

## AUTOMATIC PROGRAM REPORTS

Lígia Ribeiro<sup>1</sup> and Gabriel David<sup>2</sup>

<sup>1</sup> U.PORTO/IRICUP Praça Gomes Teixeira, 4099-002 Porto Portugal - <sup>2</sup> U.PORTO / FEUP / INESC Porto Rua Dr. Roberto Frias 4200-465 Porto Portugal  
[lmr@reit.up.pt](mailto:lmr@reit.up.pt), [gttd@fe.up.pt](mailto:gttd@fe.up.pt)

The University of Porto is operating since 1996 a Web-based academic information system, developed in-house and now called SIGARRA. It has progressively covered many aspects of the academic information needs. In particular, all the steps in the pedagogic process are automated. The working model views SIGARRA as an information hub to which many entities contribute, to the benefit of every task in the mission of the University. This is the case of the academic service, the professors and the students, among others. The consolidation of all the data and the production of consistent views are thus very important.

At the single program level, there is a set of statistics classified in five areas (admission, population, progression, conclusion, mobility), each with several graphs. An example is shown in figure 1. There is the policy of presenting the data supporting a specific graph along with it, so other people may reuse the same data to build different views.

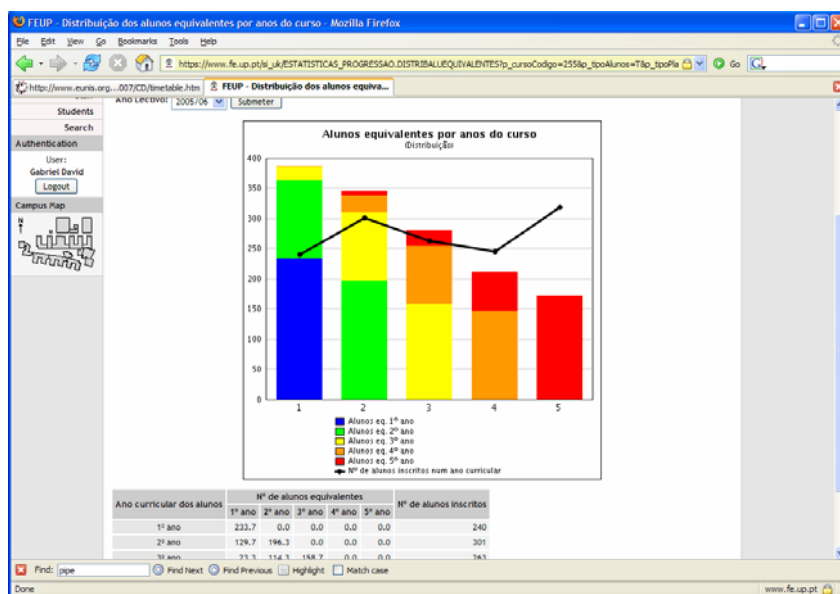


Figure 1. Student distribution highlighting courses from previous years.

The graphs can be consulted on-line in a specific statistics page attached to each program. However, to help program directors on their yearly reporting task, those graphs have been fully automated in a single on-line document to which the program director is invited to add comments on each section or graph. This report combines a high level of automation in the inclusion of standard graphs with flexibility enough to adapt a specific report to the goals and style of the director. The paper will show how this is accomplished through report templates and instance copy.

Other critical aspects are data consistency and the facility to query it. For this reason a data warehouse project has been set up. The paper will describe the general architecture, the six data stars in its dimensional model and some problems solved through a carefully designed ETL process. The paper ends with a comparison between the new and previous approaches.