

A HYBRID APPROACH TO VIETNAMESE AMERICAN PRODUCTION OF PH.D.'S

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1. Introduction

Higher education is a key element for the health of a country and its economic development. Through higher education, future leaders, managers and skilled workers are trained, needs identified and assessed, and tools for economic development defined and obtained. As Vietnam develops the infrastructure to move from an agricultural to an industrial country and from a closed to an open economy, the country will accordingly depend on higher education as a primary development tool. In order for higher education to meet the challenge and its mission in Vietnam, it needs serious development and updating, i.e., improvement and enrichment of the faculty's knowledge, skills and credentials.

The needs for faculty improvement and enrichment are numerous. First, the current foreign-trained faculty members who received training from the former Soviet Union, Eastern European countries and China, need more expertise and experience with the world economic powers who are or will be Vietnam's new trading partners. They are North America, European Union, Japan and economically emerging Asian countries such as South Korea, Taiwan, Singapore and India. These countries are English-speaking or executives of companies from these countries are fluent in English. It is a necessity for Vietnam to increase the number of foreign-trained faculty members that are trained from English-speaking countries in order to help Vietnam deal with the new business partners effectively. Second, the faculty's credentials do not meet international standards where the Ph.D. degree is a prerequisite for a career in higher education. The majority of Vietnamese faculty members do not possess a Ph.D. degree in the field they teach. Vietnam desperately needs to improve its Ph.D.-to-student ratio to be compatible and competitive with its trading partners. Finally, Vietnam needs to re-train its obsolete faculty

members with marketable skills and expertise. For example, Vietnam has a large number of Russian-language and mathematics teachers while students and the new economy want English and information technology. It is a necessity to retrain Russian-language teachers to teach English and mathematics teachers to teach information technology.

The above in mind, Vietnam needs to consider developing a significant number of its new Ph.D.'s who will be prepared to help the country work with new business partners and enter new lucrative industries. These new Ph.D.'s should be trained fully or partially in a country that is or will be a major business partner of Vietnam. Training new Ph.D.'s overseas such as in the USA or in Europe is very expensive, costing between US\$60,000 to 120,000. Vietnam therefore needs a way to produce foreign-trained Ph.D.'s inexpensively.

This paper proposes a hybrid approach to Vietnamese American production of Ph.D.'s for Vietnam. Under this proposal, Vietnam and its universities control the Ph.D. production process and issue the Ph.D. degrees. American universities provide research and teaching support. This approach will increase the quality of new Ph.D.'s dramatically at significantly lower costs. In this paper the joint Vietnamese American production of Ph.D.'s will be looked at from the following aspects:

- Comparison of Vietnamese and American Ph.D. production processes
- Why a U.S. curriculum is used?
- The proposed hybrid approach and its costs
- Benefits of the hybrid program
- How the University of Houston-Clear Lake can help?

2. Comparison of Vietnamese and American Ph.D. production processes

There are hundreds of Ph.D. programs throughout the USA. Within a university, a department or a college

manages its own Ph.D. program. Ph.D. programs at one university are totally independent from others, with minimal standards being certified by national and professional accrediting agencies. The American Ph.D. production process generally follows the following path:

- Academically strong students with at least a bachelor's degree, though generally a master's degree, can apply to a department or a college of a doctoral granting university for doctoral candidacy. A minimum grade point average is generally specified.

- The admissions process requires the student to obtain a satisfactory score on either GRE or GMAT exam (and TOEFL for international students). Work experience and letters of recommendation are also used in the admissions process.

- Once being admitted into a Ph.D. program, the student will take between 30 to 90 credit hours of course work depending on the student's previous educational background. Those with master's degree in the same field of the Ph.D. degree complete 30 to 60 credit hours. Those with master's degrees outside the field complete 72-78 credit hours. Students with bachelor's degrees complete 60-90 credit hours. **Master-level and Ph.D.-level courses in the major field are frequently the same in American universities.**

- After completing the required course work, the student will take a comprehensive exam to test his or her knowledge of his major field. Students may also be required to prepare a candidacy paper.

- After passing the comprehensive exam, the student will search for a meaningful dissertation topic and defend the dissertation topic for its scientific worthiness in front of a dissertation committee.

- The student will conduct research, write the dissertation, and eventually defend it in front of the

dissertation committee and invited guests.

- The university that houses the doctoral program will award the Ph.D. degree to the student.

The Ph.D. production processes are quite different between Vietnam and the USA both in admissions criteria and in the contents. The Vietnamese process moves the comprehensive exam and the defense of the dissertation topic for its scientific worthiness up front as the entrance requirements while the American process utilizes these exams towards the middle of the doctoral program. The Vietnamese process is tightly controlled by the Ministry of Education and Training (MET) while individual universities control the process in the U.S.A. The Vietnamese Ph.D. production process appears as follows:

- MET defines the admissions criteria for all Ph.D. programs in Vietnam.

- Academically strong students with at least a bachelor's degree can apply for their doctoral candidacy. A minimum grade point average is generally specified.

- The admission process requires the student to have at least a publication in the subject of his or her research interest and to obtain satisfactory scores on three tests. The first test is on foreign language proficiency (English, French, Chinese, Russian and German). Second is the comprehensive exam. For candidates with a master's degree, this exam is equivalent to that of American comprehensive exam. For those with a bachelor's degree, the exam is somewhat less demanding. The third requirement is on the defense of the proposed dissertation topic. Work experience and letters of recommendation are also used in the admission process.

- Once being admitted into a Ph.D. program, the student with a bachelor's degree will take between 60 to 75 credit hours of course work and 3 to 5 credit hours on special research topics. Those with a master's degree in the same field of the Ph.D. degree take 3 to 5 credit hours on special research topics.

- After completing the required course work, the student will engage in the dissertation research project and eventually defend the dissertation.

- The MET will award the Ph.D. degree to the candidate who completes all above requirements and who is recommended by his or her respective university.

3. Why a U.S. curriculum model is used?

American universities have world-class faculties and leading experts in nearly all fields. A typical American graduate faculty member has a Ph.D. degree and substantial graduate work in the field of his or her teaching. In addition to teaching, doctoral qualified faculties are expected to publish scholarly books and articles, conduct learned research, and provide service to the community and the university. American universities are highly research-oriented and produce many new useful ideas, technologies and processes.

Next, an average American library that supports comprehensive doctoral research contains millions of books, microforms, CD-ROM, current periodicals and recent statistics on nearly every academic discipline. Further, the library is technologically up-to-date with easy access to the Internet. Finally, the inter-library loan program allows students from one university to borrow books from other universities within the state and across the nation.

Finally, there are large highly literate and economically vibrant Vietnamese communities, particularly in Houston, Texas and Los Angeles, California, that make a long stay in the USA more bearable socially and emotionally for Vietnamese Ph.D. candidates.

The above richness offers Vietnamese doctoral candidates an abundant wealth of available knowledge to do their research work. Dissertation research conducted in the USA will be of the highest quality based on the abundance and availability of state-of-the-art information.

4. Proposed hybrid approach and its costs

The proposal calls for a hybrid approach to producing new Ph.D.'s in Vietnam with participation from American universities as follows:

- The Vietnamese government and its universities maintain the same control over the Ph.D. production process such as admissions criteria, approval of dissertation topic, prescription of course work, supervision of research and awarding of the Ph.D. degree.

- The student travels to the USA to attend an American university and uses its library resource to conduct the dissertation research. Those who finish the course work in Vietnam will come to the USA just for

dissertation research. Those who have not finished the course work (individuals with bachelor's degree or individuals who move to a new field) will come to the USA for course work and dissertation research. Those who have satisfactory scores on TOEFL and GRE/GMAT exam will enroll in and complete specified courses or a master's degree during their stay. The research for the Vietnamese Ph.D. degree will be completed in the U.S.A.

- Once completing the research, the student will return to Vietnam to complete and defend the dissertation.

- Vietnam will award the Ph.D. degree to the student.

Accredited American graduate schools have strict admissions standards. They only admit international students into their graduate programs to take courses for credit or to work on a degree program when students meet all admissions requirements. For international students with an approved bachelor's degree, admissions are given only to those with satisfactory scores on TOEFL and GRE/GMAT exams. In the absence of such satisfactory scores, they can only audit the course or sit in a class to do all the required work but will not receive a grade or credit for the work.

There are three options (I, II and III) available to participating Vietnamese doctoral candidates depending on their English proficiency, time availability and financial resource.

Option I is research and auditing courses. This option is available to students who can not gain admission into a graduate program. They come to the USA mainly to do library research (Option I-A). If they need to learn new subjects, they can audit courses (Option I-B). Since their English is marginal, these students may need research guidance and language support from a research advisor and/or Vietnamese-speaking advisor to guide them during their stay in the USA. Because of the lack of English proficiency and the resulting failure to gain admission into a graduate program, the participating American university can not issue the traditional F-1 student visa to such students. J-1 visa (visa for visiting scholar) is required for such cases. American universities only grant J-1 visas to exception cases. Thus, a special agreement between the American participating university and Vietnamese Ph.D. granting authority

is needed to secure the J-1 visa. The number of J-1 visas granted may be limited and the university may charge the student auditing and other fees to participate as a visiting scholar.

Option II is research and taking courses. This option is available to students who can gain admission into a graduate program. They can take courses for credit and do library research. This option is available to students with English proficiency but with limited financial resource or limited time to stay in the USA. This option is suitable for candidates who want to migrate to a new field that is currently not available in Vietnam. These students generally enter the USA on a J-1 visa as well.

Option III is research and master's degree. This option is available to students who can gain admission into a graduate program and have enough financial resources

those in between, it may take about 18 months (Medium Master's Option or III-B). To maximize the contribution of American professors on the doctoral research, students must do a master's thesis or write a substantial research paper as a requirement of the master's degree program. The topic of their master's level research must be same as that of the dissertation. Consequently, the doctoral research is an extension of the master's level research.

A summary of the three options is as follows:

The following table shows cost estimates of various options assuming that Vietnamese doctoral candidates attend a public university in Texas or California in an urban area. Please, note that estimates of living expenses are based on American way of life. Actual expenses may be lower or higher depending on the candidate's lifestyle, taste and preferences.

5. Benefits of the hybrid program

	OPTION		
	I. Research & Auditing Courses	II. Research & Taking Courses	III. Research and Master's Degree
Who approves Ph.D. candidacy?	Vietnam	Vietnam	Vietnam
Who approves dissertation topic?	Vietnam	Vietnam	Vietnam
Is TOEFL required?	May be waived	Yes	Yes
Is GRE/GMAT required?	No	Yes	Yes
How long is the stay in the USA?	6-12 months	8-18 months	16-36 months
Type of research	Library only	Library +	Library ++
Who issues the master's degree?	N/A	N/A	USA
Type of visa	J-1	J-1	F-1
Is special advisor needed?	Yes	May be	No
Is special cooperative agreement needed?	Yes	May be	No
Where to defend Ph.D. dissertation?	In Vietnam	In Vietnam	In Vietnam
Who issues the Ph.D. degree?	Vietnam	Vietnam	Vietnam

and time to complete a master's degree in the USA. This option is also suitable for candidates who want to migrate to a new field that is currently not available in Vietnam. Depending on the candidate's background (English proficiency, financial resource and staying in the same field of the previous college degree), a master's degree can be earned between 16 months to 24 months of study. For those with substantial training in the field, the master's degree can be earned in 16 months (Short Master's Option or III-A). For those who switch to a new field, it may take up to 2 years (Long Master's Option or III-C). For

The proposed program offers Vietnam and its participating Ph.D. candidates numerous benefits:

a. **Research Relevant to Vietnam:** Since Vietnam maintains the control of the Ph.D. production process, it continues to select dissertation topics that are relevant to situations in Vietnam. Thus, Vietnam will be the sole beneficiary of the research conducted by its doctoral candidates in the USA.

b. **High-Quality Research:** By doing the doctoral research in the USA, Vietnamese doctoral candidates have easy access to a wealth of knowledge from American professors, library and information systems, and state-

of-the-art research resources. Consequently, the research will be of high quality.

c. **Practical Training Opportunity:** International students are eligible to work in the field of their study after two semesters of residence under a program known as Cooperative Education. This option is only available for students who have gained an official admission into a graduate program and possess marketable technical and English skills. For those who stay for a master's degree, they are eligible to work legally for one year in the field of their study under a program named Practical Training. The cooperative education and practical training programs provide practical industry skills to Vietnamese doctoral candidates as well as compensation for their work at the prevailing American wages.

d. **Understanding American Culture and Systems:** The USA is the leader in many fields and the core of the world economy. By staying in the USA for a while, doctoral students can gain significant insight to American culture and systems that propel the USA to the global leadership position. This understanding will help Vietnam move faster in its effort to improve its economy.

e. **English Fluency:** English has become the international language of science, education, business, travel and politics. Since the USA is an English-speaking country, a long stay in the US will improve the student's English proficiency dramatically. Improved English language skills will enable the student to work and develop a network with a broad range of international groups in the future. The network building will begin during their period of study in the USA.

f. **American Master's Degree:** American graduate degrees have become a prestigious internationally recognized credential. With an American master's degree, the candidate will have many new opportunities in the future such as serving as a visiting professor at an American university, working for an international organization, and serving as a consultant for American companies in Vietnam. Finally, the candidate may not have to retake standardized admissions exams such as TOEFL and GRE/GMAT when applying for graduate study with an American university.

g. **Free Ph.D. Education for Qualified Candidates:** For those with high TOEFL and GRE/GMAT scores, free Ph.D. education in the form of teach-

Characteristics	Research Option (Library Search and)					
	I-A. No Others	I-B. Auditing Courses	II. Taking Courses	III-A. Short Master's	III-B. Medium Master's	III-C. Long Master's
Average stay in months	6	12	12	16	20	24
Number of Courses taken / audited	1	7	7	12	15	18

Expenses on Preparation for Ph.D. Candidacy in Vietnam						
TOEFL-exam preparation			US\$500	US\$500	US\$500	US\$500
GMAT/GRE-exam preparation				US\$500	US\$500	US\$500
TOEFL exam fee			US\$300	US\$300	US\$300	US\$300
GMA/GRE exam fee				US\$300	US\$300	US\$300
Travel to take GRE/GMAT Exam				US\$300	US\$300	US\$300
Total			US\$800	US\$1,900	US\$1,900	US\$1,900
Study in the USA (Texas & California) *						
Travel to/from USA for re-research	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500
Acclimation to US life	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Course work	\$1,000	\$7,000	\$7,000	\$12,000	\$15,000	\$18,000
Research costs (copies, equip., etc.)	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Living and Transportation (\$800/mo)	\$4,800	\$9,600	\$9,600	\$12,800	\$16,000	\$19,200
Total	\$9,300	\$20,100	\$20,100	\$28,300	\$34,500	\$40,700
Research/Vietnamese-Speaking Advisors (when needed)						
Advising costs	\$4,000	\$4,000	\$4,000			
Total	\$4,000	\$4,000	\$4,000			

* Assume the candidate attends a public university. Private universities may cost more. Tuition and fees are different from state to state in the USA.

ing/research assistantships may be feasible. American doctoral programs throughout the USA frequently provide limited number of assistantships to qualified international students to attend their doctoral programs with either free tuition or reduced tuition. Students generally receive a monthly stipend to cover living expenses. In exchange, students must work about 20 hours per week as teaching or research assistants for American professors. Vietnamese students may be able to switch to the assistantship program when their language skill is improved enough to gain admission into American doctoral programs, depending on assistantship availability and the competition for the assistantships.

6. How the University of Houston-Clear Lake can help?

The University of Houston-Clear Lake (UHCL) can work with Vietnam to carry out this hybrid program as follows:

a. Numerous Specialized Master's Programs: UHCL has many specialized master's programs that fit in very well with the hybrid program. Courses in master's programs at UHCL are the same courses that are taught in many doctoral programs, and many master's programs require a master thesis. When master thesis is not required, students can choose to write a research paper under the supervision of a faculty member. Currently, UHCL and its four schools offer the following master's degrees:

(1) School of Business and Public Administration
 Master of Business Administration
 Master of Science in Accounting
 Master of Science in Finance

Master of Science in Management Information Systems
 Master of Science in Environmental Management
 Master of Healthcare Administration
 Master of Arts in Human Resource Management
 Master of Arts in Public and Private Management
 (2) School of Education
 Master of Science in Counseling
 Master of Science in Curriculum and Instruction
 Master of Science in Early Childhood Education
 Master of Science in Education Management
 Master of Science in Instructional Technology
 Master of Science in Multicultural Studies
 Master of Science in Reading with Reading Specialist Certification

Master of Science in School Library and Information Science
(3) School of Human Sciences and Humanities

Master of Arts in Behavioral Sciences-General

Master of Arts in Behavioral Sciences-Psychology

Master of Arts in Behavioral Sciences-Sociology

Master of Arts in Behavioral Sciences-Clinical Psychology

Master of Arts in Behavioral Sciences-Family Therapy

Master of Arts in Behavioral Sciences-School Psychology

Master of Arts in Fitness and Human Performance

Master of Science in Studies of the Future

Master of Arts in Cross-Cultural Studies

Master of Arts in History

Master of Arts in Humanities

Master of Arts in Literature

(4) School of Natural and Applied Sciences

Master of Science in Computer Engineering

Master of Science in Computer Information Systems

Master of Science in Computer Science

Master of Science in Mathematical Science

Master of Science in Statistics

Master of Science in Biological Sciences

Master of Science in Chemistry

Master of Science in Environmental Science

Master of Science in Software Engineering

Master of Science in Physical Sciences

b. Availability of Vietnamese American Professors and Advisors:

UHCL has employed two Vietnamese American professors who are fluent in both Vietnamese and English. They can work with Vietnamese candidates whose English is marginal. Further, UHCL can access a rich reservoir of Vietnamese American scientists in the NASA community to serve as special advisors for the hybrid program.

c. Graduate Transfer Program with VNU-HCMC: UHCL is working with the Vietnam National University-Ho Chi Minh City (VNU-HCMC) to develop a graduate transfer program in which numerous graduate courses will be taught by qualified Vietnamese faculty members. When this program becomes fully operational, doctoral candidates can take several courses in Hồ Chí Minh City and shorten their time in the USA to earn a master's degree from UHCL.

d. University of Houston and Rice University Libraries: UHCL is one of the four campuses in the University of Houston System. Among the campuses, University of Houston (UH) is a comprehensive research university. UH library, with over three million volumes and additional instructional materials, is a world class research library. Rice University, in Houston, is another comprehensive research university with an outstanding research library. UHCL students can access books not only from UH and Rice, but also from universities across the USA. The UH and Rice libraries are within driving distance of the UHCL campus and collectively provide Vietnamese doctoral candidates relevant research information on all academic fields.

e. Issuance of J-1 Visa: UHCL has the experience with J-1 Vietnamese

visiting scholars (Ms. Tô Thu Thủy and Ms. Nguyễn Anh Thư of the University of Technology-Hồ Chí Minh City). UHCL is confident that J-1 visas can be issued to Vietnamese doctoral candidates to come to the USA to do their dissertation research.

d. Joint Research between UHCL Professors and Vietnamese Scholars: UHCL graduate faculty consists of many prolific researchers who are interested in doing joint research with foreign colleagues that lead to publications in overseas journals. Professor Dr. Trần Văn Hiến of UHCL and Ms. Tô Thu Thủy of the University of Technology-Hồ Chí Minh City have done joint research that lead to publications in the journal of *Economic Development Review* sponsored by the University of Economics-Hồ Chí Minh City.

7. Conclusion

The proposed hybrid approach to joint Vietnamese American production of Ph.D.'s is an innovative program that can be used to improve the quality of Vietnamese faculty as well as to train Ph.D.'s in new disciplines. This proposal should serve as a model for future Ph.D. training projects with other countries. The MET is urged to accept this proposal and integrate it into the Vietnamese Ph.D. production process. Upon acceptance of this proposal UHCL will draft and negotiate separate contracts required to fulfill the proposal attributes. ■

References

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