



## **HotDocs: Promoting Research Based Training in Cyberspace and the Real World**

Many of the problems facing young scientists are international but we can learn from the way in which they are tackled in different countries. In France in 1994, a group of doctoral students in Toulouse set up an internet mailing list, HotDocs, for the discussion of PhD issues. Pascal Degiovanni reports for Next Wave on how this initiative has led to the formation of a number of national organisations and the production of a report which has been consulted by academia, industry and government in the search for answers to the problems facing PhDs in France.

---

PhD studies in France are similar to those in America, taking place after five years undergraduate university study, and lasting between two and four years. Approximately 10 000 French PhDs, in all fields ranging from pure mathematics to economical sciences, are awarded each year. However, the employment situation is rather tough. Global data, collected by the French ministry of Higher Education and Research show that in 1995, there were roughly 7000 stable positions for doctors: 3000 tenures in research or higher education, 1000 in civil corps and secondary education, 1500 in the private sector, 1500 foreign students going back in their native countries. The remaining 3000 are split between unemployment (1050) and postdoctoral or temporary positions (1950). Obviously, the situation depends on the scientific field. Nevertheless even supposedly high demand scientific profiles such as physics have a 19.8% unemployment rate. Even without entering a detailed analysis, one may hardly deny the existence of a severe job crisis.

It is in this context that the Collective of Doctoral Students of Toulouse created in 1994 a mailing list called HOTDOCS. This list aimed to provide information about problems associated with training and future career prospects. Rapidly, the list gave birth to various Internet services, gathered under the name of GUILDE DES DOCTORANTS.

As information started to spread on the Net, the need for a deeper and stronger action was felt by many subscribers to HotDocs. It was decided to create an authoritative document which would give the low-down on doctoral training and all its potential difficulties. This report would then be used for lobbying politicians and the media as well as those in the academic world.

After six weeks of intensive work, in which doctoral students and young researchers from all disciplines and institutions across France took part, the HotDocs report came off the presses. Several hundred copies were sent out to Government Ministries, research agencies, university Vice-Chancellors, national and international student organisations, research societies, research training supervisors, the press, and trades unions.. Freely available on Internet, the report was consulted by several hundred people in the first few days of its existence.

The main recommendations of the report included restructuring French academic life in order to create a new dynamic and a closer relationship with the industrial sector. In addition to closer direct links between public and private research sectors it was felt that a widening of access for recruitment to top industrial posts as well as management jobs in the Civil Service was needed. As noted above only 1500 of the 10 000 French PhDs are recruited by the private sector each year. France has a unique Higher Education system -in addition to Universities, specific schools, Grande Écoles, provide high quality education. For various historical reasons these schools are traditionally used by industry and high level civil administrative corps for recruitment. To aid greater private recruitment the thesis must be viewed not only as background training but also as part of a genuine period of practical applied training, and all those involved in doctoral research be they doctoral student, supervisor or future collaborators must be alerted to their wider responsibilities

The report also put forward the idea of a thesis contract. This would take the form of a clear and coherent scientifically-expressed contract binding the doctoral student, the thesis supervisor and the directorate of the research unit. To make this contract effective any overall evaluation of researchers or lecturers carrying out research and research groups or labs should include a specific evaluation of any thesis contracts in which they are engaged.

As far as I know, the HotDocs report is now considered as a reference on the subject. Over the last two years, the Minister for Education, Higher Education and Scientific Research, François Bayrou, carried out a long reforming process of the French Higher Education System. At various stages of this process, the HotDocs report and its proposals have been taken into consideration. In the meantime, the HotDocs community has given birth to a representative organisation designed for representing doctoral and post-doctoral researchers on temporary contracts. It has the form of a confederation of associations, was created on March 2 1996, and is called the Confédération des Etudiants-Chercheurs (CEC).

At present time, both the Confederation, the Guilde and Action-HotDocs work together to promote PhD training in France. In many universities and research institutes, discussions have started on the basic proposals issued from the HotDocs report. Many actions toward extra-academic insertion of PhDs have been, and will be performed. These discussions have involved PhD student associations, industries, the Bernard Gregory Association and the Ministry for Higher Education and Research. Members of the CEC are working with the French Academy of Sciences on the future of PhDs in France. Discussions are now underway at institutional level on the possible ways to improve PhD training quality and professional placement of doctors. Although the general election surprisingly called by President Chirac might slow down these discussion, they will be continued with the next elected administration.

In my opinion, the success of this action is based on three facts. First of all, the strong mobilisation of many PhD students and young researchers that felt deeply concerned by the situation of PhD employment and by the future of research and higher education. Secondly the seriousness and the quality of the work performed, and third the general philosophy for PhD training underlying the HotDocs report. This document does not focus only on academic aspects of PhD training and professional insertion but strongly affirms the need for research based training in other fields of society such as the industrial sector and high level civil services.

Published in Nextwave, 1997.