

## DIGITAL MULTIMEDIA PORTFOLIOS: THE PLAN, THE PURPOSE, A PREVIEW

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### INTRODUCTION

The project, to apply ability-based assessment as a tool in the Valley City State University Curricula and as a result enable students to complete a multimedia digital portfolio on CD-ROM prior to graduation, became visible on the campus in November of 1995. The campus secured a five-year Title III grant from the Federal Government. It funded equipment, personnel, and support for faculty training. The grant enabled the CD-ROM portfolios process to become a campus wide initiative. The portfolio is integrated into the curriculum through application of the University's eight Abilities and twenty-two Skills [See Table I]. The Abilities and Skills had previously been created by the faculty and adopted by the Faculty Senate. A project is assigned in most every course offered. In almost every academic course a project is assigned with rubrics from the selected Skill level for the course.

Valley City State University is a campus of about 1,100 students. Eighty percent of its students major in Education or Business. Two innovations on the campus made the CD-ROM portfolios a possibility. The first, in the spring of 1995 a campus technology committee made the decision to create one of the nation's first notebook computer campuses. In the fall of 1996 every full time student was issued an IBM Notebook computer upon registration. The notebooks allow students to create and save materials on their own hard drives. The faculty received their notebooks and appropriate training in February of 1996 (Tykwinski, Brown & Holleque, 1997).

A second innovation occurred that allowed the faculty to choose the CD-ROM format for the portfolios. The campus network was developed to allow fairly simple movement of large files from computer to computer. This made the saving of materials and creation of the CD-ROMs feasible for a large number of students (Tykwinski et. al., 1997). These realities make the ambitiousness of the digital multimedia Portfolio project more lucid.

To begin the diffusion of the portfolio process, a ten-member faculty learning team representing every academic division was established. These individuals began discussing the portfolio process and making decisions concerning the purpose, audience and expectations for the senior portfolio. Among the articles read and discussed by the team were Sheingold & Frederiksen (1995) and Gillespie, Ford, Gillespie & Leavell, (1996). The members of the group also received training on the hardware and software needed to create multimedia projects. The second year of the implementation process included one-on-one mentoring for ten more faculty. The process continued until, by the end of the fourth year, 85% of the faculty had been involved in the process. In the fifth year a priority was placed on mentoring new faculty. Also during the fourth year of the process, faculty stipends were provided for those who wished to generate Ability-based projects for their courses or produce program course maps that identified the connections between course and the Abilities and Skills.

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1. Communications	Written, Visual, Spoken Performance
2. Collaboration	Positive Interdependence, Leadership
3. Effective Citizenship	Provides Service to Others, Teaches Others, Change Agent Skills
4. Global Perspectives	Works with Diversity, Understands System Interrelationships
5. Problem solving	Gathering Information, Problem Recognition, Creative Thinking, Systems Analysis, Decision Making
6. Technology	Selects, Applies
7. Aesthetic Engagement	Receptivity, Visualization
8. Wellness	Self Management, Self Worth

**Table I: The 8 University Abilities and 22 Skills**

During freshman orientation following the distribution of the notebook computers, a four-hour computer basics session is held. The senior portfolios are demonstrated at this time. Necessary hardware and software skills for multimedia development are included in a required general education course taken by 95% of freshmen. These course activities include web page creation, scanning, CD burning, and audio & video capture. All other necessary expertise is integrated into existing courses and included in the curriculum content as needed for the projects.

Each division determines how and where their students begin to develop the portfolio and which of the Abilities are included in the senior portfolio. The projects are created with assessment rubrics that students must respond to when completing the project. The faculty in each academic program assess the senior portfolios prior to graduation. Education faculty assess the teacher education portion of the portfolio.

The division of Education was the first to fully adopt the portfolio. The senior electronic portfolio is currently required for the exit exam in the teacher education program. A one-credit senior electronic portfolio seminar is offered in each division during every semester to aid students in the development of their portfolio. These classes review the accepted layout of the portfolio, the types of projects that can be used and some of the technical skills required. The portfolio audience is also discussed in this seminar. In addition, a handbook for the senior electronic portfolio project has been developed which includes how-to steps and examples. A web site is available to assist the students. (<http://www.vcsu.nodak.edu/offices/titleiii/portfolios.htm>).

Beginning in 2002, each graduating senior will organize a digital portfolio and burn a CD-ROM for use by faculty in his/her major as an assessment device and/or by students as part of employment activities. Currently approximately fifty portfolios are submitted each year and 80% of those are from Teacher Education students. The other 20% are from Business and Human Resource graduates.

At the end of each semester, a day is reserved for graduating seniors to present their portfolios to a small group of faculty members. The faculty members then accept or reject the finished electronic portfolio. This process is still evolving with much evaluation and feedback instigating new change.

Students are increasingly perceived and treated as full partners in the learning process and institutional governance. A strong emphasis on what students must know and be able to do is surmounting traditional orientation toward courses and credit hours as the measures of learning achievement.

Beginning in 2001 all faculty applying for promotion or tenure will be required to organize and submit their material in a digital format.

Other university outcomes reported from data gather over a five year period by Dr. Terry Corwin is available on the web (Corwin, 2000).

A student survey given for a forth year in 2000 reports the in-depth opinions of our students concerning their learning and the use of technology as part of that learning. The Survey was created and correlated by Dr. Kathryn Holleque (1998), Division of Education & Psychology.

VCSU students will become self-directed, self-assessing learners. The use of portfolios in general classes and the completion of a CD-ROM portfolio gives students more ownership in their own assessment. The student centered tracking software for storage of projects will make students responsible for their learning materials.

VCSU will increase the appropriate use of instructional technologies, including notebook computing for improving teaching and learning. The student notebook computer initiative is central to the creation and saving of portfolio materials.

VCSU will produce graduates who demonstrate that they meet established standards of knowledge and abilities. The demonstration of the eight Abilities through the CD-ROM portfolio provides the vehicle. VCSU will streamline and reduce duplication of courses by focusing on the unique contributions of each course and its competencies for graduation.

The ultimate aim of the CD-ROM portfolio project is to complete a major transformation of institutional culture and practice that began with a mandate from the State Board of Higher Education in 1990, from a traditional teaching institution to a student-centered, innovating, technology based institution.

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