to defend the national border. While both were working as a teacher and participating in national defence, teachers tried to complete the training program for students of the first course, with 228 students including bricklayer, tiling worker, and mason. Students who graduated from the school were employed to work at the Mining Construction Company. (P7)

In South Vietnam, the French curriculum of vocational schools was changed to the USSR's VET program like North Vietnam. The Nguyen Truong To Technical Secondary School established in South Vietnam was an example of one such school. In 1976, the school changed its name to the Ho Chi Minh City Industrial Engineering Secondary School. It offered 2 to 3-year program, which depended upon the level of training. If students took 2-year program, graduates were granted a Technical Worker Degree, and students enrolled in 3-year program were awarded an Intermediate Technical Degree. In 1979, the school was renamed the Ho Chi Minh Industrial Engineering School and offered the same training program (T7).

6.4. Summary of Chapter

As presented above, after the unification of Vietnam in 1975, South Vietnam's VET model, which followed the French VET style, was replaced by North Vietnam's VET model based on the USSR's VET model. The nature of VET from 1975 to 1985 was a socialist VET system, which was designed to provide "Builders of Communism". Although it was a

statebased model like the Republican government of South Vietnam's model, the Vietnamese VET system was under the Communist Party leadership and managed by an overlap of ministries, state agencies, and local governments. VET was developed based on the planning of the state economy. The general administration of the VET system was under DVET, but local governments, ministries and state agencies established and directly managed vocational schools. The VET curriculum was structured around skills, political qualities, and revolutionary ethics, which were different from the French colonial VET model. It emphasized political education more than vocational skills. Although the VET policy made efforts to implement a renewal of the VET system, in fact, it closely followed the USSR's VET model, which was to provide socialist workers. VET was considered as part of the general education system, but vocational schools did not offer general subjects like South Vietnam's VET model. The government-funded VET was through ministries, state agencies, and local governments, so vocational schools were free to attend. Private schools were not permitted. Notably, VET at this stage separated into two systems, vocational education under the administration of DVET and technical education under the management of the Ministry of Higher Education and Technical Secondary School. Both these two systems of the vocational school were subsidized by the state and served the same purpose of training socialist workers. At the middle of the 1980s, VET faced a serious crisis of economy and the VET quality declined. In Chapter 7, I present the VET model from 1986 to the present.

Chapter 7: History of VET from 1986 to the Present

In Chapter 6, I presented the characteristics of Vietnamese VET in the period 1975 to 1986. After the unification of the country in 1975, the Vietnamese VET system followed the USSR's VET style. Although the Directorate of Vocational Education and Training (DVET) replaced the General Department of Technical Workers Training (GDTWT) to manage the VET system, the administration of the VET system by ministries, state agencies, and local governments overlapped. The state-funded public vocational schools developed at different levels but private vocational schools were not permitted. In the middle of the 1980s, Vietnam faced a serious crisis of economy and the quality of VET declined. In this chapter, I examine the model of VET in the period from 1986 to the present. At this stage, it was crucial to clarify further the Doi Moi policy which impacted the Vietnamese economy in general and VET in particular.

At the Sixth Party Congress in 1986, the Vietnamese government started to implement the Doi Moi policy (the Renewal policy) which transitioned the centrally planned economy into a market economy. The Doi Moi policy aimed to "transform a central command, subsidized to a multi-sectoral economy with market mechanisms and state regulations" (Nghị, 2006, p.12). Parallel to reforming its economy, Vietnam has implemented an open policy to cooperate with all countries in the world. Vietnam has diplomatic relations with 187 countries, including all developed countries, and is a member of many international organizations and forums such as ASEAN (1995), Asia-Europe Cooperation Forum (ASEM) (1996), Asia-Pacific Economic Cooperation Forum (APEC) (1998), and World Trade Organization (WTO) (2006) (B. M. Pham, 2012). Vietnam has been ready to coordinate its economic, commercial, and educational systems with countries all over the world, and to seek further economic development within the regional framework (Yamaoka, 2009). The Vietnamese VET system has started to exit the USSR's model and adapt to the

modern VET models. This is reflected in the policies, administration, funding, and curriculum and qualifications.

7.1. Policy

Following the economic reform known as the Doi Moi policy in 1986, the demand for skilled workers intensified. Policies of VET have been issued to develop a highly-skilled workforce that will contribute to making a competitive economy, both regionally and globally. The government has emphasised decentralizing VET administration, internationalising the VET model, innovating VET curriculum, and encouraging the development of private vocational schools. The USSR VET model which was state-based has been transitioned to a dual VET model, which aims to meet the demands of the market economy and international integration. VET has remained as an independent system which exists parallel to the general education system and has been delivered by secondary vocational schools and colleges.

In its efforts to reform the VET system, the political report of this Sixth Congress 1986 determined the purpose of VET as follows:

VET aims to train and provide the socialist workers, a contingent of skilled workers in the industry, in line with the requirements of labour division of society. (The Vietnamese Congress, 1986,p.3).

Compared with the objectives of VET before 1986, the primary purposes of VET set out in this Congress were not changed much. VET continued to aim at providing “Builders of Communism”. Until 1991 at the Seventh Congress of Party, in which the objectives of VET were directed to provide a skilled work force that could meet the demands of a market economy, the Vietnamese VET system began to approach the modern VET model of developed countries. At the Seventh Congress of Party in 1991, it was stated that:

Objectives of VET are to improve the level of workers, train human resources, foster talents, and provide a force of knowledgeable and skilled workers, who are capable of practice, autonomy, dynamism and creativity, as well as have a communist morality, the spirit of patriotism, and socialist ideal. Vocational schools train the young generation to provide them with deep professional skills, working attitudes and the ability to work after graduating. (The Vietnamese Congress, 1991,p.65)

To realise the above objectives, the VET system must be modernised based on democratising management of VET and by diversifying types of vocational schools (V. L. Nguyen, 1991).

VET started to transfer from the subsidised to a flexible VET system. In

1997, the Vietnamese government issued Decision No. 500/1997 “Vietnam’s VET Development Strategy by 2020”. The government assigned the MOET to take the key responsibility for organizing and directing the strategy (Phan, 1997). This strategy was an organic part of the socio-economic development strategy to provide skilled human resources. It was planned for specific periods including stages 2000 to 2010 and 2010 to 2020 to internationalize the VET system to be adaptable to rapidly changing market economy (Nong, 1998).

The Socio-Economic Development Strategy for the stage of 2001-2010 stated that to meet the requirements of skilled human resources in a global economy, VET was the decisive factor for the development of the national economy (The Vietnamese government, 2001a).

The objectives of the strategy were to improve the quality of VET to meet the advanced VET level of the world while also matching the context of Vietnam (The Vietnamese government, 2001a). Priority was given to improving the quality of human resources with particular emphasis on training high-level scientific and technological human resources

(Duggan, 2001). The government emphasised innovating VET management, restructuring the national VET system, and developing a network of vocational schools and institutions across the country (Duggan, 2001; T. Huong, 2010; London, 2006; M. H. Nguyen, 2005).

To reform the VET system, the Vietnamese government has focused on renewing contents, programs and methods of VET to approach the dual VET model. It has paid attention to improving the quality of vocational staff, modernising teaching equipment at vocational institutions, and encouraging practical training at enterprises. To socialise VET activities, the government has encouraged Vietnamese organizations and individuals, foreign organizations and individuals and overseas Vietnamese to take part in activities of VET (The Vietnamese National Assembly, 2006a).

In 2006, the Vietnamese government officially issued the Law of VET, which emphasises the role of VET in international integration and market economy development. This law states that the development of VET is a leading national policy to improve skilled human resources and foster talents. The development of VET is associated with the needs of socioeconomic development, scientific and technological advances, national defence and security consolidation. This law determines that the new VET system approached the dual VET model, by which it is standardised, modernised and socialised (The Vietnamese National Assembly, 2006a).

In 2011, the Vietnamese Government's Economic Development Strategy proposed that Vietnam will become a substantially industrialised and modernised country by the year 2045 (T. D. Nguyen, 2011). To put this into practice, human resources development is one of the three strategic breakthrough solutions, in which the quality of VET is regarded as a critical element in the Vietnamese socio-economic development. The Vietnamese VET system has adopted the principles of "radical and comprehensive VET renovation" (The

Vietnamese Government, 2012). Based on this direction, the Vietnamese government has made efforts to design a flexible VET system which is delivered by a variety of providers. The formal VET system has included various programs from elementary to university level. MOET, MOLISA and DVET have taken the primary responsibilities for making policy, issuing legal documentation, ensuring the quality of VET, as well as planning and monitoring the programs (H. M. Nguyen, 2018; The Vietnamese Government, 2011).

By 2014, the government had developed an open, flexible and diversified VET system (S. H. Nguyen, 2014). Investing in the VET system was prioritized as a policy of socio-economic and human resource development (H. M. Nguyen, 2018). The budget for the VET system has been prioritized in the total state budget (H. M. Nguyen, 2017). The Vietnamese government has continued to diversify types of vocational institutions and forms of vocational training. It has also encouraged and created conditions for enterprises, socio-political and socioprofessional organizations, social organizations, Vietnamese citizens, foreign organizations and individuals, and overseas Vietnamese people in order to establish vocational education institutions and participate in VET activities. The Law on Vocational Education and Training of 2014 clarified the position and role of the VET system in the national education system. It specified the regulations of the organization and operation of vocational institutions as well as the rights and obligations of organizations and individuals involved in VET (S. H. Nguyen, 2014). This law has developed further towards decentralising the VET system by involving socio-political organizations in activities regarding VET. To develop the dual model, this law has established a foundation for social partners to be involved in VET activities. Specifically, this law defines that social partners include the Vietnam Chamber of Commerce and Industry and enterprise associations (S. H. Nguyen, 2014).

The policies of VET since 2014 have seen the centrally planned administration mechanism of the VET system transition to a decentralising administration. The VET policies have boosted the internationalisation of the VET system to meet the demands of industrialising, modernising and international integration.

Efforts of transitioning from the USSR's to the dual VET model at this stage was found in the processed data of the Constructional Workers School. On 17 February 1976, the school was established under Decision No. 819 / BXD-TC by the Minister of Construction. A DOLISA director, a former staff member of the school from 1991 to 1995, related that:

After the USSR and Eastern European countries collapsed, the school transferred from its old model, which copied the USSR. To catch the market economy, the school redesigned the program, strengthened the facilities, and recruited more qualified teachers to open more new occupations such as cooling, welding, and electronics. The school expanded international cooperation to seek investment opportunities. (D13)

On 16 February 2004, the Minister of Education and Training signed Decision No. 685 / QDBGD & DT-TCCB to upgrade the school to the College of Urban Construction. The school modernised its facilities innovated the curriculum and expanded the scale of training (D13). A principal of the school shared: "In the stage of 2004 to 2007, the school sent teachers abroad to improve their vocational skills. There were more than 20 teachers sent to France, Germany, Japan, and New Zealand" (P13).

In 2008, the school opened courses of engineering and information technology. In 2009, the school offered new vocations such as geodetic engineering and construction management with 832 students. In 2013, the school provided more majors: water resources engineering,

and environmental engineering. The school exported a large number of skilled workers to the international market such as Saudi Arabia, South Korea and Japan.

International cooperation was promoted with many approved projects such a "Training Centre for Water and Environment Industry" phase 2 with the French government in 2007, the project "Technical assistance for Vietnamese water supply companies entitled to mixed credit funds" (2005-2007), and the project "Japanese technical cooperation in developing human resources for urban water supply companies in Central Vietnam" (20102013) (P13).

Another principal of the school noted:

The school has partnered with Germany since November 2007 to perform significant projects such as teacher training and retraining in Germany, seeking sponsorships from there, and the project "Building an environmentally friendly housing model between Germany and Vietnam (2012-2015). (P13)

A DOLISA director observed:

Since 1986, the vocational schools have strengthened international cooperation with partners from Japan, Federal Republic of Germany and Korea and established relationships with hundreds of domestic enterprises. (D13)

In examining the above data, an open policy of VET can be seen in vocational institutions since the Doi Moi policy. Vocational schools have been more autonomous in approaching international models of VET and innovating their school model.

In internationalising the VET model, the Vietnamese government has boosted cooperation with other developed countries to modernise its model of VET. Apart from the current VET model in Vietnam that is funded by the Vietnamese governments and private providers, other models financed by foreign providers or Foreign Development Aids Projects are implemented in Vietnam.

Germany is an example of cooperating with the Vietnamese government to develop and implement strategies and frameworks for improving the VET system with a focus on links with the private sector. The Vietnamese and German governments have contracted to develop occupational standards and delivery of training, which emphasizes practical training and life-long learning.

With the support of the German government, the German VET model under the Gesellschaft fuer Internationale Zusammenarbeit (GIZ) projects to assist Vietnam develop its VET was established in five selective vocational colleges in the northern area of Vietnam. The dual training program which uses a module delivery method has been introduced and implemented in those colleges in combination with training at enterprises. The infrastructure and facilities have been equipped in a way similar to a vocational college in Germany.

In 2012 within the framework of Vietnam-Germany Cooperation "Vietnam Vocational Training Innovation Program", the General Department of Vocational Training with the support of German Development Cooperation (GIZ) piloted a vocational training model in cooperation with enterprises. This cooperation model was a combination of vocational schools and enterprises in order to improve the quality of teaching knowledge, vocational skills, production skills and workplace attitudes (H. M. Nguyen, 2018). Enterprises were responsible for implementing a part of the training program based on vocational standards jointly developed by schools and the enterprises. Apprenticeship locations were implemented in both places including at the school (classrooms and real workshops) to learn necessary vocational skills and knowledge and at the enterprises to learn skills of production. The assessment of learning outcomes was carried out jointly by the school and the enterprise.

In 2016, MOLISA issued The National Targeted Program on VET- Employment and Work Safety (2016-2020) to connect VET and the labour market, closing the gap between labour supply and demand, and creating more jobs. This program has aimed to reinforce labour export, increase labour productivity, and improve working conditions and labour income.

Besides Germany, since 2016, the Australian government has assisted Vietnam to develop a competency-based vocational education and training system, based on active engagement and partnership between businesses, VET providers and the state to meet the demands of the labour market.

In January 2017, the Danish Ministry of Education and MOLISA implemented a 2-year (2017-2019) project to pilot a dual VET model at vocational schools in Hanoi and Ho Chi Minh cities (H. M. Nguyen, 2018). The project aimed to improve the linkage between authorities, VET schools and enterprises to address skills gaps and competencies of VET school graduates and determine what is required by enterprises and the labour market in Vietnam.

Since the Doi Moi policy in 1986, the network of vocational training in Vietnam has spread throughout the whole country, and every province has its vocational college and school systems. Vocational training schools are developed according to regional planning, diversified forms of ownership and type of training (MOLISA, 2017). The number of vocational training schools in general and private institutions, in particular, has increased rapidly. In 2013, there were 1339 vocational training institutions, including 162 vocational colleges (accounting for 12.1%), 302 vocational secondary schools (22.6%) and 875 vocational training centres (65.4%). In 2015, there were 72 vocational schools run by ministries and state agencies and 193 local schools, of which 23 were secondary vocational schools and 70 technical schools. There were 109 enterprises schools, of which 81 were

secondary vocational schools, 29 vocational colleges and 95 technical schools, which were established by social and political organizations and private organizations (MOLISA, 2017). In general, each province has at least one vocational school, and districts have vocational secondary schools. Including other vocational training institutions (including universities, colleges and other centres with vocational training), the national vocational training network in 2013 had nearly 2040 vocational establishments, including public vocational training institutions, which made up about 60% (H. M. Nguyen, 2018).

Table 7.1.

Vietnamese National Qualification Framework (X. P. Nguyen, 2016).

Level	Academic qualifications	VET qualifications
1	5 credits	Certification I
2	15 credits	Certification II
3	25 Credits	Certification III
4	Secondary diplomas	Secondary vocational diploma
5		College diploma
6	Bachelor degree	Bachelor degree (Engineer)
7	Master degree	
8	Doctoral degree	

To modernize the VET system, the Vietnamese government designed and issued the National Qualification Framework (NQF) as shown in Table 7.1 (p.128), which is based on the Australian Framework. NQF has eight levels and is designed and monitored by the Ministry of Education and Training (MOET) and the Ministry of Labour and Social Affairs (MOLISA) (X. P. Nguyen, 2016).

The processed data of the Vietnam-Korea Vocational College established by MOLISA at No. 1963 / QD-LĐTBXH dated 20 December 2013 provided another example of approaching the dual model. A current DOLISA director informed me that:

This public vocational school is under the management of the provincial People's Committee. This is a newly established school by the project "Establishing 5 Vietnam-Korea Vocational Colleges", funded by the Korean government. (D4)

Korea invested in construction works, supported the training of teachers and managers, designed training programs, and provided vocational equipment. The school signed training contracts with the enterprises, where learners may visit and practise. The school has focused on providing technical specialists with departments specializing in mechanical, electrical, electronic and automotive fields. It is expected to train about 810 technical students each year. A principal of the school said:

The school offers short-term courses such as car technology, industrial electronics, metal cutting, IT (Software application), mechatronics, computer network administration, graphic design, website design, and engineering of electrical installation and control in the industry. Students signed with employers of enterprises to get practical training. (P10)

In conclusion, since 1986, the Vietnamese government has issued VET policies in the direction of modernising the VET system to meet the quick changes of a market economy. The VET administration system is decentralizing and vocational institutions have been assigned to be fully autonomous in their activities. VET funding is socialized through diversifying VET funds, which come from a state budget, fees paid by students, international funds, and social supports. The framework curriculum has been standardized and transferred

to the competency approach, which provides students with the skills, knowledge, attitudes and behaviours of the workplace. Vocational institutions have been self-designing their curricula to match the demands of the local labour market. Forms of combining enterprises and schools in providing VET have been encouraged.

The Vietnamese government enacted the National Qualification Framework in 2016 based on the Australian Qualification Framework to standardise its occupational skills level. Besides cooperating with developed countries such as Germany and Korea to implement the dual model, the Vietnamese government has cooperated with the Australian government to develop a dual model at vocational institutions. At present, this model has been applied in many provinces and cities across the country (H. M. Nguyen, 2018).

7.2. Administration

Since 1991, the administration of Vietnam's VET system has been shared between the central government via MOLISA and local governments. After issuing the law of education and vocational training in 2014, which has aimed to modernize the VET model to follow a dual model, the government has directed the VET administration to decentralise, and vocational schools have been empowered to be more autonomous in their activities.

In 1992, the Prime Minister stated that MOET and the Government Commission for Organization and Personnel should overhaul the management of the education and training sector at the central and local levels in order to improve the VET quality (The Vietnamese government, 1992). To meet the demands of the market economy, the Law of Education 1998 was issued to encourage the private VET sectors. The government facilitated public vocational schools to play a critical role in the national education system. Until 2006, when the Law of VET was officially released, the VET system was under the general management of DVET. At present, DVET has taken the primary responsibility for managing VET quality, assigning and decentralising VET management, strengthening autonomy and

selfresponsibility of vocational institutions. DVET has the responsibility for organising the implementation of vocational training development strategies and making plans as well as policies of VET. DVET has been responsible for promulgating and issuing the legal documents on vocational training (The Vietnamese National Assembly, 2006b). DVET has taken the responsibility for: defining vocational training objectives, methods and programs; building standards of vocational teachers; making a list of training occupations at all levels; issuing regulations on enrollment and qualifications and vocational certificates; organizing the training and retraining of teachers and vocational training managers; and managing international cooperation on vocational training (The Vietnamese National Assembly, 2006b). On 27 November 2014, the Eighteenth National Assembly passed a law on vocational education and training and this law became effective in 2015. Accordingly, the system of colleges and vocational colleges has been transferred into colleges, and the secondary technical school system under MOET has been transferred into a vocational school system including 3 training levels: College, Intermediate and Primary (The Vietnamese National Assembly, 2014). Thus, the vocational school system under MOLISA and technical school system under MOET were unified under the state management of MOLISA. The Directorate of Vocational Education and Training (DVET) under MOLISA has taken an advisory role in governing and implementing the policies of VET (The Vietnamese National Assembly, 2014).

At the same time, the Vietnamese government restructured the national education system, in which the formal VET system was restructured as shown in Figure 7.2 (p.134) (S. H. Nguyen, 2014). Specifically, graduates from elementary training programs receive Certificates I, II or III, depending on the program, which they complete. Graduates of this program can move into further education in secondary VET training. The secondary VET training program is offered at the upper secondary schools, which are established by various

ministries and agencies. Graduates from secondary VET training programs can advance to further VET programs, which are provided in colleges at the post-secondary non-tertiary level. Graduates from college can proceed to (general) Bachelor programs at the tertiary education level.

The law of VET (2014) defines VET as training that is provided as in-service, or guided self-study training at the elementary, intermediate, and college levels (The Vietnamese National Assembly, 2014). Flexible or part-time vocational training programs are also considered as VET. This law states that vocational institutions should be autonomous in human resources, finance, curriculum, international cooperation, and quality assurance (S.

H. Nguyen, 2014). Public vocational institutions have to ensure all investment expenditures are self-reliant and fully accountable under the government's regulations (MOLISA, 2017).

Together with MOLISA, other ministries, enterprises, local governments, and private sectors have played an important role in the development of VET. For example, apart from MOLISA, other ministries such as the Ministry of Construction, the Ministry of Industry and Trade, and the Ministry of Culture, Sports and Tourism provide VET programs in their vocational institutions. Additionally, social organizations like the Women's Union, Farmers' Union, and Youth Union have run their vocational training centres that provide short- or long-term vocational training programs. Thus, besides the general management of DVET, VET is established and managed by an overlap of ministries, state agencies, local governments and other social organizations.

Since 2014, MOLISA has been the sole government agency in charge of VET, taking over the VET portfolio from MOET. As a result, 201 colleges and 303 secondary technical schools moved from MOET to MOLISA's jurisdiction in 2017 (H. M. Nguyen, 2018). While DVET under MOLISA is the government agency in charge of VET policy, there are a large

number of vocational institutions under the jurisdiction of other government agencies such as other ministries or provincial People's Committees. DVET has taken the primary responsibility for developing VET policy, strategies and national occupational standards, managing all qualification levels within the national qualifications framework (MOLISA, 2017).

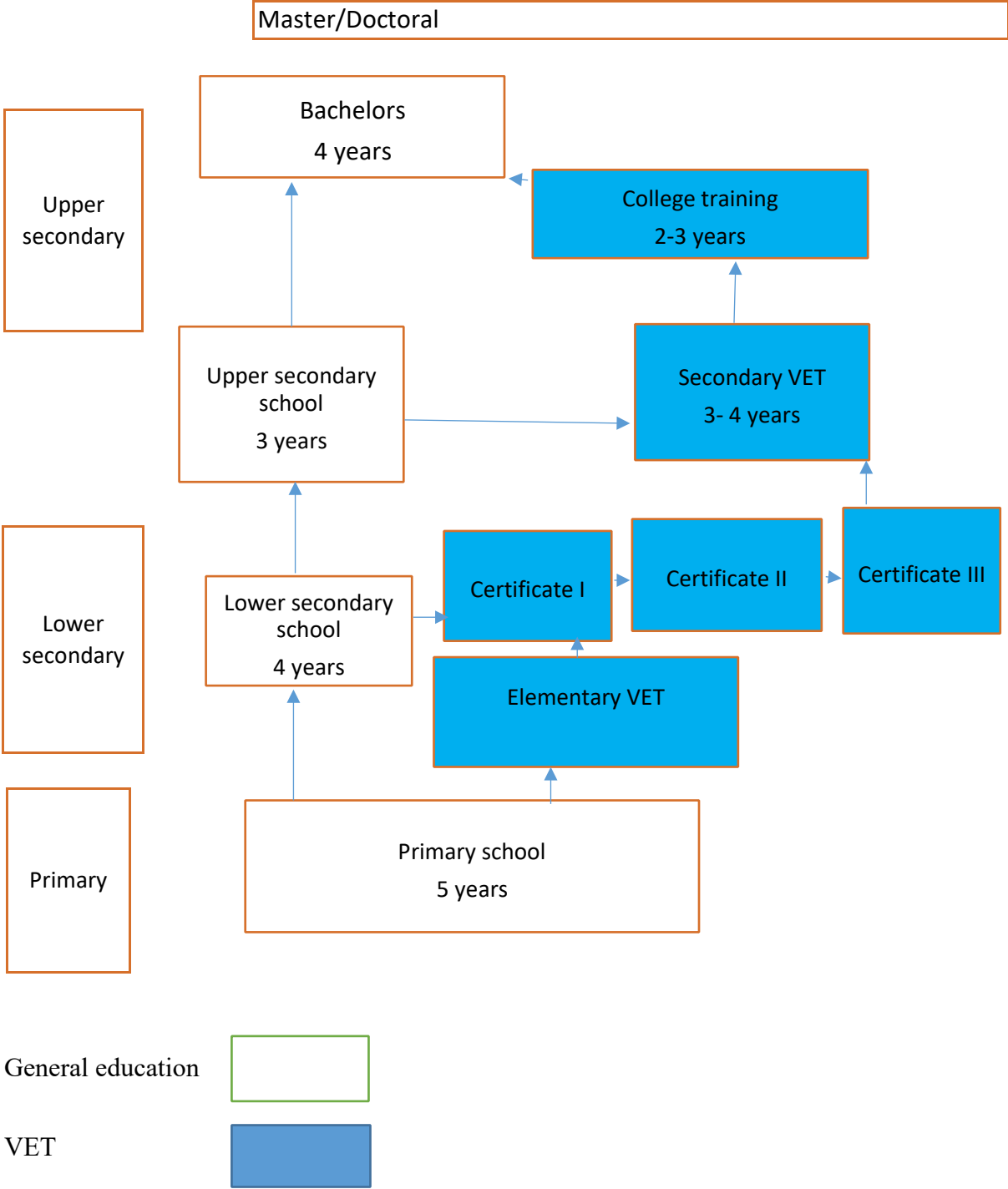
Additionally, social organizations like the Women's Union, Farmers' Union, and Youth Union have vocational training centres that provide short- or long-term vocational training programs. Thus, besides the general management of DVET, VET has been established and managed by an overlap of ministries, state agencies, local governments and other social organizations. On 3 July 2017, the government issued Decision No. 29/2017 / QD-TTg on defining the functions, tasks, powers and organizational structure of DVET under MOLISA (X. P. Nguyen, 2017). DVET has been assigned to assist MOLISA to manage vocational education activities throughout the country. DVET is a subordinate agency of MOLISA and represents MOLISA in the state management and implementation of VET law (except for pedagogy) across the country. DVET manages and implements public services concerned with VET (H. M. Nguyen, 2018). DVET provides guidance concerning VET curriculum, student affairs, physical facilities and training equipment, quality accreditation and skills certificates. An example of VET administration was found in the processed data of the College of Economics-Technical Trade. According to Government Decision No. 97 / QD-TTG dated 22 May 1998, the Central Trade Secondary School 1 was upgraded to the College of Economics-Technical Trade. At present, the school aims to provide courses in the field of commerce. A principal of the school said: "Currently, the school is under the leadership of the Ministry of Industry and Trade (MOIT), the general management MOLISA and the direct management of the local government where the school is located". (P8).

The school is under mixed management of state agencies including MOIT which manages the facilities of the school, MOLISA which manages curriculum, and the local government which pays staff and funds operations of the school. Overlap of school administration has been retained at the present. The Hanoi Construction and Technical Vocational College established under Decision No. 02/2004 / QD-UB dated 19 January 2004 by Hanoi People's Committee as the Engineering and Construction Professional School Hanoi, was a further example of administration overlap.

On 29 May 2007, the school was transformed into the Hanoi Construction and Technical Vocational College according to Decision 1817 / QD-UB of Hanoi People's Committee. This is a public vocational training institution in the national vocational training system under the direct management of the Hanoi Housing Investment and Development Company and the state management of Hanoi DOLISA. A principal of the school related:

The school trains human resources for the Hanoi Housing Investment and Development Corporation, and enterprises in Hanoi with three main functions including training of technical and professional occupations in and outside the construction industry. The school also provides

Figure 7.2. VET in the national educational system (S. H. Nguyen, 2014)



training courses for export of labour, informatics, foreign languages, and skills improvement for workers in some other fields. (P7)

The school has trained technical workers in fields such as civil and industrial electricity, transportation, operating construction machines, operating cranes, water supply and drainage, and construction and operation of drilling pile machines. The school has exported skilled workers to international market such as Taiwan, Malaysia, and the Middle East (T2).

7.3. Funding

Since the Doi Moi policy in 1986, VET has diversified providers including private, public schools and overseas cooperating schools, so VET funding has come from different sources. Although the public schools have been authorized to be autonomous in their activities, the government has maintained a state budget for these schools. Public schools are free but at private schools, students must pay fees for their courses.

In 1994, MOET was assigned to manage the use of the state budget for education, and training (H. Q. Tran, 1994). At local schools, the Department of Education and Training in provinces and cities was authorized to deliver the state VET budget to vocational institutions. Other vocational institutions were owned and financed by a variety of different organizations, including local governments, different ministries, trade unions, companies and private institutions. Private vocational institutions made up about 30 % of the institutions governed by MOLISA and 20% of those by MOET (H. Q. Tran, 1994). The complexity of VET governance with an overlap of responsibilities caused duplication of training offers and confusion among beneficiaries (M. H. Nguyen, 2005). A college could run courses funded and overseen by both MOLISA and MOET. In 2006 when the Law of VET was first issued, it clarified the financial sources of VET. According to this law, the VET budget included a state budget, tuition and admission fees; revenues from consultancy, technology transfer, production, business and service activities of VET establishments; investment from domestic and foreign organizations and individuals; and other grants from domestic and foreign organizations (The Vietnamese National Assembly, 2006a).

The law of VET in 2014 has standardised the national VET system, restructured vocational education institutions and ruled the rights and obligations of organizations and individuals participating in VET activities. The law aims to improve the VET quality and increase productivity and competitiveness of VET to meet the demands of international integration. Two of the most critical aspects of the law relate to greater autonomy of vocational institutions and the participation of social partners in VET. According to the law, public vocational institutions, whose recurrent expenditures and investment spending are financed by the state, are entitled to be fully autonomous in organization and personnel, finance and property, training and technology, international cooperation and quality assurance. The law also defines the rights and responsibilities of enterprises in engaging in VET activities. Article 51 of the law states that expenses relate to VET activities conducted by enterprises are deducted from taxable income (The Vietnamese National Assembly, 2014).

The total amount of state budget which the government invested in VET in 2016 was AUD 934.4 million, compared to AUD 576.5 million in 2011 (H. M. Nguyen, 2018). The state budget for VET is allocated to the recurrent expenditure which covers costs spent by VET institutes on the regular tasks entitled to government funding (e.g. staff salaries and welfare, learning and teaching material, administration costs, property purchases,) (The Vietnamese National Assembly, 2014). The state budget allocation for recurrent expenditure is determined by the number of students targeted by the government to enrol at institutions. From 2011 to 2016, the recurrent expenditure for VET nearly doubled to AUD 398.1 million (H. M. Nguyen, 2018). Essential construction expenditure covering costs for the development of technical infrastructure doubled over the 2011-2016 period. A DOLISA director provided me with further information:

In 2016, VET funding at vocational institutes was AUD 494.8 million, which accounted for 52.95 % of the total government budget allocated for VET in the same year. (D2)

In conclusion, in adapting to the market economy, VET administration has been delivered the power of self-government for local governments and schools. The state gradually has lost its ability to intervene in VET. This has assisted vocational institutions in diversifying the types of training they offer, which can meet the demands of a variety of learners in the current trend of global integration. Also, the budget for VET now comes from a diversity of sources which can support VET to develop productively.

7.4. Curriculum

Before 1986, the VET curriculum followed the USSR's style. Since the Doi Moi in 1986, VET curriculum has been reformed and innovated to adapt to a market economy. The VET curriculum transitioned from the USSR's skills-based to a competency-based approach to meet the demands of international integration. The Vietnamese government has cooperated with developed countries to implement this approach at vocational institutions.

In responding to the market economy, the VET curriculum has been updated to serve a rapid change in the labour market. The Law of Education in 1998 stated that VET was to train workers with professional knowledge and skill to meet diversifying demands of the labour market (Nong, 1998). VET methods combined theoretical teaching at schools with practical training at the workplace to ensure that after graduation, learners were capable of applying their skills and vocational knowledge at the workplace. To unify the VET curriculum across the country, the Ministry of Education and Training (MOET) coordinated with relevant ministries to establish a framework for technical and vocational secondary education, including the number of subjects, the duration of subjects and the time ratio between theory

and practice (Luan, 2010). Based on the curriculum framework, the vocational and technical schools designed their vocational program.

Students who finished the technical or vocational secondary program took a graduation examination to get vocational diplomas. Students who finished the short-term vocational training program attended a test to get the vocational certificate. Principals of technical and vocational secondary schools granted technical secondary education diplomas, vocational training graduation diplomas and vocational certificates.

In 2001, the objectives, contents and programs of VET were innovated to standardize and modernize VET (The Vietnamese government, 2001). To standardise the VET programs at all levels, the government developed and promulgated a list of training vocations, which aimed to improve practical skills, self-employment capacity, and capacity to adapt to the rapid change of technology, production and business reality (M. H. Nguyen, 2000). VET was designed to be strictly linked to the employment needs of the labour market. The government stated that it was essential to combine basic knowledge at the schools with practical training at the enterprises (The Vietnamese government, 2001a). The government focussed on modernising VET system to achieve the advanced level in the region and the world, give priority to the fields of technology such as information, new materials, machine manufacturing, automation and some industries for agriculture and rural development (M. H. Nguyen, 2005).

It was not until 2006 when the Law of VET was enacted, that the VET system was standardised under the law. The Law of VET of 2006 stated that MOLISA should coordinate with ministries, state agencies and enterprises concerned to redesign the framework program of VET for vocational schools (The Vietnamese National Assembly, 2006a). The Law of VET of 2014 specified further the functions of the vocational secondary schools. According to this law, the role of the vocational secondary schools is to equip vocational learners with

professional knowledge and capacity to practise vocational skills (The Vietnamese National Assembly, 2014). After graduating, students can work independently and apply technology in their work. The vocational schools have to assist students to develop a professional conscience, sense of discipline, and working style. In 2016, technical secondary schools under the management of MOET were transferred into vocational secondary schools under the administration of MOLISA and followed the curriculum framework issued by MOLISA.

The law of 2014 stated:

VET at vocational secondary level aims to train employees with the essential knowledge and practical skills of a profession, which helps students to work independently and creatively. VET aims to train technical workers with the ability to practise vocational skills commensurate with the training level. (The Vietnamese government, 2014, p.3)

The law regulates that vocational secondary schools offer a course of 1 to 2 years for students who graduate from upper secondary school (S. H. Nguyen, 2014). The course of 3 to 4 school years is for students who graduate from junior secondary school. Vocational training is to combine training of practical skills with professional knowledge and to promote in apprentices the self-confidence, self-awareness and the ability to work independently (The Vietnamese National Assembly, 2014). Students who complete the intermediate vocational program have to attend an examination to be granted vocational secondary diplomas (The Vietnamese National Assembly, 2014).

An example of modernising the VET curriculum was found in the processed data of Germany -Vietnam Technical and Vocational School in Hatinh province. In 1997, under the support of the German Federal Republican government, the Prime Minister signed Decision No. 1072 / QD TTG approving the investment project of the Technical and Vocational School Vietnam

and Germany. In 2000, the project was carried out based on the exchange of the two governments. In 2002, Germany-Vietnam Technical and Vocational School was established by Decision No. 919 QD / UB-TC dated 3 May 2002 by the People's Committee of Ha Tinh Province. Based on the model of Germany VET, the Germany- Vietnam Technical and Vocational School was established to provide technical human resources for production and service. A principal of the school shared:

At my school, the curriculum aims at equipping learners with practical skills, professional conscience, sense of discipline, and working attitudes. The school signs with enterprises to provide practical training at the workplace for students.

(P7)

The school offers two courses of 1.5 and 2.5-year. A 1.5-year course is for students who have graduated from upper secondary school and equivalent or higher and a 2.5-year course is for students who have graduated from junior secondary school. Enrolment is selected through transcript of upper secondary school or junior secondary school. The school offers programs such as metal cutting, manufacturing mechanical equipment, car technology, welding, industrial electricity, air conditioning & air conditioning technology, corporate accounting, information technology. (P7)

Another example of international cooperation to modernise VET curriculum was found in the processed data of the Vietnam and Singapore Vocational College (international trade name: Singapore Vocational College). This school originating the Vietnam-Singapore Technical Training Centre was established in 1997 under the project of training cooperation between the two governments of Vietnam and Singapore. According to a DOLISA director, the assignment of cooperation is as follows:

The Vietnamese government is responsible for infrastructure, recruiting personnel, and providing regular operation funding. Singapore government takes responsibility for providing training programs and machinery, organizing professional training courses for Vietnamese teachers in Singapore, providing experienced experts and managing operations of the school. (D2)

A principal of the school provided me with further information:

The school provides courses at three levels including college, intermediate and primary levels to equip learners with practical skills, moral and professional conscience, sense of discipline, and working style. (P2)

The school offers a 2 years course at the intermediate level for students graduating from an upper secondary school. The curriculum includes fields such as automotive technology, mechatronics, manufacturing mechanics, industrial electricity, civil power, industrial electronics, engineered machine repair, and computer repair. A 3 years course is for students graduating from a junior secondary school. Besides providing vocational courses, the school offers academic subjects in parallel with the vocational training program for students who want to enrol at universities (T1).

A further example of cooperation with developed countries to implement competency-based curriculum was found in the processed data of the Vietnam-Australia Vocational College (VAVC). This school, formerly known as the Vietnam-Australia Vocational Secondary School was established in July 2007 by cooperation project between the Vietnamese and Australian governments and was upgraded to a Vietnam-Australia Vocational College under Decision 216 / QD-BLDTBXH by MOLISA.

The school offers vocational courses of elementary, intermediate and college level with majors such as hotel management, food processing techniques, room service, restaurant

management, travel management, tourism, travel accounting, beverage mixing techniques (bartender), and sales and marketing. A teacher at the school said:

Our curriculum is compiled based on the textbook of Vietnamese National Administration of Tourism (VNAT), textbook of Da Nang Tourism Human Resource Development Project which was funded by Europeans and Australian curriculum, which was compiled by experienced managers to meet the needs of modern society. (T9)

The competency-based curriculum reflects the vocations the school designs for. Hospitality management is an example. A principal of the school related:

After graduating, a student must achieve knowledge, professional skills and working attitudes as required. For example, to show their knowledge, graduates must describe the process of basic operations of the hotel, including reception, professional room service, restaurant operations and food processing. To display their professional skills, graduates must strictly follow the customer service process of positions in reception, the restaurant, rooms or conferences according to hotel standards. Graduates must learn appropriate attitudes including obeying orders, self-discipline and being willing to share professional experience with colleagues. (P9)

The processed data of the Hanoi Industrial Vocational College established in 1974 provides a further example of renewing curriculum. This school has made considerable efforts to become a key and high-quality school by 2020. A principal of the school provided me with information that:

Before 1991, our school followed the USSR's skills-based curriculum. This curriculum did not meet the needs of the market economy, so we replaced it with a competency-based curriculum. This new curriculum focuses on knowledge, attitudes, skills, and the moral qualities of learners, which could meet the needs of the market economy, and international integration. (P6) The school offers a 3 - year course for the college level, a 2 - year course for the intermediate level and a 1-year course for the primary level, with 20 occupations in the fields such as information technology, car technology, and mechanics. The curriculum is rationally distributed between theory and practical training, between general and specialized subjects to meet the basic knowledge and vocational standards (P6).

The school offers a multi-disciplined and advanced training model, which is closely linked to institutions, agencies, enterprises and localities. The school provides high-quality human resources to meet social needs according to national, regional and international standards, contributing to the development of the country.

As examined, after the Doi Moi policy, vocational schools have transitioned the USSR's skills-based to the competency-based curriculum whereby schools and enterprises combine to provide VET.

7.5. Summary

In this chapter, I presented the model of VET after the Doi Moi policy was issued in 1986. Since 1986, the VET model has transitioned from a state-based to a dual model to meet the requirements of the market economy. The VET system has been restructured and technical secondary schools under MOET have been transferred into vocational schools under the management of MOLISA since 2016. At present, the administration of VET has been

directed to decentralise, and at the same time, funding for VET has been diversified from different courses. Private vocational schools have been encouraged to develop and students pay fees for their courses. The curriculum has moved to a competency approach, which provides skills, behaviours and knowledge of a vocation. Qualifications follow the Australian Framework of Qualifications with eight levels. In 2009, to meet the demands of international integration, English was designed as a compulsory foreign language in the VET system. However, VET administration overlap has been retained at the present.

Since 2016, Vietnam has cooperated with the Australian government to implement the dual model and developed a competency-based curriculum. In reality, to realise the dual model in the current context of Vietnam, the Vietnamese VET system has been facing challenges including weak enterprises, vocational skills mismatched with the workplace reality, imbalance of vocations in local areas, the mismatch between supply and demand, weak management, and low outcomes for graduates. These problems will be discussed in Chapter 8.

Chapter 8. Findings

As presented in Chapter 7, since 1986, Vietnam has implemented the Doi Moi policy (Renewal policy) which transitioned the country from a planned to a market economy. To meet the demands of a free market economy and international integration, the Vietnamese VET system has been moving towards the dual model. Administration of the VET system has been decentralised and vocational institutions authorised to be autonomous in their activities. Funding for VET comes from a variety of sources such as the state budget, fees paid by students, international aid, or cooperating foreign projects. The curriculum has been transferred from a skills-based to a competency-based approach. VET is provided by both private and public vocational institutions. In 2016, the Vietnamese government issued the National Qualification Framework based on the Australian Qualification Framework in order to standardise the outcomes of VET. Also since this time, Vietnam has cooperated with the Australian government to implement the dual model at vocational institutions across the country. Following, I summarise the observations and findings of the research, and analyse the challenges that the Vietnamese VET system has been facing.

8.1. Findings

Since 1954, the Vietnam VET system has experienced three historic periods consisting of stages from 1955-1975, 1976-1985, and 1986 to the present with three different models of VET, which included the French VET, the USSR's VET and the dual model as shown in Table 8.1 (p.149).

From 1954 to 1985, VET in Vietnam was considered a non-formal education system even though it was part of the national educational system. VET had been strongly influenced by the USSR's style, in which VET was attached to the plans of the state economy. At the stage

of 1975 to 1985, VET was provided by two school systems, vocational schools under the administration of MOLISA and technical schools under the management of MOET. Vocational education, a form of a non-formal education, did not provide a path to higher education while technical education was permitted. Students enrolling into vocational schools were seen as school failures and manual labourers. Vocational schools were designed to provide skilled workers while technical schools trained professional workers, who specialised in a field. This period remained an overlap of VET administration as it was in the stage of 1954 to 1974. While the Directorate of Vocational Education and Training played a state management role of VET, ministries or state agencies established and managed these schools. Local governments ran and funded local schools. During this period, VET was not considered a priority of the national policy and not standardised. In 1986, the Vietnamese government enacted the Doi Moi policy (the renewal policy), and until 1991, VET was prioritised the top national policy, in which VET was stated as a key tool in the economic development. In 1997, the Vietnamese government officially recognised the important role of VET in developing the market economy when the government enacted Decision No. 500/1997 “Vietnam’s VET Development Strategy by 2020”, in which the government stated that VET would take the key role in providing the highly skilled human resource needed for the national economy. The importance of VET in the market economy continued to be emphasised by Decision No 201/2001/QD-TTg on “the Educational Development Strategy for the stage of 2001-2010” issued in 2001 but it had to wait until 2006 when the first VET law was issued, that the VET system was standardised and the role of VET system in the national economy became official under legal regulations. Under this law, the VET system was redesigned to meet the requirements of a market economy, industrialisation and modernisation of the country. VET connected with the labour market and provided a path to higher education. The investment in VET was one of the basic

principles of the investment for the national economic development. The Vietnamese government encouraged the diversification VET providers including semi-public, private and international schools together with public vocational school systems. It implemented an “open door” policy in VET according to the trend of globalisation in order to modernise the VET system. In 2014, the Vietnamese government enacted the Law of Education and Vocational Training, which integrated the Law of Amended Education in 2009 and the Law of Vocational Education in 2006. According to this law, the technical secondary school system under the management of MOET was transferred to DVET under MOLISA. This law directed the VET system to follow the dual model. However, the overlap of the VET administration has been retained at the present. Since 2016 international cooperating projects of VET with developed countries such as Germany, Singapore and Australia have been implemented at a series of vocational institutions across the country to develop a dual model. The Vietnamese VET system has been facing challenges in implementing this model.

Table 8.1.

Characteristics of the Vietnamese VET Models Since 1954

	Policy	Administration	Funding	Curriculum/qualification
Periods				
1955-1975	In South Vietnam: + State-based VET follows the French VET model +VET was a part of the general education +Provided by private and public schools	+State took a key role in activities of VET through Ministry of Education	+State-funded public VET system +Students paid their fees for private schools	+Offered both general and vocational education +Followed the French VET model
	In North Vietnam: + State based VET followed the USSR's VET model + Not a part of the general education system. +Trained “ Builders of Communism” (Tomiak, 1983, p.136) + VET was provided by public vocational schools	+ VET under the leadership of the Communist Party +State intervention in all activities of VET + Managed by DVET +Overlap of VET administration by ministries, state agencies, and local governments	+State-funded VET system through ministries, branches and local governments + No private schools	+Not standardised + Combined between training and producing + Short-courses based
1976-1985	+ The VET system based on the USSR's VET model + Nationalized private schools in South Vietnam + Train “ Builders of Communism” (Tomiak, 1983, p.136) + A part of general education system + Provided by public schools +Not connected with labour market +Attached to the state plans	+Strong intervention of the state in all activities of VET through ministries, state agencies, and local governments + Under the leadership of the Communist Party + Managed by DVET +Overlap of VET administration	+State-funded VET system through ministries, state agencies, and local governments	+Skill-based curriculum with 7 levels of skills following the USSR's VET model + Combined training and producing
1986- the present	+Developing a dual model +Diversifying types of vocational schools +Curriculum/Encouraging private schools +Connect with enterprises and labour market	+Decentralising +Vocational schools assigned to be autonomous and self-responsible for their activities +Less intervention of the state.	+State-funded public schools +Students pay their fees for private schools.	+Competency-based curriculum +Diversifying of courses +Following the Australian Framework

8.2. The challenges of VET in Vietnam

Vietnam has been industrialising and modernising the country, and VET takes a vital role in realizing these objectives. Although the Vietnamese government has implemented policies of VET reform which aim to innovate and internationalise its VET model to become a dual model, the Vietnamese VET system has been facing some challenges in meeting the demands of a free-market economy and international integration.

Recent VET reports show that the Vietnamese VET system has been improved but is still imbalanced (MOLISA, 2012; MOLISA, 2018). Social perception emphasises university education, considered the only way of achieving success and pays less attention to VET, especially for high-level jobs. A principal argued that:

We are strongly influenced by the Chinese culture, which raises the academic education and looks down on the manual trades. Parents do not want their children to pursue vocational education because they think that they will not be respected. (P3)

Another principal supported this argument:

Parents believe that if their children graduate from universities, they will enjoy a lot of choices for their jobs and importantly they will have a higher position in society. This is the reason why the increase of enrolment in recent years mainly takes place at a university education. Whereas, the rate of students who enrol in technical, professional and vocational schools is still low and increasing slowly. (P7)

The VET curriculum mainly focuses on knowledge and is heavy on theory. It is not closely associated with the needs of the labour market or the needs of employers (MOLISA, 2017).

A teacher advised:

The USSR's VET model has been maintained too long, and vocational schools are slow to update their curriculum. Many schools have continued to apply the USSR's skills-based curriculum. It is important to change perceptions of vocational teachers and managers about the dual model. (T10)

In 2015, within the framework of Vietnam-Germany cooperation "Vietnam Vocational Training Innovation Program" (MOLISA, 2017), MOLISA surveyed 280 businesses and graduates from 26 vocational institutions. Survey results showed that occupational theory knowledge of graduates at all vocations was lower than capacity requirements. Graduates in all categories of occupational skills surveyed were lower than the requirements of the business. The survey results reflected that although facing a dynamic and rapidly changing labour market in the process of economic development and international integration, the Vietnamese VET system had not adapted accordingly.

The quality of teachers and professional education managers has not been improved and the facilities and equipment of many vocational institutions have not met the requirements of new vocations. A DOLISA director informed me that:

Although VET policies have emphasised the role of teachers in improving the quality of VET, vocational teachers have been paid less attention to than teachers of the general education system. They are traditionally considered as a lower class in the education system. (D6)

In decentralising administration of the VET system, increasing the autonomy of VET institutions in their activities is required, but many institutions want to maintain the subsidised mechanism, where the state funds them. (H. M. Nguyen, 2018). A DOLISA director noted:

This appears to be a burden on the management capacity of these vocational institutions because the USSR's administration style has been retained for a long time. There is a need to strengthen the governance systems of these institutions and create closer support and collaboration from other ministries and state agencies as well as local governments. (D8)

Another principal argued:

The complexity of VET administration leads to difficulty in managing vocational institutions. Staff are paid and directly controlled by local governments while DVET manages activities of these vocational schools. (P2)

A further challenge is that the majority of the enterprises in Vietnam are small- and medium-sized enterprises which use outdated technologies (H. M. Nguyen, 2018). These companies do not provide proper employment places for VET graduates. The Vietnamese government has not designed a demand-driven VET system. Another DOLISA director advised:

It is difficult to implement the dual model in the context of Vietnam because the private enterprise's system is weak and was formed late. Moreover, employers do not want to offer practical training for trainees. (D7)

The target of the vocational training strategy for the period of 2011-2015 was about 9.6 million people, but the implementation results only reached 9.1 million people, of which the enrollment in secondary vocational and vocational colleges was only 53 % (MOLISA, 2017). Annual vocational secondary school enrollment was reduced by 15% per year.

Enrolment is mainly into the elementary course, which offers fewer than 3 months (accounting for 88%). Whereas, enrolment into vocational secondary courses accounts for only about 12%. The imbalance in the structure of occupations among regions has been slow

to improve and led to the failure to meet the human resource needs of the society. A teacher argued:

The network of vocational education institutions is still inadequate, not yet rationally distributed among regions, as well as not yet planned to serve each field, profession and level of training. The development of teachers and professional education managers has not been given adequate attention.

Facilities and equipment of many vocational education institutions are out of date. (T11)

In conclusion, although the Vietnamese government has strived to modernise its VET model, the Vietnamese VET system has been facing challenges in the market economy and with international integration. Thus, VET needs to be improved to match the new requirements of the country. To realise a dual VET model, the Vietnamese government should consider some visions for the future in its policy-making.

8.3. Visions of the Vietnamese VET in the future.

The public Vietnamese VET system was established in 1969, strongly influenced by the USSR's state-based VET under the Party leadership. In modernising and internationalising its VET model to adopt a dual VET model, some visions should be considered.

It is forecast that by 2025, Vietnamese workers will have made a rapid shift from the agricultural sector to industry and services. By 2025, it will be necessary to provide VET for about 12 million people, of whom 1.44 million will be college graduates (about 12%), with 1.76 million intermediate students (accounting for about 14.5%), and primary level will be 8.8 million people (accounting for about 73%) (MOLISA, 2017).

In moving forward to a dual model to realise the above objectives, Vietnam's current VET system must make every effort to remove the state-based model which has been dominant in

Vietnam since 1954. To perform this objective productively, a DOLISA director advised that “the Vietnamese government should ensure a reasonable VET structure which should be an open and flexible with diversified types of VET” (D13).

As the state takes a key role in enhancing the autonomy of public vocational institutions, the government should create conditions for these institutions to innovate and improve the quality of VET. A DOLISA director argued that “the overall goal is to innovate the VET model and improve the VET quality because If outcomes of graduates can meet the labour market requirements, they will have better jobs and incomes” (D5).

Another DOLISA director supported this idea:

It is necessary to develop and issue legal documents guiding the productive implementation of the Law on Vocational Education 2014 and related laws, fully promulgating standards and norms in the field of VET. Redesigning and updating the list of industries and training courses of the VET system aim to meet the demands of the labour market in the global economy. (D6)

The Vietnamese government could encourage the participation of enterprises in developing and promulgating standards of knowledge and skills (output standards) for industries and trades in order to ensure compliance with the qualification and standard of national vocational skills. For national key occupations, the Vietnamese government could direct its VET system to access the regional standards of ASEAN and developed countries and develop the standards of facilities for each industry, occupation and training level as well as issue regulations on a quality assurance system for secondary vocational schools. In the administration of VET, a principal noted that:

It is important to promote administrative reform in the field of VET and clearly define more functions, tasks and powers, associated with the responsibilities of the state

management agency on vocational education at all levels. The government may decentralise state management functions of ministries, state agencies and local governments. (P2)

In moving forward with decentralising administration, the government could gradually reduce the administrative intervention of managing state agencies for public vocational institutions.

Another principal advised further that:

Related agencies and enterprises could combine effectively to employ students after graduating from junior and upper secondary school. The connection between levels in the VET system and between vocational education and university education is important to ensure that graduates who need to upgrade to a higher level can continue their learning. (P3)

To plan VET productively, the Vietnamese government should pay attention to the forecast demand for human resources and training needs according to the structure of industry, profession and training level under the requirements of economic and social development in local areas. Another teacher related:

It is very necessary to renovate the mechanism of receiving and processing information, and build a national database on vocational education. The government could complete synchronously policy mechanisms, which are suitable for teachers, learners, vocational institutions, workers and enterprises participating in training as well as employment. The government could use a source of finance reasonably to increase the autonomy of their vocational education institutions and motivate society to participate in this activity. (T10)

To enhance the quality of VET, the Vietnamese government could establish an inspection and examination mechanism, develop a system of VET quality management which evaluates and

recognise national VET quality to ensure compatibility with regional reference frameworks.

The government may encourage vocational institutions to apply information technology in building and operating a modern management information system at vocational schools.

In developing a staff of vocational teachers, the government could promote training and retraining of engineers, bachelor degree holders, artisans, and high-skilled people who have worked at enterprises. This training would include pedagogical and vocational skills in order to become vocational education teachers. The government could apply developed countries' standards to develop international-standard teachers who are capable of running training programs for transferring from abroad and retraining other teachers in the system. Ministries, state agencies and localities could review and rearrange vocational education networks under their management. In sharing visions of VET, a former DOLISA director said:

Vocational institutions should be entitled to be autonomous in determining the annual enrollment quotas based on the conditions on the quantity, quality of teachers, facilities and training equipment at these institutions. (D3)

Developing new national occupational skill standards will ensure compatibility with occupational skills standards of ASEAN and APEC regions. Recognising vocational skill standards between Vietnam and other ASEAN countries will help the Vietnamese VET system access regional and international occupational standards, especially in the APEC, ASEAN, and Mekong Sub-region frameworks.

To realise the dual model, strengthening training links with businesses and completing the regulations for enterprises are important to the Vietnamese VET system. Enterprises should participate in all stages of the training process, and pilot the establishment of industry councils in VET fields with the participation of state management agencies (P1). Ministries,

state agencies and enterprises are crucial to implementing the dual model successfully. In responding to this vision, another former DOLISA director accounted that:

The government should establish close links between businesses and vocational training institutions to enhance the quality and skills of vocational training to meet the needs of businesses and the labor market. (D1)

Specifically, there should be regulations and legal documents that clearly define the position of the enterprise as the main participant in VET. To strengthen cooperation between schools and businesses, it will be necessary to promote models and methods of cooperation between enterprises and vocational institutions. Supporting this view, a retired principal opined:

The government should expand forms of vocational training contracts between enterprises and vocational training institutions, and encourage the participation of enterprises and partners in the development of vocational training programs, vocational skill standards, and recruitment of trainees. (P1)

To attract students, VET institutions should promote scientific research, and international cooperation, improve the quality of teacher and career guidance for students. In particular, it is necessary to develop a professional and methodical communication plan with the participation of ministries, state agencies, localities, vocational training institutions, teachers and relevant agencies in order to actively provide information to the press to influence public opinion positively and create trust in the VET system.

VET institutions should also provide students with a broad education which prepares them to easily achieve vocational skills and knowledge to serve their future career goals. They should be prepared for quick changes in technology and the labour market in the future. A current DOLISA director supported:

VET institutions should create opportunities for students to study and to practice necessary cognitive skills at a practical workplace and give students opportunities to combine between theory and the practice. It should provide learning environments in which students can both learn theory and practise their skills. (D12)

In standardising the VET system, the government could unify standards of VET including skills and qualifications which are widely recognised in the labour market and continually adjusted to changes within industries. The VET system should adapt to the development of a market economy in which the student will work and to the level of technological development.

At the local level, in the context of Vietnam, the structure of the population is crowded and imbalanced, nearly 90 million people in which the youth labour force accounts for 70 %.

There are many stages of economic development that a single unified model is probably not reasonable. Although the government has issued innovative policies of VET, these policies have not mentioned the design of VET systems at the local level. In designing VET systems at the local level, programs, institutions and skill standards should all be matched to the stage of development of local areas but these different levels should be based on a national curriculum framework, allowing students in each local area the opportunity to move up the higher ladder. The government could set up a substantially employer-driven governance system. It is important to design a governance system at every level — national, province, city and institution that encourages employers to be more effectively involved in the implementation of VET. Employers, especially private employers of enterprises, need to be central subjects involved in assessing current and future skill demands and the types of equipment and training needed in a rapidly changing market. For example, at the local level, chairman, employers, industry associations, and officials of VET could set up the VET

governing board. The government also needs to encourage enterprises recognition of vocational degrees and incentivize these enterprises to improve the quality of VET at work.

In meeting the rapid change of a market economy, the government could encourage vocational institutions to redesign their VET curriculum to adopt the demands of the labour market. The vocational schools should provide occupations that labour market requires instead of providing just what is available in the schools. To redesign the curriculum, the vocational schools should create new structures of experience for students, which suit the authentic occupations of the workplaces.

To implement the dual model productively, the government could incentivise employer participation in increasing the standards of VET. All firms, including state-owned enterprises, should be taxed a training fee which is used to support the VET system. This tax would be waived for firms that offer youth apprenticeships and a substantial program of continuing education for their workers. The waivers would be granted by local boards based on national criteria. VET institutions should also be given subsidies to align themselves with the most globally advanced, highest productivity firms in the industries in which they offer programs and to continuously upgrade their programs to international standards.

Although the government set up bridges between VET and academic and higher education, VET needs to be conceived as a lifelong learning pursuit that enables individuals, enterprises and the nation to continually adapt to the rapid economic change. The government should raise the low public perception of VET. It must be a strong campaign to change the Vietnamese traditional emphasis on academic education and diplomas towards a broader conception of people for long-life learning.

In conclusion, to realise the dual model successfully in the context of Vietnam, the above recommendations should be considered in designing the VET policies in the future. Having

maintained the USSR's VET model for a long time will be a key challenge in implementing the dual model in Vietnam.

Chapter 9. Conclusions and Recommendations

In Chapter 8, I summarised the observations and findings of the research, and analysed the challenges that the Vietnamese VET system has been facing. In Chapter 9, I make conclusions from the research and recommendations for further research.

9.1 Summary of Conclusions

Informal vocational education in Vietnam emerged in ancient times under the form of a handicraft community or a handicraft village. During the feudal dynasties, this handicraft model was retained although not developed to become a formal system of VET. It was not until the end of the 19th century under the French colonial government, that the formal VET system was established following the French state-based style.

From 1955 to 1975, Vietnam was divided into two separate governments, the capitalist Republican government in South Vietnam supported by the United States (US) and the socialist Democratic-Republican government in North Vietnam aided by the Union of Soviet Socialist Republic (USSR). During this period, the VET system in South Vietnam retained the French style as in the colonial period in order to serve its market economy. The VET system was designed by the state and was based on democratic principles including humanity, science, and liberality to train skilled workers who served the capitalist economy. South Vietnam's VET was a part of the national general education system under the management of MONE. VET was provided by public and private vocational schools and enrolment at public vocational institutions was free for all students while students in private schools had to pay fees. The VET curriculum offered both general and vocational education and qualifications followed the French VET model.

In North Vietnam, it was not until 1969 after the establishment of the General Department of Technical Worker Training (GDTWT), that the public VET system was officially founded to

meet the demands of the socialist economy. North Vietnam's VET system took the principles of communist ideologies, which consisted of patriotism, and revolutionary ethics as a basis to train "Builders of Communism". North Vietnam's VET developed independently and was managed by an overlap of ministries, state agencies, and local governments under the Party leadership. VET was provided by public schools, which were established besides state-run factories, collectives or enterprises in order to serve the context of the war against South Vietnam. VET was free and intended for students who came from the poor classes such as peasant and farmers or students who had failed in academic education. The government provided finance for VET through ministries, state agencies and local governments. Private schools were not permitted. The VET curriculum focused on vocational education which combined training with production in the context of the war, following the USSR's style.

After the unification of the country in 1975, the Vietnamese VET system was unified into a socialist VET system. The VET model in this period retained the USSR's VET style to serve a centrally planned economy. VET was attached to the plans of the state economy. The general administration of the VET system was under DVET, but local governments, ministries and state agencies took a direct role in establishing and managing their vocational schools. The overlap of VET administration remained during this period and there existed two streams of VET including vocational education under the management of DVET and professional technical education under the administration of the Ministry of Higher Education and Technical Secondary School (MHETSS).

At this stage, the Vietnamese VET system was considered a part of the general education system, but vocational schools did not offer general subjects. The government provided finance for the VET system through ministries, state agencies and local governments and vocational schools were free for all students. The curriculum and qualification system

followed the USSR's skills-based model. In the middle of the 1980s, Vietnam experienced a serious crisis of economy and the VET quality declined.

Since the Doi Moi policy in 1986, the Vietnamese VET system has been internationalized to meet the requirements of a market economy. The Vietnamese government has made efforts to remove the USSR's VET model and develop a dual VET model. In 2006, the Vietnamese government officially issued the Law of Vocational Education, which emphasizes the role of VET in international integration and market economy development. This law states that the development of VET is a leading national policy to improve skilled human resources and foster talents. The VET development has been associated with the needs of socioeconomic development, scientific and technological advances, national defence and security consolidation. This law determines that the new VET system approaches the dual VET model, by which it will be standardised, modernised and socialised (The Vietnamese National Assembly, 2006a).

At present, DVET has taken the primary responsibility for managing VET quality, assigning and decentralising VET management, strengthening autonomy and selfresponsibility of vocational institutions. DVET has the responsibility for organizing the implementation of vocational training development strategies and making plans as well as policies of VET. DVET has been responsible for promulgating and issuing the legal documents on vocational training (The Vietnamese National Assembly, 2006b). VET has diversified providers including private, public schools and overseas cooperating schools, so VET funding has come from different sources. Although the public schools have been authorized to be autonomous in their activities, the government has maintained a state budget for these schools. Students at public schools are free but at private schools, students must pay fees for their courses.

In 2016, Vietnam cooperated with the Australian government to implement a dual model and apply a competency-based curriculum in vocational institutions across the country.

However, the Vietnamese VET system has been facing challenges in order to realise this model. These challenges have come from a social perception that vocational education is manual labour, an administration overlap where VET has been managed by many different state agencies, an out of date curriculum that does not match the labour market and poor quality vocational teachers.

9.2. Research Limitations and Further Research.

The current research was based on a qualitative method in which data were collected from documents and interviews of participants in 13 vocational schools. Specifically, I selected 54 participants based on the snowball method. The research provides an outlook on VET models since 1954 and describes their characteristics. The research resulting from documentary and interview data showed that VET in Vietnam has experienced three VET models including the French state-based and the USSR's state-based VET at the stage of 1954 to 1975, the USSR's state-based VET during the period of 1976 to 1985, and from 1986 to the present, moving forward with a dual model. Thus, quantitative methods such as questionnaires or surveys which investigate current challenges that the Vietnamese VET system has been facing should be conducted for further research.

This research is also limited in the number of samples which only included 13 schools and 54 participants, so a larger sample for interview is necessary for further research. Another limitation is the purpose of the research which only provides an overall look of VET since 1954, so VET policies since 1954 could be examined in further research

In promoting the dual model, further research on its implementation in vocational schools is necessary to clarify further advantages and disadvantages of this model in the context of

Vietnam. Although the policies of VET since 1986 have directed vocational schools to apply a competency-based curriculum, the productivity of this approach has not been clarified by this research. This is a gap that further research could fill.

9.3. Conclusions

As examined, since 1954 the Vietnamese VET system has experienced three models including the French state-based VET, the USSR's state-based VET and the dual model.

Although an informal vocational education in the form of handicraft villages emerged in Vietnam in ancient times, it was not developed to become a formal VET system. It was not until at the end of the 19th century when France ruled Vietnam and established vocational schools to serve the colonial economy, the formal VET system was officially in place.

From 1954 to 1974, Vietnam was separated into two political regions, North Vietnam under the Democratic-Republican government supported by the USSR and South Vietnam under the Republican government aided by the USA. VET at this stage was characterised by two models, in which South Vietnam's VET model followed the French VET while North Vietnam's model was influenced by the USSR VET model. VET in South Vietnam was designed to serve the market economy while North Vietnam's VET was established to meet the needs of the socialist economy. After the unification of Vietnam in 1975, the Vietnamese VET system was unified and followed the USSR's VET style. South Vietnam's VET system was abolished and private schools were nationalised. VET in this period was provided by two school systems, vocational schools under the management of MOLISA and technical schools under the administration of MOET. Vocational education was considered a nonformal education system and did not offer a path to higher education while technical education was permitted and students of this system could move up to higher education. An overlap of VET administration was retained and VET was subsidised by the state. Vocational students of public schools were free and at this stage, private schools were not

permitted to run. In 1986, the Vietnamese government enacted the Doi Moi policy, which transitioned from a subsidised economy to a market economy. In responding to this policy, the Vietnamese government has made efforts to remove the USSR's VET model to internationalise its VET model, which can meet the new requirements of the global economy and international integration. The Vietnamese government has cooperated with developed countries such as Germany, Australia and Korea to develop a dual model, whereby schools combine with enterprises to provide VET. In realising this objective in the context of Vietnam, challenges have been determined and some valuable recommendations for VET policymakers have been mentioned to assist them in making VET policies in the future.

References

- Adams, R. (2005). Allocation of VET funding by state training authorities. *Funding and financing vocational education and training. Research readings* (17-27).
doi:<https://www.ncver.edu.au/data/assets/file/0023/5594/nr2202.pdf#page=19>
- Agrawal, T. (2013). Vocational education and training programs (VET): An Asian perspective. *Asia-Pacific Journal of Cooperative Education*, 14(1), 15-26.
doi:<https://files.eric.ed.gov/fulltext/EJ1113707.pdf>
- Ainley, P. (1990). *Vocational education and training*. London: Cassell.
- Albert, J. P. (Ed.) (1990). *Vocational education in the 1990s: Major issues*. USA: Prakken Publications, Inc.
- Australia Department of Employment, E. a. T. (1991). *Indonesia: A comparative study*. Australia: Commonwealth of Australia.
- Berner, E. G., Philipp. (2016). *History of vocational education and training in Europe: Cases, concepts and challenges. Studies in Vocational and Continuing Education. Volume 14*. Newyork: Peter Lang Publishing Group.
- Blanchflower, D. G., & Lynch, L. M. (1994). Training at work: A comparison of US and British youths. In *Training and the private sector: international comparisons* (pp. 233-260). USA: University of Chicago Press.
- Blom, K. (2001). VET in the United States of American and Canada. *Research Digest*.
doi:<https://files.eric.ed.gov/fulltext/ED476024.pdf>
- Blossfeld, H.-P., & Stockmann, R. (1998). Guest editors' introduction: The German dual system in comparative perspective. *International Journal of Sociology*, 28(4), 3-28.
doi:<https://www.tandfonline.com/doi/pdf/10.1080/15579336.1998.11770184>
- Bosch, G., & Charest, J. (2008). Vocational training and the labour market in liberal and coordinated economies. *Industrial Relations Journal*, 39(5), 428-447.
doi:<https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1468-2338.2008.00497.x>
- Bouder, A., & Kirsch, J. L. (2007). The French vocational education and training system: Like an unrecognised prototype? *European Journal of Education*, 42(4), 503-521.
doi:<https://www.jstor.org/stable/pdf/4543114.pdf>
- Braun, F. (1987). Vocational training as a link between the schools and the labour market: The dual system in the Federal Republic of Germany. *Comparative Education*, 23(2), 123-143.
doi:<https://doi.org/10.1080/0305006870230202>
- Brauns, H. (1998). Vocational education in Germany and France. *International Journal of Sociology*, 28(4), 57-98. doi:<https://www.jstor.org/stable/pdf/20628545.pdf>
- Brunns, H., Steinmann, S., Kieffer, A., & Marry, C. (1999). Does education matter? France and Germany in comparative perspective. *European Sociological Review*, 15(1), 61-88.
doi:<https://doi.org/10.1093/oxfordjournals.esr.a018255>
- Brockmann, M., Clarke, L., Méhaut, P., & Winch, C. (2008). Competence-based vocational education and training (VET): The cases of England and France in a European perspective. *Vocations and Learning*, 1(3), 227-244. doi:<https://link.springer.com/content/pdf/10.1007%2Fs12186-0089013-2.pdf>
- Brockmann, M., Clarke, L., & Winch, C. (2008). Knowledge, skills, competence: European divergences in vocational education and training (VET)—the English, German and Dutch cases. *Oxford Review of Education*, 34(5), 547-567. doi:<https://doi.org/10.1080/03054980701782098>
- Browne, K. (2005). Snowball sampling: Using social networks to research non-heterosexual women. *International journal of social research methodology*, 8(1), 47-60.
doi:<https://doi.org/10.1080/1364557032000081663>
- Bryant, J. (1998). Communism, poverty, and demographic change in North Vietnam. *Population and Development Review*, 235-269. doi:<https://www.jstor.org/stable/pdf/2807973.pdf>

- Bui, H. L. (2018). History of Hue technical school. Retrieved from <http://aihuukythuat-hue.com/vietve-truong-trung-hoc-ky-thuat-hue/> website: <http://aihuukythuat-hue.com/viet-ve-truong-trung-hoc-ky-thuat-hue/> doi:<http://aihuukythuat-hue.com/viet-ve-truong-trung-hoc-kythuat-hue/>
- Caillods, F. (1994). Converging trends amidst diversity in vocational training systems. *Int'l Lab. Rev.*, 133, 241.
doi:https://heinonline.org/HOL/Page?handle=hein.journals/intlr133&div=25&g_sent=1&cas_a_token=&collection=journals&t=1557371369
- Campbell, J., Thomson, E., & Pautz, H. (2011). Apprenticeship training in England: Closing the gap? *Journal of Contemporary European Studies*, 19(3), 365-378.
doi:<https://doi.org/10.1080/14782804.2011.610606>
- Cantor, L. (1991). Vocational education and training in the developed world. *The Vocational Aspect of Education*, 43(115), 173-182.
doi:<https://www.tandfonline.com/doi/pdf/10.1080/10408347308003671>
- Chesne. (1903). *Quyết định thành lập trường nghề Bien Hoa (The decision on establishing the Bien Hoa vocational training school)*. Vietnam: The French colonial government.
- Clarke, L., & Winch, C. (2012). *Vocational education: International approaches, developments and systems*. London, UK: Routledge.
- Clarke, L. W., Christopher. (2007). *Vocational education: International approaches, development and systems*. London, UK: Routledge.
- Cockrill, A., & Scott, P. (1997). Vocational education and training in Germany: Trends and issues. *Journal of Vocational Education and Training*, 49(3), 337-350.
doi:<https://www.tandfonline.com/doi/pdf/10.1080/13636829700200019>
- College of Bien Hoa. (n.d). History of the Bien Hoa technical School. Retrieved from http://dongnaiart.edu.vn/Apps/News_Detail.aspx?cateid=3&&idnew=2
- Cooke, F., Lee. (2005). Vocational and enterprise training in China: Policy, practice and prospect. *Journal of the Asia Pacific Economy*, 26-55.
doi:<https://www.tandfonline.com/doi/pdf/10.1080/1354786042000309062>
- Cooper, N. (2001). French indochina. *academia.edu*.
doi:https://s3.amazonaws.com/academia.edu.documents/4198845/filetodownload_20691_en.pdf?
- Dang, P. (2004). *Kinh tế miền nam thời kỳ 1955 -1975 (The South economy period of 1955 -1975)*. Viet nam: NXB khoa học xã hội.
- Dao, D. A. (Ed.) (2006). *Dai nam Nhat Thong Chi (A history of Dai nam)*. Vietnam: NXB Thuan Hoa.
- Dao, K. D. (2016). *Lịch sử trường cao đẳng Cao Thang - 100 năm (Cao Thang Technical College - A history of 100 Years)* (K. D. Dao Ed.). Ho Chi Minh city: Nha Xuất Bản Trẻ.
- Day, C. (2001). *Schools and work: Technical and vocational education in France since the Third Republic*. Canada: McGill-Queen's Press-MQUP.
- Deissinger, T. (1994). The evolution of the modern vocational training systems in England and Germany:A comparative view. *Compare*, 24(1),17-36.
doi:https://kops.unikonstanz.de/bitstream/handle/123456789/35163/Deissinger_0-354055.pdf?sequence=3
- Deissinger, T. (2004). *Apprenticeship systems in England and Germany: Decline and survival*. Paper presented at the Towards a history of vocational education and training (VET) in Europe in a comparative perspective: First international conference 2002, Luxembourg.
- Deissinger, T. (2007). "Making schools practical" practice firms and their function in the full-time vocational school system in Germany. *Education+ Training*, 49(5), 364-379.
doi:https://kops.unikonstanz.de/bitstream/handle/123456789/12058/Education_Training_Deissinger.pdf?sequence=1&isAllowed=y
- Deissinger, T. (2008). Cultural patterns underlying apprenticeship: Germany and the UK. In (pp. 3455). London: Routledge.

- Deissinger, T., & Gonon, P. (2015). *Stakeholders in the German and Swiss VET system and their role in innovating apprenticeships*. Paper presented at the Architectures of Apprenticeship: Achieving Economic and Social Goals; Sixth Annual INAP Conference, Melbourne.
- Doan, t. H. D. (2010). *Giao duc Viet Nam 1975 -1986 [Vietnamese education in the stage 1975-1986]* (Publication no. https://diepdoan.violet.vn/entry/show/entry_id/4262110). Retrieved 12.12.2018, from diepdoan.violet.vn
- Doan, t. H. D. (2010a). *Nen giao duc Vietnam 1975 -1986 (The Vietnamese education in the stage 1975 to 1986]*. Retrieved 12.01.2019, from diepdoan.violet.vn https://diepdoan.violet.vn/entry/show/entry_id/4262110
- Dougherty, C. (1987). The German dual system: A heretical view. *European Journal of Education*, 195199. doi:<https://www.jstor.org/stable/pdf/1503217.pdf>
- Duggan, S. (2001). Educational reform in Viet Nam: A process of change or continuity?. *Comparative Education*, 37(2), 193-212. doi:<https://www.tandfonline.com/doi/pdf/10.1080/03050060120043411>
- Dunlop, O. J. (1911). Some aspects of early English apprenticeship. *Transactions of the Royal Historical Society*, 5, 193-208. doi:<https://www.jstor.org/stable/pdf/3678366.pdf>
- Eichhorst, W., Rodríguez-Planas, N., Schmidl, R., & Zimmermann, K. F. (2015). A road map to vocational education and training in industrialized countries. *ILR Review*, 68(2), 314-337. doi:<https://doi.org/10.1177%2F0019793914564963>
- Elbaum, B. (1989). Why apprenticeship persisted in Britain but not in the United States. *The Journal of Economic History*, 49(2), 337-349. doi:<https://doi.org/10.1017/S002205070000797X>
- Elias, P., Hernaes, E., & Baker, M. (1994). Vocational education and training in Britain and Norway. In *Training and the private sector: International comparisons* (pp. 283-298). American: University of Chicago Press.
- Epstein, S. R. (1998). Craft guilds, apprenticeship, and technological change in preindustrial Europe. *The Journal of Economic History*, 58(3), 684-713. doi:https://www.cambridge.org/core/services/aop-cambridgecore/content/view/4B18A7808BACBFA40D76475FBCB665E0/S0022050700021124a.pdf/craft_guilds_apprenticeship_and_technological_change_in_preindustrial_europe.pdf
- Euler, D. (2013). Germany's dual vocational training system: a model for other countries? doi:http://aei.pitt.edu/74021/1/Germanys_dual_vocational_training_system.pdf
- Evans, K., & Heinz, W. (1993). Studying forms of transition: methodological innovation in a crossnational study of youth transition and labour market entry in England and Germany. *Comparative Education*, 29(2), 145-158. doi:<https://doi.org/10.1080/0305006930290203>
- F.Silberman, H. (Ed.) (1982). *Education and work*. Chicago: The National Society for the Study of Education.
- Fall, B. B. (1954). Local administration under the Viet Minh. In *Pacific Affairs* (Vol. 27, No. 1, pp. 5057). University of British Columbia: JSTOR.
- Flude, M., & Sieminski, S. (1999). *Education, training, and the future of work: Developments in vocational education and training. II* (Vol. 2). Newyork: Psychology Press.
- Frankema, E. (2013). Colonial education and post-colonial governance in the Congo and Indonesia. In *Colonial Exploitation and Economic Development* (pp. 173-197). London: Routledge.
- Frommberger, D., & Krichewsky, L. (2011). Curriculum reforms in VET in Europe– A comparative view on France and Germany. *CHAPTER I DEVELOPING CURRICULA AND QUALIFICATION SYSTEMS*, 59. doi:<https://www.inap.unibremen.de/dl/inap%20conference%20proceedings%202011.pdf#page=56>
- Gates, C. L., & Truong, D. H. (1993). Transition of a developing socialist economy to a developing mixed economy: The case of Vietnam. *International Journal of Political Economy*, 23(1), 65-

85. doi:<https://doi.org/10.1080/08911916.1993.11643854>
- Gavin, M. (2002). Identifying vocational education and training. *Journal of Vocational Education and Training*. doi:<https://www.tandfonline.com/doi/pdf/10.1080/13636820200200197>
- Gonon, P. (2014). What makes the dual system to a dual system?: A new attempt to define VET through a governance approach. *Berufs-und Wirtschaftspädagogik-online*. doi:<https://bibbdspace.bibb.de/jspui/handle/BIBB/761709>
- Gospel, H. (1995). The decline of apprenticeship training in Britain. *Industrial Relations Journal*, 26(1), 32-44. doi:<https://doi.org/10.1111/j.1468-2338.1995.tb00721.x>
- Gough, K. V., & Rigg, J. (2012). Reterritorialising rural handicrafts in Thailand and Vietnam: a view from the margins of the miracle. *Environment and Planning A*, 44(1), 169-186. doi:<https://doi.org/10.1068%2Fa44175>
- Green, A., Leney, T., & Wolf, A. (1999). *Convergence and divergence in European education and training systems*. London, UK: Institute of Education.
- Greinert, W.-D. (2004). European vocational training" systems"--Some thoughts on the theoretical context of their historical development. *European Journal: Vocational Training*, 32, 18-25. doi:<https://files.eric.ed.gov/fulltext/EJ734142.pdf>
- Greinert, W.-D., & Hanf, G. (2004). Towards a history of vocational education and training (VET) in Europe in a comparative perspective. *Cedefop, Thessaloniki*. doi:https://www.cedefop.europa.eu/files/5153_1_en.pdf
- Ha, V. T. (1960). *The Vietnamese geography and history*. Vietnam: NXB Su Hoc.
- Hanushek, E. A., Schwerdt, G., Woessmann, L., & Zhang, L. (2017). General education, vocational education, and labor-market outcomes over the lifecycle. *Journal of Human Resources*, 52(1), 48-87. doi:<https://muse.jhu.edu/article/649468/pdf>
- Hayward, G. C., & Benson, C. S. (1993). Vocational-technical education: Major reforms and debates 1917-the present. *Office of Vocational and Adult Education (ED), Washington, DC*. doi:<https://files.eric.ed.gov/fulltext/ED369959.pdf>
- Heikkinen, A. (2004). Models, paradigms or cultures of vocational education. *European Journal: Vocational Training*, 32, 32-44. doi:<https://files.eric.ed.gov/fulltext/EJ734144.pdf>
- Heinz, W. R., Kelle, U., Witzel, A., & Zinn, J. (1998). Vocational training and career development in Germany: Results from a longitudinal study. *International Journal of Behavioral Development*, 22(1), 77-101. doi:<https://journals.sagepub.com/doi/pdf/10.1080/016502598384522>
- Ho, T. H. T., & Reich, A. (2014). Historical influences on vocational education and training in Vietnam. Retrieved from VOCEd <http://avetra.org.au/wp-content/uploads/2014/05/Abstract-13.pdf>.
- Hoang, N. (2015). Truong nghe khong tuyen sinh duoc do chat luong han che (Low quality of vocational training seriously influences enrolment of vocational schools). Retrieved from vnexpress website: <http://vnexpress.net/tin-tuc/giao-duc/truong-nghe-khong-tuyen-sinhduoc-do-chat-luong-han-che-3134427.html>
- Hoang, N. V. (2018). Mau chong quy hoach mang luoi giao duc nghe nghiep [It is time for restructuring vocational education and training network]. Retrieved from nhandan.vn website: doi:<http://nhandan.com.vn/cuoituan/item/36162302-mau-chong-quy-hoachmang-luoi-giao-duc-nghe-nghiep.html>
- Hobart, B. (1999). *Globalisation and its impact on VET: Review of research*. Australia: National Centre for Vocational Education Research.
- Howieson, C., Raffe, D., Spours, K., & Young, M. (1997). Unifying academic and vocational learning: the state of the debate in England and Scotland. *Journal of Education and Work*, 10(1), 5-35. doi:<https://www.tandfonline.com/doi/pdf/10.1080/0268093970120607>
- Hummelsheim, S., & Baur, M. (2014). The German dual system of initial vocational education and training and its potential for transfer to Asia. *Prospects*, 44(2), 279-296. doi:<https://link.springer.com/content/pdf/10.1007%2Fs11125-014-9311-4.pdf>

- Hummelsheim, S., & Timmermann, D. (2000). *The financing of vocational education and training in Germany. Financing Portrait. CEDEFOP Panorama*. Germany: European Centre for the Development of Vocational Training, Thessaloniki (Greece).
- Huong, P. L., & Fry, G. W. (2004). Education and economic, political, and social change in Vietnam. *Educational Research for Policy and Practice*, 3(3), 199-222. doi:<https://link.springer.com/content/pdf/10.1007/s10671-005-0678-0.pdf>
- Huong, T. (2010). Insights from Vietnam. *Learning through English: Policies, challenges and prospects. Insights from East Asia*, 96-114.
- Hy, V. L. Đ., Diep Hoa. (1991). Culture and capitalism in the pottery enterprises of Bien Hoa, South Vietnam (1878–1975). *Journal of Southeast Asian Studies*, 22(1), 16-32. doi:<https://doi.org/10.1017/S0022463400005440>
- Zajda, I. J. (1980). *Education in the USSR*. Australia: Pergamon Press.
- Idriss, C. M. (2002). Challenge and change in the German vocational system since 1990. *Oxford Review of Education*, 28(4), 473-490. doi:<https://www.tandfonline.com/doi/pdf/10.1080/0305498022000013625>
- Imdorf, C., Granato, M., Moreau, G., & Waardenburg, G. (2010). Vocational education and training in Switzerland, France, Germany -- Perspectives for sociological research. *Editorial: Berufsausbildung in der Schweiz, Frankreich und Deutschland - Perspektiven für die soziologische Forschung.*, 36(1), 5-10. doi:[https://edoc.unibas.ch/23206/1/Imdorf, Granato, Moreau %26 Waardenburg \(2010\) Vocational Education and Training in Switzerland, France, Germany – Perspectives for Sociological Research \(Editorial\).pdf](https://edoc.unibas.ch/23206/1/Imdorf, Granato, Moreau %26 Waardenburg (2010) Vocational Education and Training in Switzerland, France, Germany – Perspectives for Sociological Research (Editorial).pdf)
- Juul, I., & Jørgensen, C. H. (2011). Challenges for the dual system and occupational self-governance in Denmark. *Journal of Vocational Education & Training*, 63(3), 289-303. doi:<https://www.tandfonline.com/doi/pdf/10.1080/13636820.2011.560393>
- Keating, J., Medrich, E., Volkoff, V., & Perry, J. (2002). *Comparative study of vocational education and training systems: National vocational education and training systems across three regions under pressure of change. Review of Research*. Australia: National Centre for Vocational Education Research, Leabrook (Australia).
- Kien, T. N., & Heo, Y. (2008). Phat trien kinh te Vietnam gia doan 1986 to 2005 (The Economic development in Vietnam in the stage from 1986 to 2005). *International Area Review*, 11(1), 205-232. doi:10.1177/223386590801100112
- Klorer, E., & Stepan, M. (2015). Off target: China's vocational education and training system threatens the country's rise to industrial superpower status. *Mercator Institute for China Studies*, 2. doi:https://www.researchgate.net/profile/Matthias Stepan/publication/284168630_Off_target_China%27s_vocational_education_and_training_system_threatens_the_country%27s_rise_to_industrial_superpower_status/links/564d98b308ae4988a7a45af0/Off-target-Chinasvocational-education-and-training-system-threatens-the-countrys-rise-to-industrialsuperpower-status.pdf
- Koch, R. (1989). *Vocational education in France--Structural problems and present efforts towards Reform. CEDEFOP Document*. Washington: European Centre for the Development of Vocational Training, Berlin (Germany).
- Korpi, T., & Mertens, A. (2003). Training systems and labor mobility: A comparison between Germany and Sweden. *Scandinavian Journal of Economics*, 105(4), 597-617. doi:<https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.0347-0520.2003.00005.x>
- Laczik, A., & Mayhew, K. (2015). Labour market developments and their significance for VET in England: Current concerns and debates. *Research in Comparative and International Education*, 10(4), 558-575. doi:<https://doi.org/10.1177%2F1745499915615974>
- Lam, T. (1956). *Giao duc moi [A new education]*. Vietnam: NXB Thanh Binh.

- Lane, J. (2005). *Apprenticeship in England, 1600-1914*. England: Routledge.
- Le, H. (2017). Cac sinh vien phai dao tao them sau khi tot nghiep [Graduates must be retrained]. Retrieved from laodong.vn website: <https://laodong.vn/viec-lam/sinh-vien-sau-khi-totnghiep-van-phai-dao-tao-them-583391.do> doi:<https://laodong.vn/viec-lam/sinh-vien-saukhi-tot-nghiep-van-phai-dao-tao-them-583391.do>
- Le, T. (2015). Thay doi nhan thuc chon nghe cho ca phu huynh va hoc sinh [Changing perception of students and their parents about vocational education]. *Vocational education* Retrieved from Thanhnien.vn website: <http://thanhnien.vn/giao-duc/thay-doi-nhan-thuc-chon-nghe-cho-cahoc-sinh-va-phu-huynh-527318.html>
- Le, T. N. (1980). *Chi thi cua thu tuong ve viec xay dung danh muc nha nuoc ve cac nghe cong nhan, nhan vien ky thuat va nghiep vu (Decree of Prime minister on building items of vocations for technicians, workers and professional staff)*. (25/CP). Vietnam: Le Thanh Nghi.
- Le, T. N. (1981d). *Quyết định về hướng nghiệp cho các học sinh THPT [Decision on directing careers for students in upper secondary schools]*. (48-BT). Vietnam: The Vietnamese government.
- Le, T. T. (2015). Tai cau truc he thong giao duc Vietnam: Thu gon hay coi noi (Restructure of Vietnamese educational system: Widen or narrow). Retrieved from vnexpress website: <http://vnexpress.net/tin-tuc/giao-duc/tai-cau-truc-giao-duc-viet-nam-thu-gon-hay-coi-noi3310221.html>
- Le, V. (2018). Doi moi chat luong giao duc nghe nghiep Vietnam: Mot nhu cau buc thiet [The Renewal of Vietnamese Vocational Education and Training System: An urgent requirement]
- Retrieved from baomoi.vn website: <https://baomoi.com/doi-moi-chat-luong-giao-duc-nghe-nghiepdoi-hoi-buc-thiet/c/27950743.epi>
- Le, V. T. (2000). *Ho Chi Minh toan tap (Ho Chi Minh in full)*. Hanoi: Nha Xuat Ban Chinh Tri Quoc Gia.
- Le, V. T. (2016). Su tro giup cua Lien Xo cho Vietnam (Assistance and support of the USSR for Vietnam). 2018. doi:<http://lichsu.tnus.edu.vn/chi-tiet/695-SU-CHI-VIEN-GIUP-DO-CUA-LIEN-XO-VOI-VIET-NAM-TRONG-CUOC-KHANG-CHIEN-CHONG-MY-CUU-NUOC-1954-1975>
- Le, V. T. (2017, 12.12.2018). Dao tao can bo Vietnam o Lien Xo [Vietnamese officials trained in the USSR]. Retrieved from <http://khoalichsu.ussh.vnu.edu.vn/dao-tao-can-bo-viet-nam-o-lien-xo-vai-nhan-dinh/>
- Lehmann, W. (2000). Is Germany's dual system still a model for Canadian youth apprenticeship initiatives? *Canadian Public Policy/Analyse de Politiques*, 225-240. doi:<https://www.jstor.org/stable/3552557>
- Li, J., & Pilz, M. (2017). Modularisation in the German VET system: A study of policy implementation. *Journal of Education and Work*, 30(5), 471-485. doi:<https://www.tandfonline.com/doi/pdf/10.1080/13639080.2016.1243233>
- London, J. D. (2006). Vietnam: The political economy of education in a "Socialist" periphery. *Asia Pacific Journal of Education*, 26(1), 1-20. doi:<https://doi.org/10.1080/02188790600607770>
- Luan, P. V. (2010). *Chuong trinh khung trung cap chuyen nghiep (Curriculum framework of secondary technical school)*. (16/2010). Vietnam: Bo truong bo giao duc Retrieved from https://bientap.vbpl.vn//FileData/TW/Lists/vbpg/Attachments/25450/VanBanGoc_16_2010_TT-BGD%C4%90T.pdf.
- Luong, N. (2000). Tinh hinh Vietnam 1954 -1965 (The context of Vietnam in the stage 1954 to 1965). In C. T. Q. Gia (Ed.), *Lich Su Vietnam Gian yeu*. Hanoi: Chinh Tri Quoc Gia.
- Lusk, B. (1997). Historical methodology for nursing research. *Image: The Journal of Nursing Scholarship*, 29(4), 355-360. doi:<https://sigmapubs.onlinelibrary.wiley.com/doi/pdf/10.1111/j.15475069.1997.tb01055.x>
- Luu, t. T. V. (2006). Cac lang nghe truyen thong dong bang Song Hong (Traditional handicraft villages in Red River). *Vien khoa hoc xa hoi Viet nam*, 2.

- doi:http://www.hids.hochiminhcity.gov.vn/c/document_library/get_file?uuid=a9d6f477a2e9-424f-bc3d-ff070626557b&groupId=13025 Malgorzata, K. F., Simon, . (2018). England: OECD.
- Mason, G., Prais, S., & Van Ark, B. (1992). Vocational education and productivity in the Netherlands and Britain. *National Institute Economic Review*, 140(1), 45-63. doi:<https://journals.sagepub.com/doi/pdf/10.1177/002795019214000104>
- Mason, R. O., McKenney, J. L., & Copeland, D. G. (1997). A historical method for MIS research: Steps and assumptions. *MIS quarterly*, 307-320. doi: 10.2307/249499
- McCulloch, G. R., William. (2000). *Historical research in educational settings*. United States of America: St Edmundsbury Press Ltd.
- Méhaut, P. (2006). *Key concepts and debates in the French VET system and labour market*. Paper presented at the Seminar “Developing a European Qualification Framework-Conceptual and Labour Market Questions”, King's college, London., London.
- Meroño, P., Albert, Ashkpour, A., Van Erp, M., Mandemakers, K., Breure, L., Scharnhorst, A., Van Harmelen, F. (2015). Semantic technologies for historical research: A survey. *Semantic Web*, 6(6), 539-564. doi:10.3233/SW-140158
- Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation*. USA: John Wiley & Sons.
- Michelsen, S., Olsen, O. J., & Høst, H. (2014). Origins and development of VET 1850–2008– An investigation into the Norwegian case. *Roskilde: Roskilde University*.
- Millicent, P. (1992). *Education and work*. Australia: Australian Council for Educational Research Ltd.
- Minh, T. (2017). Giao duc nghe nghiep dang dung truoc nhieu thach thuc [Vocational education and training facing many challenges]. Retrieved from infonet.vn website: <https://infonet.vn/giao-duc-nghe-nghiep-dang-dung-truoc-rat-nhieu-thach-thucpost249482.info>
- Ministry of National Education. (1958). *Chuong trinh trung hoc pho thong (The Secondary Curriculum)* Vietnam: South Vietnamese Government.
- Ministry of National Education. (1960). *Chuong trinh giao duc Vietnam cong hoa (The educational program of the Republican government)*. Viet Nam: Chinh Phu Vietnam Cong Hoa Retrieved from <https://sites.google.com/site/namkyluctinhorg/tac-gia-tac-pham/s-t-u-v/tran-vanchanh/chuong-trinh-giao-duc-va-sach-giao-khoa-thoi-viet-nam-cong-hoa>.
- Moc, T. (2017). Sinh vien ra truong duoi viec [Graduates difficult to be employed because of their weak skills of English]. Retrieved from Zing.vn website: <https://news.zing.vn/sinh-vien-duoiviec-vi-khong-noi-duoc-tieng-anh-post739052.html> doi:<https://news.zing.vn/sinh-vien-duoiviec-vi-khong-noi-duoc-tieng-anh-post739052.html>
- MOET. (2017). Tom luoc lich su phat trien giao duc va dao tao Vietnam [A Brief history of education and training in Vietnam) (Publication no. <https://bigschool.vn/tom-luoc-lich-su-phat-triengiao-duc-va-dao-tao-viet-nam>). Retrieved 21.12.2018, from bigschool.vn
- MOLISA. (2014). *Tom tat lich su phat trien day nghe Vietnam (A summary of the Vietnamese vocational educational history)*. Vietnam: MOLISA Retrieved from <http://gdnn.gov.vn/Default.aspx?tabid=82&IntroId=586>.
- MOLISA. (2017). *Bao cao dao tao nghe Viet nam 2016[Report on Vietnamese VET]*. Retrieved from Vietnam:<https://www.tvet-vietnam.org/vi/article/1410.báo-cáo-giáo-dục-nghề-nghiệp-việtnam-2016.html>
- Mustapha, R., & Abdullah, A. (2004). Malaysia transitions toward a knowledge-based economy. *Journal of Technology Studies*, 30(3), 51-61. doi:<https://files.eric.ed.gov/fulltext/EJ905143.pdf>
- National Office of Overseas Skills Recognition. (1992a). *France: A comparative study*. Australia: Department of Employment, Education and Training.
- National Office of Overseas Skills Recognition. (1992b). *Soviet Union: A comparative study*. Australia: Department of Employment, Education and Training.

- National Office of Overseas Skills Recognition. (1992). *United Kingdom: A comparative study*. Australia: Department of Employment, Education and Training.
- National Office of Overseas Skills Recognition. (1996a). *Malaysia: A comparative study*. Australia: Department of Employment, Education and Training.
- National Office of Overseas Skills Recognition. (1996b). *Vietnam: A comparative study*. Australia: Department of Employment, Education and Training.
- Newhouse, D., & Suryadarma, D. (2009). The value of vocational education: high school type and labor market outcomes in Indonesia. *Oxford University Press*.
doi:https://openknowledge.worldbank.org/bitstream/handle/10986/13476/wber_25_2_296.pdf?sequence=1
- Ngo, S. L. (1697). *Dai viet su ky toan thu (A history of Dai Viet)*. Vietnam: Khoa Hoc Xa Hoi.
- Nguyen, G. P. (1999). *Lich su giao duc Vietnam (History of Vietnamese education)*. Vietnam. In D. H. D. Lat (Ed.). doi:<https://tailieu.vn/doc/giao-trinh-lich-su-giao-duc-viet-nam-dh-da-lat-1690814.html>
- Nguyen, H. (1972). Hien tinh kinh te Vietnam [The Current Vietnamese economy]. In N. Huy (Ed.), *The Current Vietnamese Situation* (pp. 22). Vietnam: NXB Lua Thieng.
- Nguyen, H. L. (1952). *The he ngay mai (Tomorrow's generation)*. Vietnam: NXB Doi Moi.
- Nguyen, H. M. (2017). *Van ban quy pham phap luat ve day nghe [Legal Documents on Vocational Training]*. Vietnam: MOLISA.
- Nguyen, H. M. (2018). *Bao cao giao duc nghe nghiep Vietnam 2018 [Report on Vietnamese Vocational education and training 2018]*. Hanoi: Scientific Professional Institution
- Nguyen, M. C. (2015). Gia tri tu tuong cua Ho Chi Minh trong su nghiep giao duc - Dao tao con nguai Vietnam (Ideologies of Ho Chi Minh on Training the Vietnamese young generation) (Publication no. <https://voer.edu.vn/m/gia-tri-tu-tuong-cua-ho-chi-minh-trong-su-nghiepgiao-duc-dao-tao-con-nguai-viet-nam/eaeb61c1>). Retrieved 22.12.2018, from voer.edu.vn <https://voer.edu.vn/m/gia-tri-tu-tuong-cua-ho-chi-minh-trong-su-nghiep-giao-duc-dao-taocon-nguai-viet-nam/eaeb61c1>
- Nguyen, M. H. (2000). *Quyết định ban hành điều lệ trường trung học chuyên nghiệp [Decision on regulations of secondary technical schools]*. Vietnam: Bộ Giáo dục và đào tạo Retrieved from <http://vbpl.vn/bogiaoducdaotao/Pages/vbpg-toanvan.aspx?ItemID=6272>.
- Nguyen, M. H. (2005). Bao cao thuc hien ke hoach chien luoc giao duc 2001 -2005 (Report on implementation of the strategic plan for educational development during the period of 20012005). from MOET siteresources.worldbank.org
- Nguyen, N. T. (2002). Ky yeu trung cao dang cong chanh (Diary of public transport college). Retrieved from <http://www.aihuucongchanh.com/kycc.html>
- Nguyen, P. (2009). Truong ky thuat mien nam Vietnam [The Vietnamese southern technical schools before 1975]. Retrieved from <http://lientruongkythuat.org.au/index.php/truongxua/baiviet/2-nho-ve-truong-ky-thuat>
- Nguyen, P. T. (2013). *Nghi quyết trung ương số 29 [The resolution of the Vietnamese Communist Party's Central committee No 29]*. (29). Vietnam: Ban Chấp hành trung ương Retrieved from <https://thuvienphapluat.vn/van-ban/Thuong-mai/Nghi-quyet-29-NQ-TW-nam-2013-doimoi-can-ban-toan-dien-giao-duc-dao-tao-hoi-nhap-quoc-te-212441.aspx>.
- Nguyen, P. T. (2019). *Nghi quyết của trung ương đảng về cách mạng công nghiệp 4.0 (the Resolution of Vietnamese Communist Party's Central Committee on the Fourth Industrial Revolution)*. Vietnam: Vietnamnet.vn.
- Nguyen, Q. (2018). Hau het cac sinh vien Vietnam phai dao tao lai [Most of the Vietnamese graduates must retrain]. Retrieved from PLO.vn website: <https://plo.vn/xa-hoi/giao-duc/hau-het-svsau-khi-ra-truong-deu-phai-dao-tao-lai-805500.html> doi:<https://plo.vn/xa-hoi/giao-duc/hauhet-sv-sau-khi-ra-truong-deu-phai-dao-tao-lai-805500.html>

- Nguyen, Q. N. (2006). *Viet nam Tu 1975 Den nay [History of Viet Nam since 1975]*. Ha noi: NXB Giao Duc.
- Nguyen, Q. T. (1998). *Khoa cu va nen giao giuc Vietnam (Examinations and Education of Viet nam)*. Vietnam: NXB Van Hoa Han Noi.
- Nguyen, T. D. (2011). *Chien luoc phat trien kinh te xa hoi Viet Nam Giai Doan 2011-2020 [Strategy on developing the Vietnamese society and economy in the stage from 2011 to 2020]*. Vietnam: Vietnamese Government.
- Nguyen, T. D. (2011). *Quyết định chính phủ về phát triển nhân lực Việt Nam giai đoạn 2011 -2020 [Decision on developing the Vietnamese human resource in the stage from 2011 to 2020]*. (579). Vietnam: Vietnamese Government Retrieved from <https://thuvienphapluat.vn/vanban/Lao-dong-Tien-luong/Quyết-dinh-579-QĐ-TTg-phe-duyet-Chien-luoc-phat-trien-nhanluc-Viet-Nam-122715.aspx>.
- Nguyen, T. L. (2018). *Nen giao duc Mien Nam truoc 1975 (South Vietnam's VET before 1975)*. Retrieved from trithuc.vn website: <https://trithucvn.net/van-hoa/nen-giao-duc-mien-namtruoc-1975-trich-luoc.html>
- Nguyen, U. T. (2015). *Dia chi Thuy Nguyen - History of Thuy nguyen district*. Vietnam: NXB Hai Phong.
- Nguyen, V. B. (2014). *Nhin lai nen giao duc mien nam truoc 1975 (Reviewing South Vietnam's education before 1975)*. Retrieved from <https://docvui-suyngghi.net/tiengviet/vhv06/>
- Nguyen, V. H. (2002). *Su phat trien giao duc nghe Vietnam [Vietnamese Vocational Education Development]*. Vietnam: MOLISA.
- Nguyen, V. L. (1991). *Hoi nghi ban chap hanh trung uong khoa VII (The Seventh Congress of the Vietnamese Party Central Committee)*. Vietnam: Ban Chap Hanh Trung Uong Retrieved from <http://tulieuvankien.dangcongsan.vn/van-kien-tu-lieu-ve-dang/hoi-nghi-bch-trunguog/khoa-vii/phat-bieu-khai-mac-hoi-nghi-lan-thu-hai-ban-chap-hanh-trung-uong-khoa-viii1117>.
- Nguyen, X. P. (2016). *Khung trinh do quoc gia (the National Qualification Framework)*. (1982/QĐTTg). Vietnam: Prime Minsiter Retrieved from <https://thuvienphapluat.vn/van-ban/giaoduc/Quyết-dinh-1982-QĐ-TTg-phe-duyet-khung-trinh-do-quoc-gia-Viet-Nam-2016327841.aspx>.
- Nguyen, X. P. (2017). *Quyết định về chức năng, nhiệm vụ và quyền hạn của DVET [Decision on fuction, duties, power, and structure of Directorate of Vocational Education and Training]*. Vietnam: Thu tuong chinh phu Retrieved from <https://thuvienphapluat.vn/van-ban/Giao-duc/Quyết-dinh-29-2017-QĐ-TTg-chuc-nang-nhiem-vu-quyen-han-co-cau-Tong-cuc-Giao-duc-nghenghiiep-333815.aspx>.
- Nong, D. M. (1998). *Luat giao duc Viet Nam 1998 [Law of Vietnamese Education]*. Vietnam: Quoc Hoi Viet nam.
- Nyen, T., & Tonder, A. H. (2016). Vocational education and training in Norway: Growth in apprenticeships. 技術教育学の探究= *Bulletin of Institute of Technology and Vocational Education*(15), 19-25. doi:file:///C:/Users/c3212575/Downloads/bulitv_15_19.pdf
- Olsen, O. J., Høst, H., & Tønder, A. H. (2014). *Key challenges for Norwegian VET: The state of play*. Denmark: Nord-VET.
- Papong, E. (2014). The influence of John Dewey's educational thought on Philippine education. *Bulgarian Journal of Science and Education Policy*, 8(1), 62. doi:<http://eds.a.ebscohost.com/eds/pdfviewer/pdfviewer>
- Parkes, D. (1993). Is British VET out of step?. *Management in Education*, 7(4), 29-31. doi:<https://journals.sagepub.com/doi/pdf/10.1177/089202069300700415>
- Pham & Pham, T. N. (2006). Public attitudes toward a market economy in Vietnam In *Citizens, Democracy and Markets around the Pacific Rim* (pp. 6). Oxford: Oxford University Press.

- Pham, B. M. (2012). Ngoai giao Vietnam dat den tam cao moi [Vietnamese diplomacy reaches new peak]. Retrieved from <http://congly.vn/thoi-su/thoi-cuoc/ngoi-giao-viet-nam-vuon-toinhung-tam-cao-moi-11816.html>
- Pham, C. S. (2004). *Lang nghe truyen thong Viet Nam (the Vietnamese Traditional Handicraft Villages)*. Vietnam: NXB Van Hoa Dan Toc.
- Pham, D. T. (2013). Lich su giao duc pho thong o dong bang song Cuu Long 1975 -2000 [Summary of secondary education history in South Vietnam from 1975 to 2000]. *Tap Chi Khoa Hoc Dai Hoc Can tho*, 6. doi:file:///C:/Users/c3212575/Downloads/trongtruong_so25c_04.pdf
- Pham, V. D. (1979). *Chi thi cua Thu tuong chinh phu ve day manh nguyen ly giao duc hoc tap ket hop san xuat (Statement of Prime Minister on boosting educational principle of learning with producing)*. (309). Vietnam: Vietnamese Government.
- Pham, V. D. (1979a). *Quyết định của hội đồng chính phủ về hệ thống giáo dục phổ thông mới (The decision of the Vietnamese government on the new national education system)*. Vietnam: Pham Van Dong.
- Phan, V. K. (1997). *Quyết định của thủ tướng chính phủ về việc xây dựng chiến lược phát triển giáo dục nghề Việt nam đến năm 2020 [The Decision of Prime Minister on building the strategy developing Vietnamese VET by 2020]*. Vietnam: Thủ tướng chính phủ Retrieved from <http://vbpl.vn/bogiaoducdaotao/Pages/vbpbq-toanvan.aspx?ItemID=8456>.
- Phillips, D. (1995). *Education in Germany: Tradition and reform in historical context*. London and Newyork: Routledge.
- Pike, D. (1977). Vietnam during 1976: Economics in command. *Asian Survey*, 17(1), 34-42. doi:<https://www.jstor.org/stable/pdf/2643438.pdf?refreqid=excelsior%3Abf3510063541ecf959f05a6d68e06b>
- Pool, M. (1992). *Education and work*. Australia: the Australian Council for Educational Research Ltd.
- Prais, S., & Steedman, H. (1986). Vocational training in France and Britain: the building trades. *National Institute Economic Review*, 116(1), 45-55. doi:<https://doi.org/10.1177%2F002795018611600106>
- Prince, J. D. (1904). The code of Hammurabi. In. the USA: University of Chicago Press.
- Prybyla, J. S. (1966). Soviet and China 's economic aid to North Vietnam. *The China Quarterly*, 27, 84100. doi:<https://doi.org/10.1017/S0305741000021706>
- Rasul, M. S., Ashari, Z. H. M., Azman, N., & Abdul Rauf, R. (2015). Transforming TVET in Malaysia: Harmonizing the governance structure in a multiple stakeholder setting. *TVET@ Asia*, 4, 1-12. doi:https://www.researchgate.net/profile/Norzaini_Azman/publication/283624938_Transforming_TVET_in_Malaysia_Harmonizing_the_Governance_Structure_in_a_Multiple_Stakeholder_Setting/links/5641b48d08ae24cd3e425d18/Transforming-TVET-in-Malaysia-Harmonizing-the-Governance-Structure-in-a-Multiple-Stakeholder-Setting.pdf
- Rauner, F., & Maclean, R. (2008). *Handbook of technical and vocational education and training research* (Vol. 49). Germany: Springer.
- Ryan, P., Gospel, H., & Lewis, P. (2006). Educational and contractual attributes of the apprenticeship programmes of large employers in Britain. *Journal of Vocational Education and Training*, 58(3), 359-383. doi:<https://www.tandfonline.com/doi/pdf/10.1080/13636820600955807>
- Ryan, P., & Unwin, L. (2001). Apprenticeship in the British 'training market'. *National Institute Economic Review*, 178(1), 99-114. doi:<https://journals.sagepub.com/doi/pdf/10.1177/002795010117800114>
- Sanderson, M. (1967). Education and the factory in industrial lancashire, 1780-1840. *The Economic History Review*, 20(2), 266-279.
- Shabad, T. (1958). Economic Developments in North Vietnam. *Pacific Affairs*, 31(1), 36-53. doi:10.2307/2753681
- Snedden, D. (1910). *The problem of vocational education*: Houghton Mifflin.

- Solga, H., Protsch, P., Ebner, C., & Brzinsky-Fay, C. (2014). *The German vocational education and training system: Its institutional configuration, strengths, and challenges*. Retrieved from German: <https://www.econstor.eu/bitstream/10419/104536/1/805013571.pdf>
- Steedman, H. (1988). Vocational training in France and Britain: Mechanical and electrical craftsmen. *National Institute Economic Review*, 126(1), 57-70. doi:<https://journals.sagepub.com/doi/pdf/10.1177/002795018812600107>
- Steedman, H. (2005). *Apprenticeship in Europe: 'fading' or flourishing?* London, UK: Centre for Economic Performance, London School of Economics and Political ...
- Steedman, H., Gospel, H., & Ryan, P. (1998). *Apprenticeship: A Strategy for growth*. doi:<https://files.eric.ed.gov/fulltext/ED470912.pdf>
- Stephen, J. W., William. (2005). *Research methods in Education: An Introduction*. Boston: Pearson Education, Inc.
- Stewart, V. (2015). *Made in China: Challenge and innovation in China's vocational education and training system. International Comparative Study of Leading Vocational Education Systems*. Retrieved from Washington, USA: <https://files.eric.ed.gov/fulltext/ED556319.pdf>
- Streeck, W., Hilbert, J., van Kevelaer, K.-H., Maier, F., & Weber, H. (1987). *The role of the social partners in vocational training and further training in the Federal Republic of Germany*. Berlin, Germany: European Centre for the Development of Vocational Training
- Szylowski, R. A. (2008). *Expansion of the Vietnamese handicraft industry: From local to global*. (Master), Ohio University, United States of America. Retrieved from https://etd.ohiolink.edu/%21etd.send_file?accession=ohiou1218497546&disposition=inline
- Thai, P. (1941). *Mot nen giao duc moi (A new education)* (h. s. nguyen, Trans.). Hanoi: Nha Xuat Ban Doi Moi.
- The North Vietnamese National Assembly. (1959). *Hien phap Vietnam (The Vietnamese Constitution 1959)*. Vietnam: Quoc Hoi Vietnam Retrieved from <https://thuvienphapluat.vn/van-ban/Bomay-hanh-chinh/Hien-phap-1959-Viet-Nam-Dan-Chu-Cong-Hoa-36855.aspx>.
- The Vietnamese Communist Party 's Central Committee. (1996). *Hoi nghi trung uong lan thu X (The Vietnamese Party Central Committee's Congress X)*. Vietnam: Ban chap Hanh Trung Uong Retrieved from <http://quochoi.vn/tulieuquochoi/anpham/Pages/anpham.aspx?AnPhamItemID=2391>.
- The Vietnamese Communist Party. (1983). *Mot so van kien cua trung uong dang va hoi dong bo truong ve cong tac khoa giao (A number of the National Statements on Education and Vocational Training)* (H. S. Nguyen, Trans. B. K. G. T. Uong Ed.). Vietnam: Nha Xuat Ban su that.
- The Vietnamese government. (1980). *Chi thi cua Thu tuong ve tang cuong to chuc doi song trong cac truong dai hoc, cao dang, va trung cap nghe [Decrative of Prime Minister on enhancing the standards of life in universities, colleges and technical secondary schools]*. Vietnam: Thu tuong chinh phu Retrieved from <http://vbpl.vn/bogiaoducdaotao/Pages/vbpgtoanvan.aspx?ItemID=1419>.
- The Vietnamese government. (1981a). *Quyết Định của hội đồng chính phủ về hệ thống giáo dục phổ thông mới [The Decision of the Government Council on the new National Education System]*. Vietnam: Hội Đồng Chính Phủ Retrieved from <https://thukyluat.vn/vb/quyet-dinh-135-cp-hethong-giao-duc-pho-thong-moi-1981-a82d.html>.
- The Vietnamese government. (1981b). *Nghi quyết của hội đồng chính phủ về nhiệm vụ, phương hướng, chủ trương và biện pháp phát triển công tác dạy nghề [The Resolution of Government on duties, directions, and solutions for developing vocational education]*. (109). Vietnam: Hội Đồng Chính Phủ.
- The Vietnamese government. (1981c). *Quyết định của hội đồng chính phủ về giáo dục nghề nghiệp [Decision of Prime Minister on Vocational Education]*. Vietnam: Hội Đồng Chính Phủ.

- The Vietnamese government. (1981e). *Quyết định về việc thành lập hội đồng giáo dục các cấp [the Decision on establishing the council of VET at all levels]*. Vietnam: Hội đồng chính phủ Retrieved from <http://vbpl.vn/bogiaoducdaotao/Pages/vbpq-toanvan.aspx?ItemID=4054>.
- The Vietnamese government. (1992). *Chỉ thị của chủ tịch hội đồng bộ trưởng về một số vấn đề cấp bách trong công tác giáo dục và đào tạo [Directive of the Prime Minister on urgent issues of VET]*. (287). Vietnam: Thủ tướng chính phủ Retrieved from <http://vbpl.vn/bogiaoducdaotao/Pages/vbpq-toanvan.aspx?ItemID=11134>.
- The Vietnamese government. (2001). *Chiến lược Phát triển giáo dục Việt Nam giai đoạn 2001-2010 [Strategy for developing Vietnamese education stage 2001-2010]*. (201). Vietnam: Vietnamese Government Retrieved from <https://thuvienphapluat.vn/van-ban/Giao-duc/Quyết-dinh-2012001-QĐ-TTg-phe-duyet-Chien-luoc-phat-trien-giao-duc-2001-2010-48949.aspx>.
- The Vietnamese Government. (2011). *Chiến lược phát triển giáo dục Việt Nam 2011-2020 [Strategy on developing Vietnamese education stage 2011-2020]*. Vietnam: The Vietnamese Government Retrieved from <https://thuvienphapluat.vn/van-ban/Giao-duc/Quyết-dinh-711QĐ-TTg-nam-2012-Chien-luoc-phat-trien-giao-duc-2011-2020-141203.aspx>.
- The Vietnamese Government. (2012). *Chiến lược phát triển giáo dục dạy nghề Việt Nam giai đoạn 2011-2020 (Strategy for Developing Vocational Education and Training stage of 2011 to 2020)*. Vietnam: Vietnamese Government Retrieved from http://vanban.chinhphu.vn/portal/page/portal/chinhphu/hethongvanban?class_id=2&page=1&mode=detail&document_id=159647.
- The Vietnamese National Assembly. (2005). *Luật giáo dục Việt Nam 2005 [Law of Education 2005]*. (38). Vietnam: Quốc Hội Việt Nam Retrieved from <https://thuvienphapluat.vn/van-ban/giaoduc/Luat-Giao-duc-2005-38-2005-QH11-2636.aspx>.
- The Vietnamese National Assembly. (2006a). *Luật dạy nghề Việt Nam 2006 [Law of the Vietnamese Vocational Training and Education 2006]*. (76/2006). Vietnam: Chính phủ Việt Nam Retrieved from http://vanban.chinhphu.vn/portal/page/portal/chinhphu/hethongvanban?class_id=1&mode=detail&document_id=29575.
- The Vietnamese National Assembly. (2014). *Luật giáo dục nghề nghiệp Việt Nam 2014 [The Vietnamese Law of Vocational Education 2014]*. Vietnam: Quốc Hội Việt Nam.
- The Vietnamese National Assembly. (2014). *Luật giáo dục Việt Nam 2014 [The Vietnamese Law of Education]*. Hanoi: Quốc Hội Việt Nam Retrieved from <https://thuvienphapluat.vn/vanban/lao-dong-tien-luong/luat-giao-duc-nghe-nghiep-2014-259733.aspx>.
- The Vietnamese National Government. (1949). *Chương trình trung học phổ thông (The Secondary Curriculum of the Vietnamese national Government)*. Vietnam: The National government.
- The Vietnamese Party's Central Committee. (1976). *Hội nghị trung ương lần thứ IV [The Fourth National Congress]*. Vietnam: Ban Chấp Hành Trung Ương Retrieved from <http://tulieuvankien.dangcongsan.vn/ban-chap-hanh-trung-uong-dang/dai-hoi-dang/lanthu-iv/dai-hoi-dai-bieu-toan-quoc-lan-thu-iv-cua-dang-22>.
- The Vietnamese Party Central Committee. (2006). *Hội nghị Trung Ương lần thứ X [The Vietnamese Party Central Committee Congress X]*. (01). Vietnam: Ban Chấp hành Trung Ương Retrieved from <http://tulieuvankien.dangcongsan.vn/van-kien-tu-lieu-ve-dang/hoi-nghi-bch-trunguong/khoa-x/nghe-quyet-so-01-nqtw-ngay-2542006-hoi-nghi-lan-thu-nhat-ban-chap-hanh-trung-uong-dang-khoa-x-600>.
- The Vietnamese Party Central Committee. (2011). *Hội nghị ban chấp hành trung ương khóa XI [The Vietnamese Party Central Committee Congress XI]*. Vietnam: Ban Chấp Hành Trung Ương Retrieved from <http://tulieuvankien.dangcongsan.vn/van-kien-tu-lieu-ve-dang/hoi-nghi-bch-trung-uong/khoa-xi/thong-bao-hoi-nghi-lan-thu-11-ban-chap-hanh-trung-uong-dang-khoaxi-599>.

- Thies, W. J., & Thies, W. J. (1980). *When governments collide: Coercion and diplomacy in the Vietnam conflict, 1964-1968*: University of California Press.
- Tomiak, J. J. (Ed.) (1983). *Soviet education in the 1980s*. Australia: Croom Helm Ltd, Provident House, Burrell Row.
- Tran, B. S. (2004). *Nen giao duc Vietnam duoi che do Cong San 1954 -1975 (The Vietnamese Education under the Communist government 1954 -1975)*. Retrieved from <https://www.vietthuc.org>
- Tran, B. S. (2010). *Nen giao duc Vietnam duoi chinh the quoc gia [The Southern Vietnamese Education under the Republic Government]*. *Vietthuc.org*. Retrieved from <https://www.vietthuc.org>
doi:<https://www.vietthuc.org>
- Tran, H. P. (2000). Vietnamese higher education at the intersection of French and Soviet influences. doi:<https://elibrary.ru/item.asp?id=5462882>
- Tran, H. Q. (1994). *Thong tu huong dan quan ly ngan sach giao duc [Decree on management of educational budget]*. Viet nam: Bo giao duc va dao tao Retrieved from <http://vbpl.vn/bogiaoducdaotao/Pages/vbpg-toanvan.aspx?ItemID=10350>.
- Tran, T. N. (2016). Summary of South Vietnam's education during the period of 1954 to 1975. *Educational Article*, 9-16. doi:http://iemh.edu.vn/UploadFile/files/2_%20TranThanhNguyen%20-BT1.pdf
- Tran, V. C. (2017). *Giao duc Mien Nam tren duong xay dung va phat trien [South Vietnam's Education on the Developing Way]*. *Van Hoc Va Ngon Ngu*. doi:<http://khoavanhocngonngu.edu.vn/nghien-cuu/giao-duc/6397>
- Tremblay, D.-G., & Le Bot, I. (2000). The German dual apprenticeship system: An analysis of Its evolution and present challenges. doi:<https://files.eric.ed.gov/fulltext/ED461048.pdf>
- Trinh, D. T. (2016). *Lich su Vietnam lop 9 (History of Vietnam for Class 9)*. Vietnam: Nha Xuat Ban Quoc Gia.
- Truong, H. Q. (2008). *Dai cuong Lich Su Vietnam (A history of Vietnam in full)* (D. X. L. Truong Huu Quynh, La Mau Han Ed.). Vietnam: Educational publisher.
- Varsori, G. (2004). *Towards a history of vocational education and training (VET) in Europe in a comparative perspective: proceedings of the first international conference October 2002, Florence*. European: Office for Official Publications of the European Communities.
- Vnexpress. (2015). *Hang loat truong nghe hoat dong cam chung (Series of vocational schools run ineffectively)*. Retrieved 08/04/2016, from *Giao duc* <http://vnexpress.net/tin-tuc/giaoduc/hang-loat-truong-nghe-hoat-dong-cam-chung-3133821.html>
- Vuong, Q.-H. (2011). Vietnam's economic history: The Feudalism System. <https://worldview.stratfor.com/article/vietnams-economic-history-feudalism-system>
- West, J., & Steedman, H. (2003). *Finding our way: vocational education in England*. London, England: Centre for Economic Performance, London School of Economics and Political.
- Winterton, J. (2000). Social dialogue over vocational training in market-led systems. *International Journal of Training and Development*, 4(1), 26-41. doi:<https://doi.org/10.1111/14682419.00094>
- Woodside, A. (1983). The triumphs and failures of mass education in Vietnam. *Pacific Affairs*, 56(3), 401-427. doi:<https://www.jstor.org/stable/pdf/2758190.pdf>
- Wright, S. (2002). Language education and foreign relations in Vietnam. *Language policies in education: Critical issues*, 225-244. doi:<http://www.nzdl.org/gsd/collect/literatu/index/assoc/HASH01f4.dir/doc.pdf> Wu, X., & Ye, Y. (2018). *Technical and vocational education in China*: Springer.
- Yamaoka, K. (2009). The Feasibility of Cuban market economy: A comparison with Vietnam. *Institute of Developing Economies, Japan External Trade Organization*. doi:<http://hdl.handle.net/2344/832>

- Yunos, J., Ahmad, W., Kaprawi, N., Razally, W., & Onn, K. U. T. T. H. (2006). *System of technical & vocational education & training in Malaysia (TVET)*. Paper presented at the 2nd International TT-TVET EU-Asia-Link project Meeting, VEDC Malang.
- Zain, Z. M. (2008). TVET in Malaysia. *University of Malaysia Perlis*, 2008-2012. doi:https://www.researchgate.net/profile/Zuraidah_Zain/publication/267992469_TVET_in_Malaysia/links/55960ed608ae99aa62c747d0/TVET-in-Malaysia.pdf
- Zhang, W., Hu, X., & Pope, M. (2002). The evolution of career guidance and counseling in the People's Republic of China. *The Career Development Quarterly*, 50(3), 226-236. doi:<https://doi.org/10.1002/j.2161-0045.2002.tb00898.x>

Appendix A

FACULTY OF EDUCATION AND ARTS

Professor James Albright
School of Education and Arts
The University of Newcastle
University Drive, Callaghan, NSW 2308, Australia
Phone: (+61) 2 49216738
Email: James.Albright@newcastle.edu.au



Doctor Maura Sellars
School of Education Faculty
of Education and Arts
The University of Newcastle
University Drive, Callaghan, NSW 2308, Australia
Phone: (+61) 2 49217919
Email: Maura.Sellars@newcastle.edu.au

Consent Form for Organization

Thesis: History of Vietnamese Vocational Education since 1954
Prof. James Albright Dr. Maura Sellars Mr. Song Hien Nguyen
Principal supervisor Co- supervisor Research student

Document version 2, dated 29/05/2018

I agree for you to access to my organization in order to collect data for the research. Yes No

I understand that the research will be conducted as described in the Information Statement, a copy of which I have retained.

I understand that my staff can withdraw from the research anytime and do not have to give any reason for withdrawing.

I consent to (please tick):

Allow you access to my staff Yes No

Allow you access to relevant organization documents to the research Yes No

I understand that my organization will remain confidential to the researchers.

I would like to receive a summary of the findings after the research is concluded Yes • No

Print Name:

Signature: _____ Date: / / 2018 Please
provide contact details below if you would like to receive a summary of the findings after
the research is concluded.

Appendix B

FACULTY OF EDUCATION AND ARTS

Professor James Albright School of Education and Arts
The University of Newcastle
University Drive, Callaghan, NSW 2308, Australia
Phone: (+61) 2 49216738
Email: James.Albright@newcastle.edu.au



Doctor Maura Sellars School
of Education
Faculty of Education and Arts
The University of Newcastle
University Drive, Callaghan, NSW 2308, Australia
Phone: (+61) 2 49217919
Email: Maura.Sellars@newcastle.edu.au

Information Statement for Organization

Thesis: History of Vietnamese Vocational Education since 1954

Document Version 2; dated 29/05/2018

You are asked to allow your staff to participate in the research identified above which is being conducted by Song Hien Nguyen, a Master Philosophy candidate from the School of Education, Faculty of Education and Arts at the University of Newcastle.

The research is part of Song Hien Nguyen's studies at the University of Newcastle, supervised by Professor James Albright from the School of Education, Faculty of Education and Arts, and co-supervised by Doctor Maura Sellars.

Why is the research being done?

The purpose of the research is to construct a history of Vocational Intermediate Education (VIE). This history will inform current policy and provision of VIE within the Vietnamese education system to understand its past and current challenges. This research may provide policy makers, educators, and administrators with an overall review of Vietnamese vocational educational development throughout its four historic periods.

Who can participate in the research?

Officers of Ministry of Labour, Invalid and Social Affairs (MOLISA) and Ministry of Education and Training (MOET), and policy makers of Vocational Education and Training (VET) have been identified as initial potential participants. Similarly, current directors of Department of Labour, Invalid and Social Affairs (DOLISA) in Vietnam's 18 provinces and

cities have been also identified as initial potential participants. Current principals of vocational intermediate school and vocational college upgraded from vocational intermediate schools in Vietnam's 18 provinces and cities will be selected to participate.

What choice do your staff have?

Participation in this research is entirely a matter of their choice. Only those people who give the informed consent will be included in the research. Whether or not they decide to participate, their decision will not disadvantage you or your organization.

If they do decide to participate, they may withdraw from the research at any time without giving a reason and have the option of withdrawing any data which identifies them.

What are the risks and benefits of participating?

We cannot promise you and your organization any direct benefits from participating in this research. However, the results of this research will contribute to building the knowledge and policy base necessary to support change in Vietnamese vocational education system. This study may provide vocational education policy makers, educators, and administrators with an appreciation of its development through Vietnam's key historical periods since independence. The historical framing of current VIE challenges and practices may contribute to meeting the Vietnamese government's industrialisation and modernisation goals. All participants and your organization will not be identified by name and will be coded by number so will not have any risk identified.

What would your staff be asked to do?

They will be asked to take part in a recorded interview and share the information statement of the research with colleagues who may be interested in this research. They will also be asked to consider allowing the researcher access to relevant organization documents. They will be asked to forward the information statement to colleagues who may wish to approach the researcher to become subsequent potential participants.

How much time will it take?

Interview will take about 30-45 minutes. The interview will occur outside normal work at a place agreeing with the participants.

How will your privacy be protected?

All information of participants in this research will be coded by number and participants' institutional location will also be coded to ensure the privacy.

How will the information collected be used?

Collected data through documents from your organization will be only used in this research. In specific, it will be used to solve the research questions as presented in the

researcher's research proposal. The collected data will be transcribed into text data and then be analysed as shown in the part of methodology in the research proposal.

What do you need to do?

Please read this Information Statement and be sure you understand its contents before you allow your staff to participate. When you finish your consent form and return it to the researcher's email, the researcher will contact with your staff through their own email or contact number and arrange reasonable time and place for an interview. The researcher will also ask you to provide relevant documents and how to collect these documents. After 5 years, all data will be destroyed.

Complaints statement

If there is anything you do not understand, or you have questions, feel free to contact via the researcher's email.

When the research is concluded in December, 2019, a summary of findings will be sent to you if you request. Please contact through the researcher's email:

songhien.nguyen@uon.edu.au.

Further information

If you would like further information please contact Prof. James Albright:

Phone: (+61) 2 49216738

Email: James. Albright@newcastle.edu.au

Thank you for your kind consideration of this invitation.

Professor James Albright

Principal Supervisor

Doctor Maura Sellars

Co-Supervisor

Song Hien Nguyen

Research student

Appendix C

FACULTY OF EDUCATION AND ARTS

Professor James Albright Doctor Maura Sellars
School of Education Faculty of Education and Arts
The University of Newcastle
University Drive, Callaghan, NSW 2308, Australia
Phone: (+61) 2 49216738
Phone: (+61) 2 49217919
Email: James.Albright@newcastle.edu.au
Email: Maura.Sellars@newcastle.edu.au



Consent Form for Potential Participants

Thesis: History of Vietnamese Vocational Education since 1954

Prof. James Albright Dr. Maura Sellars Mr. Song Hien Nguyen

Principal supervisor Co-supervisor Research student

Document version 2, dated 22/05/2018

I agree to participate in the above research and give my consent freely to take part in the recorded interview.

I understand that the research will be conducted as described in the Information Statement, a copy of which I have retained.

I agree to share the information statement of the research with my colleagues

I understand I can withdraw from the research anytime and do not have to give any reason for withdrawing.

I consent to (please tick):

Participate in an interview and have it recorded Yes No

Share relevant organization documents to the research Yes No

I understand that my personal information will remain confidential to the researchers.

I will have the chance to review the recording of the interview.

I have had the opportunity to have questions answered to my satisfaction.

I have had the opportunity to amend, change, omit, clarify or delete the recording of the interview.

I would like to receive a summary of the findings after the research is concluded Yes • No

Print Name: _____

Signature: _____ Date: / / 2018

Please provide contact details below for the interview arrangement if you would like to participate in the research.

Phone number: _____ Email address: _____

Appendix D

FACULTY OF EDUCATION AND ARTS

Professor James Albright
Doctor Maura Sellars School of Education
Faculty of Education and Arts
The University of Newcastle
University Drive, Callaghan, NSW 2308, Australia
Phone: (+61) 2 49216738
Phone: (+61) 2 49217919
Email: James.Albright@newcastle.edu.au Email:
Maura.Sellars@newcastle.edu.au



Information Statement for Participants

Thesis: History of Vietnamese Vocational Education since 1954

Document Version 2; dated 22/05/2018

You are invited to participate in the research identified above which is being conducted by Song Hien Nguyen, a M. Phil candidate from the School of Education, Faculty of Education and Arts at the University of Newcastle.

The research is part of Song Hien Nguyen's studies at the University of Newcastle, supervised by Professor James Albright from the School of Education, Faculty of Education and Arts, and co-supervised by Doctor Maura Sellars.

Why is the research being done?

The purpose of the research is to examine the history of Vocational Intermediate Education (VIE). This history will inform current policy and provision of VIE within the Vietnamese education system to understand its past and current challenges. This study may provide policymakers, educators, and administrators with an overall review of Vietnamese vocational educational development throughout its four historic periods.

Who can participate in the research?

Officers of Ministry of Labour, Invalid and Social Affairs (MOLISA) and Ministry of Education and Training (MOET), and policymakers of Vocational Education and Training (VET) have been identified as initial potential participants. Similarly, current directors of the Department of Labour, Invalid and Social Affairs (DOLISA) in Vietnam's 18 provinces and cities have been also identified as initial potential participants. Current principals of the vocational intermediate school and vocational college upgraded from vocational intermediate schools in Vietnam's 18 provinces and cities have also been identified.

What choice do you have?

Participation in this research is entirely a matter of your choice. Only those people who give the informed consent will be included in the research. Whether or not you decide to participate, your decision will not disadvantage you or your organization.

If you do decide to participate, you may withdraw from the research at any time without giving a reason and have the option of withdrawing any data which identifies you.

What would you be asked to do?

You will be asked to take part in a recorded interview and share the information statement of the research with colleagues who may be interested in this research. You will also be asked to consider allowing the researcher access to relevant organization documents to the research. You will be asked to recommend subsequent potential participants contact independently with the researcher.

How much time will it take?

Interview will take about 30-45 minutes. The interview will occur outside normal work at a place agreeing with the participants.

What are the risks and benefits of participating?

We cannot promise you and subsequent participants any direct benefits from participating in this research. However, the results of this research will contribute to building the knowledge and policy base necessary to support change in Vietnamese vocational education system. This study may provide vocational education policymakers, educators, and administrators with an appreciation of its development through Vietnam's key historical periods since independence. The historical framing of current VIE challenges and practices may contribute to meeting the Vietnamese government's industrialisation and modernisation goals. All participants will not be identified by name and will be coded by number so will not have any risk identified.

How will your privacy be protected?

All participants in this research will be coded by number and participants' institutional location will be not identified to ensure their privacy. For example, participants who are officers of MOLISA will be coded by MOL and number such as MOL1, MOL2... and participants who are officers of MOET will be coded by MOE and number such as MOE 1, MOET 2...Participants who are directors of DOLISA will be coded by DOL and number such as DOL1, DOL 2....and participants who are Principals of Vocational Intermediate Schools (VIS) will be coded by PVIS and number such as PVIS1, PVIS2....and participants who are

Principles of Vocational colleges (PVC) will be coded by PVC and number such as PVC1, PVC2....Participants who are Teachers of Vocational Intermediate Schools (VIS) will be coded by TVIS and number such as TVIS 1, TVIS 2...and Participants who are Teachers of Vocational Colleges (TVC) will be coded by TVC and number such as TVC 1, TVC2...

Coding themes will not identify name and institutions of participants. Government documents from MOLISA and MOET which are public will be identified by the name of author and organization. Local documents such as principle level will be identified by institutional location.

After finishing the interview transcription, the researcher will give you a hard copy of interview transcript to revise what you told. You have a right to amend, clarify, change, or delete what you told.

How will the information collected be used?

Collected data through interviewing and documents from participants will be only used in this research. In specific, it will be used to solve the research questions as presented in the researcher's research proposal. The collected data will be transcribed into text data and then be analysed by hand as shown in the part of methodology in the research proposal.

What do you need to do to participate?

Please read this Information Statement and be sure you understand its contents before you consent to participate. When you finish your consent form and return it to the researcher, the researcher will contact with you through your own email or contact number and arrange an interview. If there is anything you do not understand, or you have questions, feel free to contact the researcher.

When the research is concluded in December 2019, a summary of findings will be sent to you if you request. Please contact the researcher's email:

songhien.nguyen@uon.edu.au.

Further information

If you would like further information please contact Prof. James Albright:

Phone: (+61) 2 49216738

Email: James. Albright@newcastle.edu.au

Thank you for your kind consideration of this invitation.

Professor James Albright Doctor Maura Sellars Song Hien Nguyen

Principal Supervisor Co-supervisor Research student

Appendix E

Documents that comprised the corpus for a period of the Vietnamese VET before 1954

Name	Date	Publisher	Author	Primary (P) Secondary (s)
Cac Lang Nghe Truyen Thong Dong Bang Song Hong (Traditional Handicraft Villages in Red River)	2006	Vien khoa hoc xa hoi va nhan van	Tuyet Van, Luu	P
Cac Tieu Chi Lang Nghe (Standards of the Traditional Handicraft Villages)	2006	Ministry of Agriculture and Rural Issues	Kinh Tan, Diep	P
Lich su Giao Duc Viet nam (A history of Vietnamese Education)	2015	Nha Nam & NXB The Gioi	Duy Anh, Dao	P
Dai Nam Nhat Thong Chi (A history of Dai nam)	2006	Thuan Hoa	Duy Anh, Dao	P
Dai cuong Lich Su Vietnam (A History of Vietnam in full)	2008	The Vietnamese educational pulisher	Huu Quynh, Truong	P
Tom tat Lich Su Phat Trien day Nghe Vietnam (A Summary of the Vietnamese Vocational Educational	2014	Tong cuc day nghe	MOLISA	S

Name	Date	Publisher	Author	Primary (P) Secondary (s)
history)				
So Luoc Lich Su Phat Trien Giao Duc Nghe Vietnam (A summer of Vietnamese Vocational Education Development)	2002	Tong cuc day nghe	Van Hoang, Nguyen	S
Lang Nghe Truyen Thong Viet Nam (the Vietnamese Traditional Handicraft Villages)	2004	NXB Van Hoa Dan Toc	Cong Son, Pham	p
Lich Su Gian Luoc Hon 1000 nam Nen Giao Duc Viet Nam (A summary of the Vietnamese Educational History over 1000 years)	2003	NXB Quoc Gia	Van Giang, Le	S
Lich su truong Cao dang Cao Thang-110 nam (Cao Thang Technical College-A history of 110 Years)	2016	NXB Tre	Khanh Du, Dao	p

Chuong Trinh va Sach Giao Khoa Trung Hoc (The Secondary Education Curriculum)	1945	Bo giao duc quoc gia	The Vietnamese National government	P
---	------	----------------------	------------------------------------	---

Name	Date	Publisher	Author	Primary (P) Secondary (s)
Hien Phap Viet Nam (Vietnamese Constitution 1946)	1946	The Northern Vietnamese National Assembly	The Democratic Republican government	P
Mot Nen Giao Duc Moi (A new education)	1941	NXB Doi Moi	Thai, Phi	P
A History of the Vietnamese	2013	Cambridge University Press	Taylor, Keith Weller	P
The He Ngay Mai (Tomorrow's generation)	1952	NXB Doi Moi	Nguyen, Hien Le	P
Dai Viet Su Ky Toan Thu (A history of Dai Viet)	1697	Khoa hoc xa hoi	Ngo, Sy Lien	P

Thi Cu va Giao duc Viet nam thoi Phap thuoc (Examination and Education in Vietnam under the French colonial)	2018	nghiencuuquocte.org	Tran, Bich San	P
Handicraft heritage and development in Hai Duong, Vietnam	2010	Heritage tourism in Southeast Asia	Hitchcock, Michael Nguyen, TTH	P
Name	Date	Publisher	Author	Primary (P) Secondary (s)
			Wesner, Simone	
Giao Duc Viet Nam Thoi Phap Thuoc (The Vietnamese under the French colonial government)	2017	vnexpress	Tung, Manh	P
Quyết định thành lập trường nghề Biên Hòa (The decision on establishing the Biên Hòa vocational training school)	1903	The French colonial government	Chesne	P

Appendix F

Documents that comprised the corpus for a history of the Vietnamese VET from 1954 to 1974

Name	Date	Publisher	Author	Primary (P) Secondary (S)
Nen Giao Duc Mien Nam truoc 1975 (South Vietnam's Education before 1975)	2018	Trithuc.vn	Thanh Liem, Le	S
Nghị Định Thành Lập Trường Nghệ (The Decision on Establishing the Technical Secondary school)	1956	South Vietnam's Republican government	Dinh Diem, Ngo	P
The Vietnamese Geography and History	1960	NXB Su Hoc	Van Tan, Ha	P
Chương Trình Trung học Phổ Thông (The Secondary Curriculum of the Republican government)	1958	South Vietnam's Republican government	Ministry of National Education	P
Hiến Pháp Việt nam Cộng Hòa (The Constitution of the Vietnamese Republican government)	1956	South Vietnam's Republican government	Dinh Diem, Ngo	P
Giáo Dục Mới [A New Education]	1956	NXB Thanh Binh	Lam, Toai	P
Đạo Tao Cán Bộ Việt Nam ở Liên Xô [Vietnamese officials]	2017	Khoa lịch sử	Van Tich, Le	P

Name	Date	Publisher	Author	Primary (P) Secondary (S)
trained in the USSR)				
Su Tro Giup cua Lien Xo Cho Vietnam (Assistance and support of the USSR for Vietnam)	2016	Khoa lich su	Van Tich, Le	P
Kinh te mien nam thoi ky 1955 1975 (The South economy period of 1955 1975)	2004	NXB Khoa hoc xa hoi	Phong, Dang	P
Lich su truong Cao dang Cao Thang-110 nam (Cao Thang Technical College-A history of 110 years)	2016	NXB Tre	Khanh Du, Dao	P
Giao Duc Mien Nam Tren Duong Xay Dung va Phat Trien (South Vietnam's Education on the Developing Way)	2017	Van hoc va ngon ngu	Van Canh, Tran	S
Xay Dung Mien Bac va Dau Tranh Chong My Diem Mien Nam 1954 1960 (North Vietnam's development and the civil war against South Vietnam from 1954 to1960	2000	NXB Chinh Tri Quoc Gia	Luong, Ninh	P

Nhin Lai Nen Giao Duc Mien Nam truoc 1975 (Recalling	2014	Tap san Vinh Long	Van Bon, Nguyen	S
--	------	-------------------	-----------------	---

Name	Date	Publisher	Author	Primary (P) Secondary (S)
South Vietnam's education before 1975)				
Lich su Giao Duc Viet nam (A history of Vietnamese Education)	2015	Nha Nam va NXB the gioi	Duy Anh, Dao	P
Education and economic, political, and social change in Vietnam	2004	Educational Research for Policy and Practice	Huong, Pham Lan Fry, Gerald W	P
Bien Hoa Technical School	2009	Cao dang my thuat Dong Nai	www.Caodaodangbienhoa.com	S
Chuong Trinh Giao Duc Vietnam Cong Hoa (The Educational program of the Republican government]	1960	Chinh Phu Vietnam Cong Hoa	Ministry of National Education	p
Culture and Capitalism in the Pottery Enterprises of Bien Hoa, South Vietnam (1878–1975)	1991	Journal of Southeast Asian Studies	Hy, Van Luong & Diep Hoa, Dinh	P

Soviet and Chinese economic aid to North Vietnam	1966	The China Quarterly	Prybyla, Jan S	P
A bowl of rice divided: the economy of North Vietnam	1962	The China Quarterly	Kaye, William	P

Name	Date	Publisher	Author	Primary (P) Secondary (S)
Hien Phap Vietnam (The Vietnamese Constitution 1959)	1959	Quoc Hoi Vietnam	The Vietnamese National Assembly	P
May cam nhan ve su khac biet giua giao duc Mien Nam va giao duc Mien Bac (Differences between North Vietnam 'sEducation and South Vietnam's Education)	2014	Tap Chi Nghien Cuu va Phat Trien	Tri Nhan, Vuong	S
Economic Developments in North Vietnam	1958	Pacific Affairs Journal	Shabad, Theodore	P

Communism, poverty, and demographic change in North Vietnam	1998	Population and Development Review Journal	Bryant, John	P
Ky yeu Truong Cao dang Cong Chanh (Diary of Public Transport College)	2002	Ai Huu Cong Chanh	www.aihuucongchanh.com	P

Name	Date	Publisher	Author	Primary (P) Secondary (S)
Gia Tri Tu Tuong cua Ho Chi Minh trong Su Nghiep Giao Duc-Dao Tao Con Nguoi Vietnam (Ideologies of Ho Chi Minh on Training the Vietnamese young generation)	2015	Voer.edu.vn	Minh Chien, Nguyen	P
Hien Tinh Kinh Te Vietnam [The Situation of The Current Vietnamese Economy]	1972	NXB Lua Thieng	Huy, Nguyen	P
The Diem Regime in Southern Vietnam	1955	Far Eastern Survey	Crozier, Brian	P

Tinh Hinh Vietnam 1954 1965 (The context of Vietnam in the stage 1954 to 1965)	2000	NXB Chinh Tri Quoc Gia	Luong, Ninh	P
Vietnam: A Comparative Study	1996	Department of Employment, Education and Training	National Office of Overseas Skills Recognition, Australia	P
Name	Date	Publisher	Author	Primary (P) Secondary (S)
Nen Giao Duc Vietnam duoi Che Do Cong San 1954 1975 (The Vietnamese Education under the Communist government 1954 1975)	2004	Cothommagazine.com	Bich San, Tran	P
Local Government and Administration in the Democratic Republic of Vietnam since 1954 (Part I)	1962	The China Quarterly Journal	Ginsburgs, George	P
The Progress of American Influence in South Vietnam during the 1950s	2009	Blackwell Publishing Ltd Oxford, UK	Journoud, Pierre	P

Hien Phap Viet Nam Cong Hoa (The constitution of the Vietnamese Republic government)	1967	Chinh phu Viet nam Cong Hoa	Van Thieu, Nguyen	P
Quyét dinh thanh lap truong trung cap Thuy Loi (Decision on establishing the Middle School of Irrigation)	1963	Ministry of Irrigation	Ke Tan, Ha	P
Quyét dinh thanh lap truong trung cap dien (Decision on establishing the Middle School of Training Electricians)	1963	Ministry of Irrigation	Ke Tan, Ha	P

Appendix G

Documents that comprised the corpus for a history of the Vietnamese VET from 1975 to 1986

Name	Date	Publisher	Author	Primary (P) Secondary (S)
Postwar Vietnam: dilemmas in socialist development	1988	SEAP Publications	Marr, David G White, Christine Pelzer	P
Nen giao duc Vietnam 1975 1986 (The Vietnamese education in the stage 1975 to 1986]	2010	Diepdoan.violet.vn	Hong Diep, Doan	P

Mot So Van Kien cua Trung Uong Dang va Hoi Dong Bo Truong ve Cong Tac Khoa Giao (A number of the National Statements on Education and Vocational Training)	1983	Nha Xuat Ban su that	The Vietnamese Communist Party	P
Chi thi cua Thu tuong ve viec xay dung danh muc Nha nuoc ve cac nghe cong nhan, nhan vien ky thuat va nghiep vu (Decree of Prime minister on building items of vocations for technicians, workers and professional staff)	1980	The Vietnamese government	Van Dong, Pham	P
Quyet dinh cua hoi dong chinh phu ve he thong giao duc pho	1979	The Vietnamese government	Van Dong, Pham	P
Name	Date	Publisher	Author	Primary (P) Secondary (S)
thong moi (The decision of the Vietnamese government on the new national education system)				
Chi thi cua Thu tuong chinh phu ve day manh nguyen ly giao duc hoc tap ket hop san xuat (Statement of Prime Minister on boosting the educational principle of learning and producing)	1979	The Vietnamese government	Van Dong, Pham	P

Co Cau He Thong Giao Duc Quoc Dan Vietnam (The Vietnamese national education's Structure)	1982	The Vietnamese government	The Vietnamese government	P
So Luoc Lich Su Phat Trien Giao Duc Nghe Vietnam (A summer of Vietnamese Vocational Educational Development)	2002	MOLISA	Van Hoang, Nguyen	S
Quyết định về việc thành lập hội đồng giáo dục các cấp [the Decision on establishing the council of VET at all levels]	1981	The Vietnamese government	The Vietnamese government	P

Name	Date	Publisher	Author	Primary (P) Secondary (S)
National Office of Overseas Skills Recognition, Australia	1996	Department of Employment, Education and Training	National Office of Overseas Skills Recognition, Aust.	P
Nghi Định Của Chính Phủ về Kế Hoạch Hoa Khoa Học (The Vietnamese government's Resolution on Planning Science and Education)	1981	The Vietnamese government	The Vietnamese government,	P

Chi thi của Thủ tướng về tăng cường tổ chức đời sống trong các trường Đại học, cao đẳng, và trung cấp nghề [Decrative of Prime Minister on enhancing standard of the life in universities, colleges and technical secondary schools]	1980	The Vietnamese government	Van Dong, Pham	P
Chi thi của Thủ tướng về việc xây dựng danh mục Nhà nước về các nghề công nhân, nhân viên kỹ thuật và nghiệp vụ (Decree of Prime minister on building items of vocations for technicians, workers and professional staff)		The Vietnamese government	Thanh Nghi, Le	P

Name	Date	Publisher	Author	Primary (P)
------	------	-----------	--------	-------------

				Secondary (S)
Tom tat Lich Su Phat Trien day Nghê Vietnam (A summery of the Vietnamese Vocational Educational history)	2014	MOLISA	MOLISA	S
Quyết định về hướng nghiệp cho các học sinh THPT [Decision on guilding careers for students in upper secondary schools]	1981	Chinh phu Vietnam	Thanh Nghi, Le	P

Lich su trung Cao dang Cao Thang-100 nam (Cao Thang Technical College-A history of 100 Years)	2016	NXB Tre	Khanh Du, Dao	P
Nghi Quyet Cua Bo Chinh Tri Ve Chinh Sach Khoa Hoc Ky Thuat [The Resolution on Policies of Science and Technology]	1981	Bo chinh tri	The Vietnamese Communist Party Central Committee	P
Hoi Nghi Trung Uong Lan Thu IV ve giao duc va dao tao [The Fourth National Congress about Education and Training]	1976	Ban Chap Hanh Trung Uong	The Vietnamese Communist Party Central Committee	P
Name	Date	Publisher	Author	Primary (P) Secondary (S)
Hien Phap Vietnam 1980 [The Vietnamese Constitution 1980]	1980	The Vietnamese National Assembly	The Vietnamese National Assembly	P
Soviet Education in the 1980s	1983	Croom Helm Ltd, Provident House, Burrell Row	Tomiak, J.J	P
Socialist development: the political economy of agrarian reform in Vietnam	1984	Bulletin of Concerned Asian Scholars	Werner, Jayne	P

Quyết định số 682/BXD-TC về việc thành lập trường công nhân xây dựng Việt Nam Soviet (Decision No 682/BXD-TC on establishing the Vietnam-USSR School of Training Builders)	1976	Ministry of Construction	Muoi, Do	P
Lịch Sử trường đào tạo công nhân xây dựng Việt Xô (History of Vietnam- USSR School of Training Builders)	2019	Vixo.edu.vn	Vixo.edu.vn	P

Appendix H

Documents that comprised the corpus for a history of the Vietnamese VET from 1986 to the present

Name	Date	Publisher	Author	Primary (P) Secondary (S)
Hội Nghị Ban Chấp Hành Trung Ương VI (The Congress of the Vietnamese Communist Party Central VI about Doi moi-Renewal)	1986	Ban Chấp Hành Trung Ương	Van Linh, Nguyen	P

Transition of a Developing Socialist Economy to a Developing Mixed Economy: The Case of Vietnam	1993	International Journal of Political Economy	Gates, Carolyn L Truong, David HD	P
Transition to a market economy in Vietnam	1997	Economies in Transition: Comparing Asia and Eastern Europe	Riedel, James Comer, Bruce	P
Vocational training and agricultural productivity: evidence from rice production in Vietnam	2010	Journal of Agricultural Education and Extension	Ulimwengu, John Badiane, Ousmane	P
Hoi Nghi Ban Chap Hanh Trung Uong Khoa VII (The Congress	1991	Ban Chap Hanh Trung	Van Linh, Nguyen	P

Name	Date	Publisher	Author	Primary (P) Secondary (S)
of the Vietnamese Party Central Committee VII)		Uong		
Chi thi cua chu tich hoi dong bo truong ve mot so van de cap bach trong cong tac giao duc va dao tao [Directive of Prime Minister on urgent issues of VET]	1992	Chinh phu Vietnam	Van Kiet, Vo	P

Quyết định của Thủ tướng Chính phủ về việc xây dựng chiến lược phát triển giáo dục nghề Việt Nam đến năm 2020 [The Decision of Prime Minister on building the strategy developing Vietnamese VET by 2020]	1997	Chính Phủ Việt Nam	Van Khai, Phan	P
Phát triển kinh tế Việt Nam giai đoạn 1986 to 2005 (The Economic Development in Vietnam in the stage from 1986 to 2005)	2008	SAGE Publications	Kien, Tran Nhuan Heo, Yoon	S
Việt Nam Trên Con Đường Đổi Mới [The Renewal in Vietnam in stage from 1986 to 2000]	2003	NXB Giáo dục	Truong, Huu Quynh	P
The Vietnamese economy in the 1990s	1997	Asian-Pacific Economic	Riedel, James	P

Name	Date	Publisher	Author	Primary (P) Secondary (S)
		Literature		
Political change in Vietnam: In search of the middle-class challenge to the state	2002	Asian survey	Gainsborough, Martin	p

Vietnam: The political economy of education in a “Socialist” periphery	2006	Asia Pacific Journal of Education	London, Jonathan D	p
Training and firm performance in economies in transition: A comparison between Vietnam and China	2011	Asia Pacific Business Review	Nguyen, Thang Ngoc Truong, Quang Buyens, Dirk	P
Vietnam's trade liberalization and international economic integration: evolution, problems, and challenges	2005	ASEAN Economic Bulletin	Thanh, Vo Tri	P
Vietnam: A Comparative Study	1996	Department of Employment, Education and Training	National Office of Overseas Skills Recognition, Australia	P
Luat Giao Duc Vietnam [Vietnamese Education Law 1998]	1998	Quoc hoi Vietnam	Duc Manh, Nong	P
Luat Day Nghe Vietnam 2014 (Law of Vietnamese Vocational	2014	Quoc hoi Vietnam	Sinh Hung, Nguyen	P

Name	Date	Publisher	Author	Primary (P) Secondary (S)
and Training Education 2014)				

Quyết định về chức năng, nhiệm vụ và quyền hạn của DVET [Decision on function, duties, power, and structure of Directorate of Vocational Education and Training]	2017	Chính phủ Việt Nam	Xuan Phuc, Nguyen	p
Khung Trình Do Quốc Gia (the National Qualification Framework)	2016	Chính Phủ Việt Nam	Xuan Phuc, Nguyen	P
Báo cáo Giáo dục Nghề Nghiệp Việt Nam 2016 [Report on Vietnamese Vocational Education and Training 2016]	2016	MOLISA	Hong Minh, Nguyen	P
Chiến lược phát triển dạy nghề Việt Nam đến 2020 [Strategy for vocational training development by 2020]	2012	Chính Phủ Việt Nam	Tan Dung, Nguyen	P
Expansion of the Vietnamese handicraft industry: From local to global	2008	Ohio University	Szydlowski, Rachael A	P
Quyết Định Chính Phủ Về Phát Triển Nhân Lực Việt Nam giai	2011	Chính Phủ Việt Nam	Tan Dung, Nguyen	P

Name	Date	Publisher	Author	Primary (P) Secondary (S)
------	------	-----------	--------	------------------------------

doan 2011 2020 [Decision on developing the Vietnamese human resource in the stage from 2011 to 2020]				
Chien Luoc Phat Trien Kinh Te Xa Hoi Viet Nam Giai Doan 2011-2020 [Strategy on developing the Vietnamese society and economy in the stage from 2011 to 2020]	2011	Chinh Phu Vietnam	Tan Dung, Nguyen	P
So Luoc Lich Su Phat Trien Giao Duc Nghe Vietnam [A summer of Vietnamese Vocational Education Development]	2002	MOLISA	Van Hoang, Nguyen	S
Quyết định của thủ tướng chính phủ về việc xây dựng chiến lược phát triển giáo dục nghề Việt nam đến năm 2020 [The Decision of Prime Minister on building the strategy developing Vietnamese VET by 2020]	2011	Chinh Phu Vietnam	Tan Dung, Nguyen	P
Quy định về chương trình trung cấp chuyên nghiệp (Regulations on Curriculum of Secondary Technical school)	2012	MOET	Vu Luan, Pham	P
Bao cao thực hiện kế hoạch chiến lược giáo dục 2001 2005	2005	MOET	Minh Hien, Nguyen	P

Name	Date	Publisher	Author	Primary (P) Secondary (S)
(Report on implementation of the strategic plan for educational development during the period of 2001-2005)				
Selected Normative Documents on Vocational Education and Training	2018	MOLISA	Minh Hong, Nguyen	S
Nghi Quyet Trung Uong So 29 [The Resolution of the Vietnamese Communist Party's Central committee No 29]	2013	The Vietnamese Communist Party's Central Committee	Phu Trong, Nguyen	P
Nghi Quyet cua Trung Uong Dang ve Cach Mang Cong Nghiep 4.0 (the Resolution of Vietnamese Party Central Committee on the Fourth Industrial Revolution)	2019	The Vietnamese Communist Party's Central Committee	Phu Trong, Nguyen	P
Thong tu huong dan quan ly ngan sach giao duc [Decree on management of educational budget]	1994	Bo giao duc va dao tao	Hong Quan, Tran	P
Quyết định số 1072/1999/QĐ-TTg về việc thành lập trường Việt Đức (Decision No 1072/1999/QĐ-TTg on establishing the Vietnam- German Vocational Training School)	1999	Chính phủ Việt Nam (Vietnamese government)	Van Khai, Phan	P

Name	Date	Publisher	Author	Primary (P) Secondary (S)
Lich su trung VietDuc (History of Vietnam- German Vocational Training School)	2018	Vdht.edu.vn	Vdht.edu.vn	S
Quyết định số 1272/QĐ-UB về việc thành lập trường Cao đẳng nghề Việt Nam- Hàn Quốc (Decision No 1272/ QĐ-UB on establishing the Vietnam- Korea Vocational Training College)	1998	UBND tỉnh Nghệ An (Nghệ An province's Committee of People)	Tran Ky, Hoang	P
Lich su hình thành trường Cao đẳng nghề Việt Nam- Hàn Quốc (History of Vietnam- Korea Vocational Training College)	2019	www.vkc.edu.vn	www.vkc.edu.vn	S
Quyết định số 216/QĐ-BLĐTBXH về việc thành lập trường nghề Việt Úc (Decision No 216/QĐ-BLĐTBXH on establishing Vietnamese Australian Vocational Middle School)	2007	MOLISA	Hang Thi, Nguyen	P

Appendix I

List of initial potential participants who are officials of MOLISA

Coding name	Organization	Position
O1	MOLISA	Minister
O2	MOET	Minister
O3	GDOVT	Directorate

Appendix K

List of initial potential participants, who are current directors of DOLISA in 13 provinces/cities

Coding name	Organization	Position	Province /city	Regions
D1	Department of Labour, Invalids and Social Affairs (DOLISA)	Director	Nghe An	Central
D2	DOLISA of Ha Tinh	Director	Hatinh	
D3	DOLISA of Quang Binh	Director	Quang Binh	
D4	DOLISA of Thanh Hoa	Director	Thanh Hoa	
D5	DOLISA of Quang Tri	Director	Quang Tri	
D6	DOLISA of Binh Dinh	Director	Binh Dinh	
D7	DOLISA of Ho Chi Minh city	Director	Ho Chi Minh	South
D8	DOLISA of Can Tho	Director	Can Tho	
D9	DOLISA of Ben Tre	Director	Ben Tre	
D10	DOLISA of Hai Phong	Director	Hai Phong	North
D11	DOLISA of Quang Ninh	Director	Quang Ninh	
D12	DOLISA of Nam Dinh	Director	Nam Dinh	

D13	DOLISA of Hanam	Director	HaNam
-----	-----------------	----------	-------

Appendix L

List of initial potential participants who are principals of vocational schools in 13 provinces and cities of Vietnam

Coding name	Schools	Established	Position	Provinces /cities	Regions
P1	Vocational training college of Vietnam-Germany	1972	Principal	Nghe An	Central
P2	Vocational intermediate school of Vietnam-Korea	1991	Principal	Hatinh	
P3	Vocational commercial and tourism intermediate school	1962	Principal	Thanh Hoa	
P4	Economic and Technological intermediate school	1976	Principal	Binh dinh	
P5	Cao Thang Vocational College	1903	Principal	Ho Chi Minh	South
P6	Vocational training college	1957	Principal	Can Tho	
P7	Vocational training college of Dong Khoi	1993	Principal	Ben Tre	
P8	Vocational training college Bien Hoa	1901	Principal	Dong Nai	
P9	Bac Lieu Vocational training college	1979	Principal	Bac Lieu	

Name	Schools	Established	Position	Provinces /cities	Regions
P10	Quang Ninh vocational college of transport and electrical technology	1966	Principal	Quang Ninh	North
P11	Long Bien Vocational training college	1959	Principal	Hanoi	
P12	Vocational training college	1967	Principal	Ha Nam	
P13	Hai Phong vocational and industrial college	1975	Principal	Hai phong	

