EDU Administration

EDU is a sophisticated system for administering quizzes and assignments to students via the internet. A key to making good use of the system is to set up an administrative structure that makes it possible for all instructors of a given course to be able to use the materials prepared for that course by one “power user.” Materials can be shared among users at different institutions, so it is not necessary that the group of faculty teaching a particular course include one person who has the skills to write a question bank. For the purpose of this document, EDU administration refers to all of those tasks other than creating the original question bank, that is,

1. Uploading a given question bank
2. Setting assignments
3. Managing student use
4. Recording grades

The goals of an administration plan are (a) to free the individual instructor from these tasks as far as possible and (b) to accomplish all tasks with a minimum of administrator time. It can be tricky. Consider Math 106 (Calculus I) at the University of Nebraska-Lincoln as an example. Math 106 is taught in approximately 3 to 5 lecture sections each term, with up to 120 students in each section divided into 5 recitation sections. Lecturers have primary responsibility for their section, but recitation instructors usually handle most of the bookkeeping. All sections use EDU for a proctored Gateway exam. Individual instructors may also use a standard set of regular assignments or assignments of their own design.

The secret to effective administration is setting up a structure at the course level to manage the shared question bank and assignments.

OVERVIEW OF THE FOLDER STRUCTURE

Figure 1 diagrams the relationships among the types of folders used in the administrative structure. Items in the larger font are loaded directly into the folder or created within the folder, while items in the smaller font are inherited from another folder. The arrows point from mother folder to daughter folder, indicating the direction of inheritance. Thus, the 106 COURSE folder contains the original question banks, the Gateway exam, and practice assignments for the course. The 106+ COURSE folder is created as a copy of the 106 COURSE folder, so it automatically contains everything that is in the 106 COURSE folder. The small-point-value assignments created for the course are loaded into the 106+ COURSE folder. Instructors who want to use the small-point-value assignments get them by having their class folder be a copy of the 106+ COURSE folder. Instructors who want to create their own assignments or who do not want to use the system other than for the Gateway exam have their class folder be a copy of the 106 COURSE folder. In both cases, the student records for the class reside in the class folder rather than either of the course folders. There are two principal advantages of this system:

1. The class folders do not contain any information that might be needed in the next semester.
2. The course folders need very little maintenance to prepare them for the next semester.
THE COURSE FOLDERS

The course folders are created and maintained by one of the instructors of the course. As long as
the course content remains the same, the only changes that are needed in the course folders are to
to the dates of the assignments. At the beginning of each semester, the course administrator edits
the Gateway exam dates in the 106 COURSE folder and the assignment dates in 106+
COURSE folder. New class folders created as copies of these course folders inherit the dates
set in the course folders, regardless of whether the class folder creation precedes or follows the
date changes.

THE CLASS FOLDERS

At the beginning of each semester, someone (in our case, a member of the office staff) creates
the class folders, copying the appropriate course folder as determined by each individual
instructor. Each instructor needs to know how to manage a class folder, but the list of tasks
required for this is minimal. Instructors need to know how to observe and re-grade student work.
Generally, the system will mark an answer right or wrong just as a human grader would.
Occasionally, the system will mark an answer wrong that a human grader might consider to be
correct, as in the case where the error appears to be nothing more than a typing error. Instructors
also need to know how to change the details of an assignment. Most commonly, this need arises
because an instructor wants to allow a little more time for students to complete the assignment.
Finally, instructors need to know how to manipulate and download the gradebook so that scores
can be entered into their class grade spreadsheet without copying or hand computation. These
tasks are learned by working through EDUtutorial.doc, which takes no more than 45 minutes.