explanations, tutorials, “hot” data plots, simulations, and quizzes, represents the core of the IDEA. They are embedded in a Web-based course frame, together with course annunciatior and communicator segments. ISLNs and course frame have been produced with MS-Word TM and MathcadTM software and can be viewed with freely available browsers. This widely used software makes the tasks achievable for both students and instructor. The IDEA course system has been accessible via the University’s local network but may serve as a more general model of an effective self-paced, distance-learning environment.

USING GRAPHING SOFTWARE, COMPUTERS AND EKG'S TO HELP STUDENTS LEARN ABOUT THE BEHAVIOR OF THE HEART
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Reading the output of an EKG is often confusing for students in beginning biology courses. A variety of distances, ratios and slopes need to be read from the graph to obtain the pertinent information for describing the behavior of the heart. However, many students in these classes do not have a good background in graphical analysis. We propose that doing some mathematical work in a biology course before encountering circulation lab activities will greatly aid in the students' understanding of the material. The students first generate some very simple graphs. They see how various distances, slopes and ratios obtained from the graphs describe different quantitative behaviors. The students work through a small set of increasingly complicated periodic graphs leading to a graph that looks like the output of an EKG. Then, when running the actual EKG's, the students can concentrate on the biological concepts rather than learning new mathematics.

I.M.O.PHY. A NET-COURSE SUPPORTING THE INTRODUCTION TO MODELING IN PHYSICS EDUCATION AT HIGH SCHOOL LEVEL
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I.M.O.PHY (Introduction to MOdeling in PHYsics-education) is a teacher training Course delivered on the Web. It consists of various Net-Seminars (on line seminars using on-line discussion groups) concerning different physics topics. Each Net-Seminar is tailored to train teachers in transforming their teaching by promoting a constructivistic teaching practice and computer-enhanced instructional approaches that enable students to learn about the process of modeling physical phenomena. The Net-Course approach involves a construction of the physics content structure that has to be taught not mainly, or even solely, oriented to physics issues but also including educational issues and pupils' conceptions. These two issues, students spontaneous models and statements of the scientific knowledge, are therefore accepted to be of the same relevance and treated as resources for physics education. The Net-Seminar about thermal interaction between bodies will be described and the pedagogical tools prepared (experiments using Microcomputer Based Laboratory and software) will be analyzed.

A NAVIGABLE BOOK TO LEARN DISCRETE MATHEMATICS
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This work will discuss on a course material in web-format for teaching and learning Discrete Mathematics, a subject that is offered at the Computer Science School of the Universitat Oberta de Catalunya (UOC). UOC is an Open University with a virtual campus where both students and teachers interact, breaking time and distance constraints. The learning and teaching process is evolving with the new information technologies. The teacher-student relationship is changing, even more in distance education. The interactivity between the student and the material can be done through the resolution of exercises and the experimentation with simulated cases. The simple exercises are usually Java Applets embedded in the same html page where the exercise evolves, in a xml framework. Depending on the student’s behavior and skills, different paths are presented in order to optimize the learning process. The more the student knows, the more difficult questions are. A tailor-made and oriented evolution implies an intelligent tracking of the student’s actions. In this respect, we might say that this kind of activity allows either the student to learn significantly or the teacher to keep the process under control.