

Why Children in Vietnam Drop out of School and What They Do After That

Le Thuc Duc and Tran Ngo Minh Tam



Why Children in Vietnam Drop out of School and What They Do After That

Le Thuc Duc and Tran Ngo Minh Tam

Why Children in Vietnam Drop out of School and What They Do After That

Le Thuc Duc and Tran Ngo Minh Tam

First published by Young Lives in October 2013

© Young Lives 2013

ISBN: 978-1-909403-15-4

A catalogue record for this publication is available from the British Library. All rights reserved. Reproduction, copy, transmission, or translation of any part of this publication may be made only under the following conditions:

- with the prior permission of the publisher; or
- with a licence from the Copyright Licensing Agency Ltd.,
90 Tottenham Court Road, London W1P 9HE, UK, or from another national
licensing agency; or
- under the terms set out below.

This publication is copyright, but may be reproduced by any method without fee for teaching or non-profit purposes, but not for resale. Formal permission is required for all such uses, but normally will be granted immediately. For copying in any other circumstances, or for re-use in other publications, or for translation or adaptation, prior written permission must be obtained from the publisher and a fee may be payable.

Printed on FSC-certified paper from traceable and sustainable sources.

Funded by



Ministry of Foreign Affairs of the
Netherlands

Young Lives, Oxford Department of International Development (ODID), University of Oxford,
Queen Elizabeth House, 3 Mansfield Road, Oxford OX1 3TB, UK
Tel: +44 (0)1865 281751 • E-mail: younglives@younglives.org.uk

Contents

Summary	ii
The Authors	ii
Acknowledgements	ii
1. Introduction	1
2. Education in Vietnam: performance in recent years	3
2.1 The education system	3
2.2. Dissatisfaction with the quality of education	5
3. Characteristics of the children who have dropped out of school	7
3.1 Young Lives data and description of variables	7
3.2 Factors behind school drop-out: school performance or poverty	8
3.3 Analysis of the reasons for having dropped out	12
4. A qualitative investigation of school drop-out	14
4.1 Young Lives qualitative surveys	14
4.2 Children who left school before completing lower secondary education	15
4.3 Young people who left school straight after lower secondary education	16
5. What children do with their time after they have dropped out	18
6. Summary and policy recommendations	25
References	27

Summary

This paper uses data on 3,000 children in Vietnam, as well as on their siblings, to investigate the problem of children dropping out of school early or leaving straight after lower secondary education. Both quantitative and qualitative approaches are employed. We find that poor performance in class is the biggest predictor of children leaving school early. Household poverty and parental education are also important factors behind the probability of this phenomenon.

The most frequent reason given by parents for children ceasing to attend school is lack of interest. Our analysis shows that poverty is not an important determinant of lack of interest. Other factors, such as being from an ethnic minority or having a mother with a low level of schooling, however, are strongly associated with lack of interest in school.

Furthermore, even though children may give one of several different reasons for leaving school early, qualitative evidence from our in-depth interviews with them points to the fact that the children's performance and their perception of the value of schooling are the most common ones.

Finally, our analysis of the pattern of time use suggests that the children who have stopped attending school and who do neither paid nor unpaid work spend a lot of time sleeping and/or on leisure activities, and that may be interpreted as evidence for limited opportunities for productive livelihoods.

The Authors

Le Thuc Duc is the Principal Investigator of Young Lives in Vietnam, based at the Centre for Analysis and Forecasting, Vietnam Academy of Social Sciences.

Tran Ngo Minh Tam is a research assistant, also based at the Centre for Analysis and Forecasting, Vietnam Academy of Social Sciences

Acknowledgements

The authors thank Andreas Georgiadis and an anonymous referee for their detailed comments on an earlier version of this paper, and Isabel Tucker for her thorough and insightful editing.

About Young Lives

Young Lives is an international study of childhood poverty, following the lives of 12,000 children in 4 countries (Ethiopia, India, Peru and Vietnam) over 15 years. www.younglives.org.uk

Young Lives is funded from 2001 to 2017 by UK aid from the Department for International Development (DFID), and co-funded by the Netherlands Ministry of Foreign Affairs from 2010 to 2014.

The views expressed are those of the author(s). They are not necessarily those of, or endorsed by, Young Lives, the University of Oxford, DFID or other funders.

1. Introduction

Vietnam's Socio-economic Development Strategy for 2011–2020 is to turn the economy into a 'modern industrialised' one by the end of the period. Given that the country's human resources have been struggling to meet the demands of economic growth, this presents a big challenge for the education and training sector in the years ahead. To have a broad-based supply of skilled labour requires that most children complete lower secondary education (LSE). This level of education is necessary for young people to enter vocational education and thereafter to get and perform non-agricultural jobs. For that reason it is important for Vietnam to achieve universal LSE, a goal that was articulated in the Strategy for Education Development 2001–2010.¹

Vietnam's primary education enrolment rates have been favourable. 'In 2009, the net enrolment in primary school was 97 per cent and 88.5 per cent of children who enter primary school complete five years of primary education. Of these, over 90 per cent continue to lower secondary education' (United Nations in Viet Nam 2012). However, the country's positive record on primary education enrolment is now being undermined by the growing problem of children who have dropped out of school. According to the UNESCO *Education for All by 2015? Will We Make It* report, in 2005 the number of out-of-school children in Vietnam was the highest in south-east Asia, and Vietnam was among ten countries in the world with more than one million out-of-school children (UNESCO 2007: 51).² These findings surprised Vietnamese policymakers and commentators at the time, making them aware suddenly of the extent of the out-of-school issue in Vietnam. Furthermore, data from the Population and Housing Census 2009, from which it can be calculated that 1.26 million children born in the period 1994–2004 either dropped out of school or never attended, confirmed the UNESCO findings.

As out-of-school children has not been an issue of public concern in Vietnam until recently, there are only a limited number of papers on this topic. Vo and Trinh (2005) work with three datasets from Vietnam's Living Standard Surveys (VLSS) – from 1992/3, 1997/8 and 2001/2 – to identify the underlying determinants of school drop-out in Vietnam and then to project its trend up to 2015. In their study, a child is classified as having dropped out 'if he/she has not completely enrolled in schools in the 12 months prior to the survey, given he/she used to enrol in school sometime before'. The authors recognise that their definition 'suffers from some shortcomings such as the inclusion of a small number of children who had to postpone their education for specific reasons and intended to continue their education in the next coming year' (ibid.: 20). The determinants they analyse include child characteristics (such as age, level of school, time spent working), household characteristics (such as parental education, household per capita expenditure, number of siblings) and cost of schooling. The authors find that the effects of these determinants on school drop-out are statistically significant. Particularly, 'the schooling drop-out probability has been very sensitive to the changes in the household's per capita expenditure and the direct costs of schooling' (ibid.: 2).

1 There has been no official report on whether universal LSE was achieved by the end of the period.

2 The other countries with more than one million of out-of-school children were India, Nigeria, Pakistan, Burkina Faso, Côte d'Ivoire, Ethiopia, Kenya, Mali and Niger (UNESCO 2007).

Bui (2011) also uses VLSS data to study school drop-out in Vietnam from 1998 to 2006, focusing on primary and lower secondary levels of schooling. The author emphasises that her definition of children who have dropped out of school is the students who ceased attending school during the school year. Thus, children who have dropped out 'do not include students who discontinue their studies after a given school year' (ibid.: 152). To find the reasons for drop-out, Bui looks at three sets of determinants. The first includes pupil characteristics (age, gender and school level) and the second, household characteristics (household size, per capita expenditure, expenditure on education, and parental education). Thirdly, characteristics such as region, location (urban or rural) and public expenditure on education are also examined.

Baulch et al. (2012) look at the determinants of school drop-out using Young Lives data for Vietnam.³ They do so separately for two sub-samples. The first consists of the three-fifths of Young Lives Older Cohort children who had completed LSE by Round 3, and the second consists of the remaining two-fifths. They find that for the first sub-sample, the strongest predictors of children leaving school after LSE were the educational level of the child's mother and father and the amount of paid or unpaid work undertaken by the child in Round 2. For the second sub-sample, however, whereas the mother's education level continues to be an important determinant, the level of the father's education was no longer important. Ethnicity was another important factor behind the likelihood of drop-out before completion of LSE.

In Vietnam, school has been compulsory until the end of LSE since 2001; therefore, we find it important to distinguish children who left school *after* having completed LSE but having failed the entrance exam to upper secondary school, from the children who dropped out *before* they had completed LSE. In this paper, we analyse these two sets of children separately. We are aware of cases where pupils who stopped going to school for a while were persuaded by the teachers to come back, but such pupils are not considered in our study as children who have dropped out.

According to our hypothesis, children's school performance is a major factor behind the problem of school drop-out. With this in mind, we consider children's performance in addition to the factors that are commonly used in the aforementioned studies on school drop-out in Vietnam. Another important feature of this study is its combination of quantitative and qualitative analysis. A qualitative section provides complementary views and looks at the cross-cutting issues. Furthermore, we believe that an analysis of how the children who are no longer attending school spend their time may reveal the degree of limitations in the opportunities currently available to young people. Which young people participate in economic activities (and thereby perhaps learn some skills), and which spend their time sleeping longer and/or pursuing more leisure activities? And is the latter perhaps due to a lack of access to vocational education and training?

Section 2 of this paper presents an overview of education in Vietnam, including issues and problems that the system has faced in recent years. For the quantitative analysis in Section 3, we use the Young Lives survey data to focus on some important characteristics, such as age, ethnicity, past school performance, household assets, per capita consumption expenditure and parental education, in order to identify the factors that are key in explaining drop-out. The in-depth investigation in Section 4 is based on qualitative data from Young

³ Young Lives is a longitudinal study of childhood poverty in four developing countries. A description of Young Lives data will be given in Section 3 of this paper.

Lives survey. In Section 5 we look at the pattern of time use among children no longer attending school. Section 6 presents conclusions and policy recommendations.

2. Education in Vietnam: performance in recent years

For developed market economies, the benefits of education are well documented.⁴ The private sector and society both have incentives to undertake investment in education. That generally applies to Vietnam too. One noteworthy characteristic in Vietnam's case, however, is that the returns to investment in schooling are low, though they have improved over time. Using VLSS data from 1993 and 1998, Liu (2006) finds that each additional year of schooling is expected to increase an individual's future wage by between 3 and 6 per cent. More recently, Doan and Gibson (2010) show that the rate of return to one year of schooling was 3.8 per cent of one's wage in 1998, and that that figure increased to 10 per cent in 2008. The latest level is comparable to returns to schooling in other developing countries (see, for example Patrinos and Psacharopoulos, 2010: 45)

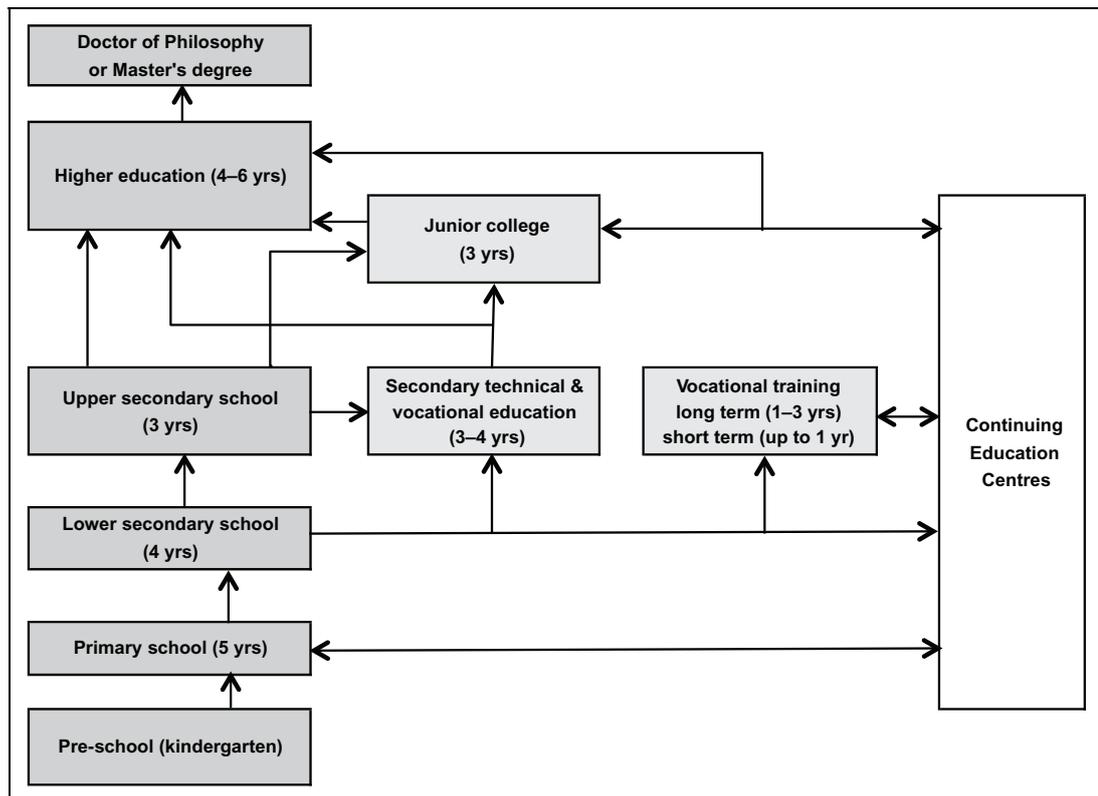
Low returns to schooling discourage investment by the private sector. Moreover, poverty certainly causes market failure with respect to investment in education, when poor households are unable to make the best choice of education for their children, even if they recognise that the benefits will far outweigh the cost. Moreover, there are other failures, including some on the supply side of the education service, which will be considered in the sub-section below.

2.1 The education system

There is much work to do to achieve the goals set in Vietnam's Socio-economic Development Strategy 2011–2020, and this will be particularly challenging for the education and training systems. The United Nations Human Development Report 2011 (UNDP 2011: 129) shows that the average number of years of schooling for people over 24 in Vietnam is 5.5. Until recently, pre-primary education, which includes kindergarten, has not been universal in Vietnam. Multiple Indicator Cluster Survey data show that in 2006, 'only 57.1 per cent of children aged 36–59 months were attending preschools' (GSO 2006: 93). This source also indicates that, even in the relatively prosperous Mekong Delta, the pre-school attendance rate was as low as 40 per cent. Vietnam's Strategy for Education Development (SED) 2001–2010 included a government commitment that by 2010 two-thirds of children aged between 3 and 5 would be enrolled in kindergartens.

The 2009 Vietnam Population and Housing Census demonstrates that, of persons aged 15 years and above, 5.5 per cent had had no schooling at all and 14.5 per cent had not completed primary school. As many as 25.7 per cent had completed primary school, but not lower secondary school. Thus, 40 per cent of persons aged 15 or over who started school had dropped out before completing LSE (a few remained in LSE after turning 15). Among people living in rural areas, the corresponding figure was 45 per cent.

⁴ See, for example, OECD (2011).

Figure 1. *Vietnam's education system*

Source: Adapted from the website of the Vietnam Ministry of Education and Training (www.moet.gov.vn).

Primary education, which consists of Grades 1 to 5, is compulsory. Children normally start Grade 1 at the age of 6. The Government declared that in 2008 practically all children in Vietnam had access to primary education. Another major target of the SED 2001–2010 was to realise universal LSE by the end of the decade. As stated above, it is not clear whether this has been achieved.

It normally takes four years to complete LSE (Grades 6–9). Having completed Grade 9, young people have to pass an entrance exam to get into upper secondary school. Statistics from the Ministry of Education and Training (MOET) show that in the academic year 2008/9, while there were nearly 5.52 million pupils in lower secondary schools, there were only 2.95 million in upper secondary schools (Grades 10–12), although upper secondary education is only one year shorter than LSE. A substantial proportion of pupils completing LSE either fail the upper secondary school entrance exam or do not take it. In such cases, children are denied further schooling in the regular academic track, unless they try again and are successful in the exam in the following year. Many of those who are denied upper secondary education go into secondary technical and vocational education and training, which can consist of short or regular programmes (see Figure 1). Others follow non-formal education, partly made up of Continuing Education Centres that provide opportunities for those who are not able to take full-time and regular courses. It is not common for young people with qualifications from the technical and vocational training schools and the Continuing Education Centres to go on to universities.

One of the important characteristics of the education system in Vietnam is the fact that the competition for admission to tertiary education is extremely strong. The Survey Assessment of Vietnamese Youth (SAVY), first conducted in 2003, is the largest and most comprehensive

survey of youth ever undertaken in Vietnam. The 2003 survey involved 7,584 young people aged 14 to 25 from 42 provinces across the country. According to the report, 90 per cent of young people who were attending school said that they wanted to go to university (MOH et al. 2005: 31). However, for most of them, the goal was never achieved: only a fraction were admitted to university. The 2009 Vietnam Population and Housing Census shows that, of the 6.49 million young men and women born between 1987 and 1990 and thus of tertiary education age at the time of the census, only 1.06 million (16 per cent) were studying in colleges and universities in April 2009. There is evidence that explains the strong competition for tertiary education. That is, the returns to one year of tertiary education were greater than those for a completed primary education. According to Oostendorp and Doan (2010: 24), the return is 3 to 5 per cent at six years of education, increasing to 6 to 12 per cent at 12 years of education and 7 to 17 per cent at 15 years of education.

In the 1990s Vietnam's education sector was thought to be performing well, given the economic conditions at the time. According to Glewwe (2004), in 2000 Vietnam was ranked by the World Bank as 164th among 206 countries by national income per capita; yet the country's performance in education was much higher than that of other low-income countries. It might therefore have been expected that, with a continuation of economic growth, the country's education would improve further. The evidence in the following sub-section, however, implies that this was not the case.

2.2. Dissatisfaction with the quality of education

The performance of education in Vietnam in the first decade in the twenty-first century can hardly be regarded as successful. According to Hoang Tuy (2011), a well-known professor and prominent commentator on education, the Vietnamese education sector suffers from three major problems. The first is inappropriate policy toward teachers. An indication of the policy failure is the fact that a high proportion of teachers find their salaries insufficient to cover their living costs.⁵ Consequently, teachers are not willing to dedicate their time fully to the profession. Secondly, it is an examination-oriented education system, with many examinations and with an overemphasis on marks in the evaluation of performance, while other aspects of students' skills are not considered to be important. Exam cheating, involving both exam takers and invigilators, has been widely reported in the mass media in recent years. Thirdly, the education system has been struggling to control the quality of teaching and learning activities. The term 'achievement syndrome' is used to describe insufficient professionalism on the part of officials and teachers, biased evaluation of output, and the failure to uphold quality standards. It reflects the tendency for 'Vietnamese state agencies, officials, and teachers to report exaggerated enrolment and graduation figures and shuttle students through the system, regardless of learning outcomes' (London 2011: 28).

⁵ In 2009, a primary school teacher with one year's experience received a salary and allowances equivalent to just US\$100 per month. The corresponding amount for a secondary school teacher with one year's experience was US\$120 per month. As Carr-Hill (2011) notes, such salaries are 'low compared with the teachers' salaries in several other Asian countries. [So] many teachers teach extra classes or second shifts or have other forms of employment in order to supplement their incomes.'

Box 1. *In the wrong class*

'Sitting in the wrong classroom' is how the author of an article in the newspaper *Tuoi Tre* (Youth) refers to a boy in the third grade in Dong Thap province, who cannot read three-letter words. It is not a particularly rare case of a third-grade pupil who cannot hardly write anything, even his own name. *Tuoi Tre's* correspondent visited the home of a boy in Grade 5 attending the same primary school. The pupil's mother showed the correspondent two sets of test papers the boy had done in the previous week and for which he had got full marks. But when asked to do any of the types of arithmetic given in the tests, the pupil could not. He admitted that he had been copying from a textbook (not even trying to understand it).¹

These are not rare cases. The *Phap Luat Tp. Ho Chi Minh* newspaper (Ho Chi Minh City Newspaper of Laws) of 6 December 2011 reports another case of a pupil 'sitting in the wrong classroom' in the city of Quy Nhon in Binh Dinh Province.² Fifteen-year-old Nguyen Van Nhat is in Grade 7 in the lower secondary school in Dong Da, but is nearly illiterate. This pupil admits that he can't read; in fact, he could only copy what he saw on the blackboard. In doing the tests, teachers 'ignored' him to watch pupils sitting nearby. Nhat's classmates said that teachers had known about his problems for quite a long time, but no measures had [been] taken to address them. Despite being nearly illiterate, Nhat has been making 'normal progress' every year. When asked for an explanation, the Head of the District Department of Education and Training, Mr. Phan Van Chung, promised that he would check if this was a case of 'achievement syndrome' at the Dong Da Lower Secondary School or the primary school [that] Nhat had attended previously. A similar story recently appeared about the lower secondary school in the My Luong, District of Cho Moi, in An Giang province.³

¹ Thanh Tu (14 December 2011). ² Tan Loc (6 December 2011). ³ Khoi Nguyen (1 March 2012).

One of the consequences of achievement syndrome is that the rate of grade repetition has been wrongly kept low. Almost all children keep advancing to the next grade and gradually find themselves in the wrong grade, where their level of learning makes it difficult for them to follow the lessons. MOET's deputy minister Nguyen Minh Hien is quoted by Truong Cong Thanh (2009) as having acknowledged that there are two major factors that lead to school drop-out. The first is related to the unfavourable socio-economic conditions in children's localities, including poverty and a lack of nearby schools. The second is achievement syndrome in the education system.

Box 2. *Traditional teaching methods fail to motivate pupils*

Phu Yen is one of the provinces in which Young Lives conducts its survey.¹ The Head of the Phu Yen Department of Education and Training (DOET), Mr Nguyen Van Ta, tells the *Phu Yen* newspaper why he thinks that so many children drop out of school in this province. According to the Mr Nguyen Van Ta, one of three major reasons is failure on the part of many teachers to be innovative in their methods of teaching and evaluating pupils. These teachers are not enthusiastic enough in their teaching and their classes are boring. In such classes, the below-average students fail to follow, lose interest in learning and gradually lose the foundation necessary for further study. Poor performance leads to grade repetition, and that is often closely linked to pupils dropping out of schools.²

¹ Data from the province will be used for the quantitative and qualitative analyses in Sections 3 and 4 of this paper. ² Thuy Hang (12 February 2012).

The evidence suggests that the education system has been struggling to meet the demands of society. The public are now more critical than in the past about the quality of schools. Most public debaters and commentators say that the quality of schools is a matter that urgently needs to be addressed. The remainder of this paper examines the linkage between socio-economic factors and the problem of school drop-out, which appears to be caused, at least in part, by the quality of education on offer.

3. Characteristics of the children who have dropped out of school

3.1 Young Lives data and description of variables

Henceforth, we will work only with the Young Lives survey data. Young Lives is an international study of childhood poverty taking place over a period 15 years, involving 12,000 children in four countries: Ethiopia, India (Andhra Pradesh), Peru and Vietnam. In each country, the Young Lives sample comprises a Younger Cohort of 2,000 children, who were born in 2000–1, and an Older Cohort of 1,000 children, who were born in 1994–5. In Vietnam the sample is drawn from 20 sentinel sites in five provinces. These are Lao Cai in the Northern Uplands; Hung Yen in the Red River Delta; two provinces in Central Coast – the City of Da Nang to represent the urban sector and the rural province of Phu Yen; and Ben Tre province in the Mekong Delta. To date, Young Lives have conducted three rounds of quantitative surveys of all the children and their households (in 2002, 2006–7 and 2009); as well as three in-depth qualitative surveys (in 2007, 2008 and 2011). The sub-sample for the qualitative surveys, however, covers smaller parts of each of the Young Lives provinces.

The sections on education in the household questionnaires are of particular importance for the econometric analysis of reasons for school drop-out. The surveys contain quantitative data on schooling, not only for the Young Lives children but also their siblings, which allows for fuller picture of schools. In Rounds 2 and 3 data were collected on schooling and time use of household members, including siblings who were 17 years or younger.

For the present analysis, the dependent variable is a dummy variable which equals 1 if the child had started formal education and then dropped out of school.⁶ The explanatory variables consist of child, household and community characteristics. The child characteristics are age, gender, and ethnicity, which is represented by a dummy equal to 1 if the child's mother belongs to an ethnic minority. To represent students' learning or performance, we use the information on the child's class performance, which is reported by the child's caregivers in the categories of 'excellent', 'good', 'reasonably good', 'poor' and 'very bad'.⁷ In the analysis, the data on class performance in Round 2 are used to define three dummy variables: 'good and excellent', 'average' (children whose performance was 'reasonably good'), and 'poor/very bad', with the category of 'average' being the baseline.

The household characteristics are household size, parental education, an asset index, and per capita consumption expenditure. Because the focus of our study concerns the children staying in school for more or less than nine years, for parental education we choose to use the following dummy variables: 'Mother's schooling less than nine years' equals 1 if the child's mother has not completed LSE, zero otherwise; and 'Father's schooling less than nine years', defined similarly. The asset index and consumption expenditure are measures of the prosperity of the household. With its components being the household's ownership of livestock, land, dwellings, consumer durables and productive assets, the asset index represents economic power and future cash flow. The ownership of land and livestock and other productive assets can also have an effect on the incidence of child work on farms or herding and may therefore affect school drop-out. The data on assets and consumption in Round 2 will be used for the analysis.

One of the important characteristics of a community is the time it takes to travel to the district capital. The quality of services, including the qualifications and experience of teachers in commune schools, is in general poorer in remote communes than in the district capital town or the communes nearer to it.

Finally, we use five dummy variables to control for the regions/sectors in which the children live. The regional dummies are the Northern Uplands, Red River Delta, Coast, and Mekong Delta. The region of Coast includes the urban sector (of Da Nang) and the rural part, which is Phu Yen province. The Red River Delta region is taken as the baseline.

3.2 Factors behind school drop-out: school performance or poverty

3.2.1 *Description of models*

Our primary goal is to identify the factors behind the phenomenon of children leaving school before completing LSE. Model 1, described in more detail below, serves that purpose. The sample for Model 1 consists of all the Young Lives children, and their siblings, who had started school by Round 2 (when the two cohorts were aged 5 and 12) and were still in school in Round 3. We selected the sample this way in order to use the variables on class performance from a previous round.

Model 2 serves to explain why a child does not go on to either upper secondary school or secondary technical and vocational education. The sample for Model 2 comprises only

⁶ It depends, however, on the models in question, to be described in more detail in next sub-section.

⁷ As there are very few reports of 'very bad' performance, we combine poor and very bad into one category.

children who had already completed LSE by Round 3. The dependent variable for the Model 2 equation is a dummy which equals 1 if the child had stopped school straight after completing LSE and zero if he/she was still attending school. The set of explanatory factors in Model 2 is the same as for Model 1, apart from the dummy on the category of 'poor/very bad' for class performance in Round 2. This is because none of the children in the categories of 'poor' and 'very bad' in Round 2 had completed LSE by Round 3, even though some still attended school. Model 2 thus differs from Model 1 not only by the sample, but also with one variable fewer.

The next outcomes under study are the reasons given for dropping out or leaving school. Here the respondent is permitted only one answer - the most important reason. In most cases the answers were actually given by the child's caregivers. The following categories of reasons are most frequently reported. The first is *lack of interest*, recorded when the interviewees said that the child was no longer interested in study and/or did not want to go to school. Two main reasons lay behind reported lack of interest: either that the child found the classes too boring and did not want to go (which could be because of poor teaching, or because the child was unable to follow what was taught), or that the child finds no way to benefit from education, given his/her background. In either case, lack of interest can be regarded as a measure of a pupil's perception of the value of their education.

The second category, *direct cost of education*, includes the answers of either 'fees are too high', or 'books and/or other supplies are too expensive'. Thirdly, the answers 'having to work in the household, doing farm work/herding or other', or 'having to do paid work', are grouped as the *child work* category. All the other groups of single answers were much less frequent.

For the models on reasons for dropping out, we choose the multinomial logistic regression of STATA to analyse the outcomes, rather than the regular logistic regression. That is justified by the way the multinomial logistic regression works simultaneously with three categories of answers. The regular logistic regression works with only one category. For instance, if *lack of interest* is the dependent variable, it treats every child with reports other than *lack of interest* as baseline. Thus, the answers of a baseline child can be any of the *direct cost of education*, *child work*, or any of the others (except *lack of interest*). The heterogeneity of the base makes the estimates less likely to be robust. An application of the multinomial logistic regression helps to reduce heterogeneity for the base.

3.2.2 Results of regressions

Table 1 shows the results of logit regressions for Models 1 and 2. Gender is not really an important factor in Model 1. Boys are only 1.8 per cent more likely than girls to drop out of school before completing LSE. For those who have completed LSE, the probability of stopping schooling straight after Grade 9 for boys is nearly 10 per cent greater than for girls. This is consistent with the findings of Bui Thai Quyen (2011).

Even if the results regarding age in Table 1 seem mixed, there is a trend of a slight increase in the probability of school drop-out in a certain range of birth years. Let's consider two ways in which age affects the probability of drop-out. The first is the individual life course: that is, the likelihood of dropping out increases with age. Secondly, there can be a trend over time. For the Young Lives children and their 6–18-year-old siblings under our consideration, we only know if the child had dropped out by Round 3, but we do not know when and at what grade s/he stopped going to school. However, one may say that drop-out has been increasing if one finds that the drop-out rate is high for the younger, but low for the older children. The prevalence of younger children who have dropped out explains why the

coefficient of age in Model 1 can be negative, while the coefficient of age squared is virtually zero. Thus, the negative sign of the coefficient on age in Model 1 is consistent with the findings in the UNESCO report (UNESCO 2007) discussed in Section 2. Furthermore, the negative sign of the coefficient for the squared age in Model 2 reflects the fact that for the sample in Model 2, the number of 15-year-old children who left school was greater than the total number of non-attenders aged 16 and 17 in this sample.

Table 1. *Logit models: marginal effect on the probability of dropping out*

	Model 1: Not completed LSE vs. compl. LSE or more	Model 2: Left school having compl. LSE vs. cont. schooling
Male	0.0178* (0.0106)	0.0970 (0.0661)
Age (years), R3	-0.0512 (0.0640)	0.5675 (0.3863)
Age squared	0.0003 (0.0022)	-0.0262** (0.0127)
Class performance in R2: poor/ very bad	0.4488** (0.1807)	
Class performance in R2: good or excellent	-0.0486*** (0.0142)	-0.3599*** (0.0618)
Ethnic minority	0.0491 (0.0351)	-0.1154 (0.1067)
Household size	0.0073* (0.0040)	0.0336 (0.0305)
Asset index (normalised)	-0.0206*** (0.0065)	-0.1191*** (0.0429)
Consumption expenditure per capita (normalised)	-0.0497*** (0.0141)	-0.1056 (0.0773)
Father's schooling less than LSE	0.0540*** (0.0177)	0.2459*** (0.0787)
Mother's schooling less than LSE	0.0443*** (0.0163)	0.1607* (0.0840)
Travel time to district capital, by motorcycle (normalised)	0.0146* (0.0078)	0.1645** (0.0706)
Northern Uplands	-0.0414*** (0.0160)	-0.3387*** (0.0809)
Urban	-0.0290** (0.0127)	-0.1770* (0.0972)
Number of observations	1,120	405
LR chi ² (14)	478.21	220.08
Pro>chi ²	0.0000	0.0000
Pseudo R ²	0.48	0.40

Note: Not all the regional effects are displayed

The standard errors are reported in parentheses, underneath of the coefficients

*** p<0.01, ** p<0.05, * p<0.1

The estimation results for Model 1 imply that class performance in Round 2 is a strong predictor of drop-out. In comparison to the category of 'average', which is used as the base, the children who performed poorly or very badly in Round 2 have a probability over 40 per cent higher of dropping out of school before completion of LSE than those who performed well or excellently.⁸ On the other hand, the good/excellent students are 5 per cent less likely to drop out before completion of LSE than the 'average' students. With respect to the children who have completed LSE, we find the students who were above the average (either good or excellent) in Round 2 were 36 per cent more likely to attend school in Round 3.

Poverty/prosperity is found to be an important determinant of dropping out. An increase in the household asset index by a standard deviation is expected to reduce the probability of school drop-out before completion of LSE by 2 per cent. The impact of the asset index in Model 2 is more substantial: the probability of dropping out decreases by 12 per cent for a standard deviation increase in the household asset index. Remember that having a high asset index means a household owns many productive assets – land, livestock, dwellings and consumer durables. One might expect that the more land and livestock a household owns, the greater its demand for labour, including that of its own children. In that case more assets could increase the likelihood of the children dropping out of school to work. However, our results indicate that the labour demand effect is outweighed by the opposing wealth effect: the more assets a household has, the less likely its children are to drop out or leave school after LSE.

Higher household consumption per capita has the effect of keeping children in school until they complete LSE, and an increase of a standard deviation in the consumption expenditure is associated with a 5 per cent decrease in the probability of dropping out. However, with respect to going on to upper secondary school or to vocational training, the effect of consumption expenditure is not statistically significant, even though the sign and magnitude of coefficient for the variable on consumption expenditure in Model 2 are similar to those of the asset index.

Whether or not the father completed LSE affects the odds of the child dropping out before completing LSE or of not continuing in education afterwards. If the father did not complete LSE, his child's likelihood of dropping out rises by 5 per cent and their likelihood of continuing in education after completion of LSE is reduced by one-quarter. The estimates for the effect of the mother's education are slightly lower.

The likelihood of dropping out increases by 1 per cent for a rise of one standard deviation in the time it takes to travel from the commune to the district capital by motorcycle. Remote communes often have a lower quality of public services, including education, than the district capital. The effect of distance to the district capital is stronger in Model 2, with the probability of continuing schooling after completing LSE decreasing by over 16 per cent for each additional standard deviation increase in the distance to district capital. This can be explained by the fact that there are only a few upper secondary schools in a rural district, but at least one school is located in the district capital. Distance becomes an important factor in the cost of education for children in remote communes.

At least three factors might explain the negative effect of the regional dummy of the Northern Uplands. The first is selectivity; the second is the large amount of education aid given to this, the poorest, region; and the third is that the effect of ethnicity is already controlled for. The

8 The category of 'poor/very bad' is quite small, accounting for 3.4 per cent of the sample under study.

issue of selectivity arises here because dropping out is considered only for the children who had already started formal education. According to Le et al. (2011: 34), the Northern Uplands have the lowest percentage of children ever to have started formal education. In Round 1 the rate of school enrolment for the Older Cohort for this region was 6.1 per cent lower than that for the Red River Delta, which is used as the baseline in this logistic regression. With respect to education aid, while only a fraction of the Older Cohort children in other regions report having received some kind of school aid, the majority of the children in the Northern Uplands did so. In particular, for one sentinel site in this region, 'which is among the poorest districts in Vietnam, the rate of tuition fee exemption for the Older Cohort students is as high as 92 per cent' (Le et al. 2011: 53). Finally, as the effect of ethnicity is already controlled for, the fixed effect of Northern Uplands is in fact for its ethnic majority in this region. Here the ethnic majority have enjoyed relatively favourable economic conditions in comparison with local ethnic minorities, while benefiting from the assistance given to residents of mountainous/isolated areas.

It is not surprising that urban children are 3 per cent less likely (than the ones in Red River Delta, which is used as baseline) to drop out of school before completing LSE, and almost 18 per cent more likely to continue schooling after completing it. Not only are there more schools in urban areas, but urban households more likely in general to be able to afford further education, and they also have a greater chance of helping their children to get non-farm jobs.

3.3 Analysis of the reasons for having dropped out

To improve our understanding of the reasons for dropping out, we now analyse the answers to the question of why a child has dropped out of school.

We keep the same set of explanatory factors as in Model 2. Note that for the regressions in this sub-sample the sample becomes substantially smaller than in Models 1 and 2 because school attenders cannot be included in the analysis of reasons for drop-out. Of all the Young Lives children in both cohorts and their siblings aged between 6 and 17 who had started formal school by Round 3, we find that 9.6 per cent had left school in that round. Of the 459 cases of children who had started and left school (and with the data available on the reasons), 39 per cent reported *lack of interest* as the reason for leaving school. The next most frequently reported reasons are *child work* (18 per cent) and *direct cost of education* (9.6 per cent). When considering only the persons dropping out before they had completed LSE, however, we find that 47 per cent reported lack of interest. Thus, the children who dropped out before completion of LSE were more likely to report lack of interest than otherwise.

We run a multinomial logistic regression and present the odds ratios for those three categories of reasons. The figures in Table 2 indicate that boys who have stopped going to school are more likely than the girl non-attenders to be in the category of lack of interest.

Table 2. *Multinomial logistic: odds ratios of reports on reasons for dropping out of school or leaving after Grade 9*

	Odds ratios (standard errors)		
	Lack of interest	Direct costs	Child work
Male	1.613* (0.454)	0.312** (0.152)	0.690 (0.243)
Age (R3, years)	0.900 (0.089)	1.071 (0.200)	1.166 (0.155)
Class performance in R2: good or excellent	0.736 (0.227)	0.978 (0.523)	1.156 (0.468)
Ethnic minority	3.819** (2.118)	8.991** (8.178)	7.670*** (5.137)
Household size	0.924 (0.088)	1.094 (0.182)	0.792* (0.101)
Asset index (normalised)	1.084 (0.166)	0.720 (0.188)	0.872 (0.174)
Consumption expenditure per capita per month (normalised)	0.950 (0.381)	0.102** (0.094)	0.318* (0.207)
Father's schooling less than LSE	0.959 (0.375)	0.716 (0.508)	0.621 (0.348)
Mother's schooling less than LSE	2.524** (1.003)	3.572 (3.063)	0.941 (0.486)
Travel time to district capital, by motorcycle (normalised)	0.754 (0.158)	0.255* (0.189)	1.079 (0.243)
Northern Uplands	0.884 (0.515)	0.000 (0.002)	4.828 (4.691)
Urban	0.592 (0.296)	0.112* (0.134)	1.473 (0.934)

Number of observations: 354; LR chi2: 153.6, Pro>chi2: 0.0000; Pseudo R2: 0.17

Note: Not all the regional effects are displayed
The standard errors are reported in parentheses underneath the coefficients
*** p<0.01, ** p<0.05, * p<0.1

Even though not statistically significant, it can be observed that the children who have performed well in Round 2 (rated as either good or excellent by their caregivers) are 25 per cent less likely (than the average or poor) to be in the category of lack of interest. This may imply that lack of interest is partly due to performance.

Ethnicity is an important factor for all the categories presented in Table 2. An ethnic minority child who has stopped attending school is more likely than his or her ethnic majority counterpart to report any of the categories mentioned above. The ethnic minorities live in mountainous areas, where the quality of services in general, and that of education in particular, is poor. Data analysis indicates that nearly 90 per cent of the ethnic minority mothers in the sample had not completed primary school. Research in Vietnam shows that the ethnic minorities 'are much less likely to be employed as wage workers and are generally less mobile than the Kinh-Hoa. Furthermore, not only is access to wage income limited for ethnic minorities, but the few ethnic minority workers who are wage employees are subject to lower returns than the Kinh-Hoa counterparts with the same characteristics' (Baulch et al.

2010: 41). That reality may weaken the motivation for schooling, and therefore backs up our finding that the ethnic minority children who have stopped attending school are four times more likely than their ethnic majority counterparts to report lack of interest.

With respect to socio-economic status, the estimation results of logit regressions show that neither the asset index nor consumption expenditure per capita has any statistically significant impact on the odds ratios of reporting lack of interest as the reason for drop-out. The mother's level of schooling, however, has a strong effect. Mothers with more education help to keep their children interested in learning. Thus, the factors behind the incidence of lack of interest are not temporary, but long-term characteristics of the child's birth and upbringing.

Gender, ethnicity and consumption expenditure are important factors for the category of direct education costs. The odds ratio of boys who no longer attend school being in this category shows that the parents, or the young people themselves, are more willing to pay for boys' schooling. Next, the more prosperous the household, the lower the likelihood is of children in the household who have stopped attending school being reported in the direct cost of education category.

Finally, with respect to the category of child work, the only factor that has a statistically significant effect is the dummy on ethnic minority.

There are other factors related to children from ethnic minorities who have dropped out that the variables in the aforementioned models fail to capture. The qualitative materials presented in the following section might provide some insight into the matter.

4. A qualitative investigation of school drop-out

The quantitative analysis in the previous section helps us to understand which children are more likely to drop out of school, and it is also useful in identifying the odds ratios for the characteristics of children with different reasons for having dropped out. However, qualitative evidence about the children who have dropped out provides an additional dimension of evidence.

4.1 Young Lives qualitative surveys

We look at the data from the third round of the in-depth qualitative survey of the Young Lives study, which took place in 2011, when the two cohorts of children were aged 10 and 17. This round was conducted in three out of four Young Lives qualitative sites, namely Van Lam in Central Coast, Van Tri in Red River Delta, and an urban site of Nghia Tan in Central Coast (Da Nang).⁹ The fieldwork took place in the first two sites simultaneously at the beginning of April 2011 and in the remaining site in September 2011. Each site survey lasted 15 days in total. Besides collecting data pertaining to the case-study children, the fieldwork researchers carried out interviews with those who were related to, or knew about, these children, and they participated in the children's and community member group activities and discussions, as

⁹ Names of sites and respondents are pseudonyms.

well as making school and community observations. The third round of the qualitative survey records seven children who were no longer attending school in the qualitative sample of 36, but only two of these had dropped out before completing lower secondary school. Of all the children no longer attending school recorded in the Young Lives qualitative survey, there is only one case relating directly to poverty. For all the others, what happened in the classroom was said to be the main reason for leaving school.

4.2 Children who left school before completing lower secondary education

Cham H'roi girl Ho Nit lives in Van Lam, a very poor mountainous community in the South Central Coast that is populated mostly by ethnic minority groups. Ho Nit was determined to leave school at the age of 10, when she was in Grade 4. She cannot read or write in Vietnamese now, nor has she any notion of time. Most members of Ho Nit's family left school before completing upper secondary education. Her father left school in the sixth grade, and her mother in the second grade, like most of their generation. One of Ho Nit's brothers ceased his schooling in Grade 9 and is now working on the household's farm, and the other, who left in Grade 5, is now serving in the army. Almost all of Ho Nit's close friends had already left school. The only reason Ho Nit's father gave for her dropping out was her incapacity to follow the lessons, the same explanation as he gave for her siblings' dropping out. Her father greatly appreciated her significant support for the family: "She does everything – grazing oxen and feeding pigs, cooking for the family and others. She does all the housework." In return, they "take more care of her, for example spending more on her clothes, footwear and hats than on her brothers". It is the children's inability to follow lessons, and their contribution to the household's economy, that leads these parents to allow their children drop out.

Cham H'roi boy Y Think comes from the same commune as Ho Nit. Y Think appears to be passionate about football and is relatively well integrated socially with his peers. His determination to stop schooling at Grade 7 was first derived from being provoked by a fellow student in the school. "I got into fights at school ... He teased me for being from an ethnic minority ... He punched me in the face" Though Y Think was annoyed by the ethnic discrimination, his teacher and the headteacher kept telling off him and his family for his fighting with others at school. His parents did not consider the punishments to be serious, but the fact that the blame was put on Y Think undermined his pleasure at being socially included at school and inculcated in him a dislike for school. Apparently his poor learning capacity could have been another factor, and the fact that several other children in the neighbourhood had dropped out made him more determined to do the same. Y Think said that many of his friends had dropped out and did not see leaving school as a serious decision. Having left school, Y Think began working for his two brothers and was paid the market wage. He voluntarily gave half his wages to his parents and kept half for himself.

Truong (2011) has conducted a study on education in the mountainous province of Đắk Nông, which has a high concentration of M'Nông minority people. She found that the factors obstructing the road to education of the M'Nông children were two-fold: the language of instruction and differences in attitude and behaviour between the teachers and parents. The use of Vietnamese as the language of instruction and the unfamiliar Vietnamese accent of the teachers challenged the ethnic minority students to absorb the lectures. In multi-ethnic classrooms the teachers communicated with everyone rather than individuals, although some were ethnic minority students who could not understand even simple commands such as 'open the book'. In addition, discrepancies between the Vietnamese spoken by the

teachers and the standard spoken Vietnamese of the national media made it difficult for the M'Nông students to grasp what teachers said.

With regard to differences in attitudes, the M'Nông dislike the public criticism and punishment applied by Vietnamese teachers, which goes against their cultural expectation of gentle, private admonishment. This also can lead to drop-out. Another example of the differences is that whereas some Kinh students may bribe or lobby teachers, or even cheat to achieve good performance at school or to pass the exams, the M'Nông consider such behaviour shameful. They might stop going to school rather than follow suit.

Furthermore, even though the ethnic minority children and their parents value schooling, they are discouraged by the perceived pervasive injustice and favouritism towards Kinh in their community (Truong 2011). Thus, ethnic minority children and their parents are aware of the disadvantages to come even if they pursue education: school certificates, if any, might not give them the same opportunities for employment or livelihoods as Kinh candidates. This can undermine their determination to succeed at school.

4.3 Young people who left school straight after lower secondary education

Admission to the regular state upper secondary school is competitive. This is also true for the good private upper secondary schools, where students are well equipped to pass the national tertiary education entrance exam. Students who fail the entrance exam to the regular state upper secondary schools or the good private schools choose either to go to the secondary technical and vocational schools, or the Continuing Education Centres, which belong to the non-formal part of the education system, or to leave education altogether.

Of all the children featuring in the Young Lives qualitative Round 3 survey, Long is the only child for whom poverty is the direct reason for leaving school. Long's family lives in Van Tri, a prosperous rural area in the Red River Delta, with a high population density and good infrastructure. Her household has always been in the chronically poor list, essentially because they have never had enough farmland. Assistance from the poverty reduction programme is far from sufficient to deal with the problem. Long's father and younger brother are not able-bodied, and so the burden of maintaining the family's livelihood has fallen on the shoulders of Long and her mother. Even before Long left school, she had to devote most of her time to work on the family's farm, and she was often too exhausted to study at home. Long's limited time for study led to poor performance at school, and it was expected that she would fail the entrance exam to upper secondary school. Although Long wanted to sit the entrance exam to the tenth grade, her mother decided to stop her education. Long told us, "I begged my mum to be allowed to sit another exam next year, but she told me that given my ability, I would fail again anyway, and therefore she did not permit me pursue that idea ..."

In Van Lam, 17-year-old boy Y Mich of the Cham H'roi ethnic group left school to work on the family farm just one week after enrolling in Grade 10. He could have continued his education and could give no reason for his decision not to: "I just left. I have nothing to explain why I did so." The economic status of Y Mich's family is relatively good. His family has always appreciated education and were disappointed with his decision, given the favourable conditions that they had created for him (his sister used to drop him off at school and pick him up again, and the family had celebrated his LSE graduation). Up to the time of his interview, Y Mich had not had to work to contribute to the household's income. The desire to work for his own spending money was therefore unlikely to be his motivation by comparison

with the fact that there were no other ethnic students in Y Mich's Grade 10 class. 'He confided once that he was sad as he could not talk to anyone in the class. He asked to move to another class but the headteacher did not allow that,' said one close ethnic friend. Thus, it seems that he lost interest in schooling because he could not be socially included in his new class, and it is to this that his apparent apathy might be attributed. In this case, the school's efforts to prevent discrimination against minority children by arranging for an equal number of minority students in all classes had the unintended reverse effect.

School drop-out is not only a problem in the ethnic minority community. However, the reasons differ elsewhere. In the urban sector and in Red River Delta, the most frequently reported reasons are failure in the entrance exam to the regular state upper secondary school, and economic considerations. Nga and her five siblings live in a poor Kinh household in Nghia Tan, Da Nang city. As beneficiaries of the Government's poverty reduction policy, her family have been provided with loans and favourable conditions to maintain the family business of a street stall and passenger-carrying motorbike. They also receive monthly transfers from sponsors as well as the local government. Yet Nga left education soon after enrolling in the tenth grade in a Continuing Education Centre. She explained that she was no longer interested in school: she could not follow the lessons, and she disliked "spoilt" students fighting with each other. "They are spoilt rotten, they always like fighting ... And I was not able to understand lessons so I find it is better to stay at home to assist my mum," Nga recalled. Although her parents confirmed that they could manage to pay the costs of her education, she still wants to work partly to contribute to the household's income and partly for her own spending money. Nga works as a waitress at a café from 6am to 6pm every day, and then helps with her parents' business in the evening. As her parents do not require her to contribute to the family's income, she often spends what she earns after giving her mother a small amount. Nga's parents always encouraged her schooling, yet they made almost no effort to alter her decision to work instead of continue at school, perhaps because they are apprehensive about her lack of determination and her immaturity. Whereas Nga sometimes wishes to be a bartender in the future and sometimes wishes to be back at school, in her parents' opinion, Nga is well suited to be the owner of a street stall like her mother, and so her withdrawal from school was the right decision for her.

Unlike Nga, Hung is from a rural, relatively well-off family in Van Tri. Encountering various shocks last year – his brother's illness, the death of their herd of pigs, and the theft of their ornamental plants – his family continues to rebuild their house using their savings and their stable income sources. Hung's father is employed to make pots for ornamental trees, his mother does farming, and his brother and he became masons after failing the entrance exam to upper secondary school. Ignoring his parents' suggestion of enrolling in a private school instead, he decided to start working when one of his friends, who had also left school, enticed him with a proposition: "It was all of a sudden, somebody persuaded me to work with him in a factory, and I agreed ... There were four others from the same village working there and we went there together." His mother consented to his decision, saying, "You must have a trade, as you will never starve to death thanks to it, and society will need you for that." Having left school, he worked in a pottery and then in a shoe factory before becoming an apprentice mason. He is appreciated by his family for his conscientiousness, his caution and especially his advice about the family businesses, for example, on when it is possible to sell the plants or whether they should breed pigs. He hands over his pay to his parents, and it accounts for a considerable share of his household's income. His decision to leave school seems to be good both for him and his parents, given his inability to pursue upper secondary education in the state system.

Also residing in Van Tri, Quoc's family has good economic status. In addition to having a family farm, his parents often work as assistant masons in agricultural slack seasons. This extra work contributes significantly to their income. His parents, especially his father, value education highly as a means of livelihood in the future. Therefore they have encouraged Quoc's schooling and that of his younger brother. When he failed the entrance exam to upper secondary school, his parents advised Quoc to continue in school but he refused: "At this time I want to work, I am fed up with going to school. I cannot learn anything in lessons." He decided to work as his friends did: "[I]n this community the children of his age work after dropping out of school," his mother said. He does not regret leaving school: "No, I do not feel sorry. If I had continued going to school at that time, I would have dropped out by now anyway." Because his parents understood Quoc's unwillingness to continue his schooling, they arranged work for him, firstly in a pottery in Bat Trang village, then in a nearby factory that produces windows. While his parents have extra income from his work, he does what he wants and has some pocket money at his disposal.

Despite the different reasons for dropping out of school respondents gave Young Lives, we find no stories concerning secondary vocational school. The institutions for technical and vocational training are there, but they are not being considered by the children and their parents. Some of the good secondary vocational schools may not be accessible for the poor households without important connections. But more likely, they are unsure whether their children will benefit if they enrol in the vocational schools.

5. What children do with their time after they have dropped out

For children who have just dropped out of school, or left after completing LSE, and their parents, an important question arises: what do they do with their time now that they do not have to go to school? How a child no longer attending school spends his or her time has important implications for that person's further development. In this section we address the following questions. First, how do the children not attending school and the school attenders use their time differently? Secondly, what determines the non-attenders' participation in economic activities? Thirdly, how does the time devoted to economic activities affect the time spent on leisure and in sleep?

Not having to go to school, the non-attenders can spend more time on other activities, but this depends on the socio-economic and cultural characteristics of the household. We consider the following categories of activities. The first is *work*, which includes unpaid work on the family farm, cattle herding, looking after animals (not just farming) and other family business, as well as paid work outside of the household or for someone not in the household. The second category consists of *care for others* (younger siblings, ill household members). The third includes household tasks such as fetching water and firewood, cleaning, cooking, washing, shopping, etc., and the fourth is simply sleeping. The final category is *general leisure*, which includes time for social life and leisure, and for eating, drinking and bathing.

The participation of the children not attending school in some of these categories of activities depends on their age. Of the Young Lives children and their siblings aged 6–17 who had started formal education but were not at school in Round 3, we find a total of ten children aged 6–10. With so few respondents in this category, average statistics for this age group

are not meaningful. There is, however, a total of 455 young people in the age range 11–17, and more than ten young people of each age. The analyses presented below are based on the sub-sample of 11–17-year-olds (the children not attending school and the children still in school for comparison).

5.1 Economic activity

We find very few young people doing both unpaid and paid work. In fact, among the 11–17-year-old children not attending school, there are only two cases of young people who do both, whereas 56 and 151 cases do paid work and unpaid household farm/herding work respectively. Moreover, very few non-attenders of certain ages do paid work.¹⁰ That justifies merging two sets of activities together. Table 3 presents the participation rates for work as well as the average working hours calculated for each age and according to schooling status.

The standard deviations signal the statistical significance for the difference between the average time use by children no longer attending school and by school attenders. It can be easily observed from Table 3 that the non-attenders do more work than the school attenders, both in terms of the participation rate and the average time use. Only one-fifth of the 11–17-year-old school attenders work, while the figure for the non-attenders is four-fifths. With respect to working hours, while the school attenders work for two hours and 15 minutes per day, the non-attenders work for five hours and 15 minutes.

Table 3. *Rate of participation in and average time use for economic work by children no longer attending school and by school attenders*

Age in years	Mean (standard deviation)			
	Children not attending school		School attenders	
	Rate	Hours ^a	Rate	Hours ^a
11	0.417 (0.149)	6.000 (0.632)	0.173 (0.025)	2.179 (0.155)
12	1.000 (0.000)	5.818 (0.761)	0.250 (0.031)	2.740 (0.189)
13	0.609 (0.104)	4.786 (0.604)	0.262 (0.028)	2.209 (0.130)
14	0.769 (0.059)	6.600 (0.392)	0.222 (0.023)	2.253 (0.102)
15	0.864 (0.033)	6.516 (0.276)	0.192 (0.016)	2.196 (0.116)
16	0.833 (0.112)	6.800 (0.727)	0.202 (0.038)	2.000 (0.178)
17	0.879 (0.058)	7.724 (0.496)	0.219 (0.034)	2.156 (0.262)
11–17	0.806 (0.025)	5.281 (0.220)	0.214 (0.010)	2.261 (0.058)

Note: The standard deviations are in parentheses, underneath of the mean

Note: The standard deviations are in parentheses underneath the means;

^aThe mean hours (and the std. dev.) are calculated for the participants only.

10 Specifically, the numbers of school drop-outs in the age groups of 11, 12 and 13, spending two hours on doing paid work are 0, 2 and 3 respectively. Furthermore, the corresponding figure for the 16-year-old group is 2.

In order to examine the characteristics of the children who engage in economic activity, we run logistic regressions for each of the categories: the first is unpaid family farm/herding work and the second is paid work (the variables equal 1 if the child not attending school uses some positive hours per day for the corresponding work, zero if not). The samples for these logistic regressions consist of all 6–17-year-old non-attenders. The results of this exercise are presented in Table 4.

The figures in Table 4 suggest that the odds ratio of boys doing unpaid work is 20 per cent lower than that of girls, but the odds ratio of boys taking paid work is 25 per cent higher than that of girls. The impact of the variable on gender is not statistically significant. Age is not important for unpaid work, but is sensitive for odds ratios of the 15–17-year-old non-attenders taking paid jobs.

Good class performance (before dropping out) helps the teenagers no longer attending school to get a job. The non-attenders who did well in Round 2 (those who were rated as good or excellent) are twice as likely to have a paid job as their counterparts who were rated average or poor/very bad. Thus the labour markets are selective, even among young people.

Ethnic minority children are more likely to do unpaid work than their ethnic majority counterparts. However this does not apply to paid work, probably due to the fact that the market economy, especially the market for labour, is much less developed in the communities where the ethnic minority children live.

An increase in the household asset index by a standard deviation is associated with an increase of slightly over 40 per cent in the odds ratio for the children not attending school who do unpaid work. Remember that an important part of the asset index is based on the household ownership of livestock, land and productive assets. So households with a higher asset index have more jobs available for its members, including children. This is why we find a strong positive association between the asset index and participation in unpaid economic activity by children who are no longer attending school. By the same token, there is a negative association with participation in economic activities outside the household. However, the association between the asset index and participation activities in the market is not statistically significant.

Table 4. *Logistic regressions: odds ratios of participation in economic activities*

	Unpaid work	Paid work
Male	0.794 (0.201)	1.257 (0.372)
Age (R3, years)	1.049 (0.101)	1.496*** (0.191)
Class performance: good or excellent in Round 2	0.660 (0.183)	2.255*** (0.697)
Ethnic minority	4.760*** (2.445)	0.557 (0.401)
Household size	1.056 (0.102)	0.788** (0.095)
Asset index (normalised)	1.427** (0.203)	0.931 (0.142)
Consumption expenditure per capita (normalised)	1.390 (0.499)	0.260*** (0.120)
Father's schooling less than LSE	0.815 (0.257)	1.117 (0.401)
Mother's schooling less than LSE	1.811* (0.626)	0.633 (0.224)
Time to district capital, by motorcycle (normalised)	1.098 (0.259)	0.337*** (0.128)
Northern Uplands	1.880 (0.976)	0.904 (0.572)
Urban	0.208** (0.127)	1.195 (0.672)
Number of observations	373	373
LR $\chi^2(14)$	109.15	82.04
Pro $>$ χ^2	0.000	0.000
Pseudo R ²	0.21	0.20

Notes: Not all the regional effects are displayed.
The standard errors are reported in parentheses underneath the coefficients
*** p<0.01, ** p<0.05, * p<0.1

By contrast, an increase of one standard deviation of household consumption expenditure per capita is associated with a decrease of about 75 per cent in the odds ratio of the children no longer attending school doing a paid job. The non-attenders from poor families are more likely than those from non-poor families to participate in the labour market. The impact of poverty/prosperity, which is measured by consumption expenditure, on the odd ratios of the non-attenders doing unpaid work is not statistically significant, even though the size of the impact is about the same as that for the asset index.

Remoteness is also significant: the longer it takes to travel to the district capital, the fewer children no longer attending school there are doing paid work in that locality. Finally, the urban non-attenders are less likely to do unpaid work, but slightly more likely to do paid work than their rural counterparts. The effect of the urban factor is statistically significant for the unpaid work only. Overall, the odds of participation in economic activities depend on certain conditions, such as age, school performance, ethnicity and household assets. Thus, opportunities are not readily available for everyone to choose from. The question that arises is: what is the implication for the children no longer attending school who do not participate in an economic activity.

5.2 Sleep

According to Johnson (2012), ‘teenagers ordinarily need eight and a half to nine and a quarter hours of sleep a night to be fully rested’. Of the 11–17 year old children in our sample, 70 per cent indeed conform to this pattern. Table 5 shows the means of sleeping hours for the young people by their schooling status, participation in unpaid economic activity and age.

Table 5. *Time spent sleeping by children no longer attending school (working and not working) and school attenders, by age (hours)*

Age in years	Mean (standard deviation)		
	Non-attenders doing some work	Non-attenders doing no work	School attenders
11	9.200 (0.374)	9.857 (0.595)	9.138 (0.060)
12	8.818 (0.182)	n.d.	9.160 (0.066)
13	9.357 (0.308)	10.22 (0.572)	8.918 (0.057)
14	9.375 (0.211)	9.750 (0.25)	8.605 (0.050)
15	8.958 (0.153)	10.8 (0.439)	8.532 (0.043)
16	8.700 (0.423)	10.50 (0.50)	8.310 (0.114)
17	8.862 (0.231)	9.50 (0.50)	8.228 (0.085)
11–17	9.039 (0.095)	10.184 (0.208)	8.702 (0.024)

Note: Standard deviations are in parentheses underneath the means.

The figures suggest that on average, school attenders have enough sleeping time. On the other hand, the children no longer attending school tend to sleep more, and even more so if not doing any work. In fact, we find that of the 11–17-year-old children who were not attending school in Round 3 and did no work, 61 per cent slept ten or more hours per day (and for the urban sector, the corresponding figure is 71 per cent).¹¹ We find that among the non-attenders in the same age range who did work for four or more hours a day, 74.4 per cent sleep nine hours or less. Thus, in most cases, the non-attenders sleep rather more than is normally required, and participation in economic activity constrains sleeping time.

5.3 Leisure

Having stopped attending school, the young people are expected to have more free time than their peers in education. In Table 6, we present the average leisure time for the Young Lives sample children, first for the children no longer attending school who do some work, then for the non-attenders who do no work, and finally for the school attenders. The non-attenders devote substantially more time to general leisure than do the school attenders.

¹¹ However, the total number of the urban children not attending school doing no work is as small as 14.

Among the non-attenders, those doing some work have less leisure time than those who do not. Thus, work takes away some leisure time from children who no longer attend school.

Table 6. *Average time spent on general leisure activities by children no longer attending school (working and not working) and school attenders, by age*

Age in years	Mean (standard deviation)		
	Non-attenders doing some work	Non-attenders doing no work	School attenders
11	7.20 (0.663)	11.571 (1.325)	5.049 (0.104)
12	8.455 (0.824)	n.d.	4.870 (0.130)
13	7.929 (0.474)	10.333 (0.866)	4.565 (0.097)
14	6.925 (0.366)	8.833 (0.638)	4.329 (0.086)
15	6.895 (0.226)	10.333 (0.728)	4.303 (0.062)
16	6.30 (0.616)	10.00 (3.00)	4.080 (0.136)
17	5.586 (0.482)	12.75 (0.479)	4.007 (0.126)
11–17	6.848 (0.163)	10.327 (0.399)	4.459 (0.037)

Note: standard deviations are in parentheses underneath the mean.

The analysis in this section shows that leaving school leads to big changes in the way that children spend their time. Children who no longer attend school devote more time to work and to helping their households, but the most notable change is the increase in time for leisure and sleep.

Having long hours for leisure may not be good for the welfare of children because it gives rise to environmental risks. Public debates on social issues regarding children and young people in Vietnam often mention the lack of safe play areas. For instance, many children play football in the streets and others ride motorbikes as part of their leisure activities, and so expose themselves to road traffic risks. In Vietnam, traffic accidents happen more often than in most countries. A report by UNICEF shows that ‘there were 495,545 head injuries due to traffic accidents in 2008. Of these injuries, victims under 14 years of age comprised about 13 per cent. Nearly 50 per cent of children who suffered brain injuries had not been wearing helmets’ (UNICEF 2010: 147). One of the most popular uses of leisure time is swimming or bathing in rivers, and accidents happen here as well. According to the Ministry of Health’s statistics, drowning caused 3,786 deaths among children and young people between 0 and 19 years of age in 2007. Child drowning is caused by low awareness and inadequate adult supervision. There are many other risks to which children are exposed after dropping out of school. For instance, in 2009, ‘the Ministry of Health estimated that 4,720 children were living with HIV and the Ministry of Justice (MOJ) reported 15,589 juveniles in conflict with the law’ (UNICEF 2010: 147).

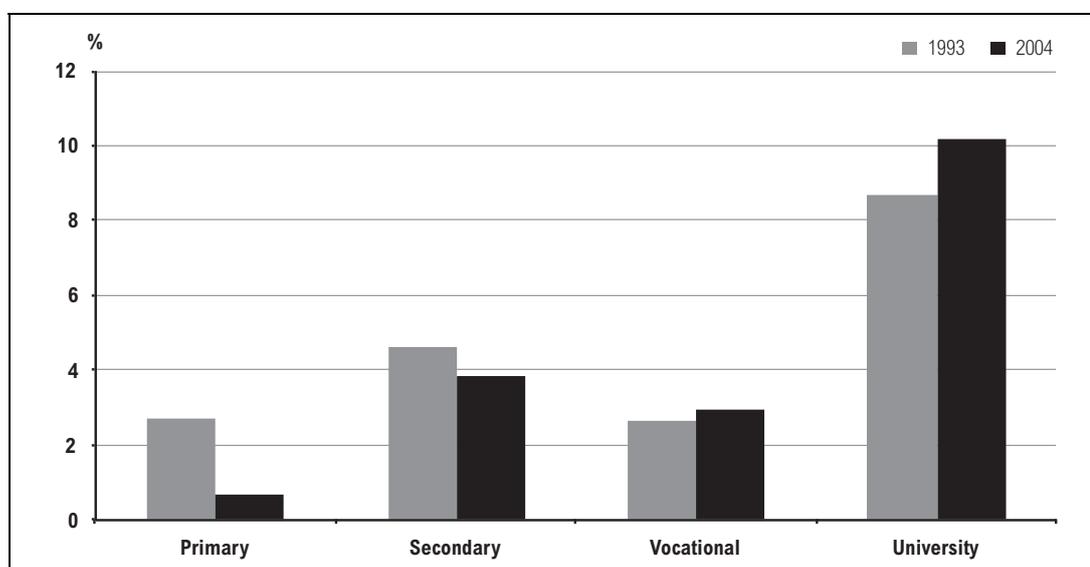
5.4 Limitation of opportunities for secondary vocational education

So far in this section, there have been two important points. First, there are not enough economic opportunities for all the children aged 15 and over who have left school, and access to those opportunities depends on certain factors such as good performance while in school, household assets, and proximity to the district capital. Second, if no economic opportunities are available, children who have left school spend significantly more time than their peers on sleeping or on general leisure, or both. This can be interpreted as evidence of the children who do not go to school having limited choices about what to do with their time.

In an ideal world, a large proportion of the children who have completed the LSE but failed the entrance exam for upper secondary would enter vocational training institutions that suited them. In practice, however, the system of secondary technical and vocational schools is relatively small in Vietnam. Statistics from MOET (2009) indicate that in the academic year 2008/9 the whole system of secondary vocational schools admitted only 149,400 new students and the secondary vocational programmes in colleges and universities admitted only 196,200 students.¹² It is important to note that the candidates for admission into the secondary vocational programme were not only the children who just completed lower secondary school that year (2008), but also the (better qualified) children who had completed upper secondary but failed the entrance exams to tertiary education institutions.

Some reasons for this are related to the transition economy. The fact that the labour market has not been functioning effectively has slowed the development of vocational education. It can be seen in Figure 2 that the rate of returns to secondary vocational education has been quite low. Figure 2, moreover, may explain why the competition for admission to university has been so fierce, while the vocational track is not very attractive. Thus, there are factors on both demand and supply sides secondary vocational education that discourage the growth of this part of the education system. This stunted vocational education limits the choices of young people in terms of routes to productive livelihoods.

Figure 2. *Rates of return by education level – 1993, 2004*



Sources: Adapted from World Bank (2008: 125)

¹² Note that in the previous academic year (2007/8), total enrolment of lower secondary schools was 5,858,500.

6. Summary and policy recommendations

The educational policy debate in Vietnam over the last decade reflects an increasing social dissatisfaction with the performance of schools. One of the most frequent complaints in public debates is that the number of children who have dropped out of school or left after LSE has been increasing in recent years. Our evidence is consistent with this criticism, and with UNESCO's clear message to this effect (UNESCO 2007).

The child's performance at school is a major factor in explaining the relatively high incidence of children dropping out early or opting to leave education after Grade 9. Over 40 per cent of the Young Lives children performing poorly or badly in Round 2 dropped out before they had completed LSE. On the other hand, in comparison with the average performers, the pupils who were rated good or excellent performers in Round 2 were 5 per cent less likely to drop out before they had completed LSE, and over a third more likely to continue schooling after completion of LSE.

Poverty is another important reason for dropping out of school. An increase of one standard deviation in household consumption expenditure is associated with a reduction of 5 per cent in children dropping out of school before completing LSE, or a reduction of 10 per cent in children leaving school after having completed LSE. The effect of parental education on the probability of children dropping out of school or leaving education straight after Grade 9 is also statistically significant.

The most frequently reported reason that caregivers give for their children dropping out of school or leaving education after Grade 9 is lack of interest, the situation in which children have no interest in studying or do not want to go to school. Lack of interest accounts for 39 per cent of all the children in our sample who had stopped attending school, and 47 per cent of the children who had dropped out before completing lower secondary school. We find, however, there is no statistically significant association of lack of interest with either measure of poverty. Household consumption expenditure is strongly correlated with the reporting of cost reasons for dropping out. But poverty in monetary terms should not be blamed for children losing interest in schooling. The mother's educational level is an important factor here. Another factor is ethnicity: non-attenders from ethnic minorities are more likely than those from the ethnic majority to claim that their reasons for dropping out are lack of interest, the direct cost of education, or having to work (whereas non-attenders from the ethnic majority report a wider variety of reasons).

The qualitative evidence does not support the notion that poverty is the main reason for drop-out. Although there is a great variety in the reasons for dropping out or leaving straight after Grade 9, the incidence is often related to the performance of the learner, and the fact that children's parents, siblings, relatives and friends left schools early. Even though child work features in nearly all the stories about the children who had stopped attending school, child work seems the *consequence* rather than the *cause* of dropping out or leaving after LSE.

Not having to go to school, about one-fifth of the teenage non-attenders participate in economic activities. Household assets generate unpaid work, while good academic performance before dropping out is important for getting a paid job. Furthermore, poverty and proximity to the district capital stimulate entry to paid work. The time spent sleeping and on

general leisure by children not attending school is significantly greater than that by school attenders. The non-attenders who do not participate in economic activities sleep on average for more than ten hours and have more than ten hours leisure time a day. This may be evidence that children not attending school lack a more constructive way to use their time.

Economic growth and poverty reduction help, but may not automatically solve the problem of children dropping out of school or leaving after Grade 9. Changes in policy and regulation of the education sector are required. As indicated in Section 2 of this study, the education system has been failing to make sure that all schools adhere to required standards. In particular, the education system must do away with the 'achievement syndrome' in order to minimise the sort of meaningless progress through school that has come to light recently. In order to give interesting and beneficial lessons, teachers should be able to concentrate on teaching, and not on having to earn a living outside school time. Teacher salaries are currently low in general, and this problem has to be dealt with sooner rather than later.

While the competition for admission to upper secondary school and university is always fierce, direct entry to productive livelihoods is not always the best option for children. Having failed the exam for admission to upper secondary school, many of the children would do best to enrol in secondary technical and vocational schools. But the limitations in the existing vocational track of the Vietnam education system certainly represent a loss of efficiency that hinders economic development in the long run. This weak part should not be left to the market to develop; good public investment in better vocational education would lead not only to economic gains for society in the future, but to social benefits, in terms of greater psychological welfare and safety for children now. More broadly, the Government of Vietnam needs to step up the current reforms of vocational education if they are to achieve the socio-economic development they envisage for the country in the coming years.

References

- Baulch, B., Nguyen T. Minh Hoa, Nguyen Thu Phuong and Pham Thai Hung (2010) *Ethnic Minority Poverty in Vietnam*, Working Paper 169, Manchester: Chronic Poverty Research Centre.
- Baulch, B., Vu Hoang Dat and Nguyen Thang (2012) *Do Vietnamese Schools Provide the Right Education for an Industrialising Country?*, Working Paper 81, Oxford: Young Lives.
- Bui Thai Quyen (2011) 'School Dropout Trends in Vietnam from 1988 to 2006' in J. London (ed.) *Education in Vietnam*, Singapore: Institute of Southeast Asian Studies.
- Carr-Hill, R. (2011) 'A Large-scale Donor Attempt to Improve Educational Status of the Poor and Household Income Distribution: The Experience of PEDC in Vietnam', *International Journal of Educational Development* 31: 251–61.
- Doan, T. and J. Gibson (2010) *Return to Schooling in Vietnam during Economic Transition: Does the Return Reach its Peak?*, MPRA Paper No. 24,984, Hamilton, New Zealand: Economics Department, University of Waikato.
- Glewwe, P. (2004) 'An Investigation of the Determinants of School Progress and Academic Achievement in Vietnam' in P. Glewwe, N. Agrawal and D. Dollar (eds) *Economic Growth, Poverty, and Household Welfare in Viet Nam*, Washington DC: World Bank.
- General Statistical Office (GSO) (2006) *Viet Nam Multiple Indicator Cluster Survey 2006, Final Report*, Hanoi: Statistical Publishing House.
- General Statistical Office (GSO) (2010) *Result of the Viet Nam Household Living Standards Survey 2010*, Hanoi: Statistical Publishing House
www.gso.gov.vn/Modules/Doc_Download.aspx?DocID=15084 (accessed 18 July 2012).
- Hoang Tuy (2011) 'Khủng hoảng giáo dục: Nguyên nhân và lối ra trước thách thức toàn cầu hoá', Hanoi University of Culture website, <http://huc.edu.vn/chi-tiet/350/>.html (accessed 2 March 2013).
- Johnson, K.P. (2012) 'The Sleepy Teenager', *Harvard Health Publications*, Harvard Medical School, http://www.health.harvard.edu/newsweek/The_Sleepy_Teenager.htm (accessed 22 March 2012).
- Khoi Nguyen (1 March 2012) 'Vi sao mot hoc sinh lop 8 chua "doc thong, viet thao"?' , *Ngươi Lao Dong*, <http://nld.com.vn/20120301043625204p0c1017/vi-sao-mot-hoc-sinh-lop-8-chua-doc-thong-viet-thao.htm> (accessed 2 March 2013).
- Le Thuc Duc, Nguyen Thang, Nguyen Van Tien, Mai Thuy Hang and Vu Thu Thuy (2011) *How Do Children Fare in the New Millennium? Initial Findings from Vietnam*, Round 3 Survey Report, Oxford: Young Lives.
- Liu, A.Y.C. (2006) 'Changing Wage Structure and Education in Vietnam 1993–1998: The Roles of Demand', *Economics of Transition* 14.4: 681–706.
- London, J. (2011) 'Education in Vietnam: Historical Roots, Recent Trends' in J. London (ed.) *Education in Vietnam*, Singapore: Institute of Southeast Asian Studies.
- Ministry of Education and Training (MOET) (2009) *Education and Training Statistics, Academic Year 2008–2009*, Hanoi: MOET.

Ministry of Health (MOH), General Statistics Office (GSO), UNICEF and WHO (2005) *Survey Assessment of Vietnamese Youth*, Hanoi: MOH.

OECD (2011) *Education at a Glance 2011: Highlights*, Paris: OECD Publishing.

Oostendorp, R.H. and Doan, Hong Quang (2010) *The Impact of Trade Liberalization on the Return to Education in Vietnam: Wage Versus Employment Effect*, Tinbergen Institute Discussion Paper No. 2011-060/3, Amsterdam: Tinbergen Institute.

Patrinos, H.A. and G. Psacharopoulos (2010) Return to Education in Developing Countries, in D. J. Brewer and P.J. McEwan (eds) *Economics of Education*, San Diego, CA: Elsevier.

Tan Loc (6 December 2011) 'Kiểm tra kiến thức học sinh "mù chữ" vẫn lên lớp 7', *Phap Luat online*, <http://phapluattp.vn/2011120510597977p0c1019/kiem-tra-kien-thuc-hoc-sinh-mu-chu-van-len-lop-7.htm> (accessed 3 March 2013).

Thanh Tu (14 December 2011) 'Học sinh lớp 3 không đọc được chú cái', *Tuoi Tre online*, <http://tuoitre.vn/Giao-duc/469201/Hoc-sinh-lop-3-khong-doc-duoc-chu-cai.html> (accessed 20 March 2013).

Thuy Hang (12 February 2012) 'Ngăn chặn học sinh bỏ học là "cuộc chiến" rất nan giải', *Phu Yen online*, <http://www.baophuyen.com.vn/Dan-tri---Nhan-luc-78/1105605505305505551> (accessed 3 March 2013).

Truong Cong Thanh (2009) 'Về tình hình học sinh bỏ học và đề xuất giải pháp khắc phục thực trạng', Ho Chi Minh City: Institute for Educational Research, University of Pedagogy, <http://www.ier.edu.vn/content/view/280/160/> (accessed 4 March 2013).

Truong Huyen Chi (2011) 'They Think They Don't Value Schooling – Paradoxes of Education in the Multi-Ethnic Central Highlands of Vietnam' in J. London (ed.) *Education in Vietnam*, Singapore: Institute of Southeast Asian Studies.

United Nations in Viet Nam (2012) 'MDG 2: Achieve Universal Primary Education', *Achieving the MDGs with Equity*, http://www.un.org.vn/images/stories/MDGs/MDG2_Eng.pdf.

UNESCO (2007) *Education For All by 2015: Will We Make It?*, *Education for All Global Monitoring Report*, Paris: UNESCO.

UNICEF (2010) *An Analysis of the Situation of Children in Viet Nam 2010*, Hanoi: UNICEF Viet Nam.

UNDP (2011) *Sustainability and Equity: A Better Future for All*, Human Development Report, New York: United Nations Development Programme.

Vo Tri Thanh and Quang Long Trinh (2005) *Can Viet Nam Achieve One of Its MDGs? An Analysis of Schooling Dropout of Children*, William Davidson Institute Working Paper 776, Ann Arbor: University of Michigan Business School.

World Bank (2008) *Vietnam: Higher Education and Skills for Growth*, Washington DC: World Bank, available at: <http://siteresources.worldbank.org/INTEASTASIAPACIFIC/Resources/Vietnam-HEandSkillsforGrowth.pdf>.

Why Children in Vietnam Drop out of School and What They Do After That

This paper uses data on 3,000 children in Vietnam, as well as on their siblings, to investigate the problem of children dropping out of school early or leaving straight after lower secondary education. Both quantitative and qualitative approaches are employed. We find that poor performance in class is the biggest predictor of children leaving school early. Household poverty and parental education are also important factors behind the probability of this phenomenon.

The most frequent reason given by parents for children ceasing to attend school is lack of interest. Our analysis shows that poverty is not an important determinant of lack of interest. Other factors, such as being from an ethnic minority or having a mother with a low level of schooling, however, are strongly associated with lack of interest in school.

Furthermore, even though children may give one of several different reasons for leaving school early, qualitative evidence from our in-depth interviews with them points to the fact that the children's performance and their perception of the value of schooling are the most common ones.

Finally, our analysis of the pattern of time use suggests that the children who have stopped attending school and who do neither paid nor unpaid work spend a lot of time sleeping and/or on leisure activities, and that may be interpreted as evidence for limited opportunities for productive livelihoods.

About Young Lives

Young Lives is an international study of childhood poverty, involving 12,000 children in 4 countries over 15 years. It is led by a team in the Department of International Development at the University of Oxford in association with research and policy partners in the 4 study countries: Ethiopia, India, Peru and Vietnam.

Through researching different aspects of children's lives, we seek to improve policies and programmes for children.

Young Lives Partners

Young Lives is coordinated by a small team based at the University of Oxford, led by Professor Jo Boyden.

- *Ethiopian Development Research Institute, Ethiopia*
- *Pankhurst Development Research and Consulting plc*
- *Save the Children (Ethiopia programme)*
- *Centre for Economic and Social Sciences, Andhra Pradesh, India*
- *Save the Children India*
- *Sri Padmavathi Mahila Visvavidyalayam (Women's University), Andhra Pradesh, India*
- *Grupo de Análisis para el Desarrollo (GRADE), Peru*
- *Instituto de Investigación Nutricional, Peru*
- *Centre for Analysis and Forecasting, Vietnamese Academy of Social Sciences, Vietnam*
- *General Statistics Office, Vietnam*
- *University of Oxford, UK*

Contact:

Young Lives
Oxford Department of
International Development,
University of Oxford,
3 Mansfield Road,
Oxford OX1 3TB, UK
Tel: +44 (0)1865 281751
Email: younglives@younglives.org.uk
Website: www.younglives.org.uk