

# Teaching Statistics: School and Social Reality

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#### Abstract

Lenin once said that Statistics is one of the most powerful tools for social awareness. Statistics is an indispensable tool in the national economy. Managers rely on statistics in order to planning policies for economic development, given the factual basis for the management and operation of the business. No statistical information, government policies will lack factual basis which may lead to decision and policy mistakes.

Statistical analysis is an important step indispensable in the fields of scientific research, especially experimental science. No statistical analysis, the study is not considered complete.

In the analysis of corporate finance activities, economic policy analysis, macro-financial analysis, statistical analysis models are scientific basis that provide more realistic in the formulation of management policies and business operation.

There is no denying the significance of statistics and statistical contributions in the field of socio-economics. So, the statistical courses teaching and learning are needed to be properly awareness and these courses are designed to suit each learning object.

# The teaching and learning of statistics at the University of Economics Ho Chi Minh City (UEH)

From 29th course (2003-2007 school year), UEH early admission to a general point, after the first three semesters, based on grade point average, UEH will recruit three wishes to comment on the professional sectors. Students selected mainly specialized in benchmarking information. They compared between the number of registered students and the actual number of students that is allocated to each

specialized sector, and their knowledge of these faculties. But from 30th course, the choice was also influenced by the great initiative to introduce students to understand the specialized training of the faculty. The ambiguity of information "introduction" of the faculty and do not have a strong basis to validate the "word of self-introduction", so that students will consider the faculty 's "hot": maybe the faculty is expected to flourish in future or the faculty will bring stable jobs, high income!

The first factor affecting students is the name of faculty. If you look through the department, such as Faculty of banking, Faculty of Commerce-Tourism- Marketing, Faculty of Business Administration, Faculty of Accounting Auditing, ... then it seemed to show very clearly that professional students can pursue after graduation. Conversely, Faculty of Economic Mathematics and Statistics is hard to visualize future career.

Another factor adding to the value of some pictures faculties such as the appearance of many companies sponsor the activities of science, scholarship funding, support jobs. These elements give students a feeling of being valued, or at least these faculties have a science closely related to the economic activity taking place.

#### **Statistics major**

UEH has trained specialized statistical from the first year, there have been 37 full time bachelor courses (not open 31th) with about 50 students for 1st to 30th course. In addition, since 1981 UEH also opened specialized statistical courses for Department of in-service Training management with the number of switching from unstable over the years.

Changes in the economy have led to changes in social perceptions of the professions. Statistics hardly ranks last in the list of majors that students choose. Students studying Statistics virtually ineligible due to other sectors, so more or less limited motivation, impact negatively on the quality of training. Besides, the statistics do not create confidence in the user. The statistics socioeconomic not convince people, not to promote correct and complete the right of its inherent role.

Grasping the real needs of society, Branch of Statistics – Data Analysis has turned to specialized training in Business Statistics from 32th course, with over 100 students. But from 35<sup>th</sup>, each course is now only about 50 students.

To meet the requirements of training new specialized major, teaching staff of our Branch have been efforts to update our knowledge in statistical theory, statistics is compiled towards applications. We found new resources from developed countries in the world, translated materials, completing the contents of

subjects, providing teaching and learning materials, updating reference materials, preparing lectures for new subjects such as data analysis, market data analysis, data mining.

Along with the renovation of the course content, change the number of subjects, teaching is also a change in the method: reducing monologue, teaching with case studies, modern pedagogy methods, presentation skills, assessment of learning outcomes combining forms. Students are encouraged to use statistical software in learning, research and professional practice. In addition, our Faculty also enhance building relationships with businesses, enabling students to visit at the market research firm's foreign and domestic companies have been using statistical tools and data analysis ... effectively, organize presentations career orientation, extracurricular presentations to equip the students with soft skills, with the reporter's business successful, the market research professionals, CEOs, successful alumni, administrators.

The difficulty is probably the same with the University of the national economy Hanoi, Hue University of Economics, with economic information systems code in accordance with the rigidity of the Ministry of Education and Training. Supplementary subjects will be more natural informatics (which is only suitable for specialized information management).

So that students study statistics more difficult than other majors, difficult to find work, even if made in the state statistics agency is often hard work, and again, statistical job is one of the low-income jobs than other UEH majors.

Currently, our Falcuty is preparing the final step to protect the specialized business statistics project (although has trained nearly 4 courses) - an independent Statistics training program, non- economic information system code.

With new code major, students who are studying in business statistics major will have many career opportunities in many fields. Students can work in:

- Organizations and companies providing market research services
- The business have research and analysis of internal data.
- The organization needs research and data analysis.
- In addition, students may establish organizations providing market research services and sale consulting, marketing. They can join statistical coaching, training, and market research in business, in secondary, colleges and universities education system.
- Students can build and develop marketing information systems to exploit the information through a combination of internal data sources, market research data, secondary data.

- Students can do the work of a researcher or an data analysis expert in the institutes, research centers, non-governmental organizations, non-profit organizations.

After 3 graduated Business Statistics courses, our faculty and our branch have received numerous positive signals from the business, from market research companies. They have the high appreciation of the capacity of students to meet the actual work. In addition, alumni are also very excited at work because of the application of their knowledge in the real environment is extremely dynamic. They always returned our Faculty to the shared professional success with the students are studying.

### The Other Majors

Statistical theory (or principle of economic statistics and statistical applications) is taught to all students in UEH. Besides, depending on specific majors, there are some statistics courses such as statistics in firm, social statistics, population statistics, economic statistics, foreign trade statistics, trade statistics, actuarial, .... But with the changing economic, social awareness of statistics major, building empowerment program for science majors, these faculties have removed all above supplementary statistics, they only study Statistical theory. We even had 2 courses, students of faculty of commerce, tourism, marketing, business administration and accounting, not studied Statistical theory. These faculties have said that it is difficult subjects, so students can hardly get good grades, graduated difficult to achieve good and excellent and this leads to students difficult find jobs.

#### **Difficulties**

Currently, most students considered Statistical theory is very difficult and relatively "dry". Students do not see the benefits and the importance of acquiring the knowledge of statistics for the following courses and the applying of Statistical theory to the real life. the formula is

One important reason may be mentioned that the teaching of statistics has long focused almost exclusively on the theory and the formula is simple yet complicated, not connect to the real life. Learners need to be guided by the information that describes the context of the economic and social situation in order to they must chose these statistical methods or other statistical methods. Thus, students will feel the closeness, the practicalities of statistics in everyday life, to realize the benefits of statistics as an effective and efficient tool for managers, for everybody who studied in the field of socio-economic, macro and micro scope.

In another aspect, society's perception of the role of statistics is not adequate.

The application of active teaching methods, this dialogue is not able to effectively apply because the class size in UEH was quite crowded. (In UEH is only suitable for high-quality class: This class scale is only about 40 students).

## **Proposals**

There is no denying the need for statistics human resource for the statistical agency of the state, the market research company, the enterprise. Therefore, to develop statistics on the role and its effects is:

- The support of the government, the General Statistics Office, Statistical Office of the provinces and districts statistics department of professional practice for students of statistics, so that they can recognize the practical application of statistics in the state.
- The Faculty and Branch should strengthen the building relationships with business, with the media to promote the training objectives, a description of training content and the workplace after graduated statistics students.
- The recruitment of Business statistics student should be reasonable since admitted to UEH, this will help our Faculty can improve the quality of input student.
- The participants in the design, construction and approval of training programs need to be understood, must visualize the specific job after graduated students so can take objectively true decisions, not based on pure sentiment or just local interest.
- Statistics staff must invest effort in training and self-training, to put the statistical methods, statistical formulas into real-world problems, associated with specific operation of the business, with the idealism of theory connect to the real life.
- The teaching of statistics to other majors should also be included the situations that related or closely related to these majors in the examples, the exercises, ... . Hopefully not much longer, from the role of social awareness, the recognition and evaluation of statistics will be positive changes and statistics will return to its place an essential tool in all sectors of the economy. And statistics will be one of the majors in UEH that students love.