

Black Monday

Courses were resumed at my university on Monday the fourth of September. On that day I had the honour of welcoming to the Geodetic Department in which I give lectures exactly ten (10!) novice students, seven boys and three girls, all fresh from high school. Over the past quarter of a century the number of new students



welcomed into my department at the start of each new academic year has never been so low as in this very millennium year. The number is no more than 25 per cent of our top years. These are really dramatic figures and I have no hesitation in assigning the term Black Monday to that particular day. Indeed, notwithstanding a rather high budget allocated to professional promotional activities aimed at facilitating entrance and encouraging enrolment

of fresh students, the number is categorically decreasing year by year.

Three Things of Substance

Is this situation unique to my university, or does it apply to technical universities in general? I think it is not unique. There is a common tendency among high school students to choose easier educational goals, levels at which the demands are lower both intellectually as well as with respect to the degree of effort required and course duration. Consequently, the large reservoir of potential students for universities opt for the less heavy educational paths, doubtless with an eye on remuneration and career opportunities. The dramatic decrease in numbers of novices is for many lecturers somewhat frustrating. About the same amount of time is required whether you prepare lectures for ten or for thirty students. However, the credits gained are much more quantitatively related. In addition, over the last decade a general climate has been created in which only three things within a university seem to be of substance: research, research and, last but not least, research. Lecturers who take their task seriously get the feeling that they are time wasting when devoting effort to preparing and improving lectures.

Easy Money Road

Trying to change this bent is in my opinion lost labour. It finds its origins in the solid state of the spirit of the age, induced by the present state of the economy. This spirit divines that welfare and personal satisfaction be expressed in just one measure: money and nothing else but money. Money has become the measure of all things. Many young people are affected by this virus, which results in their desire to ride the easy money road. Full academic studies take more years than other types of study whilst the long-term benefits, expressed in terms of earnings, are doubtful or at least uncertain. There

consequently exists an increasing reluctance on the part of new generations of young people to enter into academic studies. If we cannot change this situation, how then are we to cope with it? In order to answer this question, let's consider it in a historical perspective.

Supply and Demand Principles

Throughout history, the tasks of a university have always been to store and guard existing knowledge, to transfer knowledge to future generations and to create new knowledge; all of this in order to enable mankind to survive and to live in some kind of harmony. It goes without question that this mission requires the careful employment of not only researchers but also of teachers. About four decades ago, for a number of intervening reasons of which the most important were an increase in the number of high school students opting for university study heavily stimulated by government subsidies and vastly expanding technological development, a process began involving differentiation of academic disciplines. Many new academic chairs were established. Today there is occurring not only a decrease but even a reversal in this expansion process. For example, at my university the number of faculties has been reduced by 50 percent. This is a natural development, completely in line with elementary supply and demand principles.

We thus observe a diminishing demand for university courses. Should this mean that courses be removed from the lecture halls? Not at all! There is a deadlock. And the solution to this deadlock is to provide, through co-operative efforts between intra- as well as inter-university levels and at national as well as international levels, jointly defined and developed courses, possibly supported by the new Web-based technologies. In this way, students attending different universities and of differing backgrounds may attend the same courses.

Endangerment

To clarify my point further, let's narrow down our perspective to that of our own field: geomatics. This includes surveying, geodesy, geography, GI technology, remote sensing, environmental modelling, geostatistics and so on. Why should every faculty or university establish separate, but largely overlapping, courses? It would be much more effective to offer only one course, irrespective of the particular background of geomatics students. There may be some loss in that the contents of, for example, a remote sensing course might not entirely fit the needs of any one individual professional and that seemingly essential areas of knowledge may for that profession remain under-illuminated. On the other hand, gain would lie in the fact that students would come into contact with other disciplines, their methods, concepts and notions. This would, in the long run, undoubtedly facilitate interdisciplinary co-operation and understanding. In a world in which interdisciplinary co-operation is becoming increasingly important, such a shift of coordinates would be highly beneficial. Let us face facts. To prevent their own endangerment the different geomatics sciences need to step into the era of co-existence through the mutual provision of courses for students of different backgrounds.

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