

A Tool to Construct the “POLI PARA TODOS” Program

Itana STIUBIENER

Escola Politécnica da Universidade de São Paulo , LARC – Laboratório de Arquitetura e Redes de Computadores, itana@larc.usp.br

Ian KOROLKOVAS

Escola Politécnica da Universidade de São Paulo, LARC – Laboratório de Arquitetura e Redes de Computadores, MsC student

Luiz Fernando de BIASE

Escola Politécnica da Universidade de São Paulo, LARC – Laboratório de Arquitetura e Redes de Computadores, lfbiase@larc.usp.br

Gustavo Bianchi CINELLI

Escola Politécnica da Universidade de São Paulo, LARC – Laboratório de Arquitetura e Redes de Computadores, gustavo@larc.usp.br

Sergio RODRIGO

Escola Politécnica da Universidade de São Paulo, LARC – Laboratório de Arquitetura e Redes de Computadores, srodrigo@larc.usp.br

Regina Melo SILVEIRA

Escola Politécnica da Universidade de São Paulo, LARC – Laboratório de Arquitetura e Redes de Computadores, regina@larc.usp.br

Tereza Cristina de Melo Brito CARVALHO

Escola Politécnica da Universidade de São Paulo, LARC – Laboratório de Arquitetura e Redes de Computadores, carvalho@larc.usp.br

Wilson Vicente RUGGIERO

Escola Politécnica da Universidade de São Paulo, LARC – Laboratório de Arquitetura e Redes de Computadores, wilson@larc.usp.br

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ABSTRACT: *Nowadays information concentration is one of the most perverse ways of exclusion in the world. People that don't have information access are more and more far from the modern world. And not only information is important but also knowledge and how to use and profit from this knowledge.*

This paper presents the Poli Para Todos program that is opening and offering for free all the content of undergraduate courses of Escola Politécnica da Universidade de São Paulo.

1 INTRODUCTION

Nowadays information concentration is one of the most perverse ways of exclusion in the world. People that don't have information access are more and more far from the modern world. And not only information is important but also knowledge and how to use and profit from this knowledge. Perceiving this process and associating to Brazilian reality, the Escola Politécnica of Universidade de São Paulo (Poli), following MIT (Massachusetts Institute of Technology) initiative [MIT 2002], decided to open and offer on the Web, for free, all its undergraduate courses content to the community. This program is called “Poli Para Todos” (that means “Poli For All”). Escola Politécnica main goal in this program is to be Social Responsible to the community and to continue being an Engineering Institution reference.

Besides Poli Para Todos program, there is an extensive Distance Learning Program at the school [ZAIN 2003a][ZAIN 2003b][ZAIN 2002][GONZ 1999]. The school has done many efforts to create modern and advanced infrastructure required to provide distance courses. We have developed our own

LMS (Learning Management System)[MARG 2000], we also developed a tool to create and publish multimedia contents and we had worked at Polivirtual project [SILV 2001b][SILV 2002][SILV 2003a] where an infrastructure based on a fiber optical high speed network integrated to Brazilian Internet 2 [SILV 2003b] was implanted. Polivirtual project improves mechanism to change information by Intranet, knowledge portal, videoconference [SILV 2001a] and collaborative systems.

One of the biggest challenges of our program is to stimulate professors to join it. Many of our professors have an enormous resistance to deal with digital didactical contents, some of them due the new technology solutions unfamiliarity, and on the other hand, other ones think it takes so much time to construct a good and attractive material. To avoid this stalemate we have developed a tool to help professors to produce digital material more easily.

The objectives of this paper are to present the Poli Para Todos program and its available tool that we have developed. We present also previous results of the program. In the first section we will present the Poli Para Todos project, its main objectives and purposes. In the second section we will present a software tool we developed to help professors to join the project. In the third section will present the results we have until now and the results we expect to have in the next 6 months. Last section presents some copyrights concerns, which we understand is a very relevant issue, some conclusions and the next steps.

2 THE PROGRAM

With principles of Social Responsibility in mind, Poli launches this important initiative, opening the didactic material of its regular disciplines for everyone who is interested in knowledge and in better practices of engineering, in its most diverse areas of specialization.

With its 10 semester courses and 3 four-month courses offered to a contingent of 4.524 graduate students, 16 post-graduation courses with 4.044 students and 222 specialization courses with over 7.770 students, Poli extends even more its reach through the knowledge of engineering connected to the **Poli Para Todos** program.

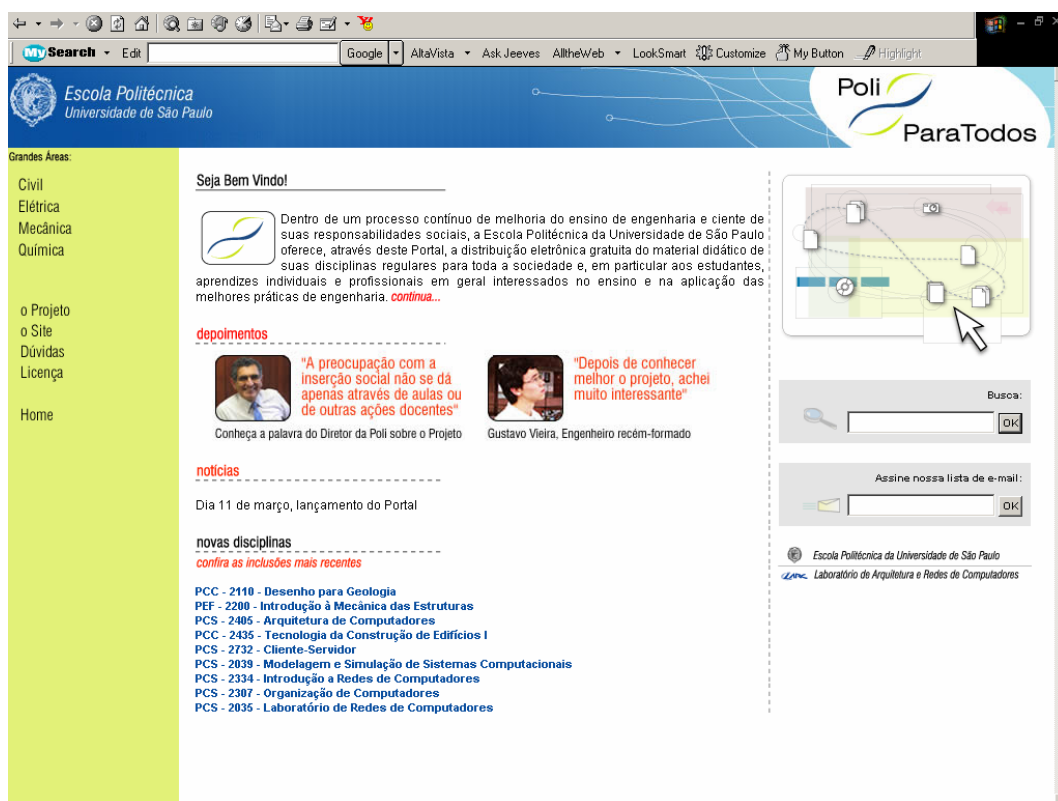


Figure 1: Poli Para Todos Portal design.

The didactical contents of its 495 teachers will be taken to the Web, allowing all interested in learning engineering the opportunity to assimilate such contents. This way, it will also allow the spread of Poli's quality pattern in teaching and learning at this knowledge area.

The ***Poli Para Todos*** program, through a web portal [STIU 2004], will centralize the distribution of didactic material on the most diverse areas of engineering. Figure 1 shows this web portal first page design <<http://poliparatodos.larc.usp.br>>. Regularly, the user will find news related to already registered material and available for community access.

At the portal there is also a Frequently Asked Questions (FAQ) list, containing the most important information proceeding from the users' questions to clarify and keep the portal working. E-mails directed to the portal webmaster or to the teachers will not necessarily be answered individually. Because of the great number of e-mails that will eventually flow, as possible, the e-mails will be selected, grouped according to similarities and answered by a supporting staff, and the common interest ones will be added to the FAQ list.

There isn't any access control at the portal. Nevertheless, we are planning to integrate the portal to CoL (our LMS system) to allow that professor store some of their content there (specially didactical audios and videos stream). Therefore, it is possible to check who is using this content and map the profile users. Moreover, video and audio stream some time could expose professor image and voice, so it may be protected and controlled. The Poli Para Todos Program is a voluntary program and professors aren't obliged to publish their didactic content. But, if they want to join it, they can make online register of their content through an upload mechanism implemented at web portal.

3 THE EPT TOOL – EASY PUBLISHING TOOL

In the years we realized that many professors have an enormous resistance to deal with digital didactical contents, because of their unfamiliarity of new technology solutions, or little time to construct a good and attractive material. To facilitate the process of constructing and publishing a didactic content, we developed the tool EPT - Easy Publishing Tool. This tool will help professors who want to join the program but don't have time or don't know exactly how to convert their material to the appropriate format.

The main reason to develop this tool was to facilitate the work for those professors that aren't familiarized with Web based technologies. Another reason to develop EPT Tool was to provide a cheap way to offer our content, as it's very expensive to create and support a complete hardware infrastructure and specialized people, like a Webmaster, to publish the material. As this is a long-term project if we don't provide professors to be autoimmune in publishing their courses we would not have enough budget to maintain the project.

With this tool professor needs only to inform where is his/her didactical content to be published. This content can be in any format as: PowerPoint slides, Word archives, texts archives, HTML, Flash, JPG, MP3, Wav, MPEG, AVI and even transparencies sheets that only must be scanned. Users must only signalize where are their archives and how they are linked and the tool publishes them automatically in a predefined format by São Paulo University.

EPT provides an easy way to publish any kind of document in any format as: PowerPoint slides, word archives, texts archives, HTML, Flash, JPG, MP3, WAV, MPEG, AVI and even transparencies sheets that only must be scanned. Providing all these possibilities we tried to stimulate all professors, even those who still have their material in printed formats.

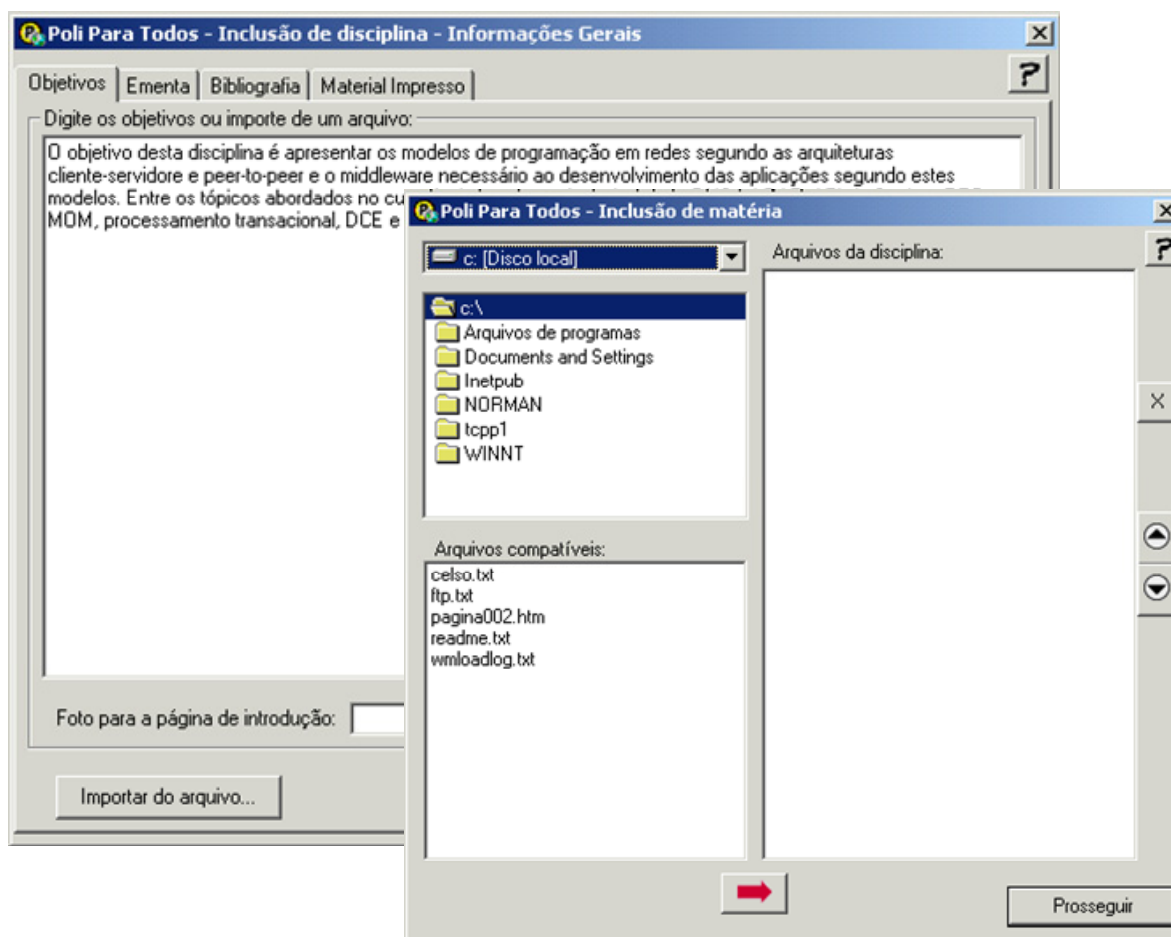


Figure 2: EPT – Easy Publishig Tool interfaces.

EPT runs like a tutorial, which guide the user over all steps he/she needs to perform to build web content. The tool provide text box where professor could fill with information about his/her disciplines as: title, objectives, calendar, lectures topics, lectures notes, activities, readings and references. This wizard put the material at html format. Professor had some different design template to choose. EPT create a final zipped file, ready to upload in the portal. So, professors can easily construct their web material based on any material they already have and publish it.

After we started “*Poli Para Todos*” program we realized that a big consequence of the development of our tool is that it helps a lot our distance learning program because it facilitates enormously the Web based content production process, that can easily be addicted to COL, as we are working and producing in a open format.

4 CONCLUSIONS

The *Poli Para Todos* program was inaugurated on March 11th and until now we have 10 courses published. Our goal is to have about 100 courses in one year and we expect that other courses of the Universidade de São Paulo join the program. The Escola Politécnica da Universidade de São Paulo allows copy, distribution and use of the available contents in *Poli Para Todos* Program, by means of the recognition of authorship and subsequent credit to the Escola Politécnica and to the author.

We are conscious that our big challenge now is to convince all professors to join the program because there is a big resistance to open their course. In parallel we realize that this program is a big step to our distance Learning Program because when a professor publish it course at this Portal, s/he realizes that this is the first step to create a distance course. We’re convinced that if we can have about 100 courses in one year, we’ll have also many new distance courses in the same period. We intend in our next steps to improve some copyrights concerns [STIU 2004], which we understand is a very relevant issue.

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