



# Academics without Borders

## USF-AWB

### Universitaires sans Frontières

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#### University models

According to the committee chaired by Sir Ron Dearing, three broad models for universities tend to be distinguished (<http://www.leeds.ac.uk/educol/ncihe/>). These are:

- the Humboldtian academic model (after Wilhelm von Humboldt's foundation of the University of Berlin in 1809) of a **research university** which was characterized by the entrenched rights of professors and students to freedom of study and teaching, and in which independent research and study was intended to provide the guiding principle of the student's university program (Germany, the Netherlands and to some extent Scandinavia);
- the Anglo-Saxon model with strong emphasis on the **personal development** of the student; in other words, the student follows the courses that they assume to be profitable for them and their live;
- and the Napoleonic model (France and Spain) which was characterized by a heavily centralized and elitist approach (the latter exemplified by the French Grandes Ecoles) in order to **fulfill needs**. This model is not far from the military schools such as naval academies.

With other words in some universities:

- teaching derives from research, so the professors are asked to do research in order to ameliorate their courses or eventually create new courses, and students are asked to help construct universal knowledge; teaching is clearly research-driven; no limitation for entering the university; usually there is no office for industrial relations;
- teaching can be targeted toward the personal development of students, so that students are free to organize their own studies, few courses are given, many electives are possible, and students must work a lot by themselves; so teaching is credit-based; any course demands other pre-requisite courses ; no limitation for entering the university; fees can be high; usually there is no office for industrial relations;
- teaching is made according to the socio-economic needs of the country, so that the students become a sort of product constructed to meet the nation's need for a highly qualified labor force; teaching is more job-oriented; practically no electives and so teaching is year-based; high level of selection; all students have same profiles; fees may be reduced; industrial internships are often mandatory. The office for industrial relations has a key-role.

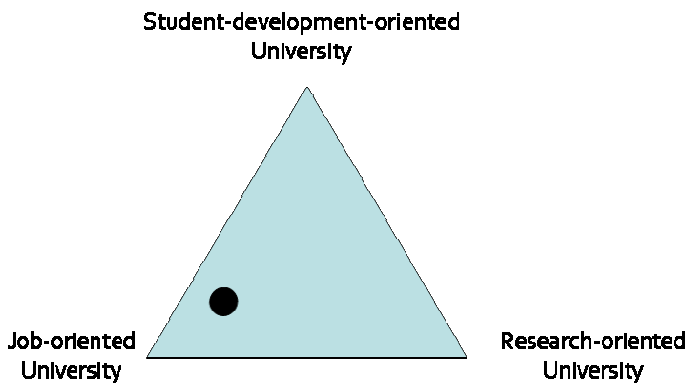
Actually in the same place, those three orientations can be more or less mixed. For instance in UK, even if the studies are targeted to student development, in some places, there are "sandwich" courses, i.e. during one year students can go to work in companies. In France, the sys-

tem is binary, universities following more or less the Humboldtian model, and Schools of Engineering targeted to meet socio-economic needs.

As an example, the most recent Malaysian development plan (See [http://www.leeds.ac.uk/educol/ncihe/a5\\_109.htm](http://www.leeds.ac.uk/educol/ncihe/a5_109.htm)) is "predicated on the assumption that the demand for an educated and skilled workforce will increase in tandem with the country's rapid industrialization. The main objectives for Malaysian higher education include commitments to:

- improve the quality and relevance of courses offered so as to match national manpower requirements;
- increase the capacity of enrolment in science, engineering and technical-related courses so as to intensify the production of manpower with scientific and technical knowledge;
- and increase the capacity and capability to undertake research and development, particularly that which is relevant to the requirements of the industrial and service sectors."

So, practically all existing universities can be located in a sort of triangle along these three directions. Generally, Schools of Engineering are located near the black dot, i.e. in the category regarding job-orientation.



As the university Shanghai ranking is essentially based on the quality of the research, it would be essential to develop another ranking of universities based on the quality of professional education and training and their relevance to the socio-economic needs of the country. For all of these aspects, the NGO "Academics Without Borders-Universitaires Sans Frontières" can and wants to contribute to the best professional development of students. Contact us, we can help you! ■

R. Laurini, President of USF-AWB.

This article is essentially a translation of an excerpt of the book "Formation des Ingénieurs face aux défis de la mondialisation" written in French by R. Laurini. Published by Lavoisier, April 2013.