# Building an E-dentity for Each Student

The rich information possible with electronic portfolios far exceeds traditional transcripts, while a universal repository simplifies management and ownership

By **John C. Ittelson**

Joellen is a 36-year old mother of two. She currently holds a full-time job. After graduating from high school, Joellen completed one year at her local community college. She and her husband then moved to a different state, and she took some additional courses from a local community college. She also took a college telecourse. She recently decided to matriculate at a four-year institution in her city. The college has asked for all her prior transcripts, in order to determine how many and which credits will transfer.

Joellen's educational history represents a composite of the type that students often bring to college. In this age of multiple campus enrollments, virtual campuses, and online courses, pity today's harried students as they struggle to keep track of their multiple transcripts. Isn't it time to explore a more student-centered solution? Imagine having to obtain statements of creditworthiness from every major creditor with which you'd dealt in order to apply for a car loan, for example.

Faced with this complexity in transcript ownership, one model in the business world merits exploration by higher education — if we can assure privacy and quality control that meets all parties' requirements, that is. Consider, then, the credit bureau.
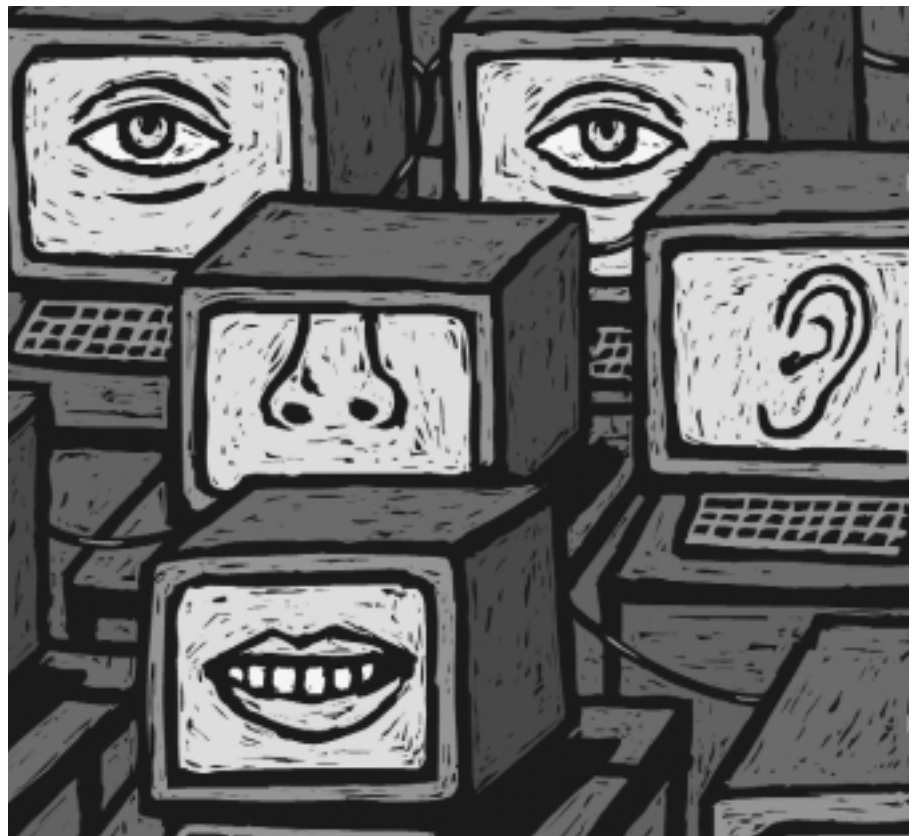
A Single Repository

Banks and other financial institutions established entities called credit bureaus to take advantage of information gleaned from credit card use and to protect their financial interests. Credit bureaus contain large quantities of information on individuals gathered from their use of a credit card, according to industry standards and accepted practices. Most important to the banking industry, they contain a person's credit rating, or creditworthiness.

Credit bureaus are almost universally hated by the general public because of the difficulty the average consumer has in dealing with them. However, the model of storing information in one place is useful. It relieves people of collecting volumes of data in order to assure every different financial institution contacted of their creditworthiness.

When it comes to students' academic records, each university holds the official transcript for each student enrolled. Every time a person applies to another institution or fills out a job application, that person must request (at personal expense) the submission or transmittal of these formal records to the appropriate institution or company.

In this electronic age, wouldn't it make more sense for a student's multiple records of academic performance to reside not in separate registrars' offices, but in a professional academic reservoir? Such a universal academic electronic-identity (e-identity) clearinghouse might look much like a credit bureau, though clearly it would have to be easier to use by individuals and institutions needing information from it.

Unfortunately, various hurdles stand in the way of implementing this proposal. For many faculty, the "look" of an institution's transcript is sacred, with the depiction of credits/outcomes on a transcript document viewed as part of the institution's intellectual identity. The transcript serves as a vehicle to communicate the quality of the credits awarded, along with the prestige and intellectual integrity of an academic department. Transcript databases focused on students rather than institutions threaten this traditional faculty role.

Universities also have established privacy policies stating that personal student information is not public; it is information that the student has some residual rights to control. How far should that control extend? For example, should a student be able to eliminate a prior institutional record because of poor performance? Individ-
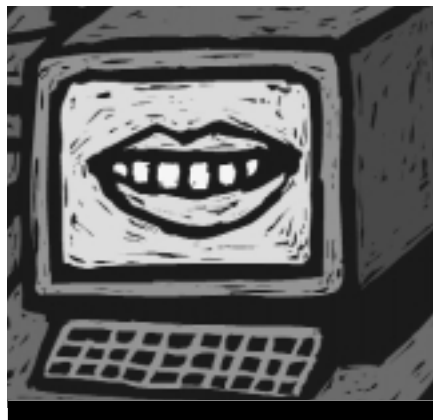
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uals cannot eliminate bad credit information from their credit bureau records unless they prove the data is wrong, in which case the credit bureau corrects the record. Should students have more control over their academic records, or would the database administrator maintain that control?

Where would such a universal e-transcript database be established, and how would it be financed? Who would ultimately control what information is collected, how errors are corrected, how information is released, and to whom? The challenge to education will be to construct a system that guarantees that institutions, students, and other stakeholders all have ongoing roles in assuring that information in the universal repository remains current, correct, and confidential.

The universal repository model suggested offers a way to handle traditional higher education transcripts, which record time, place, and presence; the number of units completed; the academic grade or credit associated with those units; and certification of the grouping of the units into a degree or certificate. These academic records link to the Carnegie unit model of accountability for both the time and

effort that go into the student's learning and the determination of faculty workloads.

However, an increasing number of institutions are moving toward authenticated demonstration of competencies, along with a belief that student reflection is central to learning. Including this richness of information by creating some sort of e-portfolio holds promise for collecting, storing, and sharing such information. If the development of a universal repository for traditional transcript information seems daunting, agreeing on what should be included in an e-portfolio used as part of a student's formal assessment and evaluation record would present an even greater challenge. At the same time, such a record would be very useful to faculty, students, and potential employers.

The Promise of E-Portfolios

Artists, architects, and others have long used portfolios to show their visual work, while musicians use them to demonstrate their musical talents, and scores of other professionals use them to tell their creative stories. Portfolios are collections of work designed for a specific objective — that is, to provide a record of the person's accomplishments. The value of such portfolios as a marketing and sales tool is self-evident. The ownership and control of the work typically remains in the hands of the work's creator.

Many students produce portfolios for their educational institutions as well as for individual faculty. They use the portfolios for various reasons, from reflection and communication with instructors, to presenting their outstanding work and credentials to potential employers. As our technical capacity continues to grow and we become more and more able to collect, store, manipulate, and share information digitally, and as students develop the skills necessary to produce their portfolios in electronic formats, electronic portfolios become a potentially vital part of a student's permanent record.

For example, at Empire State College

students prepare portfolios to demonstrate competencies and to receive credit for their prior learning. At Dartmouth, students use portfolios to organize their experiences for presentation to potential employers. At Tidewater Community College, Donna Reiss has her students prepare portfolios that are published to the World Wide Web as a way to "display and reflect on their learning" to an audience that is broader than just their classmates (see <http://www.wordsworth2.net>).

A collaborative portfolio effort currently in development is the CMA Pilot Program. It has agreements in place with the ACT Corporation, the Public Broadcasting System, and the Johns Hopkins University Institute of Policy Studies to provide validated records for inclusion in a User's Career Management Account. A user's Life Long Learning Portfolio can include transcripts, assessments, certificates, degree certifications, or any other kind of official record that a creditable institution represents as valid by maintaining an original copy and by being willing to produce that copy as needed. The program's privacy policy states that the person developing the portfolio controls both what is collected in the portfolio and who has access to the information. The program's Web site indicates that additional partners include America's Workforce Network, the U.S. Army Reserves, Network Consortium Scans 2000, the Washington Army National Guard, and iSeek Solutions. (See <http://cmapilot.alx.org>.)

In Minnesota, iSeek Solutions is a public-private partnership that maintains an electronic information system for education and employment. It also participates in a significant pilot project with the Minnesota State Colleges and University System (MNSCU) to develop electronic portfolios. The goal is to "implement a customizable, fully functional electronic portfolio system … that is designed to support individual students, workers, and faculty/teachers in compiling and presenting their experience, education, and skills." The partners envision a Web-enabled toolkit that permits an individual to enter and

maintain public and private data sets that include text, multimedia documents, and files. (See <http://www.portfoliopilot.govoffice.com>.)

Helen Barrett and her colleagues in the School of Education at the University of Alaska at Anchorage are working to ensure that each portfolio is based on learner outcomes that use national, state, and local standards, and are associated with evaluation rubrics. In each evaluation a student describes the assessment context, the audience(s) for the portfolio (student, parent, college, or community), and the content of the portfolio items, as determined by context.

Students are encouraged to work in many media-accessible, portable, and widely distributable formats, choosing the software tools that are most appropriate for the portfolio context. Portfolio materials must be replayable and reviewable, and use hypertext links to allow clear connections between standards and portfolio artifacts. Dr. Barrett notes that a teacher with an electronic portfolio will be more likely to have students with electronic portfolios. (See <http:/transition.Alaska.edu/www/portfolios.html>).

The National Teacher Certification Board has addressed some of these issues in order to offer certification that teachers have met various teaching standards set by the board. It has developed specific assessment criteria for portfolios and requires videotapes of student teaching as a part of the portfolio that each teacher prepares. The Educational Testing Service then evaluates these portfolios, and success-

ful teachers earn National Board Certification. (See <http://www.nbpts.org/index.html?http&&&www.nbpts.org/nat_board_certification/index.htm>.)

For electronic portfolios to become more than just an academic exercise, we must address multiple issues. There presently exists no universally accepted rubric for preparing or evaluating academic portfolios that parallels the college credit model. Certainly the question about review and evaluation criteria exists in every classroom and educational setting, but with the current emphasis on accountability, portfolio evaluation that doesn't rely on standardized tests is especially important.

Other questions echo those raised in the discussion of a universal repository: Who owns the data, and who decides who has access to it? In what format is it stored and updated?

My intent here is to suggest that we need a new system, appropriate to the digital age. This system should allow for the central collection of both transcripts and electronic portfolios into a universal repository, creating an e-dentity for each participant. Although creating such a system with adequate security and rich content is a formidable task, doing so will bring a simplicity and clarity to personal e-portfolio management that promises to justify the effort. *e*

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NLII Investigations into E-Portfolios

Here I've provided just an initial review of the myriad issues surrounding portfolios and electronic portfolio development. I'll continue to explore electronic portfolios as part of my National Learning Infrastructure Initiative (NLII) 2001 Fellowship project. In addition, I will be chairing a session on these issues at the NLII 2002 Annual Meeting (January 27–29, 2002, in San Diego, California) and at an NLII Focus Session, "Teaching, Learning, and Assessment with E-Portfolios," scheduled for fall 2002 (September 6).