

ANNEX

**VIETNAM
HIGHER EDUCATION REFORM AGENDA**

Period 2006-2020

ANNEX

A. HIGHER EDUCATION STRUCTURE AND SYSTEM

1. *Current Situation:*

CHARACTERISTICS OF EDUCATION SYSTEM STRUCTURE IN VIETNAM

- a. Our country's economy is still at its initial stage of industrialization and modernization period. The need for human resources with primary and secondary vocational qualifications is still high, especially in rural, remote, isolated, mountainous and ethnic minority areas. The investment into literacy programs is already a challenging task, let alone the investment into technical education. Meanwhile, education, especially high education sub-sector, is always criticized as being irrelevant and stuck to production reality; graduates are criticized to be of low quality as they are not able to perform in their jobs upon graduation but need further training.
- b. Vietnamese people (including those who strongly criticize diploma-oriented views) always have strong wish to send, by all means, their children to universities despite acknowledging that their children only have limited learning abilities. This is not an emerging trend but something, which has become deeply rooted perceptions and the nation's cultural characteristic (similar to the situation in South Korea).
- c. In the State institutions, the system for employment, salary and recruitment still shows discrimination in diplomas and learning/training modes. Exam-oriented education seems to be strongly maintained within the highest level of educational management (Ministry of Education and Training – MOET).
- d. In comparison with the educational system structures of various countries that are referred in this report, Vietnamese education system has the following characteristics:
 - No significant distinction in general education
 - Professional education in Vietnam has been implemented by vocational and secondary professional schools, colleges and even universities like in other countries.
 - There are three differences in the structure when comparing with other countries:
 1. There does not exist secondary or higher vocational education while the majority of countries does.
 2. Professional secondary programs are relatively prevalent while very few countries have those programs and have had upgraded up to college level.
 3. Higher education in Vietnam belongs to the unitary education system with only single type of universities which are either traditional ones or those upgraded from colleges, with various types of programs leading to different qualifications ranging from college to post-graduate levels. Universities in our country only offer bachelor degrees and higher ones, but not the certificates for each stage of study.

2. *Several international references:*

ON EDUCATION SYSTEM IN SOME COUNTRIES

1. General education:

General education in most countries consists of primary education, lower secondary education and upper secondary education. Up to lower secondary level, there is almost no difference (9 years with a division of 5 years and 4 years or 6 years and 3 years for primary and lower secondary respectively). The differences appear at upper secondary level. Most of countries use the system of 3 years for the upper secondary level. In Germany, there is one year at intermediate level before entering the upper secondary one. Singapore combines into only secondary level (4 years) and therefore expands the post-secondary level into 2 to 3 years. The UK applies the system of 2 years for A-level after finishing 11 years of compulsory general education. The upper secondary level in Russia and Australia consists of 2 years.

As for the US alone, primary education may, depending on each state or district, consist of 4, 6 or 8 years. If it is 4 or 6 years, the junior secondary level will be from 2 to 3 years. Secondary education includes junior and upper secondary levels. The total number of years for general education is 12 years.

2. Technical and Vocational Education

- a. Most of countries in the world establish technical and vocational education system alongside with general and tertiary education. Some countries only call vocational (e.g. in the UK and Australia) or career education. Technical and vocational education is used by UNESCO. All countries make a distinction between vocational education and training. The World Bank divides into three categories: vocational education, pre-employment training & retraining, and in-service training. The very important common characteristic of vocational education in various countries is the linkages with various careers in the society at different levels: after finishing vocational education programs, graduates are able to directly join the labor market, being equipped with what they studied.
- b. Most of countries (including Germany) provide vocational education for school-age youth with two levels: middle upper secondary (equivalent to high secondary) and upper secondary (tertiary education or higher education) or post-secondary as in Singapore. At secondary level, students are offered certificates or vocational and technical baccalaureates (as in France). At tertiary level, students are offered certificates or diplomas (as in the UK, Australia, Singapore, Thailand, etc.). Some countries recognize diplomas as those being equivalent to college degree (2 years – as in the UK, Thailand, South Korea). In Russia, professional and vocational education is provided in technikums, PTU and PL or combined with general education from 3-4 years or in form of training skilled workers with different levels. Post-secondary vocational education programs, which train middle level specialists, recruit general education graduates who will be trained in two years or lower secondary (compulsory education) graduates who will be trained in 4-4.5 years and awarded with Higher Vocational Ed. Diplomas. The above-mentioned two years of training will be considered as transition period and those students who had those two years and wish to enroll in a university with the same discipline will be able to start with the second or third year in that university.

- c. In China, vocational education certificate that is equivalent to lower secondary level is assigned for students in rural and mountainous areas, who do not wish to enter universities and colleges. This certificate is a substitute for universal lower secondary education certificate. Vocational education system in Germany accepts those who complete universal lower secondary education but the training mainly takes place in businesses and enterprises. Students spend one day learning at school each week (this is called dual system).
 - d. Most countries apply no restrictions on the linkages between general and vocational education. However, there is normally a complementary course needed to provide students with general knowledge which is vague or absent in vocational education programs.
 - e. The school system in general education is relatively simple with primary, lower secondary and upper secondary schools. In the US, there are, depending on each state or district, primary, middle/junior and high/senior high schools.
 - f. The variety of vocational schools is partly due to the diversity and flexibility in the management of vocational education programs. The majority of junior colleges, community colleges and technical institutes offer vocational programs. In some countries, universities and colleges also offer higher vocational diploma programs.
3. Higher education system
- a. The significant difference between higher education and higher vocational education is the high proportion of theoretical component and its effects in higher education and high proportion of skills (not only technical) training and occupationally oriented nature in vocational education.
 - b. Higher education system in various countries can be either unitary or binary.

Unitary system only consists of one category of higher education institutions with all different programs leading to various qualifications ranging from diploma, undergraduate to post-graduate. The programs can be research and professional oriented or have a focus on general academic component.

Binary system consists of two categories of higher education institutions: Category A includes traditional ones which link higher education with research (in EU countries, it is called universities); Category B includes those which are professionally oriented (“professional” here should be understood as being relevant to those disciplines which are related to applied sciences) with or without areas of applied research (Fachhochschulen, Hautes Ecole, Institute of Technology, Hogeschulen, polytechnique or non-university). The current trend is to remove the distinction between these two categories. Category B institutions will try to become universities of applied sciences as a copy of universities of technology.

- c. Higher education system (either unitary or binary) in various countries can offer one-tier or two-tier degrees. If it is one-tier system, only bachelor degree is offered. If it is two-tier system, bachelor and master degrees are offered. Some countries offer associate degrees (as in the US) or Incomplete Higher Ed.

- Diploma as in Russia for the first stage (2 years) of studies, and specialist's diploma as in Russia or professional degrees as in the US for post-university vocational education. When master education is regarded as part of higher education, it will form the multi-stage university programs with associate, bachelor and master degrees (about 5-6 years as in Russia, the US, etc.).
- d. Countries only offer one Ph.D. degree. There is only one exception, which offers Doctor of Science (Russia). Graduates from non-university institutions can apply (if eligible) to doctoral degree programs in universities.

ABOUT HIGHER EDUCATION SYSTEM IN THE US

School, College, University, Institute

- These nouns can be used interchangeably in any circumstances. "School" is used to refer to any place where learning takes place. Any institution, which offers degrees in the US, can be called with one of the above-mentioned names. And colleges and institutes are in no way inferior to universities.
- In principle, colleges are normally smaller and only offer undergraduate degree meanwhile universities offer both undergraduate and graduate degrees (graduate degrees include master and doctoral ones).
- Institutes are those that provide specialized training with different degree-awarding programs covering a group of closely related areas, and students can interchange among those programs.
- Research centers offer graduate degrees, or research and training opportunities with or without linkages with universities.
- In the US, there are state and private universities with different financial sources and tuition fee levels. Community colleges are the community-based educational institutions, which are linked with community groups and employers, and established to help many American students to live closely to their families. These institutions are also called 2-year or junior colleges that offer associate degree programs leading students to the third year of four-year universities. This is one of the most striking characteristics of the higher education system in the US.
- Technical and vocational colleges in the US prepare students for employment and provide certificates and short-term programs of 2 or less years. There are several thousands institutions like that.

American education system structure:

- Pre-higher education: 6-18 years old (compulsory)

The system of institutions at this level is relatively complicated, including:

Pre-primary: kindergarten, pre-school, daycare centers.

Primary/elementary: 4 years, 6 years or 8 years.

Lower secondary: normally 3 years.

Secondary: 6 years offering high school education, vocational education, honor/regent, and college preparatory courses.

Senior: upper secondary (3 years).

- Higher education

Higher education is also called post-secondary education, not divided into sectors (e.g. university or non-university sector as European countries), and diverse, and forms an autonomous community). There are 2,819 institutions offering bachelor or high degrees. 2,657 institutions offer associate degrees. 4,927 institutions offer short-term (less than 2 years) programs without leading to degrees.

Although American higher education institutions are not divided into sectors like those in Europe, they belong to 7 categories:

- Research universities
- Universities offering doctoral degrees
- Universities and colleges offering master degrees
- Colleges offering bachelor degrees
- Colleges offering associate degrees
- Professional schools or institutes
- Post-secondary technical and vocational schools.

The features of American higher education institutions are of accessibility, diversity and autonomy in both size and quality. The Government does not place its jurisdiction and power on the recognition of higher education institutions, academic profession, programs or curricula, degrees and other qualities.

Most of higher education institutions are given operation licenses by the state or provincial authorities with the property belong to the Government, a private corporation and possibly for-profit or not-for-profit enterprises.

Quality assurance is achieved in response to the Government's requirements. Quality accreditation is carried out voluntarily and ensured through the reputation gained by the institution among education communities and employers.

Quality accreditation is a self-managed quality control process that involves American higher education institution community in order to ensure minimum standards of academic and management capacities, and to promote the quality recognition among various institutions in the system. There are six regional accreditation associations, which establish minimum standards for states. There are also other associations that set up and adjust minimum standards for specific or relevant areas, especially professional education areas.

ABOUT THE RENOVATION OF RUSSIAN EDUCATION

1. Russian education system:

It is interesting that in the 1996 Country Report on Russian Education System (presented in International Conference on Education in Geneva, 30 September – 5 October 1996), there did not exist higher vocational education programs but the programs of secondary vocational education offered in technical and vocational schools, secondary special education on techniques, humanitarian, health, art and other areas, and advanced secondary vocational training. According to 2002 document on Russian education system, there appeared higher vocational education diplomas.

		Technical and vocational education					
		higher education				school education	
		university		non-university		Prof.Litsei	Prof. TU
		University		Technikum, College Uchilische			
....		Ph.D ⁸					
18-20		Associate Ph.D ⁷					
17	Master ⁶		CG ⁵				
16		CG ⁵					
15	Bachelor ⁴						
14							
13	incomplete higher education ³		higher vocational education ²	higher vocational education ²	vocational education ⁹		
12							
11	general education ¹			+ general education ¹	+ general education ¹		
10							
1-9	primary education + basic education						

Various degrees and certificates: 1. Complete general education certificate, 2. Higher vocational education diploma, 3. Incomplete higher education diploma, 4. Bachelor degree, 5. Specialist D, 6. Master degree, 7. Candidate degree, 8. Doctoral degree (Dr. Nauk), 9. Either secondary vocational education diploma or initial vocational education diploma). Students holding these two categories of degree are allowed to sit in the entrance exam to universities or higher vocational education diploma programs, 0. Unclear with or without certificates.

2. Education boom

In 2000, the total number of university students (including non-public ones) is 4,739,500 of which 2,624,300 followed day-time courses meanwhile these number in 1992 were 2,638,000 and 1,657,000 students respectively, i.e. the number of students per 10,000 people increased from 178 in 1992 to 327 in 2000. According to the “Public Opinion” in 2001, 74% (and even 80%) of the population under 35 years old believed that it’s important to have university qualifications. The enrollment competition was harder with an increase from 228 candidates/100 available places in 1997 to 300/100 available places in 2000. The reason is that more and more people belonging to different social groups regard higher education as a prerequisite for social dynamic and professional mature. The previous USSR’s education models of self-sufficiency on school education and

professional secondary education are the thing of the past. Professional secondary institutions, previously called technicums, are typically becoming just a step towards entering a university. The attention paid to higher education is very strong and has little dependence on social classes.

3. Higher education “commercialization”

It is interesting that Russians also put the term commercialization in quotation marks and define as the formation and expansion of commercial forms of education, the urge by universities on their students to make contributions into the salary funds for teachers and other staff, into dormitories, food, drinks, medicine and other services provided for them with socially fair volumes, as well as complementary educational services beyond the standard volume) ^[1].

4. Profit-making activities by public universities

The reorganization of economic relations will have impact on higher education institutions. In order to supplement to the limited financial resources, they have to carry out profit-making activities although it is not always utilitarian in nature. At present, non-budget revenues from economic activities account for 47%, 31% from science-related contracts, 22% from local budget, 17% from industries, 9% from foreign aid, and 5% from funding enterprises.

5. The establishment of non-public institutions

After 6 years starting from 1993-1994, non-public institutions have accounted for more than half of the total number of universities in the federation (54.1% in 2000), of which profit-making institutions making up 40% with more than 20% of students. ^[2]

6. Second higher education phenomenon

There are several reasons explaining the emerging popularity of the second higher education in Russia. First, there is an interaction between the current labor market and higher education system formed in the USSR’s industrial period with the principle of one education for the whole life, leading to a system where educational activities and practice are closely linked, and establishing a multi-stage system that is different from the traditional model. Second, it is hard to get into a so-called “good” university due to high competition; therefore, there is a need to establish formal higher education institutions which are the transition places in nature before entering universities believed as providing quality education. In other words, above high school stages have been formed in reality². “The expansion of distance education and second higher education can be perceived as a reaction to the rapid changes of the labor market and its demands, and as a vertical mobility for those who have limited opportunities to have access to good quality formal education”.

7. Complementary vocational and post-graduate education

The Russian President’s 2001 message clearly stated that “the development speed of economy, modern sciences and technology requires moving towards continuing life-long education”. In 2000, the complementary vocational education system consists of 1,350

institutions, which trained 1.12 million people of which 350 thousands studying practical areas of market economy and social aspects.

ABOUT VOCATIONAL EDUCATION SYSTEM IN CHINA

After a careful study, one can recognize the following four characteristics of the Chinese vocational education system which has been restructured in the direction of renovation and opening to the world:

1. Emphasis on skills training and practical orientations. No distinction is applied between skills training and practice, and knowledge provision.

2. The vocational education system has three levels: Level 1 - junior secondary, Level 2- senior secondary and Level 3- tertiary. These terms have also been used by UNESCO for both academic and vocational education.

3. Upon completion of primary schools, students have a chance to enjoy both vocational education at Level 1 (junior secondary level) and academic education, as part of universal 9-year education (equivalent to the current universal lower secondary education in our country). This normally takes place in economically disadvantaged and rural areas.

4. The Chinese vocational education system includes, without distinction, among various non-academic training types, modes and institutions despite different weights given to academic education and skills training. All *professional secondary schools, high skilled technical workers training schools and vocational schools (Level 2) fall into the category of Level-2 (senior secondary level) vocational institutions, which enroll lower secondary graduates.*

5. Level-3 (tertiary level) vocational institutions *enroll graduates from upper secondary schools and Level-2 (senior secondary level) vocational institutions, putting an emphasis on practice- and craft- oriented training.* Level-3 vocational education is provided through 5 different categories of institutions:

- Higher vocational technology colleges (30)
- Short-circle practice- oriented vocational universities (101)
- 5-year higher vocational classes within specialized secondary schools
- Higher education institutions and educational institutes for adults (180 institutes), and
- Transformed educational institutions with practice- oriented training programs in 2-3 years.

It can be seen that China has very simple and consistent level-based classification in the national education system in general and vocational education in particular with only two post-universalization levels – Level 2 (senior secondary) and Level 3 (tertiary). The programs, either for academic education or vocational and technical education, provide almost the same training duration for each level. Moreover, the system is very diverse in training modes and institutions at Level 3. All these reasons facilitate the great potential

for linkages, and free development of each individual's capacity up to Level 3. The National Education Council Office recognizes that this characteristic of the Chinese education system should be followed.

ABOUT SEVERAL BASIC TERMINOLOGIES AND CONCEPTS

Associate: the degree offered to those who complete programs of at least 2 years in order to either obtain professional qualifications (as for technical and vocational education) or move up to the last two years of training in a bachelor degree program. In Russia, there is a distinction between Incomplete Higher Education Diploma in the case of completing the first two years of university-level programs, and Higher Vocational Education Diploma in the case of completing technical education programs at non-university level. In Australia, the latter case is called Advanced Diploma.

Bachelor: the degree offered to graduates from programs of at least 4 years in most of universities and colleges.

Colleges: post-secondary institutions or specialized ones (as in Australia and Russia) offering undergraduate and sometimes graduate programs. Colleges can be part of a university (established for each area of specialization, e.g. science, education, engineering, economics, business management, etc.).

Degree: rank or title given by colleges, universities or professional schools to somebody who completes a specified training program.

High school: secondary school (including both lower and upper secondary)

Higher education: post-secondary education with various programs which offer associate, bachelor and graduate degrees in colleges, universities, junior or community colleges, professional schools, technical institutes and teacher training institutions. This terminology is commonly used in the world. Some countries make a distinction between non-university and university levels (like in Russia and EU countries); but some others do not (like in the US).

Job and occupation: According to Americans, job or occupation consists of all types of income-raising work in the society. Scientists (for example chemist or mathematician) working in research institutes can be seen as an occupation. Therefore, vocational should be understood with its narrower meaning, referring to jobs that require more skills than knowledge.

Liberal arts: a common noun referring to academic programs in the areas of humanity, and social and natural sciences.

Professional: of or belonging to a profession (according to Russian's use – primary, secondary, higher and post-college professional education); Americans use it with a narrower meaning, indicating a group of professions in relation to medicine, law and

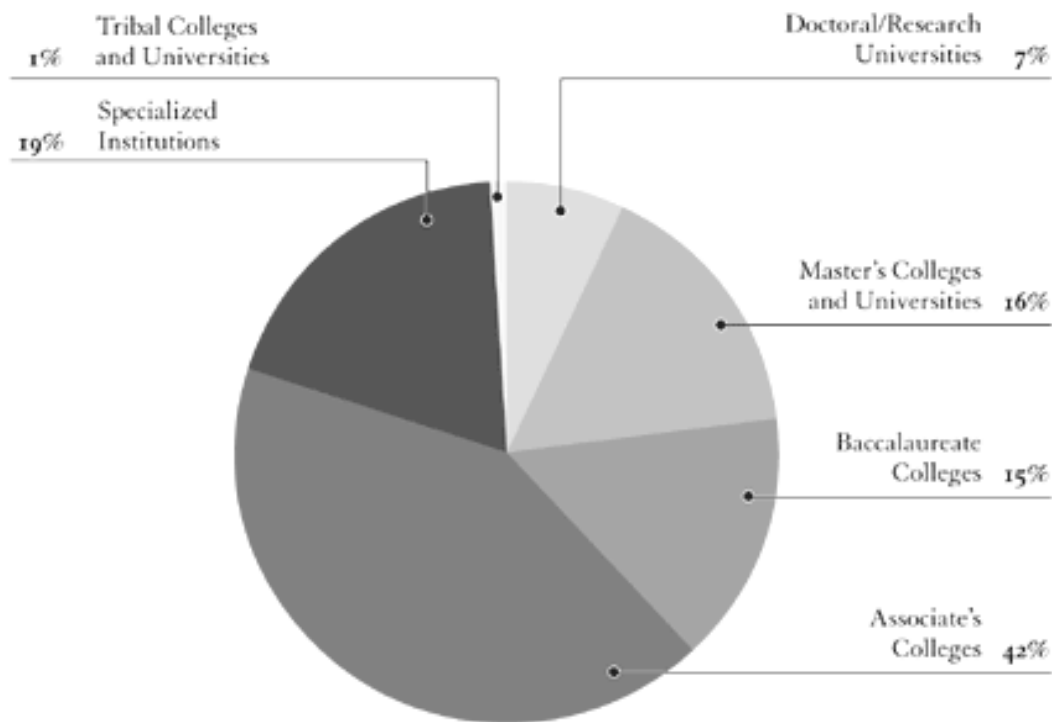
theology. Professional education is used by Americans in the phrase “graduate/professional education” to refer to advanced vocational education. In Russia, Specialist’s Diploma is also offered.

Therefore, the omission of concepts of professional education (only including vocational and professional secondary education) and professional secondary education, which have been used in 1998, Education Law is definitely appropriate.

Professional degree: normally offered after completing bachelor degree programs for several areas like medicine, dentistry, veterinary medicine and law (as in the US).

Skills: possibly basic skills like writing skills, math skills, academic skills and technical skills. It can be used to refer to levels like high level of skills or skill level.

Skilled: A highly skilled worker. The skilledness can be obtained partly in schools but mainly from employment period.



Percentage Distribution of Higher Education Institutions by 2000 Carnegie Classification

Special secondary. In Russia, this is used to refer to a special kind of school which is put in the category of secondary vocational education, as part of secondary professional education (National Report of Russian Federation, Geneva 1996). Also according to this report, the Russian education system only consists of general education comprising pre-school, primary, basic secondary, and general secondary education, and of professional education including primary, secondary, higher and post-college professional education.

Specialist's Diploma (used in Russia): this is offered to those who were trained under post-bachelor and profession-strongly oriented programs.

University: a higher education institution that normally consists of one college or school of liberal arts and several professional colleges, with various programs leading to bachelor, master and doctoral degrees.

Vocational: of or belonging to a profession. Vocational is usually accompanied with technical in the phrase “technical/vocational education” to refer to manual skills training rather than knowledge provision. (In Russia, there is a distinction between vocational and professional; therefore, “professional vocational” or “professional technical” is used). In Vietnamese language, these can be interpreted as worker/workmen/staff training.

However, the classification of workmen concept should be understood in a broader context in the new era. According to the official information from American Ministry of Labor: electricians only need to attend apprenticeship programs from 3-5 years; setters, operators, and metal and plastic tenders only need to have several weeks of on-the-job training in order to operate relevant machines, but it will take several years to become highly skilled workers; meanwhile, machinists, tool and die makers, and welding, soldering and brazing workers are required to follow vocational programs provided by high schools, vocational schools, vocational colleges, community colleges (with associate degrees) or post-secondary institutions.

References for Part A

¹ *Sheregi F.* Sociology of Education Applied Research M. Axademia 2001, 91-92.

² *Bocharova O.* Higher Education in Russia: Vertical Mobility and Social Protection Otechestvennyie #1, 2002, 108.

B. MANAGEMENT OF HIGHER EDUCATION

Current Status and the new Context

a. Current Status:

After 15 years of higher education renovation, Vietnam has, in terms of management, conducted “reforms” of system organization such as the establishment of two national universities, several regional universities*, and community colleges in various localities, etc. With regard to management decentralization, universities have been given stronger autonomy, and operated block grants system applied to universities (Decree No.10); non-public universities are fully enjoying financial autonomy, etc.

* But these higher education institutions are in form of “universities inside universities”; i.e. “a legal unit inside another legal unit” like in State-owned Corporations 90 and 91, which are currently transformed into “head and subsidiary companies”.

However, higher education system organization and management as well as management by universities themselves is *basically the same with that in 1960s and 1970s decades*, and still shows centralized decision-making. The research of management system and relevant public policies has not been conducted in professional manner. Therefore, a number decisions have been made without scientific foundations or irrelevant to the Vietnamese reality, resulting in “repeatedly change” and causing “trial and error” feelings in the renovation process, e.g. the establishment of General University and National University (in Hochiminh City), which consists of over 150.000 students and 9 big universities within it; stage transition exams, etc. Moreover, a number of very fundamental issues of higher education have not been studied such as the strategy for integrating into higher education globalization, overseas study policies, higher education stratification, higher education efficiency and effectiveness, policies on cost sharing among the State, learners and communities, scholarship and tuition fee policies, social equity in higher education, financial polices in non-public universities, etc.

b. The new Context:

The Vietnamese higher education system will continue to be expanded in size and quickly surpass the **landmark** from “elite” to “mass” higher education in 2009-2010. (The percentage of students in the age group will surpass 15%). This will make higher education correspond to an industrial economy and actually become **mass higher education**. The size of higher education will then reach some 1.8 million students with more or less than 300 universities and colleges. Furthermore, a higher education system for “lifelong learning” purposes will be gradually formed in our country. In addition, as part of the globalization process, there will be a number of twinning/joint training programs offered by foreign universities, and many branch campuses of foreign universities in Vietnam.

In that context, following issues will become increasingly urgent:

The State budget per student head will be reduced very rapidly. This will create, on the one hand potential risks for training quality deterioration, and on the other hand the pressure on tuition fee increase, resulting in less higher education opportunities for the majority of youth; and a part of them will have to experience the feeling of failure, making the problem of social equity in higher education more serious.

Vietnam will not have human resources being able to take part in competitions, even in its own country, and will face the brain-drain problems in form of global labor market and Vietnamese students studying overseas.

Higher education size and diversity will go beyond the Ministry of Education and Training’s management capacity and span of control if the current “centralized and subsidized” management style is maintained.

It can be said that the organizational and management renovation, and research and development of public policies in higher education have actually become a very urgent need. Several above-mentioned orientations are to meet such a need.

C. TRAINING PROCESS AND CURRICULA, AND QUALITY ASSESSMENT

Current Status

a. In the last 3 years, university/college enrollment activities have shown a number of improvements thanks to the 3-sharings solution. The advantages of this solution include: (i) partly reduce the pressure and costs towards the society (decreased number of applicants for universities; increased number of candidates for colleges; reduced number of candidates heading for Hanoi and Hochiminh City during exam period; and candidates only have to sit in the exam in one university but are considered by more than one university), (ii) initially create positive impact on the applicants' selection of institutions and areas of studies, (iii) improve selection quality of higher education institutions, (iv) ensure priority policies in the selection and balanced social structure of student composition, and (v) primarily produce good impact on teaching and learning in upper secondary schools and on exam disciplines. The shortcomings are: (i) basically, the conflict between study demands and training capacities has not been addressed, (ii) 2 national-level exams based on the same general knowledge foundations and taken place with only one-month interval still put strong pressure on the enrollment activities, (iii) several higher education institutions have faced difficulties in the selection due to the restrictions on the "floor" scores, and (iv) the higher education institutions do not have much freedom in their enrollment/selection activities as they have to follow general regulations set for the whole enrollment/selection system.

b. The current status of training objectives, content and methods in higher education has been clearly analyzed in the above-mentioned documents: slowly-renovated and modernized content, materials and education methods; curricula which heavily emphasize on academic component and exams without necessary focus on creativity, practical skills and career orientations as well as without close linkages with the requirements of socio-economic development reality.

c. The recent research and conclusions further identify the weaknesses in the aspects of curriculum content and training methods in higher education, namely: (i) the existing training curricula and content are slowly renovated, unable to meet the actual requirements, heavy, and inappropriately structured, (ii) the revisions have been carrying out with little efficiency (for example, the content in relation to social sciences is necessary but overloaded in the curricula used in technical and technology institutions; the time spent on basic sciences should be increased, etc.), (iii) the articulation and international integration of the curricula is low, (iv) in parallel with the out-of-date curricula, teaching staffs are insufficient and of low quality. Due to the heavy workload caused by quantitative expansion, teaching staffs have no time to do scientific research, to update knowledge, and change their teaching methods even when favorable conditions and teaching equipment/facilities are available.

References for Part C

[1] **Wim J. van der Linden, Ronald K. Hambleton.** *Handbook of Modern Item Response Theory.* Springer. 1997.

[2] **Arthur Levine** – *Handbook on Undergraduate Curriculum.* San Francisco: Jossey Bass, 1978.

[3] **Omporn Regel** – *The Academic Credit System in Higher Education: Effectiveness and Relevance in Developing Country* – The World Bank (Translation version: “Learning Credit System” – Ministry of Education and Training – 1994. *Survey Results and Recommendations,* Higher Education Project (May 2004).

[4] www.bologna-berlin2003.de.

D. DEVELOPMENT OF TEACHING STAFF, RESEARCHERS AND MANAGERS IN HIGHER EDUCATION

Current Status

Lecturers in higher education institutions are the advanced part of the country’s intellectuals, who have made significant contributions to the cause of the fatherland’s building and protection in the past decades. However, to meet various great demands for development, they are still facing a number of notable mismatches.

1. Number, qualification structure and quality:

- At present, there are 87 universities and 127 colleges nationwide with 39,985 lecturers (of which 28,434 university lecturers and 11,551 college lecturers)^[1], less than 600 school-level managers (Rectors and Vice-Rectors), and some 5,550 departmental-, unit-, center-level managers, etc. The proportion of number of lecturers over total number of staff in those institutions accounts for 50-55%^[2].
- The proportion of university lecturers holding doctoral degrees is 20.23%, master degrees 33.14% and undergraduate degrees 45.74%. The proportion of college lecturers holding doctoral degrees is 3.21%, master degrees 21.13%, undergraduate degrees 70% and college degrees 5.66%^[2]. There exists a big difference in the training qualification structure among national universities (34.9% of lecturers holding doctoral degrees), regional universities (7.1% of lecturers holding doctoral degrees), local universities (1.16% of lecturers holding doctoral degrees) and colleges^[3]. On average, there is only 1 lecturer being professor or associate professor in 617 students. Their professional quality is low in general in comparison with regional and international levels; their knowledge and practical skills are insufficient; they are weak in terms of scientific cooperation and exchange.
- Student: lecturer ratios are 28.67 and 14.22 in universities and colleges respectively. In general, this ratio in universities only reaches about 50-60% of the requirements; in economic, finance and law institutions, this ratio is too high (48 students per 1 lecturer)^[3].

2. Responsibilities and interests

- The regulations of lecturers’ working norms, teaching incentives, allowances and scientific research currently follow the Decision 1712/QD-BDH dated 18 December

1978 which is no longer appropriate. The incentives for fieldwork, academic exchanges and workshop participation, etc. are not clearly regulated. There is no specific regulation on the allowable degree of working outside their own institutions, and on part-time employment contracts for scientists working outside their own institutions. There does not exist regulations on title structure (Professor:Associate Professor:lecturer, etc.) and no distinction has been made on the tasks and titles. A number of lecturers have only taught one or two subjects for a long period of time, and even for the whole teaching life. Therefore, this prevents them from acquiring comprehensive and deep academic knowledge, and inter-subject/area creativity.

- Most of lecturers have been chosen from good and excellent graduates who have, however, never been provided with pedagogy in higher education.
- Most of lecturers (including professors) do not have their own working office in their institutions. The majority of institutions do not have subject-specific room and lecturers only come to their institutions when they have teaching or meetings.
- Salaries and nominal income are low and this possibly explains why it is difficult to keep control of and make them committed/devoted to their work (according to the new salary policy, the highest salary band is VND 2,320,000 (8.2); the lowest is VND 676,000 (2.34), excluding allowances).

3. As for higher education managers

- Higher education managers have been chosen from a pool of prestige lecturers and scientists; many of them are able to fulfill their tasks but quite a few have faced significant challenges in their management activities. Higher education managers have been provided with very few opportunities for management training (less than managers in general education have). There is no systematic plan for the selection of and training for higher education managers. They lack professional qualities, even in the positions, which require highly professional skills (such as those in relation to training and finance). Nationally, there is very small number of experts in higher education and higher education management.

References for Part D

^[1] *Summary Report on 2003-2004 Academic Year*, Ministry of Education and Training.

^[2] *Quality Accreditation in Higher Education*, Hanoi National University 2003 (???)

^[3] *Survey Results and Recommendations*, Higher Education Project (May 2004).

E. RESEARCH AND IMPLEMENTATION

Current Status

a. Context:

In 2002-2003 academic year, there were two national universities and 3 regional universities (with 20 members universities), 76 universities and institutes, and 119 colleges with 38,609 lecturers (1.87 times higher than that of 1995-1996 academic year), of which 5,479 holding doctoral degrees (14.2%), 10,598 holding master degrees

(27.4%), 324 professors (0.84%), and 1,330 associate professors (3.4%). The number of university and college students in 2002-2003 academic year was 1,020,667 (4.53 times higher than that of 1995-1996 academic year). After many years with the State's attention paid to investment, laboratories system for training and research purposes has been developed and upgraded, with many of them reaching national and international levels.

With very diverse pool of scientists in different areas, the task of scientific and technological development assigned for the education & training sector has its typical features of serving the sector development cause and making contributions to socio-economic development. Despite the financial constraints on the investment into scientific and technological activities, universities and colleges have made certain contributions to the country's scientific and technological development, speeding up the application of scientific and technological advances into the socio-economic development.

The Central Resolution 2, Term VIII on education and training, and science and technology confirms that education and training, and science and technology are the top national policies. The Central Resolution 2 has opened great opportunities and advantages, and at the same time identified challenges to the development of education & training sector in both areas of education and training, and science and technology. The big challenges that need to be addressed are the low investment from State budget and social sources into scientific and technological development; low level of technology, infrastructure and technical capacities in comparison with other regional countries; underdeveloped science and technology market; low per capita income; and insufficient reserves without meeting investment demands for development. The most fundamental advantage achieved after 7 years of implementing the Central Resolution 2 is the increased awareness of the society towards the roles and positions of education and training, and science and technology in the cause of country industrialization and modernization, towards the need for strengthened Communist Party's leadership and enhanced State management effectiveness, and towards the active roles played by all Vietnamese people for the cause of education and science development. Investment into education and training, and science and technology is regarded as investment into development. The Central Resolution 2, Term VIII has brought a flow of fresh air into the education and training development in general, and science and technology development within the sector in particular.

b. Achievements gained from scientific research and technology activities

Since the introduction of Central Resolution 2, Term VIII on education and training, and science and technology, scientific and technological activities have been carried out by universities and colleges nationally, ranging from education science research, research activities serving the purpose of designing policies for the country's development, applied research and technology development, and general research in natural and social sciences, to technology transfer to production, real life, consultancy, and scientific and technology services.

Education science research is one of the science- and technology-related tasks, which has been emphasized and given investment priority. Research findings and actual

implementation of educational management have made important contributions to the development of the *Education Law* that was passed by the National Assembly Term 10 in the 4th session in December 1998.

One of the notable scientific works, which is the collection of the whole sector's intellectual efforts, is the *Education Development Strategy for 2001-2010* period approved by the Prime Minister in the Decision No. 201/2001/QD-TTg dated 28 December 2001. The *Education Development Strategy* identifies the successes and shortcomings of the country's education in the past time, and points out scientific bases for educational development orientations in the coming period.

Studies on education science have contributed to the successful implementation of universal primary education policy nationwide and formed important basis for the National Assembly to issue Resolution No. 40/2000/QH10 on the *renovation of general education curricula and textbooks*. Starting from 2002-2003 school year, education sector has introduced new curricula and textbooks for Grades 1 and 6 as well as subsequent grades up to Grade 12. Studies on teaching/learning equipment and introduction of information technology (IT) into schools have gradually made contributions to the renovation of teaching and learning methods, which promote active and learner-centered learning.

Research on the renovation of content and training curricula for undergraduate, postgraduate, college, professional secondary and vocational education has been carried on regular basis. Upon the issuance of the Education Law, the Ministry of Education and Training has given directions and newly developed curriculum frameworks for all training areas in higher and professional secondary education, forming a basis for higher education institutions and others to update and renovate their curriculum and content.

The “hot” issues such as environment protection education and application of information technology into education have been paid more attention. The project on “Introduction of environment protection components into the national education system” was approved by Prime Minister in Decision No. 1363/2001/QD-TTg dated 17 October 2001. The Ministry of Education and Training has been implementing this project in its various sub-sectors. Informatics teaching in schools, application of information technology (IT) and Internet into teaching, and scientific research in professional secondary and higher education have been invested and gradually helped our education system integrate regionally and internationally.

Research activities serving the purpose of designing policies for the country's development carried out in the past renovation years by economic, social sciences and humanity universities have made significant contributions to the identification of scientific bases and rationale for management policy renovation, gradually transitioning from centralized to socialist-oriented market management.

During 1996-2000 period, the education and training sector was assigned to manage two State-level Social Sciences and Humanity Programs: Social Sciences Program – 03

“Socialist-oriented establishment of production relations and implementation of social advance and equity”; and Social Sciences Program – 04 “Cultural development and human development in the country industrialization and modernization period”. Under the framework of those two programs, the National Economics University played its leading role in carrying out various sub-projects like “The structure of economic components in socialist-oriented market mechanism in our country”, “Theories of, policies for and solutions to renovating and strengthening public economic component”, “Actual situation of property issue and current directions for solutions in our country”. The Agriculture University No. 1 led the implementation of the sub-project “Industrialization, modernization and social changes in rural areas – Orientations and policies”. The National Institute for Educational Sciences lead the carrying out of two sub-projects “The strategy for comprehensive development of Vietnamese people in the country industrialization and modernization period” and “Real situation and solutions to moral and political thought education, and establishing lifestyles for pupils and students within the strategy for comprehensive development of Vietnamese people in the country industrialization and modernization period”. During 2001-2005 period, universities have been assigned with take a lead in implementing 10 sub-projects under the framework of 5 key State-level Social Sciences Programs and several State-level independent sub-projects.

Several State-level independent sub-projects such as “Finalization of minimum salary calculation methods that form a basis for salary reform in Vietnam for 2001-2010 period in the light of living standard survey” (the National Economics University took its lead), “Theoretical issues and practices for the development of national and international trade and navigation laws in the context of Vietnam’s regional and international integration” (the Foreign Trade University took its lead), have contributed to confirming viewpoints and scientific basis for further adjustment of the State’s major policies in accordance with economic development, and to facilitating our country’s regional and international integration.

Research findings from “The development of farm economy in industrialization and modernization period” sub-project (assigned by the Prime Minister for the National Economics University to implement) were regarded as a foundation for the Government to issue Resolution 03/2000/NQ-CP on the development of farm economy. “Actual situation and solutions to ensuring production and life activities for peasant households without or with insufficient land in Mekong River Delta” sub-project (conducted by the National Economics University) recommended various solutions to support peasants to take land back and transform farming activities for households, which are unable to take the land back.

As for the cause of country’s industrialization and modernization, socio-economic development and environment protection: During 1996-2000 period, universities conducted 44 projects and sub-projects within the framework of 8 key State-level Science and Technology Programs, and 20 State-level independent sub-projects in the fields of bio-technology, materials, automation, machinery manufacturing, energy, transport, marine survey/study, environmental resources protection, education, social sciences,

economic management, construction, community health protection. During 2001-2003 period, universities were assigned to conduct 55 sub-projects within the framework of 9 State-level Science and Technology Programs for 2001-2005 period, and 5 State-level independent sub-projects.

During 1996-2002 period (7 years), MOET-managed universities and colleges, and two national universities implemented more than 3,800 research sub-projects and 90 ministerial level pilot projects, of which those in the field of education sciences accounting for 21%; economic, and social and humanity sciences 22%; techniques and technology 24%; agriculture, forestry and fishery 16%, community health protection 4%, environment protection 4% and other fields 9%. A number of projects and sub-projects have been applied and brought socio-economic efficiency.

On the basis of achievements gained from research projects, universities have managed to sign contracts for technology transfer to localities and production units. According to the reports from 20 technical, technology and agriculture universities, they signed nearly 13,000 contracts during 1996-2000 with total revenues of almost VND 1,188 billion, paid tax of over VND 32 billion and contributed almost VND 33 billion for their activities and improved infrastructure for research activities. As for 2002 alone, Hochiminh National University performed 800 contracts with revenue of VND 55 billion; Hanoi University of Technology implemented 402 contracts with revenue of VND 67 billion.

In 2001, the Prime Minister assigned the task for the Ministry of Education and Training (MOET) to provide on-going support to Quang Binh province. Since then, the MOET has directly instructed the Agriculture University No. 1, Agriculture and Forestry University within Hue Regional University and Marine University to transfer advanced techniques on cross-bred rice and melon, pineapple, pepper, orchards, peanut disease prevention and cure, production of breeding tiger prawn, the model of prawn farming in sandy areas, fish powder production, agricultural product drying machine, incubators, etc. After three years of implementation, encouraging achievements have been gained and contributed to scientists and technical staff training, to strengthened transition of local production structure, to providing more job opportunities for farmers and fishermen, and to improved productivity of export marine products.

Basic research in natural sciences has been increasingly promoted. Annually, universities fulfill approximately 150-200 tasks for fundamental research in the areas of mathematics, informatics, mechanics, physics, chemistry, biology and earth science. A number of scientific articles have been published in summary records of scientific conferences, and national and foreign scientific journals. Basic research tasks have actively facilitated postgraduate training. Many research findings have been incorporated in teaching materials and reflected in the main content of various master and doctoral theses.

Another significant achievement in science and technology that should be recognized is the *sector's potentials for science and technology* in form of scientific and technology staff, research equipment, and information of science and technology. Every year, about

500-600 people are sent for overseas training through State budget programs, and scholarship programs funded by foreign governments and international organizations.

With the state budget and aid sources through international cooperation activities, university laboratories have been established and upgraded. Currently, there are several laboratories that are strong at biotechnology, raw material science, information technology, automation and environmental analysis. A number of universities have used the financial sources from WB-funded Higher Education Project to establish e-libraries, information centers, local area network (LAN) and Internet connection. Major universities have set up web-sites and email system for information exchange with foreign universities.

At the end of 2002, 167 scientific research and production units were established within universities, of which there are 20 research institutes, 143 centers for research and implementation, 4 consulting offices, 1 Ltd. company and 7 state-owned enterprises within training and research institutions. With the incentives given by the State, scientific research and production units within universities have been actively involved and strengthened scientific and technology activities within the sector.

International cooperation on science and technology has also achieved qualitative improvements. We have changed from being passive and waiting for assistance from partners to being more active in international cooperation activities. We have managed to send various study tour groups to learn experience and develop research cooperation programs, which have been co-financed by both sides. The cooperation on science and technology with Russian Federal Republic and Eastern European countries has been gradually recovered. The collaboration with universities Western European countries has been enhanced. Research findings from international projects carried out by our universities on environment and resources protection, cleaner industrial production, and sustainable production in agriculture, forestry and fishery field have been highly recognized by international specialists. Since having become the official ASEAN member, cooperation activities within the framework of ASEAN Cooperation Committee on Science and Technology have been strengthened. Thanks to that, the status of Vietnamese universities and scientists has been improved and highly recognized among ASEAN members in several areas of agricultural science, technology, and natural and educational sciences.

Students' scientific research activities have gone to their depth and contributed to improving training quality. Since 1990, the Ministry of Education and Training has 14 times awarded "Student's scientific research" prizes for excellent scientific research projects by students with a view to provoking scientific research and to raising training quality. 3,563 projects have been chosen and submitted by various institutions. The Ministry of Education and Training has awarded 2,528 students' scientific research projects, of which 159 first prizes, 488 second prizes, 708 third prizes and 1,167 consolation prizes. Since 2001, the Ministry of Education and Training has implemented the policy on offering scholarships to students who got the first prizes for overseas

studies. Up to now, 4 students have received scholarships and gone overseas for studies and another 5 students are waiting for the official invitations.

Scientific and technology achievements gained by the education and training sector have been recognized by the State through various considerations for awarding scientific prizes for collective institutions and scientists who have been working in the sector. The number of these prizes of different kinds is as follows:

- National Prizes have been awarded to 8 projects and project groups carried out by university lecturers.
- From 1996 to 2002, 31 “Vietnam’s Creative Science and Technology” Prizes (previously called VIFOTEC Prize) of which 4 first prizes, 7 second prizes, 11 third prizes and 9 consolation prizes were awarded for various scientific groups within universities, accounting for 25% of the total number of prizes. Since 1986, Kovalevskaia Prizes have been awarded to 9 female lecturers with excellent scientific works and 1 female upper secondary teacher.
- At 2003 Vietnamese Technology and Equipment Market organized by the Ministry of Science and Technology, 50 units from 11 universities and institutes took part in exhibiting technologies and equipment which were research – related products. The Organizing Committee offered medals for 24 kinds of technologies and equipment introduced by universities and institutes (accounting for 17% of the total number of medals).

c. Shortcomings:

- Research on educational sciences has not been able to catch up with the current sector development.
- The proportion of research projects that have been applied to socio-economic development is still low.
- The number of university lecturers taking part in scientific and technology research projects is small.
- The supporting role in the application of research results played by science and technology management levels and universities is very limited. Researchers have had to self organize the application and marketing activities for their research products.

d. Causes:

- Investment into science and technology is not proportionate with university potentials and only makes up small proportion of total investment into science and technology cause.
- The existing management mechanism is not able to establish a science and technology market, and does not encourage enterprises to make science and technology investment in order to strengthen competitiveness.
- Training size has been experienced relatively rapid expansion without solutions to increasing the number of necessary teaching staff, leading to the problem where many of them suffer from heavy workload with little or no time for research.

F. FINANCIAL SOURCES AND INFRASTRUCTURE FOR HIGHER EDUCATION

Current Status

ESTIMATED BUDGET FOR EDUCATION AND TRAINING FOR 2000-2005
PERIOD

Unit: billion dong

Items	2000	2001	2002	2003	2004	2005
Total spending for education and training from State budget	14,480	17,628	21,590	26,810	34,421	41,600
Recurrent expenditure	12,077	14,822	17,847	22,127	25,771	32,000
<i>Of which: Foreign source</i>				200	280	200
- Central	1,208	1,449	2,052	2,935	3,300	4,200
- Local	10,869	13,373	15,795	19,192	22,471	27,800
Capital expenditure	1,803	2,196	3,008	3,687	4,900	6,000
<i>Of which: Foreign source</i>				50	350	150
- Central	216	264	408	787	1,991	2,400
- Local	1,587	1,933	2,600	2,900	2,909	3,600
National Targeted Programs	600	610	735	996	1,250	1,600
- Central	180	186	251	263	330	420
- Local	420	424	484	733	920	1,180
School Concretization Program					2,500	2,000
<i>Share of State budget for education and training</i>	15.0%	15.2%	15.6%	16.2%	17.1%	18.0%
<i>Increase percentages of State budget expenditure for education and training</i>		21.7%	22.5%	24.2%	19.1%	24.1%

TOTAL UNIVERSITY REVENUE WITHIN THE FINANCIAL YEAR

Unit: billion dong

By category	2001		2002	
	Absolute figure	Percentages	Absolute figure	Percentages
Total revenue	2,870,146.46	100%	3,909,706.86	100%
<i>Of which:</i>				
- Share of State budget for recurrent expenditure	910,102.20	31.73%	1,110,972.2	28.42%
- Share of State budget for National Targeted Programs and counterpart funds	85,879.80	2.99%	105,645.07	2.70%
- Loan Projects	29,574.21	1.03%	58,532.19	1.50%
- Share of State budget for staff training	4,383.16	0.15%	5,232.48	0.13%
- Share of State budget for scientific research activities	91,872.27	3.2%	105,028.06	2.69%
- Share of State budget for	245,163.73	8.54%	881,128.85	22.54%

capital expenditure				
- Revenue from tuition fees and regulated fees	1,258,805.90	43.86%	1,387,088.46	35.48%
- Revenue from scientific research and service contracts	34,643.75	1.21%	48,452.67	1.24%
- Revenue from raw material liquidation and compensation	1,652.28	0.06%	1,943.62	0.05%
- Revenue from grants, gifts, etc.	114,837.78	4.00%	105,432.27	2.70%
- Others	92,631.38	3.23%	100,251.17	2.57%

TOTAL COLLEGE REVENUE WITHIN THE FINANCIAL YEAR

Unit: billion dong

By category	2001		2002	
	Absolute figure	Percentages	Absolute figure	Percentages
Total revenue	741,016.28	100%	838,330.75	100%
<i>Of which:</i>				
- Share of State budget for recurrent expenditure	448,228.85	60.49%	49,325.89	58.49%
- Share of State budget for National Targeted Programs and counterpart funds	42,69.41	5.76%	48,467.81	5.78%
- Loan Projects	4,233.96	0.57%	6,916.40	0.83%
- Share of State budget for staff training	3,133.35	0.42%	3,771.50	0.45%
- Share of State budget for special items	-	-	55.00	0.01%
- Share of State budget for scientific research activities	1,914.60	0.26%	2,126.80	0.25%
- Share of State budget for capital expenditure	69,417.99	9.37%	74,305.00	8.86%
- Revenue from tuition fees and regulated fees	152,271.80	20.55%	181,247.01	21.62%
- Revenue from scientific research and service contracts	3,420.87	0.46%	3,479.29	0.42%
- Revenue from raw material liquidation and compensation	435.45	0.06%	460.34	0.05%
- Revenue from grants, gifts, etc.	2,778.98	0.38%	1,159.45	0.14%
- Others	12,490.03	1.69%	26,016.27	3.10%

Comments:

Of total university revenue in 2002 financial year, the biggest part is from tuition fees and regulated fees (35.48%); next are the revenues from State budget for recurrent expenditure (28.42%) and for capital expenditure (22.54%); other sources of revenue account for 1-3%.

As for colleges, the biggest part is from State budget for recurrent expenditure (58.49%); next are the revenues from tuition fees and regulated fees (21.62%), from State budget for capital expenditure (8.86%), and from State budget for National Targeted Programs and counterpart funds (5.78%); other sources of revenue account for a very small part (less than 1%).

**AVERAGE UNIVERSITY REVENUE PER ONE MAINSTREAM STUDENT
WITHIN THE FINANCIAL YEAR (MILLION DONGS)**

Years	2001	2002
Total	3.91	4.99
1. By university size		
- Less than 1,000 mainstream students	15.09	15.95
- From 1,000 to less than 2,000 mainstream students	7.53	10.05
- From 2,000 to less than 4,000 mainstream students	5.2	4.79
- From 1,000 to less than 10,000 mainstream students	4.08	4.55
- More than 10,000 mainstream students	3.55	5.00
2. By management level		
- National universities	4.68	10.05
- Regional universities	3.71	3.71
- Other public universities	3.85	4.46
- Locally-managed universities	6.39	6.19
- Non-public universities	3.30	3.41
3. By university type		
- Public	3.99	5.21
- Semi-public	3.43	3.46
- People-founded	3.27	3.40
4. By areas of training		
- Technical and technology	4.23	5.97
- Basic sciences – multidiscipline	3.83	5.29
- Agriculture, Forestry and Fishery	4.17	5.12
- Economics and Law	2.72	2.93
- Medicine, Pharmacy, and Physical Education and Sports	9.79	9.44
- Culture and Arts	6.30	6.55
- Pedagogy/Education	3.83	3.92

**AVERAGE COLLEGE REVENUE PER ONE MAINSTREAM STUDENT WITHIN
THE FINANCIAL YEAR**

Years	2001	2002
Total	4.96	5.01
1. By college size		
- Less than 1,000 mainstream students	7.86	8.20
- From 1,000 to less than 2,000 mainstream students	4.71	5.15
- From 2,000 to less than 4,000 mainstream students	3.85	3.77
- From 1,000 to less than 10,000 mainstream students	3.69	3.50
- More than 10,000 mainstream students	-	-
2. By areas of training		
- Technical and technology	4.42	4.27
- Basic sciences – multidiscipline	3.85	4.69
- Agriculture, Forestry and Fishery	-	-
- Economics and Law	3.74	4.00
- Medicine, Pharmacy, and Physical Education and Sports	8.15	10.03
- Culture and Arts	9.87	9.10
- Pedagogy/Education	5.25	5.21

Comments:

As for universities:

- *By university size:* the larger the university size is, the smaller the average revenue per one mainstream student is.
- *By management level:* the average revenue per one mainstream student trained in national universities is the highest (VND 10.05 million); next is locally-managed universities (VND 6.19 million); the lowest is people-founded universities (VND 3.41 million); others have the average revenue ranging over VND 3- 4 million. The difference between the highest and lowest is almost 3 times.
- *By areas of training:* the average revenue per one mainstream student trained in medicine, pharmacy, and physical education and sports universities is the highest (VND 9.44 million); next is culture and arts universities (VND 6.55 million); technical and technology universities (VND 5.97 million); the lowest is economics and law universities (VND 2.93 million); The difference between the highest and lowest is 3.2 times.

As for colleges:

- *By university size:* the larger the university size is, the smaller the average revenue per one mainstream student is.
- *By college type:* the average revenue per one mainstream student trained in public colleges is the highest (VND 5.12 million); next is semi-public colleges (VND 3.86 million); the lowest is non-public colleges (VND 3.61 million); others have the average revenue ranging over VND 3- 4 million. The difference between the highest and lowest is 1.42 times.
- *By areas of training:* the average revenue per one mainstream student trained in medicine, pharmacy, and physical education and sports, and pedagogy/education

colleges is the highest (VND 5-10 million); the lowest is economics and law colleges (VND 4 million). The difference between the highest and lowest is 2.5 times.

TOTAL UNIVERSITY SPENDING WITHIN THE FINANCIAL YEAR

By category	2001		2002	
	Absolute figure	Percentages	Absolute figure	Percentages
Total spending	2,672,729.27	100	3,169,280.12	100
<i>Of which:</i>				
- Spending on salaries, wages and other remuneration-related items	872,219.62	32.63	921,971.82	29.09
- Spending on professional fees	334,842.33	12.53	429,013.45	13.54
- Spending on the procurement, repair and maintenance of fixed assets	409,235.02	15.31	437,128.18	13.79
- Spending from budget for capital investment	246,436.14	9.22	383,583.44	12.10
- Administrative and management spending	267,799.73	10.02	316,977.18	10.00
- Spending on scholarships and other student-related items	113,595.47	4.25	131,196.39	4.14
- Other recurrent spending	143,673.04	5.38	156,858.04	4.95
- Others	284,927.92	10.66	392,551.62	12.39

TOTAL COLLEGE SPENDING WITHIN THE FINANCIAL YEAR

By category	2001		2002	
	Absolute figure	Percentages	Absolute figure	Percentages
Total spending	729,101.50	100	794,064.65	100
<i>Of which:</i>				
- Spending on salaries, wages and other remuneration-related items	192,876.78	26.45	214,866.03	27.06
- Spending on professional fees	127,040.98	17.42	137,241.19	17.28
- Spending on the procurement, repair and maintenance of fixed assets	116,438.39	15.97	115,371.16	14.53

- Spending from budget for capital investment	66,724.29	9.15	72,885.33	9.18
- Administrative and management spending	66,979.92	9.19	74,798.26	9.42
- Spending on scholarships and other student-related items	51,248.75	7.03	58,258.15	7.34
- Other recurrent spending	36,968.78	5.07	38,602.87	4.86
- Others	70,823.61	9.71	82,041.66	10.33

In 2002, the main spending categories used by universities are as follows:

- Salaries, wages and other remuneration-related items (29.09%)
- Procurement, repair and maintenance of fixed assets (13.79%)
- Professional fees (13.54%)
- Spending from budget for capital investment (12.10%)
- Administrative and management spending (10%)

In comparison with 2001 financial year, the spending proportion of two categories increased, namely professional fees and spending from budget for capital investment. The proportion for other spending categories decreased, with the highest decrease falling on salaries, wages and other remuneration-related items.

AVERAGE UNIVERSITY SPENDING PER ONE MAINSTREAM STUDENT
WITHIN THE FINANCIAL YEAR (*MILLION DONGS*)

Years	2001	2002
Total	3.29	3.49
1. By university size		
- Less than 1,000 mainstream students	9.70	10.70
- From 1,000 to less than 2,000 mainstream students	6.07	10.07
- From 2,000 to less than 4,000 mainstream students	4.65	4.34
- From 1,000 to less than 10,000 mainstream students	3.45	3.89
- More than 10,000 mainstream students	2.99	3.18
2. By management level		
- National universities	3.90	4.09
- Regional universities	3.31	3.45
- Other public universities	3.17	3.41
- Locally-managed universities	6.44	6.02
- Non-public universities	2.84	2.95
3. By university type		
- Public	3.35	3.56
- Semi-public	2.72	2.90
- People-founded	2.87	2.97
4. By areas of training		
- Technical and technology	3.23	3.51
- Basic sciences – multidiscipline	3.35	3.47
- Agriculture, Forestry and Fishery	3.52	4.17
- Economics and Law	2.38	2.50
- Medicine, Pharmacy, and Physical Education and Sports	6.72	8.35
- Culture and Arts	4.51	4.79
- Pedagogy/Education	3.40	3.21

AVERAGE COLLEGE SPENDING PER ONE MAINSTREAM STUDENT WITHIN
THE FINANCIAL YEAR

Years	2001	2002
Total	4.49	4.31
1. By college size		
- Less than 1,000 mainstream students	6.97	6.55
- From 1,000 to less than 2,000 mainstream students	4.31	4.62
- From 2,000 to less than 4,000 mainstream students	3.48	3.4
- From 1,000 to less than 10,000 mainstream students	3.46	2.79
- More than 10,000 mainstream students	-	-
2. By university type		
- Public	4.66	4.48
- Semi-public	2.28	2.44

- People-founded	3.99	2.42
3. By areas of training		
- Technical and technology	2.74	2.76
- Basic sciences – multidiscipline	3.83	4.43
- Agriculture, Forestry and Fishery		
- Economics and Law	2.91	2.67
- Medicine, Pharmacy, and Physical Education and Sports	7.51	7.90
- Culture and Arts	4.45	4.12
- Pedagogy/Education	5.14	5.00

Comments:

As for universities:

- *By university size:* the larger the university size is, the smaller the average spending per one mainstream student is.
- *By management level:* the average spending per one mainstream student trained in locally-managed universities is the highest (VND 6.02 million); next is national universities (VND 4.09 million); the lowest is people-founded universities (VND 2.95 million); others have the average spending over VND 3 million. The difference between the highest and lowest is 2.04 times.
- *By areas of training:* the average spending per one mainstream student trained in medicine, pharmacy, and physical education and sports universities is the highest (VND 8.35 million); next is culture and arts universities (VND 4.79 million); the lowest is economics and law universities (VND 2.5 million); others have the average spending ranging VND 3-4 million. The difference between the highest and lowest is up to 3.34 times.

As for colleges:

- *By university size:* the larger the university size is, the smaller the average spending per one mainstream student is.
- *By college type:* the average spending per one mainstream student trained in public colleges is the highest (VND 4.48 million); next is semi-public colleges (VND 2.44 million); the lowest is non-public colleges (VND 2.42 million). The difference between the highest and lowest is 1.85 times.
- *By areas of training:* the average spending per one mainstream student trained in medicine, pharmacy, and physical education and sports colleges is the highest (VND 7.9 million); next is colleges offering basic sciences and multidiscipline (VND 7.15 million); the lowest are technical and technology colleges (VND 2.76 million), and economics and law colleges (VND 2.67 million); others have the average spending ranging VND 4.12-5 million. The difference between the highest and lowest is almost 2.96 times.

References for Part F

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G. HIGHER EDUCATION AND INTERNATIONAL INTEGRATION

Current Status

1. International cooperation activities normally go after the basic process as follows:

a. Initial phase: International cooperation activities mainly focus on the improvement of infrastructure, construction, equipment and machinery purchase, sending staff for training courses, and invitation of experts/specialists to provide training for qualification upgrading.

As it can be seen, most of our educational institutions are currently at this initial phase. Many international cooperation projects have put so much emphasis on physical facilities and laboratory construction that there are no qualified staffs with sufficient technical, foreign language and professional skills to exploit and make full use of equipment, and to efficiently maintain and operate advanced laboratories.

b. Internationalization phase: International cooperation activities at this phase mainly focus on the internationally-oriented renovation of training curricula (utilization of international materials and textbooks; introduction of credit-based training; flexibility in the curriculum organization with an increased weight given to optional subjects; student-centered teaching and learning; and teaching method renovation).

At present, this internationalization process is present in several higher education institutions. Many of them have managed to replace all existing training materials with newly translated materials in Vietnamese language, and brought about fundamental improvement of training quality. Their graduates are highly recognized and easy to find their jobs, even in foreign-owned businesses.

This internationalization process are being strengthened thanks to the recent efforts made by the Ministry of Education and Training under the framework of a project which has encouraged universities and colleges to use internationally advanced training curricula and materials in their courses and programs.

Nonetheless, several regulations set by the Ministry of Education and Training on the training content and process are placing restrictions on the activeness and autonomy of higher education institutions and their teaching staff. The process of consideration and approval of a new specialization area, which is the combination of several existing areas, is still cumbersome with “asking-giving” procedures.

c. International integration phase: International cooperation activities at this phase mainly focus on the establishment and introduction of regional and international quality standards, on participating in international forums, treaties and conventions, on changing into learner-centered teaching methodologies, on joint training, scientific research and moving towards the establishment of international training institutions managed by the Ministry of Education and Training in Vietnam.

In the light of the 40th negotiation round on ASEAN service cooperation led by the Ministry of Trade; Decree 06 CP dated 6 March 2000 on the investment cooperation with foreign countries in the fields of medical checks and treatment, education and training, and scientific research; and Decree 18 CP dated 4 May 2001 on the establishment and operation of foreign cultural and educational institutions in Vietnam, several universities and colleges have taken advantage of available opportunities to accelerate this international integration process. The leading institutions are the National Economics University, Hanoi National University, Hochiminh City National University, Can Tho University, Hanoi University of Foreign Studies, Hochiminh City Industrial College No. 4, and some others.

In order to create better conditions for this development phase, the Ministry of Education and Training needs to accelerate management decentralization, to give greater autonomy to higher education institutions, and quickly revise, finalize and issue instructions and guidance with a view to paving the way for improved investment and international cooperation in the field of education and training. There is a need to develop a strategy for the whole sector's active international integration, and to share information on the negotiation with ASEAN and GATS with educational decision-making bodies for prompt monitoring and guidance.

2. Several achievements gained from international cooperation activities

In the past years, international cooperation activities have made partly contributions to educational achievements through the specific aspects as follows:

a. Sending students for overseas training:

In the past 5 years, Vietnamese students have been sent for overseas studies through different sources: Government scholarships provided by various countries under the framework of different agreements and cooperation protocols; scholarships under bilateral cooperation projects/programs; and scholarships found by the Vietnamese education and training institutions.

In order to facilitate the training of leading science and technology staff for leading sectors, the "Overseas training for science and technology staff through State budget sources" project or Project 322 as a short form, has been implemented since 2000. Accordingly, VND 100 billion are spent from State budget each year to send about 450 students for overseas training in the areas which serve for the cause of country industrialization and modernization, and are beyond the training capacities of Vietnamese training institutions. The implementation of this project has created very positive impression among not only national but also international communities. This is the first

time Vietnam has used state budget expenditures to send its staff for overseas training. Up to now, 407 and 86 Vietnamese students have been sent abroad for post-graduate and undergraduate training respectively in 17 countries and international training institutions under this project.

In addition to Project 322, Vietnamese students also have opportunities to study in Russia and the US under two other projects. They are “Training Vietnamese Citizens in Russian Federation under the Debt Processing Agreement” Project (signed with Russia) and “Vietnamese – American Education Foundation” Project.

Under the “Training Vietnamese Citizens in Russian Federation under the Debt Processing Agreement” Project, Vietnamese students are sent to Russia annually for training from undergraduate to doctoral levels. The project will last within 10-11 years (2001-2010) with the total budget of USD 48 million (about USD 4.5 million each year). Since 2001, the Ministry of Education and Training has selected and sent 305 students for full undergraduate training courses and 12 students for postgraduate training in Russia.

Under the “Vietnamese – American Education Foundation” Project, about 100 students will be sent annually to the USA to study in the areas of natural sciences, mathematics, science and technology, medicine and environmental sciences. The annual estimated budget is some USD 5 million. In addition, also under this project, Vietnam will receive several highly qualified American professors and scientists to work closely with Vietnamese partners in lecturing and scientific research in some selected Vietnamese universities and research institutes. The cooperation principles about project implementation were signed among VEF Executive Board, the USA and Vietnam’s VEF Advisory Board.

In parallel with sending Vietnamese students for overseas training, “overseas studies in Vietnam” is also becoming an increasingly popular pattern of training in our country. This reflects a kind of joint training between Vietnamese and foreign training institutions, or between Vietnamese training institutions with branches of foreign training institutions located in Vietnam. Advanced learning conditions, facilities, and training content and methods form the advantages of this training pattern. Moreover, through this kind of training, we can both mobilize people’s contributions to training and create training cost savings for students’ families. This kind of training is demonstrating its efficiency in: Hanoi National University; Hochiminh City National University; Da Nang University; Hanoi University of Technology (High quality engineer training program in collaboration with France, ITIMS in collaboration with the Netherlands, etc.); National Economics University (French – Vietnamese Center for Management Training (CFVG), training programs in cooperation with Belgium, the USA, the UK, and Sweden); Hanoi University of Foreign Studies; Hochiminh City Open and Semi-Public University; Hochiminh City Economics University; Asian Institute of Technology Center in Vietnam (AITCV); Royal Melbourne Institute of Technology (RMIT); SEAMEO (Southeast Asian Ministers of Education Organization) regional training center; and many other universities. This kind of training will make its contributions to facilitating Vietnamese universities to design international training programs.

However, within the current context where all sectors, levels and institutions take part in educational activities, the control of training quality offered by these joint training institutions should be paid reasonable attention, avoiding the problem where institutions without their legal status or licenses to operate in the education and training sector still associate or collaborate to provide joint training and to collect fees without clear regulations. Especially, it is difficult to control training quality because the inputs provided by these training programs are not ensured.

b. Receiving foreign students to study in Vietnam

During 1998-2003, 600 students from 12 countries which signed agreements with Vietnam and 2,800 student turns from other 18 countries studied in Vietnam. In addition to students studying under bilateral cooperation agreements signed between Vietnam and Laos, Cambodia, Ukraine, Mongolia, Cuba, China, Russia, Iraq, Hungary, Rumania, Poland, Hungary, North Korea and South Korea, the number of fee-paying students has significant increased in the last five years.

The reality shows that the attraction of foreign students to study in Vietnam is something that should be strengthened and developed. In addition to the increased revenue for Vietnamese training institutions, we will, through these foreign students, be able to show Vietnam to international community. However, the existing international training programs run in English language are very few. This is an obstacle that Vietnamese training institutions need to remove before attracting more and more foreign students to study in Vietnam, where they will have opportunities to study not only Vietnamese and Vietnamese studies but also other typical specialization areas that we are strong at.

c. Incoming and outgoing delegations

Following the Communist Party's and Government's open foreign policies, a number of policies have been issued in the last 5 years in order to gradually simplify exit and entry procedures in Vietnam. Within this context, the Ministry of Education and Training has decentralized the management of incoming and outgoing delegations to give universities more flexibility in carrying out their international cooperation activities. Specifically, the Ministry of Education and Training has delegated responsibilities to 25 universities to sign decisions on sending their staff abroad in the duration of less than 3 months. This is a positive measure to release the administrative burden on relevant Departments within the Ministry, giving them more time to focus on other sector management tasks, and at the same time to ask for more responsibilities of universities. The Ministry of Education and Training only develops annual plan for ministerial level incoming and outgoing delegations. Universities have their own authority to receive incoming foreign delegations for professional purposes.

d. Receiving voluntary teachers and short-term specialists

90% of current voluntary teachers teaching in Vietnam are foreign language teachers. They made contributed to improving the quality of Vietnamese teachers, especially those in remote and isolated areas.

Within the current context where integration trends are increasingly emerging, the demand for learning foreign languages is bigger and bigger. Many Vietnamese schools and training institutions have a need to have voluntary teachers, not only foreign language ones but also in some other areas.

e. Sending Vietnamese experts abroad as lecturers and collaborators

The expansion of different ways of cooperation and international exchanges in education sector in order to improve Vietnam's status in international arena is the aim of international cooperation activities. Sending Vietnamese education experts overseas as lecturers and collaborators also contributes to fulfilling this aim.

Countries that receive Vietnamese experts have highly recognized their professional qualifications, devotion and commitment, and spirit of overcoming difficulties, contributing to strengthening and expanding the friendship relations and cooperation between Vietnam and other countries.

f. Reception of international projects

In the past time, the Ministry of Education and Training has continuously assisted higher education institutions to expand international relations, and to take advantage of financial, technical and equipment support from foreign countries and international organizations with an aim to improve their training quality. There have been nearly 100 projects of different sizes operating at undergraduate and postgraduate levels. In general, these projects do not have large budgets, and are mainly carried out in several major and prestige universities, which have set up good bilateral relationships with foreign countries and international organizations.

- Loan projects account for 25% of total loan amounts
- Grants projects make up 40% of total grants for the sector.

Undergraduate and postgraduate training projects have made considerable contributions to renovating and improving Vietnam's higher education quality, and at the same time established linkages between Vietnamese, regional and international higher education institutions.

g. Organization of international workshops and conferences

In 5 recent years, education and training sector has hosted or collaborated to organize a number of large-scale international workshops and conferences every year. These workshops, conferences and exhibitions have aimed at providing managers, lecturers, parents and students with information on education in various countries in the world.

During regional and international integration process, the organization or participation of these workshops and conferences will be increased.

h. Cooperation with foreign institutions to provide training in Vietnam

As mentioned previously, "overseas studies in Vietnam" is a training mode which should be paid attention to, aiming at training a large number of students, reducing financial

burden and at the same time ensuring training quality. The issuance of Decree 18/2001/ND-CP dated 4 May 2001 by the Government on the establishment and operation of foreign cultural and educational institutions in Vietnam has created a legal framework for foreign countries and educational institutions to open their representative offices and training institutions in Vietnam. Up to now, there are, in education and training sector, two foreign institutions which established their representative offices in Hanoi, namely:

- The representative office of German Academic Exchange Agency (DAAD)
- The representative office of the University of East Anglia, UK.

The Government also approved the establishment of RMIT (Australia) with 100% foreign funds in Hochiminh City and Hanoi. In the coming time, there will be several other institutions that will be allowed to open representative offices or branches in Vietnam with 100% foreign funds.

i. Taking advantage of the support from Vietnamese nationals in foreign countries for education and training

Together with country renovation achievements in the last 5 years, education and training sector has well and efficiently implemented “open door” policies on seeking for external investment and support, including the contributions from Vietnamese nationals in foreign countries.

Departing from the viewpoint which regards education and training for the young generation is the task for the entire society and requires all social resources, including the support from Vietnamese nationals in foreign countries in order to enhance human and material resources for the country’s education and training. The State, and education and training sector expect that Vietnamese intellectuals settling in foreign countries will be devoted and make intellectual contributions to the development of education and training cause in Vietnam in form of consultants, visiting lecturers, curricula design and development, provision of information and science and technology materials, and acting as focal points for the collaboration with strong higher education institutions and industrial complexes in the world.

j. Other activities

- Without only receiving foreign aids and funding, Vietnam also fulfills its international tasks. In addition to staff training, Vietnamese education and training sector has supported education sector in neighbor country, Laos to establish several upper secondary boarding schools in Sekong and Champasac provinces and the dormitory for foreign students in Vientiane National University.
- In parallel with sending Vietnamese students for overseas studies, the Vietnamese education and training sector has, in the past years, mobilized the active support from foreign countries, international organizations, non-governmental organizations, sponsors and Vietnamese nationals in foreign countries in form of scholarships to be awarded to students from upper secondary schools, universities, colleges and vocational schools nationwide. Thousands of scholarships are awarded annually to students and pupils. Following are typical organizations which provide support:

- Samsung Scholarship Foundation
- Kotex Scholarship Foundation
- German and Vietnamese University Support Organization
- Tokyo Bank, Japan, etc.

References for Part G

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