

FINANCIAL RESOURCES FOR THE DEVELOPMENT OF EDUCATIONAL SERVICES IN RURAL AREAS: A CASE STUDY IN VIETNAM

Nguyen Thi Huong, VNU University of Education
Pham My Hang Phuong, Academy of Policy and Development, Ministry of Planning and Investment
Le Thanh Huyen, VNU University of Education

ABSTRACT

The article investigated financial resources for the development of educational services in rural areas of Vietnam. In order to form the basis for the assessment of financial resources, the article first identifies the model of development of educational services in rural areas of Vietnam. The results show that there exist two types, namely public and non-public schools in parallel. Similar to this model, financial resources for rural education development mainly come from the state sector, with the state budget playing the leading role in total investment resources for education. However, the Government, with the aim of implementing compulsory education, is trying to subsidize the education system too much by waiving tuition fees and using the state budget to compensate. In addition, for paid education levels, the tuition fees at public educational institutions are under-calculated, insufficient for educational institutions to ensure recurrent expenditures, while the people still have the ability to pay, causing the state to increase state expenditure, as a result, limiting the goal of educational socialization in rural areas of Vietnam.

Keywords: Educational Services, Financial Resources, Socialization, Rural, Vietnam.

INTRODUCTION

The Concept of Education

According to Dewey John (1916), Education, in the general sense, is a form of learning in which the knowledge, skills, and habits of a group of people are passed down from generation to generation through teaching, training, or research (Anwar & Nguyen, 2011; Dewey, 1916). Education usually takes place under the guidance of others, but can also be through self-study. According to Smith (2015), education is a process of encouragement and spending time exploring. In this respect, educators seek to interact with learners rather than apply education to learners. In other words, educators need to focus on creating environments and relationships for learners to experience instead of trying to cram knowledge into learners (Ha et al., 2020a; Ha et al., 2020b; Ha et al., 2020c). According to Cambridge dictionary, education is a process of teaching or learning, especially taking place in secondary schools, colleges, universities, or knowledge acquired in that process of teaching or learning. In Vietnamese, “*giáo*” means to teach, “*dục*” means to rise (not used alone). “*Giáo dục*” means “*teaching and nurturing all intellectual, moral and physical education*” (Smith, 2015). In this paper, the authors use Dewey John's (1916) concept of education and this concept will be used throughout the rest of the study.

The Concept of Educational Services

According to the World Trade Organization (WTO), educational services are usually defined as including four types of services: primary education services, secondary education services, higher education services in universities, and adult education. According to the North American Industrial Classification System (NAICS), educational services include instructions and trainings in a variety of subjects. These instructions and training are provided by specialized institutions such as high schools, colleges, universities and training centers. These facilities may be privately owned for-profit or not-for-profit, or public-owned. They may provide students with food, and/or accommodation. Educational services are usually provided by teachers or instructors to explain and supervise face-to-face learning.

As the US Bureau of Labor Statistics, educational services include/consists of services provided to the following groups: elementary and secondary schools, colleges, universities and professional schools, business schools and management and computer training centers, technical schools and schools of commerce, other schools, and educational support services. As the research group of Paolo M. P., Elena F., et al., (2013), educational services are the system of integrated services provided to students to develop the educational environment (García et al., 2013; Pumilia-Gnarini, 2012). The concept of service and training has a broad meaning (general) and a narrow meaning (specific services) (Phú et al., 2016). In the broad sense, all education and training activities are considered to be in the service sector (in relation to the other two sectors, industry and agriculture). In the narrow sense, education and training services are associated with specific education and training activities. Therefore, in the narrow sense, education and training services are classified into two types of services: (i) Educational services and (ii) Training services. In which, educational services apply to preschool and general education levels, while training services apply to colleges, universities, vocational training centers and other educational services for adults.

In this study, the research team uses the concept of educational services based on the views Nguyen et al. (2021). Specifically, educational service is a system of integrated services provided to students in educational institutions (excluding training), to develop the educational environment, including: (i) Preschool education services, (ii) General education services. This concept will be used throughout the rest of the study.

Models in Vietnam in Views of Various Systems in Vietnam

Research results show that there are two types of schools in parallel, public schools and non-public schools in rural areas of Vietnam. Therefore, the model of developing educational services for rural people in Vietnam is in the form of a combination of the State and the private sector in service provision. However, when considering the market shares of the two providers, the State and the private sectors, the market shares of educational services provided by the State accounted for the majority, approximately 97.7% in the academic year 2018-2019 (Lanjouw & Marra, 2018). Therefore, although there is a private element involved, basically the model of developing educational services for rural people is still close to the model provided by the State.

This phenomenon occurs not only in rural areas of Vietnam but also in urban areas and when considering the whole country, the proportion of public schools still accounts for the majority, over 90% (Nguyen & Tran, 2018). In Vietnam, including urban and rural areas, when considering the basic education program, in the period 2017 - 2019, the number of public schools in all educational levels decreased by 1194 schools, from 40752 schools to 39558 schools had

caused the proportion of public schools in all educational levels to decrease from 92.7% to 91.6%. In contrast, the number of non-public schools in all grades increased by 429 schools, from 3199 schools to 3628 schools, making the proportion of non-public schools in all schools levels increase from 7.3% to 8.4%. Considering both urban and rural areas of Vietnam, although public schools still account for over 90%, the proportion of non-public schools is gradually expanding.

According to the Vietnam Household Living Standards Survey 2018, in the academic year 2018-19, preschools has the highest percentage among non-public schools (21.6%), followed by high schools (15.5%), kindergarten (6.8%) and primary and secondary schools (under 1%). This represents the following two prominent trends. The system of non-public schools at the preschool level is more developed than other levels, leading to a higher percentage of non-public schools. The cause of this trend comes from two reasons: (i) The demand for non-public preschool education is high and (ii) The government's preferential policies on preschool education are the most developed. Firstly, according to the Circular No. 19/2017/TT-BGDĐT of the Ministry of Education and Training, issued on July 28, 2017, on the system of statistical indicators of education, early childhood education sector, including: preschools (3 months to 36 months) and kindergarten (3 to 5 years) (HỒ HỒNG, 2020). In fact, the type of public schools at preschool level is not developed. Meanwhile, mothers are only entitled to a maximum of 6 months of leave according to the maternity leave regime prescribed in the Law on Social Insurance 2014, so there is a need for their children to go to school from the age of 6 months (Nguyen et al., 2021). Thus, there are not many preschools run by the state, while the people's demand for preschool education services is high, leading to the development of non-public educational services at preschool level to meet the needs of the people, thereby leading to/resulting in the highest percentage of non-public schools at early childhood level (including kindergartens). Second, non-public preschools receive the most priorities compared to other levels of education. Specifically, according to Circular No. 21/2012/TT-BGDĐT of the Ministry of Education and Training issued on June 15, 2012 on the regulations on organization and operation of people-founded preschools, people-founded preschools are under the preferential policies as follows: (i) People-founded preschools are allocated land or able to be lent or leased by the State, receive support from local authorities in facilities and operating expenses, enjoy preferential policies on taxes, credits and other policies as prescribed, and (ii) State budget support for private preschools to pay teachers. It also included principals and vice principals, working under the labor contract regime according to the teacher salary scale so that they can enjoy periodical salary increase, participate in paying and enjoy social insurance, unemployment insurance, health insurance and other policies and regimes like teachers with the same training qualifications in public preschools (Tran et al., 2021). In addition, according to Decree No. 69/2008/ND-CP issued by the Government on May 30, 2008 on policies to encourage socialization of activities in the fields of education, vocational training, and health, culture, sports, environment, educational institutions, preschool educational institutions as well as non-public general education institutions also receive other supports such as: (i) Preferential registration fee, value added tax, export tax, import tax, (ii) income tax incentives, (iii) credit policy incentives, (iv) capital mobilization incentives (Dat et al., 2019; Ha et al., 2021a-c; Hanh et al., 2019; Minh & Lee, 2017; Minh & Lee, 2018; Minh et al., 2018a; Minh et al., 2018b).

In addition, the system of non-public schools at the primary and secondary school levels are not well developed, so the proportion of non-public schools at this level accounts for less than 1%. Although there have been policies to encourage socialization of primary and secondary

education institutions, the policy implementation and practical application are currently facing difficulties. Specifically, according to Decree No. 69/2008/ND-CP issued by the Government on May 30, 2008 on policies to encourage socialization of activities in the fields of education, vocational training, healthcare, culture, sports, environment, educational institutions, primary and secondary education institutions enjoy a number of preferential policies, including preferential policies on land rental and corporate tax (Tuyết, 2012). However, in fact, educational institutions do not receive enough land according to the minimum land use area requirement of at least 10 m²/student for primary and secondary schools. Meanwhile, as a Decision No. 1470/QĐ-TTg issued on July 22, 2016 by the Prime Minister on amending a number of contents of the detailed list of types, criteria, sizes of, and standards applicable to establish conducting socialization activities in the fields of education-training, vocational training, healthcare, culture, sports and environment, promulgated together with the Prime Minister's Decision No. 1466/QĐ-TTg of October 10, 2008, schools can only receive tax incentives when they satisfy the following conditions: (i) Minimum land area, (ii) Minimum class size and (iii) Continuous operation. Meanwhile, the conditions related to the minimum land area are not guaranteed, leading to non-public educational institutions not enjoying preferential rental incentives, causing difficulties in operation, especially in the rural area. In addition, the goal of the Party and the Government is to universalize primary and lower secondary education as specified in Decree No. 20/2014/ND-CP issued by the Government on March 24, 2014 on universalization of primary and secondary education and illiteracy eradication, so the State will maximize all resources for these education levels, in order to control output quality. It is for these reasons that non-public primary and secondary education has barely developed, especially in rural areas. There exists a significant gap in the development of private-provided educational services between urban and rural areas in Vietnam. Specifically, according to the 2018 Household Living Standards Survey of the General Statistics Office, in the school year 2018 - 2019, the rate of attendance at people-founded and private schools in urban areas was 9.8%, while that in rural areas was 2.3%. The rate in rural areas is 2.3%, the difference is 7.5%, due to the public schools are supported with the state budget, while people-founded and private schools must ensure their own revenue from tuition fees. Therefore, to ensure operation, people-founded and private schools must charge higher tuition fees than public schools. Meanwhile, the majority of rural people have low income, so they cannot afford to send their children to private schools.

However, when compared to China, which is considered as an education system mainly provided by the State (OECD, 2016), the proportion of public schools in Vietnam is still higher (Moretti, 2016; Snapshot, 2016). Specifically, in 2019, the rate of public primary schools in Vietnam was 99.2%, while that of China was 93%, the gap is 6.2%, the rate of public secondary schools in Vietnam is 99.6%, while that of China is 89.5%, and the difference is around 10.1%. However, the rate of public high schools in Vietnam is 84.5%, while that of China is 95%. As analyzed in the second section, the educational model provided by the State in China in the past period has had many limitations, forcing the Chinese Government to carry out synchronous reforms, especially reforms in terms of administration and management to improve the quality of the depth of the Chinese education system. To achieve a developed and effective education, it is necessary to gradually increase the market share of educational service provision by private actors. The reality in Vietnam shows that although the proportion of public schools in the basic education system is high, it is decreasing (Table 1). Specifically, in the period 2017 - 2019, the proportion of non-public schools gradually increased from 7.3% to 8.4% (Le, 2016; Tien et al., 2020).

Table 1
PROPORTION OF PUBLIC SCHOOLS BY EDUCATION LEVEL IN VIETNAM AND CHINA

School year	2017-2018				2018-2019				China
	Total	Public	Non-public	Public school proportionate	Total	Public	Non-public	Public school proportionate	
Kindergarten	2240	2113	127	94.3%	2124	1980	144	93.2%	-
Preschool	13001	10533	2468	81.0%	13339	10461	2878	78.4%	-
Primary school	14937	14826	111	99.3%	13970	13852	118	9.2%	93%
Secondary school	10939	10887	52	99.5%	10911	10863	48	99.6%	89.5%
High school	2834	2393	441	84.4%	2842	2402	440	84.5%	95%
Total number of schools	43951	40752	3199	92.7%	43186	39558	3628	91.6%	-
General				94.4%				94.4%	92.5%

Financial Resources for the Development of Educational Services in Rural Areas of Vietnam

The Scale to evaluate financial resources for education in rural areas includes indicators of: (i) State budget and (ii) Socialization in the development of educational services for rural people.

Budget Management of the Education System in Vietnam

According to the Law on Education 2019, the state budget plays a leading role in the total investment resources for education (Đỗ & Đỗ, 2014). Besides, the financial sources for investment in education also include other sources such as: (i) Legal investment capital of domestic and foreign organizations and individuals, (ii) Revenue from education, training, science and technology services. Services served and supported the educational activities of educational institutions, revenue from production and business activities, and interest on bank deposits and other legal sources of income as prescribed by law, such as state funding for ordering and assigning tasks, loans, and funding, aid and donation from domestic and foreign organizations and individuals. According to the Law on Education 2019, the State gives top priority to the allocation of the education budget, ensuring that the state budget expenditure on education and training of at least 20% of the total state budget expenditure. In fact, over the past 35 years, the government has increasingly supported the education in Vietnam. According to the Ministry of Education and Training, the proportion of the budget devoted to the education sector increased from 7% in 1986 to about 20% in 2008 and remained stable until 2018, in which the average recurrent expenditure on education and training at the central level is about 11%, while that of the local level is about 89% of the total state budget spending on education and training. In other words, of the total state budget expenditure on education, local expenditure is the main one, accounting for over 80%. From 2013 to 2017, the scale of budget spending on education always increased in absolute numbers. Specifically, the central budget expenditure increased by 14.052 billion VND in 2015 compared to 2011, the local budget expenditure increased by 69.553 billion VND in 2015 compared to 2011. However, the proportion of expenditure of the central budget tends to increase gradually from 11% in 2011 to 13% in 2015 (increased by 2%), whereas the proportion of recurrent expenditures of the local budget tends to decrease slightly from 89% in 2011 to 87% in 2015. Total settlement of expenditure for education in 2013 was 155.604

billion VND and in 2017 was 248.118 billion VND. The government allocates more recurrent expenditure on education and training in rural areas than in urban areas. The reason is that in order to mobilize rural children to go to school, the Government must reduce tuition fees, increase scholarships, and increase health and food support for children in rural areas, as a result, recurrent expenditure. Per capita per year is often higher in rural areas than in urban areas, and especially high in upland and island areas.

Socialization in the Development of Educational Services for Rural People

As analyzed in the section on state management of education in rural areas, state management of education socialization, in rural areas, there are still certain limitations as follows. Firstly, the state management mainly involves orientations and policies; there are no specific/detailed laws, regulations and circulars in the implementation of socialization of the education sector. Secondly, policy orientation has only been implemented at the central level, not really developed at the local level (apart from some localities that have concretized support policies such as Thanh Hoa, Ben Tre, Ba Ria - Vung Ship). Thirdly, support policies have not yet covered the entire education system in rural areas, focusing only on two types of education: early childhood education and vocational training (Table 2). Fourthly, there is no reconciliation between revenues and expenditures at educational institutions, leading to insufficient revenue for spending expenditure and the state budget having to make up for that shortfall.

Area	Education				Vocational training			
	2003	2006	2010	2016	2003	2006	2010	2016
Urban	355450	564400	1241680	2,148,100	14250	21330	53340	92200
Deltas	390995	664000	1460800	2,527,200	15675	23710	59260	102500
Mountainous areas - remote areas	426540	817200	1986880	3,538,100	18525	31000	80600	143500
Highlands, islands Ratio	604265	1144000	2775520	5,054,000	22800	42700	112610	205000
Urban areas	1	1	1	1	1	1	1	1
Deltas	1.10	1.18	1.18	1.18	1.10	1.11	1.11	1.11
Mountainous areas - remote areas	1.20	1.45	1.60	1.65	1.30	1.45	1.51	1.56
Highlands, islands	1.70	2.03	2.24	2.35	1.60	2.00	2.11	2.22

In addition, the process of implementing socialization has achieved some achievements as well as limitations as follows:

Types of training such as public, private at, diverse training levels from preschool to primary, high school, university and postgraduate have developed and achieved certain results. On the number of educational and training institutions. The current network of schools and classes is very diverse, including public, private, joint venture, foreign associates and 100% foreign capital. In the period 2017 - 2019, the proportion of non-public schools in all schools increased from 7.3% to 8.4%. However, socialization is not equal among regions and even among provinces, cities and localities with the same socio-economic conditions. Investment projects mainly focus on cities and localities located in dynamic economic zones such as Hanoi, Hai Phong, Da Nang, Ho Chi Minh City, Can Tho and delta regions namely Red River and the Southeast deltas. Almost no foreign investment projects have been attracted in the field of

education and training in rural areas. For FDI projects on education and training alone, Hanoi and Ho Chi Minh City account for 93.3% of the total registered capital (Ho Chi Minh City has 83 projects with a total investment of 204.5 million USD), accounting for 48.8% of the number of projects and 43.6% of the total investment capital. Hanoi had 58 projects with 233 million USD of registered capital, accounting for 34.1% of the total number of projects and accounting for 49.7% of total investment capital). Mechanisms and policies on autonomy are still inadequate and inconsistent, and the assignment of autonomy to higher education institutions has only been piloted and has not yet become an internal need of universities. The condition of autonomy is only approached mainly from a financial perspective, not taking into account the professional capacity and organizational and management capacity of training institutions. University autonomy has not been associated with innovation in school governance. During the implementation process, many training institutions have not been fully aware of autonomy. Some higher education institutions are incompetent and lack readiness, so they are confused in implementation.

Tuition Fees in Rural Areas of Vietnam

The final scale to assess the level of educational service provision for rural people in Vietnam is the price of education services or tuition fees in rural areas. Research results show that there is no relationship between rural level and tuition fees at educational institutions (Figure 1).

However, one thing that is common to all rural and urban areas in Vietnam is that because primary education is compulsory, in the period 2010-2018, primary school students in public schools do not have to pay tuition fees. In case there are not enough public schools in the locality, students must study in a private educational institution with tuition fees supported by the State (the level of support is decided by the Provincial People's Council. At the same time, according to Resolution No. 29. -NQ/TW *“On fundamental and comprehensive renovation of education and training to, meet the requirements of industrialization and modernization in the context of a socialist-oriented market economy and international integration”* implementing 9-year compulsory education, or primary and secondary education is compulsory education, starting from 2020. Therefore, lower secondary school students will be exempted from tuition fees based on a schedule in the near future. In addition, according to Article 99, Law on education 2019, 5-year-old preschool children in extremely difficult villages, communes, ethnic minority areas, remote areas, coastal areas and islands are exempted from tuition fees. For the remaining 5-year-old preschool children who do not belong to the above groups will also be exempted from tuition fees based on the schedule prescribed by the Government.

In addition, according to the Government's Decree No. 86/2015/ND-CP issued on October 2, 2015 on the mechanism of collection and management of tuition fees for educational institutions under the national and government education systems, tuition fee exemption and reduction policies from the school year 2015-2016 to the school year 2020-2021. The mechanism for determining tuition fees at a public educational institution depends on three factors: (i) economic conditions in each residential area, (ii) the actual paying ability of the people and (iii) the annual growth rate of the consumer price index. Firstly, when considering whether the calculation of tuition fees matches the economic conditions of each residential area, the research team found that the higher the local income per capita, the higher the tuition fees for different

levels of study within the standard framework promulgated by the Ministry of Education and Training.

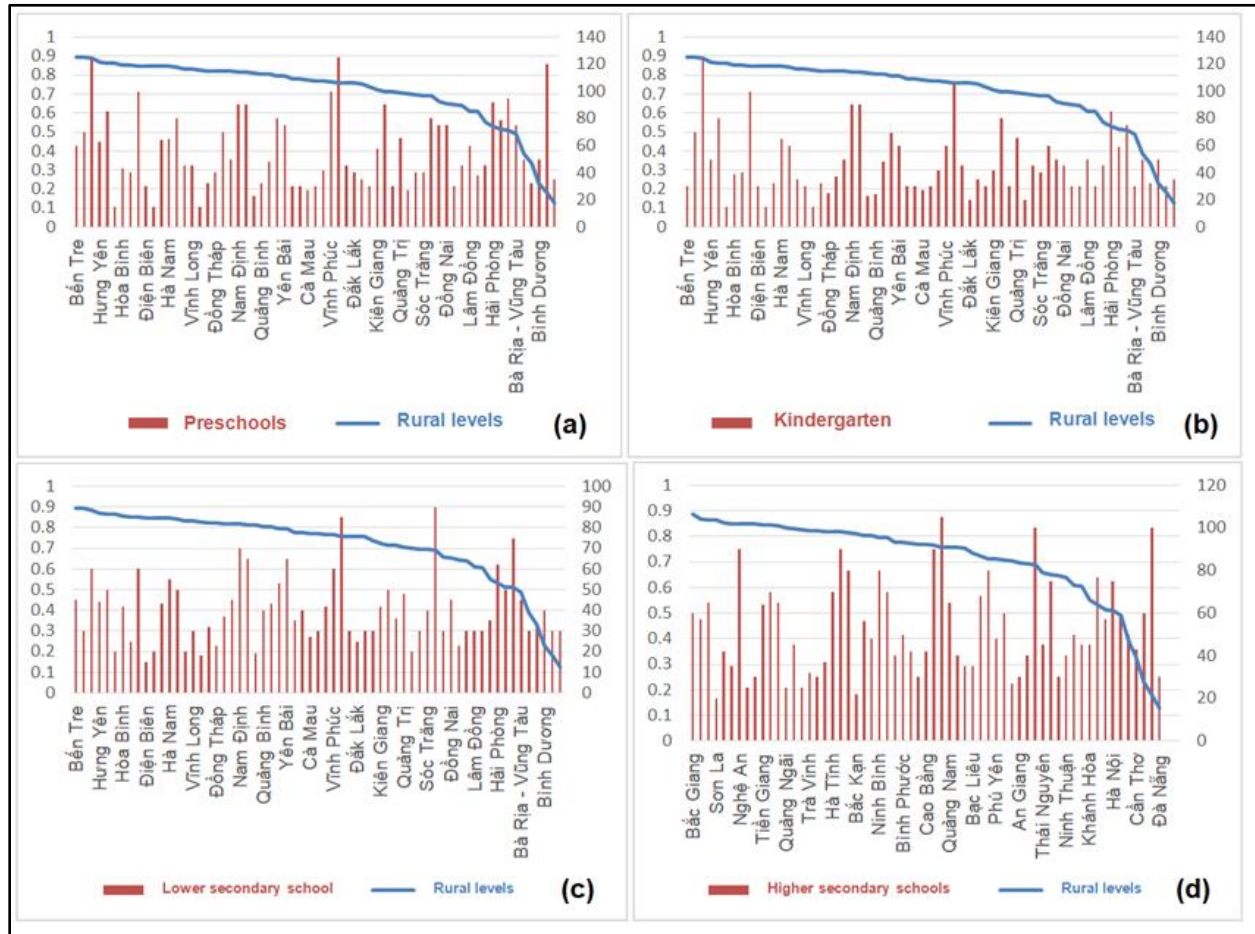


FIGURE 1
RELATIONSHIP BETWEEN RURAL LEVELS AND TUITION FEES AT (A) PRESCHOOLS, (B) KINDERGARTEN, (C) LOWER SECONDARY SCHOOL, AND (D) HIGHER SECONDARY SCHOOLS IN THE 2019-2020

This shows that tuition fees are determined in line with people's incomes, in order to ensure access to educational services. Secondly, when considering if the calculation of tuition fees can ensure the paying ability of the people, by calculating the ratio between the one-month tuition fee for the kindergarten level (in all levels, the kindergarten level has the highest tuition fees) with a monthly income/ per capita in each area, this rate ranges from 0.64% (Da Nang) to 3.76% (Tuyen Quang). Thereby, it can be seen that the ratio of tuition fees to people's income is still low, while people can pay more than that. The cause of this phenomenon is that the Government is too overprotective of the education system to achieve the goal of compulsory education, so the proportion of state budget spending on education is high and it loses its marketability in activities of education services. In addition, the Government has set up a ceiling and a floor frame for tuition fees for mass education programs in rural areas, ranging around 30-120 thousand VND/month/student. Therefore, although there is a tuition fee calculation

mechanism, the tuition fee calculation mechanism is not flexible and does not approach the market price, making the collected tuition fee not enough to meet the recurrent expenditure needs not to mention spending on development investment at public educational institutions, thereby leading to the situation in which the government has to use the state budget to compensate for those expenditures, putting pressure on the state budget (Figure 2).

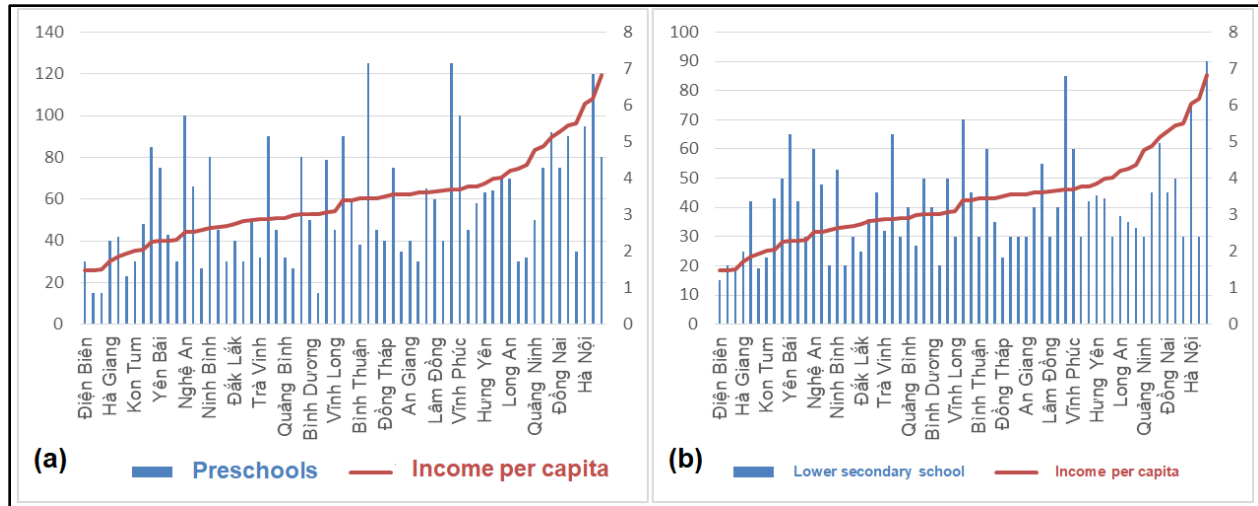


FIGURE 2
RELATIONSHIP BETWEEN PER CAPITA INCOME AND TUITION FEES FOR MASS PROGRAMS AT PUBLIC EDUCATIONAL INSTITUTIONS IN EACH AREA IN THE SCHOOL YEAR 2018-2019 OF (A) PRESCHOOLS (B) LOWER SECONDARY SCHOOL

However, there is also a situation in which even though tuition is free, non-tuition revenues at schools are high, making the total cost of education still at a high rate compared to people’s income. However, non-tuition revenues are not the same among schools, so it is difficult to reach a consistent conclusion for the phenomenon of increasing non-tuition revenues. To solve this problem, the Government has requested to increase the responsibilities of the People’s Council and the People’s Committee in setting the floor and ceiling on non-tuition revenues as well as inspecting and examining revenue, expenditure at educational institutions, and at the same time uphold/stress the responsibility of transparency and explanation of the income and expenditure of the educational institutions to the parents of students.

Thus, the model of developing educational services for rural people particularly and for all Vietnamese people generally is a model that combines the private sector and the State sector. However, the current trend shows that the participation of private actors is gradually increasing, as there is an increase in the number of non-public schools. In this context, private actors mainly participate in the preschool and vocational training levels and hardly participate in the primary and secondary school levels. The reason is that the large population's demand for non-public education and the Government’s support policies have made the number of non-public preschools and vocational schools increase the most in the past period, especially after the introduction of socialization policy, along with accompanying regulations and circulars. Besides, when comparing rural and urban areas in Vietnam, the proportion of non-public schools in urban areas (9.8%) is higher than that in rural areas (2.3%), showing a certain disparity in the

development of educational services for urban and rural people. When comparing Vietnam to China, in the school year 2018-2019, the proportion of public schools in Vietnam (94.4%) is even higher than that of in China (92.5%), showing the development models of educational services for Vietnamese people is also supported by the State too much compared to other countries with the same socio-cultural characteristics. Since then, the model of developing educational services for rural people in Vietnam has revealed certain limitations as described in section 1 and the need to increase the market share of private actors is an urgent requirement. Therefore, the policy of Socialization was created to remove the limitations of the current model and reduce pressure on the state budget. The state budget is limited and the support for most of the basic education system has resulted in inadequate financial resources for the development of each school (mainly facilities) and at the same time imposing pressure on the state budget system. However, after a period of implementation, the implementation and application of policies related to socialization in the development of educational services still encounter some shortcomings, which need to be reviewed and adjusted accordingly with actual conditions.

CONCLUSION

The government, with the aim of implementing compulsory education, is trying to subsidize the education system too much by waiving tuition fees and using the state budget to compensate. In addition, for paid education levels, the tuition fees at public educational institutions are under-calculated, not enough to ensure recurrent expenditures for educational institutions, while the people still have the ability to pay, causing the state to increase budget expenditure, limiting the goal of socialization of education. However, because tuition fees are fixed by the floor and ceiling fees set by the Provincial People's Committee, there is an over-collection of non-tuition revenues. Therefore, an important reform in the socialization of educational services and the development of educational services for rural people means the need to have a policy on tuition fees and non-tuition fee collection suitable to each local area's condition, as well as the ability of the people to pay. For each region with different rural levels, different economic development conditions, and people's incomes, the tuition policy and non-tuition income sources need to be different, to both reduce the burden on the state budget, and to ensure the goal of education universalization and improve the quality of educational services for the people.

REFERENCES

- Anwar, S., & Nguyen, L.P. (2011). Financial development and economic growth in Vietnam. *Journal of Economics and Finance*, 35(3), 348-360.
- Dat, T.T., Truong, D.D., & Anh, M.N.T.H. (2019). Green financing in the transition to climate-resilient economy in vietnam. *Socio-Economic and Environmental Issues in Development*, 947.
- Dewey, J. (1916). *Democracy and Education. An Introduction to the Philosophy of Education*. New York, Free Press.
- Đỗ, H.M., & Đỗ, Q.T.N. (2014). Higher and tertiary education in Vietnam. In *Higher education in Vietnam*. Palgrave Macmillan, London, 29-53.
- García, L.M.C., Lopes, V.J.G., González, R.L., Catarreira, S.M.V., & Carvalho, J.L.T. (2013). Theory of nuclear concepts: A new approach to understand and represent cognitive structures. In *Handbook of Research on Didactic Strategies and Technologies for Education: Incorporating Advancements*, IGI Global, 591-604.
- Ha, H.T., Huong, N.T., Dan, L.L., Tung, N.D., Trung, V.B., & Minh, T.D. (2020a). Removal of heavy metal ion using polymer-functionalized activated carbon: Aspects of environmental economic and chemistry education. *Journal of Analytical Methods in Chemistry*, 2020.

- Ha, H.T., Huong, N.T., Lee, B.K., Duc, D.S., bao Trung, V., Kien, T.T., Anh, N.H., Minh, N.Q., & Minh, T.D. (2020b). Ternary magnetic polymer cross-coupled in [γ -APTES]-dispersion to remove azole compound: economic research and educational policy management. *Research on Chemical Intermediates*, 46(11), 5023-5048.
- Ha, H.T., Huong, N.T., Minh, T.D., Lee, B.K., Rene, E.R., Bao Linh, T.V., Minh, H.D., Quang, N.N., Mai, P.C., & Duc, N.Q. (2020c). Feasibility study of Cd (II) adsorption by a novel magnetic-graphene oxide assisted with polymer from solution. *Journal of Environmental Engineering*, 146(7), 04020060.
- Ha, H.T., Minh, T.D., & Nguyet, H.M. (2021). Application of green nanocomposite to adsorb cadmium ion in Wastewater. *VNU Journal of Science: Earth and Environmental Sciences*, 37(1).
- Ha, H.T., Minh, T.D., Nguyet, H.M., & Sharma, A.K. (2021a). Ampicillin adsorption onto amine-functionalized magnetic graphene oxide: synthesis, characterization and removal mechanism. *Korean Journal of Chemical Engineering*, 38(1), 22-31.
- Ha, H.T., Phong, P.T., & Minh, T.D. (2021). Synthesis of Iron Oxide Nanoparticle Functionalized Activated Carbon and Its Applications in Arsenic Adsorption. *Journal of Analytical Methods in Chemistry*, 2021.
- Hanh, N.T., Tri, N.L.M., Van Thuan, D., Tung, M.H.T., Pham, T.D., Minh, T.D., Trang, H.T., Binh, M.T., & Nguyen, M.V. (2019). Monocrotophos pesticide effectively removed by novel visible light driven Cu doped ZnO photocatalyst. *Journal of Photochemistry and Photobiology A: Chemistry*, 382, 111923.
- Hồ Hồng, N. (2020). *Management of teaching aids in preschools, Tra Vinh city, Tra Vinh province*. Unpublished doctoral dissertation, Trường Đại học Trà Vinh.
- Lanjouw, P., & Marra, M.R. (2018). Urban poverty across the spectrum of Vietnam's towns and cities. *World Development*, 110, 295-306.
- Le, Q.A. (2016). The impact of globalisation on the reform of higher education in Vietnam. *International Journal of Business and Economic Affairs*, 1(1), 29-35.
- Minh, T.D., & Lee, B.K. (2017). Effects of functionality and textural characteristics on the removal of Cd (II) by ammoniated and chlorinated nanoporous activated carbon. *Journal of Material Cycles and Waste Management*, 19(3), 1022-1035.
- Minh, T.D., & Lee, B.K. (2018). Ternary cross-coupled nanohybrid for high-efficiency 1H-benzo [d] imidazole chemisorption. *Environmental Science and Pollution Research*, 25(22), 21901-21914.
- Minh, T.D., Lee, B.K., & Linh, P.H. (2018a). Highly efficient removal of emerging organic compound 1, 3-benzodiazole using novel triangular coordination of magnetic-polymer nanohybrid [C 2 H 5 OH]-MNP@ γ -APTES@ GO. *Research on Chemical Intermediates*, 44(11), 6515-6536.
- Minh, T.D., Lee, B.K., & Nguyen-Le, M.T. (2018b). Methanol-dispersed of ternary Fe₃O₄@ γ -APS/graphene oxide-based nanohybrid for novel removal of benzotriazole from aqueous solution. *Journal of Environmental Management*, 209, 452-461.
- Moretti, D. (2016). Accrual practices and reform experiences in OECD countries Results of the 2016 OECD Accruals Survey. *OECD Journal on Budgeting*, 16(1), 9-28.
- Nguyen, K.D., Tran, V.A., & Nguyen, D.T. (2021). Social insurance reform and absenteeism in Vietnam. *International Journal of Social welfare*, 30(2), 193-207.
- Nguyen, T.V., & Tran, T.Q. (2018). Forestland and rural household livelihoods in the North Central Provinces, Vietnam. *Land Use Policy*, 79, 10-19.
- Phú, P.H., Đặng, N.V., & N.V. (2016). *Learn some terms in the document of the 12th National Congress of the Party*. National Politics.
- Pumilia-Gnarini, P.M. (2012). *Handbook of research on didactic strategies and technologies for education: Incorporating advancements: Incorporating Advancements*. IGI Global.
- Smith, M.K. (2015). What is education? A definition and discussion. *The Encyclopaedia of Informal Education*.
- Snapshot, A. (2016). *Education in China*.
- Tien, N.H., Anh, D.T., Van Luong, M., Ngoc, N.M., & Vuong, N.T. (2020). Formative assessment in the teacher education in Vietnam. *Journal of Hunan University Natural Sciences*, 47(8).
- Tran, V.A.T., Nguyen, K.D., Nguyen, D.T., & Nguyen, D.D. (2021). Direct and spillover effects of social insurance reform: evidence from Vietnam. *Journal of the Asia Pacific Economy*, 1-21.
- Tuyết, T.Q. (2012). Researching and proposing solutions for private universities in vietnam to develop favorably in the current trend of globalization. *Hue University Journal of Science (HU JOS)*, 76(7).