Resultats del projecte europeu de TIC

STTIS - WP 1.1 REPORT

'The state of the art in the use and value of informatic tools'

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1. Introduction

This report examines the state of the art on the use and value of informatic tools in the five partner countries (France, Italy, Norway, Spain and the UK).

It is concerned with the provision of and kinds of use of computers and informatic tools in secondary schools and more particularly in science and technology classes. As planned, the report is based mainly on existing national or regional data from about 1990. However, where such data did not exist or was limited, it has proved possible with STTIS to supplement them with specially conducted surveys (see Italy and Spain).

It also provides an annotated review of the most important research or survey papers which have appeared in the scientific or educational journals of each country in relation to the above topic, in the recent years (i.e. 1995 onwards). Earlier papers have been included if they were of special importance. Priority has been given to papers on themes most relevant to STTIS, namely:

- computational modelling tools;
- simulation software; and
- real-time experiments and display tools (excluding Internet).

The report is divided into three main parts. In the first part, the provision of computers in secondary education is examined country by country; issues such as availability, location and access, cost of maintenance and replacement of computers are discussed. In the second part, the uses of information technology in secondary schools and more particularly in science and technology classes are discussed; issues such as use of specialized versus generic kinds of software (i.e. word processing, spreadsheet, database and communication tools) for teaching, contribution of information technology to teaching and learning, and teachers' competence and training in IT are raised. Finally, the third part contains a list of references of important relevant publications; for some of these publications a brief summary of the main points and conclusions is also included.

The discussion at the end of the two first parts of the report attempts a brief synthesis of the issues previously mentioned including some comparisons of the provision and use of informatic tools in secondary schools among the partner countries. Furthermore, through these comparisons, tentative as they are, some possible areas for future research at a European scale are identified and suggested.

Finally, the report as a whole sets the framework in which the data collected as part of Work Package 1 should be understood and interpreted, as it gives a state of the art account of the conditions science teachers encounter in their effort to implement the informatic tools that interest STTIS.

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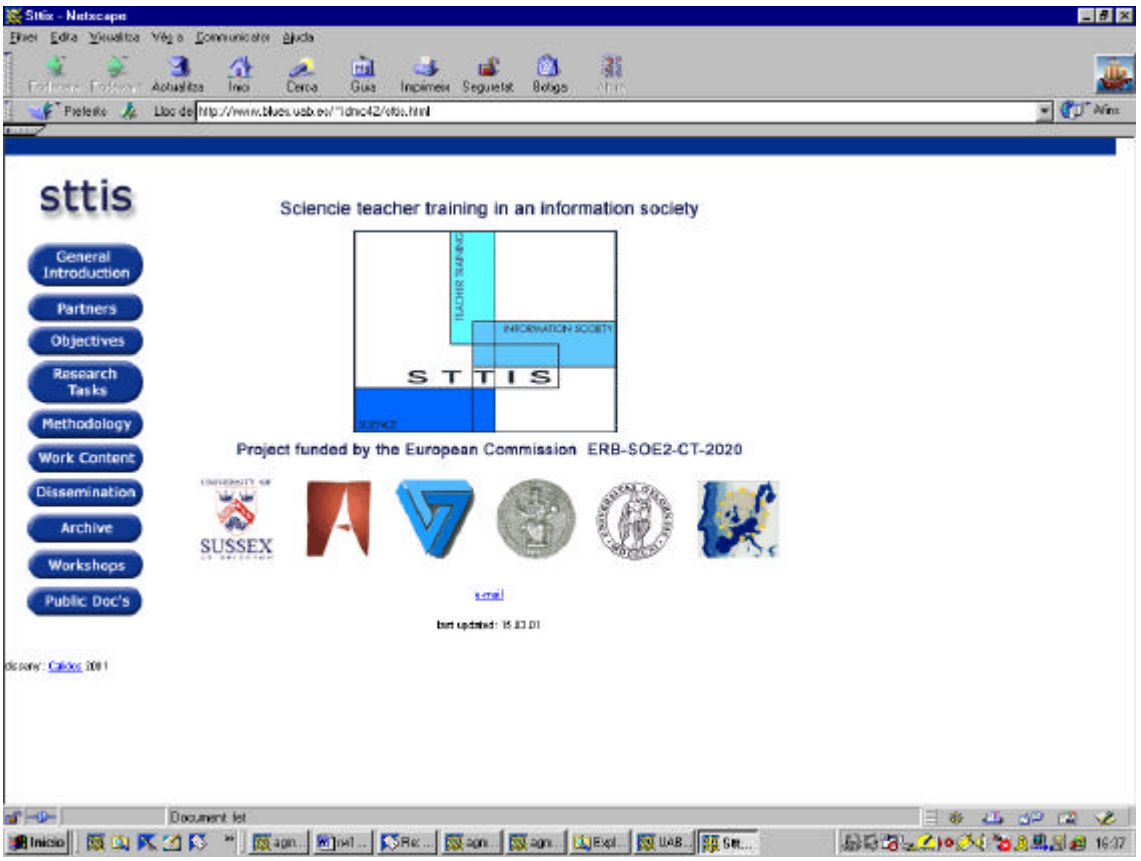

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