# The Educational Software Seminar at Brown University (CS092)
## Request for Proposals, 1998-99

This year, during the Spring semester, the Departments of Computer Science and Education at Brown will again offer the Educational Software Seminar. The basic idea motivating the course is that small groups of undergraduates (computer science and education concentrators primarily) can work with local teachers to successfully design, build and implement classroom software, originally specified by the teacher. The students work in teams, in close contact with the teacher requesting the software and his/her students, and the final result is a set of well-documented research projects that are also interesting computer programs and successful implementations of educational software. In the Spring of 1998, seven projects were undertaken by the CS092 students, and all were successfully completed and implemented. The 1998 programs ranged from a first-grade counting program for the Blessed Sacrament School in Providence, to a Web-based study of color theory for Brown University's Visual Art 10 course, and from an introduction to computer networks for Classical High School, to an exploration of the Providence sewer system for the Providence Children's Museum. These and other CS092-created programs are available to everyone at the course web site: http://www.cs.brown.edu/courses/cs092/.

Recognizing that Internet access has broadened the range of what might be called "classroom software," we should emphasize that the Brown students will be using advanced authoring tools capable of creating both "freestanding" and Web-based tools and applications, and the primary goals of the projects are to meet the specifications of the teacher and provide the most versatile implementations possible. Therefore, in considering a project for CS092, we ask that you *not* think primarily about platforms and applications, but rather about how a computer-based tool, tutorial, or guided set of activities might help you achieve specific instructional goals in your course(s).

Participating teachers will want to meet with the student team working on their projects regularly (e.g. an hour each week), and of course allow members of the team to observe your class and have access to course materials. In return, participating teachers will have "software" built for them, to their specifications, and will contribute greatly to the experience of everyone in CS092.

If you have a project for CS092, please fill out and return the attached proposal form by **December 15, 1998**. An on-line version of the form is available at the course web site, but you can also mail the form to me at the Department of Computer Science, Box 1910, Brown University, Providence RI 02912. Projects will be selected during the first week of February, and they will be completed by the end of the Spring semester at Brown. If you have any questions about possible projects, the technology we'll be using, or the Seminar in general, please don't hesitate to call me at 863-7619, or send e-mail to rbb@cs.brown.edu.

Thank you for taking the time to read this and consider the offer. And if you have any questions, please don't hesitate to contact me.

Roger B. Blumberg
Department of Computer Science &
Institute for Elementary and Secondary Education

**The Educational Software Seminar (CS092)**
**Proposal Submission Form 1998-99**
**Roger B. Blumberg, Brown University**


Please complete the following project form. I'll be in touch with you about the project before CS092 begins (late January, 1999), and we can discuss further how best to describe the project to the students.


Your Name:

School:

Phone Number:

The best times to contact you:


**Your class**

Subject:

Number of students in each section:

Grade level of students:

Class meeting times:

Textbook(s) [if relevant]:


**Facilities**

Number of computers available for each section:

Type of computers and printers available:


Please describe the project you would like to see developed. You do not need to provide all details, but please enough of an idea of the program you would like so that the Brown undergraduates can reasonably choose from among the proposals.

Your description will be most helpful if you include answers to these questions:

> • What is the topic? What do you want students to understand?

> • What have past students found difficult about this topic? How do you think using a computer might help?

• How do you envision teaching this topic with computers? How will students interact with machines (individually or in groups; all at the same pace, or some at faster or slower rates)?  Will the computer courseware introduce or reinforce the topic?

• What ideas do you have about the implementation?  Do you have any analogies or visualizations for the topic that would help?

• Any further information that you would like to add is of course welcome.