Internet Projects—International Cooperation

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Keywords: evaluation, didactical modeling, interdisciplinary, internet.

Initial Considerations
The work at a laboratory of informatics aims at propitiating better resources for research and learning for students. Therefore, we should not teach informatics, but create an amazing educational tool imbued into the learning of specific content.

Into such context, mathematics, physics and chemistry teachers make use of educational programs as they are teaching content. Later, they take students to the laboratory so that they can experiment with what they learned in the classroom. For instance, a biology teacher teaching about feeding, can take the students after class to see with the computer, how the food becomes chyle.

Thinking this way, and having the Internet as an ally, we have tried to create internet projects aimed at getting into the web culture, having teachers and students participating in national discussions about various subjects, and encouraging the interchange of experiences between students and teachers from many different countries.

Internet Project
The use of Internet for education was carried out in two phases.

1st Phase:
• participation in discussion projects, developed and managed by the Computing Department of USP;
• participation in the following worldwide projects: KIDLINK, KIDFORUM, I*EARN, GEONET, NASA SPACELINK, NASA SIMULATION.

2nd Phase:
• elaboration and creation of projects of students’ interest;
• use of data from libraries for research;
• exchange and development of educational software.

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This paper was presented at the IFIP Working Groups 3.1 and 3.3 Working Conference: ICT and the Teacher of the Future, held at St. Hilda’s College, The University of Melbourne, Australia 27th–31st January, 2003. Reproduction for academic, not-for profit purposes permitted provided this text is included.

Work Methodology
The work was conducted following the parameters below:
• directionism
• active learning (stimulate thought and action)
• definition of themes to be studied (dialogue—negotiation—significance)
• research/investigation (management and organization of knowledge)
• strategies of intervention (correction, socialization, monitoring)
• verbalization (group participation and politics consciousness).

The work was done with the students and the teacher together so that there would be exercised as active learning, stimulating thought and action. Themes were defined through dialogues, negotiation and significance. Investigation and production of knowledge, as well as strategies of intervention for correction, socialization, and monitoring were used. Verbalization comes as a way of magnifying the participation of the group within a socio-political consciousness.

The teacher is a consultant, articulator, mediator and orientator of the students’ development process. The establishment of an atmosphere of confidence, respect for the differences and reciprocity encourages the students to recognize their own conflict, and find out their potentials. This way, the teacher will not have to be inhibited in recognizing her/his own conflicts, mistakes and limitations as well. The teacher acts as a mediator, facilitator, encourager, challenger, investigator of knowledge, her/his own practice and of individual and group learning.

Evaluation
The evaluation of the projects and Interest Groups happened permanently. It was made up of the following premises:
• individualization (not individualism)
• error as an opportunity to learn/reflect upon
• effort and overcoming of difficulties
• accompaniment of production and conclusion
• strategies of recognition of effort
• concept attached to the subject

In the evaluation we conceived an error as an opportunity to re-learn/reflect, to advance in the process of learning which takes the students to overcome difficulties. Observation in the laboratory showed the participation
and the level of individual and collective growth involved in the process.

**Conclusion**

It has been noticed that some students prefer active learning based on projects with goals to reach and a methodology to be followed. Others, however, learn better when they study what they want.

Students said that many parents did not believe in their ability to work and progress with computers. Several students came to the program believing that computers were smart and belonged to smart people only. After participation in the program a feeling of pride and accomplishment was aroused and parents are regaining confidence in the future of their children.

The computer is perceived as a symbol of what is most modern, advanced, and costly in today’s society. It is also the ultimate and best of what society can offer to citizens. By knowing these facts, elites in Brazil try to seize new technologies, especially computers, as a way of perpetuating their condition. Middle and upper class parents send their children to computer courses or press schools to make such programs available.

We can use this kind of project to diminish digital exclusion. It is a way of putting technology at the service of learning, no matter what the social class.