# Bridging the Digital Divide: Instructional Technology Use in Developmental-Level Community College Classrooms

A Fall 2007 Sabbatical Report By Susan Reddoor Faculty, Academic Learning Skills Department Lane Community College

#### **Background:**

The Academic Learning Skills Department offers a variety of developmental-level, credit classes in the content areas of reading, composition, math, study skills, English as a Second Language, and basic computer skills. I have taught in the department for six years, focusing on Reading 90, Writing 80-90-95, and Using Computers to Write I & II classes. As a faculty member I have been involved with several instructional technology-related projects at Lane, such as the League for Innovation BASIC Technology Online Project and the Quality Matters peer review training for online courses. Prior to teaching at Lane, I was an Assistant Professor in the College of Education at Montana State University, Northern for five years and served as the lead faculty member of a "Preparing Tomorrow's Teachers for Technology" three-year federal project coordinating teacher training at five tribal colleges throughout the state of Montana. The project delivered courses through online, hybrid, and distance learning formats and trained tribal college students in electronic portfolio instructional technology.

The Academic Learning Skills faculty at Lane has determined many developmental-level students to be woefully under prepared in the area of basic computer skills. Student Information Sheets filled out on the first day of instruction in Writing 90, 93, and 95 classes indicate many students do not have even basic keyboarding skills or the knowledge of how to create a word-processed document. While the majority of under-prepared students tend to be older adults entering college for the first time, we also see recent high school graduates who are familiar with internet-based functions yet unable to set up a basic file for word processing. This lack of preparation can become a critical roadblock to success in any college class requiring papers to be in word-processed formats only. In addition, many students transition from our developmental-level program into college-level courses featuring web based, online components such as Moodle.

Developmental students have recognized the need for preparation in basic computer skills, and enrollment is increasing in our Keyboarding and Using Computers to Write courses. Last year I surveyed over 250 students taking classes in our department; over 75% of participants indicated they would be willing to try a course with online components. We have had an increasing number of ALS faculty members incorporating online features such as Moodle into course offerings, and our Writing 95 course has been offered in an online version twice. I applied for a Fall term 2006 technologyfocused sabbatical with these considerations in mind.

### **Sabbatical Goal:**

My purpose was to identify appropriate uses of technology in developmental-level community college instruction, particularly in the content areas of reading, writing, and study skills. I focused specifically on how instructors may effectively use technology to deliver developmentallevel courses in web-enhanced traditional classroom formats, hybrid formats with both online and classroom meeting features, and exclusively online formats. There were three main components to my sabbatical project.

<u>Component #1:</u> To explore technology use in developmental classrooms at several community colleges throughout Oregon. I conducted a series of onsite visits and telephone interviews with faculty at Chemeketa, Clackamas, Rogue, and Umpqua Community Colleges. The following colleges offered developmental classes with hybrid or online formats: **STUDY SKILLS: Chemeketa** (Stragegic Studying), **Clakamas** (College Study Skills), **Coos Bay** (Study Skills I), **Portland CC** (Study Skills Online), **Rogue** (College Success)

**READING: Chemeketa** (Rd 90 College Textbook, RD 115 Academic Thinking and Reading), **Clackamas** (Rd 115 College Reading), **Coos Bay** (College Reading I,II,III), **Rogue** (Rd 116 College Vocab, Rd 120 Critical Thinking Online), **Umpqua** (Rd 90 College Textbook Reading)

**WRITING: Chemeketa** (WR 49 Basic Writing, WR 90 Writing Fundamentals), **Coos Bay** (WR 25 Sentence Fundamentals, WR 90 Paragraph Writing), **Linn-Benton** (WR 85 Writing Refresher), **Rogue** (WR 30 Fundamentals of Composition), **Umpqua** (WR 95 Writing Fundamentals, WR 115 Intro to Expository Writing)

**SUMMARY:** Most colleges contacted reported a higher level of student retention within the term with hybrid format courses, rather than online only. All colleges emphasized the importance of orientation for students enrolled in online or hybrid courses. The orientation methods were tutorials, registration packets, or face-to-face sessions. In addition, most faculty members interviewed stressed the need for ongoing support for faculty delivering online or hybrid courses. This support took the form of course development release time, mentoring opportunities w/peers, and lots of IT training opportunities.

## <u>Component #2:</u> To examine instructional technology innovations nationwide through the League for Innovation Conference on Information Technology (CIT)

**SUMMARY:** The developmental technology innovations shared through the League for Innovations conference were quite diverse in content area and methods, but most emphasized: -The importance of an orientation component for students and faculty involved in online course offerings

-The importance of ongoing online support for students throughout the term. Innovative practices included a "Beep a Tutor" 24-hour support line, an Online Concierge Service designed to help students navigate web-based systems, and Course Management Teams developed at one site with shared faculty duties for online student support and course management tasks. -The importance of building connections among students taking the class and between campus services and students. These took the form of chat groups, virtual site tours, video conferencing, podcasts, virtual study groups, and FaceBook.

## <u>Component #3:</u> To identify "best practices" in the research on developmental-level instructional technology use, specifically in the content areas of reading, writing, and study skills.

**SUMMARY:** Resources included professional publications from the National Association for Developmental Education, International Society for Technology in Education, and the League for Innovation Alliance. Highlights of research:

-NADE study recently indicated that overall, online course use for developmental classes is still only 3% of total course offerings (hasn't grown much over the years)

-The League for Innovation& NADE Joint 1999 Study on developmental technology use called for a fundamental change in the way instructors use technology with students. Technology selected should help developmental students become more self-regulating, independent, and confident learners. Technology that makes for a "better lecture presentation" (e.g. Power Point, overhead projection systems, etc.) will help the instructor, but is unlikely to help students learn. The current "presentational mode" paradigm should consider the difference between teaching that is learner-focused vs teacher focused.