

Streaming and articulation in education: The solution for building a learning society in Vietnam

Do Thi Bich Loan¹, Nguyen Duc Trung²

¹ Email: bichloan1095@gmail.com
The Vietnam National Institute of Educational Sciences
101 Tran Hung Dao, Hoan Kiem, Hanoi, Vietnam

² Email: trung.nd@moet.edu.vn
The Institute for Research and Design of School
14 Le Thanh Tong, Hoan Kiem, Hanoi, Vietnam

ABSTRACT: *In the context of rapid and complex changes in the world, globalization and international integration has become an inevitable trend. The impact of the 4th industrial revolution has been changing the structure of education level of human resources, requiring workers to be regularly trained, updated with new knowledge and skills. The learning society becomes a new educational model. The paper analyzes the relationship between streaming and articulation in education with lifelong learning and learning society, thereby proposing some solutions to create opportunities for access to education and lifelong learning for all people appropriate to the individual's capacity and the human resource development needs of the society.*

KEYWORDS: Streaming in education; articulation in education; learning society.

→ Received 03/01/2020 → Revised manuscript received 16/5/2020 → Published 25/6/2020.

1. Introduction

The Vietnamese people have a long traditional fondness for learning which has been formed, molded, and developed throughout the history of the nation. Self-learning and lifelong learning are important educational points through the ideology of President Ho Chi Minh and asserted in the resolutions of the Party. Today when the world scene has changed rapidly, complexity, the globalization and international integration have become the inevitable trend; the scientific and technological revolution and the strong development of information and communication require workers have to be trained regularly to update their knowledge, their skills and the social learning has become a new model of education, a new trend being spread in many countries around the world. Lifelong learning has become one of the most important keys to promoting economic and social development. Streaming and articulation in education are solutions to build the learning society, in which all the learning requirements of people everywhere, all the time are met. ***This article study was conducted within the framework of the research project KHGD/16-20. DT.002 funded by the National Program on Science and Technology for the period 2016-2020.***

2. Research content

2.1. Some concepts

a. Streaming in education is the creation of ways and orientations for students having been graduated at a specified level to have the ability to choose an appropriate way for them whether to study further or to join in the labor market. Therefore educational

streaming is extremely important for the development of each country's human resource strategy as well as each person's career through that all people can have the opportunity to choose a suitable path for them to develop their capacity, their aspirations appropriate their particular circumstances and appropriate with the human resource needs of the country.

b. Articulation in education. "Articulation" is an intersection intermingling with each other or continuing from one to the other, between which there is a certain binding relationship. "Articulation in education" is understood very differently, nowadays the way of understanding many people is recognized as an activity to recognize and exempt the content that learners have learned at lower levels or in related industries. Articulation in training is a "training process that allows the recognition and transformation of learners' learning and training results from one level to one or several other levels or in different professions of the same qualification degree in the education and training system" (Ministry of Education and Training, 2002). Besides, the concept of articulation in training is also understood as: "the training process allows the use of the learners' existing learning results to further study at the same profession or when changing to the other training profession, different types of education and training levels" (Ministry of Education and Training, 2008). In education, there are many different types of articulation, that is the articulation between subjects; between levels of training; between training professions; between general education and vocational education.

“*Vertical articulation*” is a link between all levels, creating opportunities for career advancement from low to high levels; after each level of study, if learners have aspirations, competence and meet the necessary conditions, they will continue to study at a higher level.

“*Horizontal articulation*” is the connection between industries and groups of industries applied at vocational secondary, professional secondary, college, and university levels.

“*Articulation between subjects*” is an important premise for the implementation of other articulation: vertical or horizontal articulation, which is a prerequisite for learners what they may need to learn, lifelong learning.

c. “*Lifelong learning*” is understood that each needs to equip themselves with a study plan for themselves at different stages of life and the learning takes place continuously, from birth to death.

d. “*Learning society*” is a society in which “every individual is responsible for regular, lifelong learning, making use of all learning opportunities to be a good citizen; have jobs and labor with increasing efficiency; study for yourself and the people around you happy; learn to contribute to the development of the homeland, the country, and humanity (Prime Minister, 2013).

2.2. The relationship between streaming and articulation in education with lifelong learning and learning society

2.2.1. The streaming and articulation in education create opportunities to access education for everyone appropriate to the individual’s capacity

Looking at from an individual’s perspective, it shows that each learner has a different disposition, ability, forte, aspirations, and circumstances, unlike anyone. The educational streaming will create favorable pathways and orientations so that every learner has the opportunity to choose his or her career path suitable to his capacity, forte, his aspirations, and suitable for completion. personal circumstances and under the needs of the country so that we can develop to the peak of our career and contribute a lot to society.

The facts in many countries show that after the general education/compulsory education the educational system is divided into two flows: general education and vocational-technical education (Voctech Education). The general education is divided into two branches: Academic branch and general including vocational education (at low levels). The vocational-technical education is then divided into branches has taught high school vocational training and culture medium vocational branches. The flow was continued at the university level in two branches: branch-oriented research university (academic) universities and branch-oriented engineering

(technology). Thus, the streaming and articulation in education also mean respecting the rights of all citizens to live, study, and work in consistence with their aspirations and working capabilities.

2.2.2. Streaming and articulation in education create lifelong learning opportunities for everyone

- *Vertical articulation in education is an indispensable requirement of a worker*: In this day and age, science and technology are developed and manufactured by the storm also changing rapidly in the competitive market mechanism. Therefore, learning philosophy once I get a tape measure and level you can work for life is no longer appropriate, but instead what is the philosophy Balance this study, lifelong learning to keep the position their labor and live a positive way in modern society. Transferability between the level of training will create favorable conditions for employees can continue to raise the level of learning to be able to maintain your position of labor in the process of modernization of the country.

- *Horizontal articulation is a legitimate requirement of workers*. In general education, the transition from one department to another, from one type of school to another, needs to be connected and interconnected between the subjects so that students do not have to relearn from the beginning what they have learned.

In the process of industrialization and modernization, the transformation of labor structure in the whole country, as well as of each region and locality, forced some technical workers to change their jobs. Moreover, in the market mechanism and in changing social conditions, with good reasons such as personal conditions, family circumstances, social circumstances, a large number of workers have aspirations to change jobs. Horizontal articulation will facilitate workers to change their jobs without having to repeat the beginning of a new training program.

In addition, many students want to study 2 majors at the same time, this will facilitate learners to shorten the time to study the second profession. Articulation between subjects is an important premise for the implementation of vertical or horizontal articulation and is a prerequisite for learners to be able to learn what they need and learn for life.

Thus, streaming and articulation in education is a training method to ensure the development of human resources following accordance with the needs of society and create lifelong learning opportunities for everyone, to increase economic efficiency in training costs and creating favorable conditions for students and workers.

2.3. The current situation of streaming and articulation in education

2.3.1. Party's guidelines, the state's legal policies on streaming and articulation in education in Vietnam

The policy on streaming and articulation in education in Vietnam has been affirmed in Party documents, comprehensively concretized in National Assembly's resolutions, and directed through the system of documents, legislative documents of the Government, the Ministry of Education and Training, and other relevant agencies. The system of legal documents has removed many difficulties and problems, facilitated the implementation of streaming and articulation in education.

2.3.2. The current situation of streaming in education

Advantages:

(1) *Create access to education for everyone appropriate to the individual's capacity, meeting the learning needs of society*

The streaming of students after lower secondary education not only eliminates the opportunities for students to study but also diversifies the learning method, learning flow, creating appropriate conditions for many learners as well as studying to a higher level of each person. Vietnam universalizes lower secondary education. After lower secondary education, the education system is divided into 2 streams: general education and vocational-technical education. Besides, the formal education system, there is also a continuing education system. Thus, after graduating from lower secondary education, depending on their abilities and aspirations, students can enter the following 4 streams: (i) high school; (ii) continuing education (high school); (iii) vocational education; (iv) Labor market.

- *Stream to high school:* In the last 5 years, the percentage of students graduating from lower secondary school to high school is about 80-85%; about 15-20% attend continuing education, vocational education and enter the labor market (General Directorate of Vocational Training – MOLISA, 2019).

- *Stream into Vocational Education:* Vocational education has been more focused. The network of vocational education institutions throughout the country, creating favorable opportunities for learners when they have the aspirations and needs of vocational training. As of December 2018, there were 1,948 vocational training institutions nationwide, including 397 colleges, 519 vocational secondary schools, and 1,032 vocational education centers. The percentage of lower secondary school graduates going into vocational education is about 5% (2014); about 8% (in 2016) and over 10% (in 2018) (General Directorate of Vocational Training – MOLISA,

2019).

- *Stream to colleges and universities:* The percentage of students going to college or university is increasing, meeting the demand for high-quality human resources for the industrialization and modernization of the country. In the school year 2017-2018, the total number of universities is 235, including 170 public and 65 non-public universities with 1,707,025 students. The number of students per 10,000 people increased from 260 students (in 2015) to 280 students (in 2018) (Ministry of Education and Training, 2018).

(2) The streaming in education to meet the need to change the structure of the training level of human resources

The economic restructuring in recent years requires a change in the structure of the training level of human resources accordingly. The results of channeling in education have contributed to meeting the requirements of the labor force structure by training level. The annual labor statistics show that the percentage of trained workers increased in the period from quarter 2/2012 to quarter 2/2017 and reached 21.6%. The percentage of laborers without professional and technical qualifications decreased by 5.10 percentage points, the rate of workers with primary education increased by 1.09 percentage points, the percentage of workers with a college degree increased by 0.80 percentage points. The percentage point and the highest increase is in the proportion of workers with a university degree of 3.00 percentage points (Table 1).

Weaknesses:

The proportion of lower secondary school graduates going to high school is high, which has affected the structure of the labor force's training level. The survey results of 1,879 9th grade junior high school students (2018) in 6 provinces (Lai Chau, Vinh Phuc, Dak Lak, Kien Giang, Hanoi, Ho Chi Minh City) on plans after graduating from lower secondary school shows that 77.2% of students want to continue to high school (Do, 2018). Thus, continuing to high school is still the mainstream that secondary school students aim to, although many of them due to difficult circumstances or limited capacity have dropped out before finishing high school. This rate is higher than in Hanoi and HCM city.

The rate of lower secondary school graduates going into vocational education is still low. A relatively large number (about 9%, 2015) of lower secondary graduates participate in the labor market, but without training. That has affected the quality and training structure of the labor force.

The rate of high school graduates going to vocational education is low and the trend of going to college is still the way they choose. According to data published by

Table 1: Percentage of employed population at 15 years of age and above by qualification Quarter 2/2012 and Quarter 2/2017

Unit: %

	Quarter 2/2012	Quarter 2/2017	Increase / decrease (+/-) of quarter 2/2017 compared to the same period of 2012
Employed population at 15 years of age and above (thousand people)	52,581	54,523	+ 1,942
Percentage of employed population at 15 years of age and above without qualification	83.50	78.40	- 5.10
Percentage of trained employed population at 15 years of age and above	16.50	21.60	+ 5.10
In which:			
Vocational training	2.44	3.53	+ 1.09
Professional secondary school	5.21	5.42	+ 0.21
College	2.37	3.17	+ 0.8
University	6.48	9.48	+ 3.0

(Source: GSO. Labor and employment surveys [2])

the Ministry of Education and Training, in 2019 more than 880,000 candidates took the national high school exam. In which, the number of candidates registering for university and college enrollment is 653,000 (accounting for about 74%), an increase of more than 10,000 students compared to 2018 (Minh Nhat, 2019).

Causes:

(1) *Awareness of the family and society on vocational education is not correct*, which greatly affects the selection of the flow of entry for lower secondary school graduates. Many students and families do not appreciate the ability of students and family economic conditions to find an early career path. The survey results of 1,879 of 9th grade students (lower secondary school, 2018) in 6 provinces (Lai Chau, Vinh Phuc, Dak Lak, Kien Giang, Hanoi, Ho Chi Minh City) showed that they still had wrong thinking about the meaning of vocation such as they said that “In the current market mechanism, having a business idea is more important than having vocational skills” (3.03 points - 5 points is the highest level of agreement); “Being sensitive to market needs is more important than having good professional skills” (3.26 points - 5 points is the highest level of agreement) and “The problem is to be good at relationships rather than having good professional skills.” (2.6 - 5 points is the highest level of agreement); “Being sensitive to market needs is more important than having good professional skills). These thoughts have hindered the flow of students after lower secondary school and that has affected Vietnam’s human resource training structure in recent years (Do, 2018).

(2) *The system of legal documents is incomplete and*

inadequate:

- Lack of policies to encourage lower secondary school graduates to enter vocational training and encourage vocational schools to recruit lower secondary school graduates. Although the State now has a policy of lending 8.6 million VNĐ/year for vocational students to pay for vocational training. In addition, the training quality of vocational training institutions is also the cause for parents and students to turn away from vocational education.

- The Law on Vocational there is no regulations on the responsibility of the enterprise to contribute funds for the maintenance and development of the vocational training system. Suggest allowed unless the enterprise income tax for the cost of training, retraining, advanced training skilled workers, and employees of the business.

- Articulation in training between the vocational level 3 qualifications (primary vocational education, vocational secondary education, and vocational colleges) are now only vertical articulation. Contact information is not horizontal apparent, making the design of a continuous training program is separated, not motivate attract youth to join vocational training. Currently appearing more and more demand forces engineers practice, but this object is not prescribed by the Law on Vocational Training, which is a major flaw.

- The articulation in vocational training between the three levels (elementary vocation, secondary vocation, and vocational college) is only vertical. Horizontal articulation has not been clearly defined, which makes the design of the joint training program still separate, not creating motivation to attract young people to participate

in vocational training. There has been a growing demand for practicing engineering forces, but this title is still not in the Law on Vocational Training, which is a huge flaw.

- The biggest difficulty is the recruitment of vocational teachers with too high requirements. Vocational teachers must both have adequate professional qualifications, at the same time have professional-pedagogical standards, and must have appropriate professional practice skills. Meanwhile, the salary and remuneration policy for vocational teachers is not appropriate;

(3) *Career guidance and counseling in general schools are not effective.* Lack of career guidance teachers, who are knowledgeable about occupational psychology and labor market needs. Most career guidance teachers are part-time teachers. The organization of vocational education for students is very poor;

(4) *The vocational education system has not created an attraction for students,* especially lower secondary school graduates. The facilities, technical equipment of most of the schools are in a patchy state, inadequate and incompatible with the existing training programs and scales. The quality of teaching is not high, especially practical teaching;

(5) *Information on the labor market is poor and insufficient,* so families and students do not have enough information to choose an appropriate career.

2.3.3. The current situation of articulation in education

Advantages:

The scale of vocational education is expanded to meet the needs of highly qualified human resources. By December 2018, there were 1,948 vocational training institutions, including 397 vocational colleges, 519 secondary vocational schools, and 1,032 vocational centers in the whole country. The vocational education network is expanded throughout the country to meet the vocational training needs of learners and social human resource needs. In 2017, there were 161 training institutions registered to organize articulation training, of which there were 59 joint articulation training from secondary vocational to vocation college and 102 joint articulation training from secondary vocational to college, university level.

Relieve the pressing of society, meet the needs of lifelong learning for all people, and the needs of human resources for the country. Socio-economic changes, globalization, and progress of science and technology, as well as the development of the knowledge-based economy, have been taking place strongly, requiring workers to have higher levels of education with new job knowledge and skills to increase productivity and labor efficiency. In addition, today, people pay more attention to the needs of individuals to improve their quality of

life. Articulate training is the choice of many young people who want to have a high degree, but cannot enter university by the way of direct examination.

Increase revenues for schools. To increase revenue, schools have diversified their financial resources. Expanding the scale of articulate training is one of the solutions to increase revenue for the school. Schools have put in place many policies to attract more students into the articulate training system, as the tuition for the articulate training is higher. Thus, the joint articulate training has helped them to solve the financial difficulties of school.

Weaknesses: The low quality of articulated training has affected the confidence of employers. There are many students due to unable to pass university entrance exams, had to enter vocational schools until after graduating, they will study an articulated training program to the university. Besides, there is a lot of articulated training institutions that do not meet the assurance of quality. That's why some employers who have refused to recruit students graduating from the articulated training system. These shortcomings had been broken the uniform structure of the industries and structure of the training level of human resources of the country, as well as each region and each locality. At the same time, it did waste resources of the state and society.

Causes: Most training institutions have not conducted credit training so it is difficult to conduct articulated training. In addition, there are still many shortcomings in the process of articulated training such as training time shortened; the graduation diploma does not match the type of training, etc.

2.4. Some solutions on streaming and articulated in education to build a learning society in Vietnam

Based on the analyzing the relationship between streaming, articulation in education with lifelong learning and social learning, and with the practice from Vietnam, this paper would like to suggest some solutions to promote the streaming and articulation in education to develop the capacity, aspiration, and needs of each individual in consistence with the needs of the country and to build a learning society in which everyone should have an equal chance for lifelong learning. These suggestions are:

(i) Raising the awareness of the society of the streamline and articulation in education to gradually remove the concept about learning only for degrees. Mobilizing the whole society towards vocational guidance, especially the mass media, so that the younger generation and all people are aware that all profession are worthy, should be respected and universities are not the only way a good life;

(ii) Improving the structure of the national education system, ensuring the streamline in the system, especially streamline after secondary, upper secondary schools and articulation between educational programs, training levels; diversifying learning methods to meet the learning needs, creating lifelong learning opportunities for all people. After junior high, high school is divided into two branches: high differentiation and high-technology. Fertilizer high school only about 3-4 other common subjects are compulsory electives toward future careers they have chosen. The profession has taught high-school culture medium with 50% of vocational training of general education courses required culture, 50% of the time remaining apprentices, which focuses on practical training. After high school, is divided into two branches: academic branch and branch technology;

(iii) To deliver the National Qualifications Framework according to the levels of education and training under their authority, elaborate plans, necessary conditions, and roadmap for implementation and submit them to the Prime Minister for consideration and approval (Pham & Do, 2018).

(iv) Developing training programs connected to modules. Implementing the training credit system;

(v) Developing the vocational education in secondary schools: Building the plan to develop vocational teachers, building a training center for vocational teachers with national standard, the teachers are not only responsible for vocational training but also for vocational and career consultancy;

(vi) Building plan and developing the network of

professional educational institutions, improving the quality and efficiency of vocational education. Binding training with practices and employment;

(vii) Supplying and adjusting the policies to facilitate the streamline and articulation in the educational system. Developing and promulgating policies and regulations on educational articulation (vertical and horizontal).

3. Conclusion

Every human being has his biological-genetic as well as psychological characteristics and this makes the individual characteristics of each person. Therefore, educational streaming for students appropriating their characteristics can be seen as a scientific – humanistic decision that may ensure the benefits for individuals and society. Thus, streaming the students after secondary school should not only come from the wish of educational manager but the factors affecting it should also be carefully studied. Streaming should be together with articulation to give opportunities for people with aspiration and ability to learn further, to change their job/occupation, to enhance their professional skills throughout their lives.

Lifelong learning is the need of all people, is an indispensable trend in the context of scientific and technological revolution and globalization taking place in every country/ all countries. Streaming and articulation in education would be considered as solutions to improve the human resources in each country, meeting the demand for lifelong learning towards social learning, which is a world's ongoing trend especially in developing countries like Vietnam.

References

- [1] General Directorate of Vocational Training, MOLISA. (2019). Conference Documents, “*Assessment of enrollment, training, job creation in 2018 and tasks and solutions in 2019*”. Vinh Long, March 2019.
- [2] General statistics office. Report on *Labour force surveys in quarter 2/2012 and Quarter 2/2017*.
- [3] Do, T. B. L. (2014). Solutions for vocational tracking and connectivity in the education system. In V. K. Phan (Ed.), *Vietnam education management innovation: Some theoretical and practical issues* (pp. 129-210). Hanoi: Hanoi National University Publishing House. (in Vietnamese).
- [4] Do, T. B. L. (2018). The report on survey results of Project: “*Solution for streaming students after lower secondary school*”, Code: KHGD/16-20.ĐT.002 of the National Science and Technology Program for the period 2016-2020.
- [5] National Institute of Educational Sciences. (2017). The National Science and Technology Project: “*Solution for streaming students after lower secondary school*”, Code: KHGD/16-20.ĐT.002 of the National Program on Science and Technology for the period 2016-2020. Head of Project: Do Thi Bich Loan.
- [6] Ministry of Education and Training. (2002). *Decision No. 49/2002/QĐ-BGDĐT of December 5, 2002, of the Minister of Education and Training*.
- [7] Ministry of Education and Training. (2008). *Decision No. 06/2008 /QĐ-BGDĐT of February 13, 2008, of the Minister of Education and Training*.
- [8] Ministry of Education and Training. (2018). *Statistics. Information portal of the Ministry of Education and Training*, <https://moet.gov.vn>.
- [9] Minh Nhat, (2019), The Vietnam's number of university students is still very low. <https://news.zing.vn/so-nguoi-hoc-dai-hoc-cua-viet-nam-con-rat-thap-post947136.html>.
- [10] Pham, D. N. T & Do, T. B. L. (2018). *Vocational Tracking and Its Relationship With System Connectivity in the Context of Lifelong Learning (LLL)*. US-China Education Review A, September 2018, Vol 8, No 9.
- [11] Prime Minister, (2013). *Decision No. 89/QĐ-TTg, January 9, 2013, approving the Project “Building a learning society for the period of 2012-2020”*.