E-Learning at Shawnee State University

Submitted by Michael Field, Provost and Vice President for Academic Affairs

In recent years increasing attention nationally and in Ohio has been given to new instructional technologies and innovative means of delivering university classes. At Shawnee State University we make use of a variety of instructional methods, ranging from the very traditional use of classroom lecture and discussion to blends of classroom and computer-assisted instruction to entirely on-line classes. The purpose of this brief report is to indicate the extent to which SSU is making use of various instructional methods, the extent to which we have experienced student demand for different methods, and our expectations for the immediate future.

The Annual Report of the Ohio Learning Network, titled *Expanding Delivery: E-Learning in Ohio* (December 2006), suggests that “E-Learning” can be divided into a variety of modes of delivery: “online, blended, technology-enhanced, interactive video, television, CD or DVD and correspondence.” In Ohio most students taking advantage of such courses are enrolled through community and technical colleges, although the number enrolled at university campuses is growing.

Let’s review the extent to which SSU is offering what is being defined as E-Learning.

**Blackboard**

By far our most significant involvement in E-Learning at SSU is through the use of the Blackboard course management system. We have been leaders in Blackboard instruction for several years, and our faculty have presented at national conferences describing innovative ways to use the Blackboard system. There are 180 active Blackboard courses being taught Winter Quarter (out of a total of 678 courses) by approximately 85 instructors for SSU Winter 07 classes. Most classes supported by Blackboard would be categorized as “blended,” because they mix traditional modes of classroom teaching with a variety of computer and web-based options. Blackboard can also be used, however, to offer courses entirely on line (see below). Students taking courses in blended modes and also entirely on line include traditional age, full-time students, adult full-time and part-time students, and high school students enrolled under the Post-Secondary Options Program (POP—see below).

**Recent On-Line Courses, College of Professional Studies**

The courses below were offered predominantly on line.

**Department of Sports Studies**

SSPE 202 – Health and Nutrition across the Life Span (4 credit hours)
   Offered in summer 2006
12 students were enrolled

SSPE 203 – Human Nutrition (4 credit hours)
Offered in summer 2006
8 students were enrolled

Department of Industrial and Engineering Technologies

Two courses were offered through the Digital Infrastructure for Distance Learning of Engineering Technologies (DIDLET) grant. Students enrolled in high school programs were eligible for participation in these on-line courses.

ETCO 115 – Visual Basic Programming (4 credit hours)
Offered winter 2007
22 POP students in Tech Prep were enrolled

ETEC 150 – Computer System Integration (4 credit hours)
Offered fall quarter 2007
25 POP students in Tech Prep were enrolled

Department of Business Administration

BUHE 300 – Medical Terminology for Health Care Managers (4 credit hours)
Offered fall 2006 and winter 2007
29 students enrolled in fall quarter
45 students enrolled in winter quarter

BUMG 385 - Production and Operations Management   (4 credit hours)
Offered fall 2006 and winter 2007
16 students enrolled in fall quarter
45 students enrolled in winter quarter

Health Sciences Department – Nursing Program

The majority of upper level courses in the Bachelor of Science in Nursing program (BSN) are offered on line. Periodic didactic and clinical meetings for instructional and information purposes are required for these on-line courses.

Offered fall quarter 2006:

BSNR – 342 Nursing Informatics   (4 credit hours)
20 students were enrolled

BSNR 345 - History, Theory, and Trends in Nursing (4 credit hours)
55 students were enrolled
BSNR 363 - Health Appraisal and Physical Assessment (4 credit hours)  
56 students were enrolled

BSNR 454 - Community and Public Health (5 credit hours)  
20 students were enrolled

BSNR 462 - Innovations and Adaptations (6 credit hours)  
10 students were enrolled

BSNR 495 - Special Topics in Nursing (4 credit hours)  
7 students were enrolled

Offered winter quarter 2007:

BSNR 341 - Transcultural Nursing (4 credit hours)  
58 students were enrolled

BSNR 343 - Research and Decision Making in Nursing  
22 students were enrolled

BSNR 451 - Family Nursing in the Community (5 credit hours)  
16 students were enrolled

BSNR 453 - Leadership and Management in Nursing - Clinical (5 credit hours)  
29 students were enrolled

BSNR 462 - Innovations and Adaptations – Clinical (6 credit hours)  
20 students were enrolled

BSNR 495 - Special Topics in Nursing (4 credit hours)  
16 students were enrolled

Interactive Television Studio Classes

From time to time the University has offered credit-bearing classes in cooperation with other campuses through the interactive television studio located downstairs in the Clark Library. This quarter there are no credit courses being offered in this mode. When classes have been offered via interactive television enrollments have typically been low. This delivery system requires multiple sites and requires technical assistance to be available at each site; this mode is declining in popularity. We do make extensive use of the TV studio for many web casts and video conferencing purposes.

In spring quarter we will be offering two graduate classes in Library Science from Kent State in the studio through our Graduate Center, and three classes in Engineering Technology in cooperation with Miami University, supported by a grant.
Recent On-Line Courses, College of Arts and Sciences

EDUC 230 - Educational Media, Technology & Computers (4 Credit hours)  
11 students enrolled

EDUC 240 – Historical, Legal, Ethical Foundations of Education (4 credit hours)  
13 students enrolled

EDUC 245 – Teaching Individuals in a Pluralistic Society (4 credit hours)  
11 students enrolled

EDRE 305 - Content Area Reading (4 credit hours)  
11 students enrolled

These courses were offered last summer as part of the second phase of the courses and supervised experiences required for Alternative Educator Licensure (AEL) through the Ohio Department of Education. The candidates in this grant-funded cohort completed graduate level methods courses through Ohio University and Adolescent Psychology through Shawnee State University over the summer quarter of 2006. Upon successful completion of the Praxis II examination in their subject areas, they were awarded the AEL in their respective area (math or science) and they were employed with school districts teaching in those hard-to-staff areas. State law requires that they return to a university to complete additional course work in educational foundations. To accommodate their employment situations, the Department of Teacher Education offered the candidates these foundations courses via distance learning. They met three times over the quarter, first class, mid-term, and final. The remaining classes were taught via Blackboard.

Other E-Learning Efforts

As an open-admissions University, Shawnee State offers students needing special assistance access to advising and tutoring through our Student success Center. Most of the tutoring offered is traditional in nature – the student meets with someone knowledgeable about the subject matter and is helped to understand the subject. But we also offer a variety of technologically-based forms of assistance. One of the most interesting is called Smarthinking, an on-line tutoring program. Smarthinking is available 24/7 for all levels of math, chemistry, biology, microeconomics, macroeconomics, accounting, Spanish, and bilingual math. Students may also ask basic grammar questions or submit an essay for review. If students do use the essay service or on-line writing lab, they will receive a reviewed paper within 24 hours. Students simply log-on using our username and password. They then have to complete a registration form to establish their own account. Smarthinking is a collaborative effort with the Ohio Learning Network. We purchased the units as part of the Title III program. The initial investment in 2005 was $8000.00 which purchased 400 units of tutoring hours. We are still using those original units.
Since 2005, we have had 255 Smarthinking registrations from students. To provide an example of usage: from 2/28/07 to 3/05/07, we had 9 students use the on-line writing lab, 8 students submit questions and 27 live discussions which equals 44 interactions with Smarthinking. This program provides a great service to our students who cannot come to campus to use our regular one-to-one tutoring.

Post-Secondary Option Students Attending Shawnee State University
Fall 2006 and Winter 2007 Quarters

Although most of our POP students are enrolled in traditional, on-campus classes, these data are displayed for three reasons. First, the POP students are not traditional university students. Second, many are benefiting from the availability of Blackboard instruction in their on-campus classes. And finally, twenty-five POP students in the Tech Prep program have enrolled in the exclusively on-line classes sponsored by our DIDLET grant (the acronym stands for Digital Infrastructure for the Distance Learning of Engineering Technology). Table 1 shows POP student SSU enrollment and the high school they attend. POP students in this report attended nineteen high schools within four counties: Adams, Jackson, Pike, and Scioto. The high schools with the most POP students attending SSU during the fall and winter quarters were Piketon High School (23) and Portsmouth West High School (22). High schools with the fewest POP students were Hillsacres Christian School (1) and Jackson High School (1). One student was home schooled.

<table>
<thead>
<tr>
<th>Table 1: POP Students: Enrollment and High School</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>POP Students</td>
<td># Enrolled</td>
</tr>
<tr>
<td>Fall 2006</td>
<td>121</td>
</tr>
<tr>
<td>Winter 2007</td>
<td>122</td>
</tr>
<tr>
<td>Unduplicated Fall &amp; Winter</td>
<td>143</td>
</tr>
<tr>
<td>High School</td>
<td># Unduplicated POP Attending SSU</td>
</tr>
<tr>
<td>PIKETON HIGH SCHOOL</td>
<td>23</td>
</tr>
<tr>
<td>PORTSMOUTH WEST HIGH SCHOOL</td>
<td>22</td>
</tr>
<tr>
<td>PORTSMOUTH HIGH SCHOOL</td>
<td>16</td>
</tr>
<tr>
<td>NOTRE DAME HIGH SCHOOL</td>
<td>14</td>
</tr>
<tr>
<td>EASTERN LOCAL HIGH SCHOOL</td>
<td>9</td>
</tr>
<tr>
<td>WAVERLY HIGH SCHOOL</td>
<td>9</td>
</tr>
<tr>
<td>WHEELERSBURG HIGH SCHOOL</td>
<td>8</td>
</tr>
<tr>
<td>MINFORD HIGH SCHOOL</td>
<td>7</td>
</tr>
<tr>
<td>WEST UNION HIGH SCHOOL</td>
<td>7</td>
</tr>
<tr>
<td>PEEBLES HIGH SCHOOL</td>
<td>6</td>
</tr>
</tbody>
</table>
Table 2 shows the number of courses taken by POP students during the fall and winter quarters, as well as the total student credit hours attempted and earned, and the average credit hours attempted and earned. The total student credit hours earned and the average credit hours earned were not available for the winter quarter at the time of this report. In the fall quarter, POP students made up 3.1% of the undergraduate student headcount and 1.9% of the undergraduate FTE. The average GPA for SSU students overall was 2.86.

<table>
<thead>
<tr>
<th>Term (Year)</th>
<th># Enrolled</th>
<th>Total POP Student Credit Hours Attempted</th>
<th>Average POP Student Credit Hours Attempted</th>
<th>Total POP Student Credit Hours Earned</th>
<th>Average POP Student Credit Hours Earned</th>
<th>POP Average GPA</th>
<th>Hours Withdrawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2006</td>
<td>68</td>
<td>954</td>
<td>7.9</td>
<td>868</td>
<td>7.2</td>
<td>63.6</td>
<td>28</td>
</tr>
<tr>
<td>Winter 2007</td>
<td>73</td>
<td>871</td>
<td>7.1</td>
<td>NA</td>
<td>NA</td>
<td>58.1</td>
<td>11*</td>
</tr>
</tbody>
</table>

*Note: Hours Withdrawn refers to credit hours of courses that POP students withdrew from between the 15th day and the end of the quarter. Since the winter quarter is still in progress, a final number of withdrawn hours cannot be determined.

Data presented in Table 3 summarizes POP enrollments by department, course credit hours taken, and student credit hour production for both fall 2006 and winter 2007.
quarters. Course, enrollment, and credit hour details can be viewed in Tables 4 and 5 that follow.

<table>
<thead>
<tr>
<th>Department</th>
<th># POP Students Enrolled (Duplicated)</th>
<th>Course Credit Hours</th>
<th>Student Credit Hours</th>
<th># POP Students Enrolled (Duplicated)</th>
<th>Course Credit Hours</th>
<th>Student Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>14</td>
<td>32</td>
<td>56</td>
<td>22</td>
<td>40</td>
<td>88</td>
</tr>
<tr>
<td>Health Sciences/Sport Studies</td>
<td>26</td>
<td>22</td>
<td>38</td>
<td>20</td>
<td>22</td>
<td>36</td>
</tr>
<tr>
<td>Engineering Technologies</td>
<td>24</td>
<td>8</td>
<td>96</td>
<td>28</td>
<td>11</td>
<td>111</td>
</tr>
<tr>
<td>English &amp; Humanities</td>
<td>59</td>
<td>31</td>
<td>231</td>
<td>44</td>
<td>20</td>
<td>176</td>
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<tr>
<td>Mathematics</td>
<td>37</td>
<td>24</td>
<td>148</td>
<td>26</td>
<td>32</td>
<td>104</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>11</td>
<td>24</td>
<td>42</td>
<td>7</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>66</td>
<td>56</td>
<td>264</td>
<td>69</td>
<td>68</td>
<td>276</td>
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<tr>
<td>Interdisciplinary Studies</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Fine, Digital &amp; Performing Arts</td>
<td>23</td>
<td>37</td>
<td>75</td>
<td>18</td>
<td>36</td>
<td>51</td>
</tr>
<tr>
<td>UNIV</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>261</strong></td>
<td><strong>238</strong></td>
<td><strong>954</strong></td>
<td><strong>235</strong></td>
<td><strong>251</strong></td>
<td><strong>871</strong></td>
</tr>
</tbody>
</table>

**Future Directions and Project 20/20**

An examination of enrollment patterns suggests that on-line E-learning presents real opportunities for growth. At the same time, our recent enrollment patterns offer no indication of a vast, untapped market waiting for the University to invest heavily in on-line E-Learning, and there are certainly some indications that suggest caution. Some universities, particularly for-profit private universities, have invested heavily in on-line instruction with excellent results. Conversely, many institutions have found that making large numbers of on-line courses available resulted, not in the enrollment of new students as anticipated, but rather in traditional on-campus students simply taking some of their classes on-line. In effect, classes that would have enrolled 30 students on campus enrolled only 15, with the other 15 taking an on-line class. Thus the institution had doubled the instructional costs without increasing enrollment.
Shawnee State University must be flexible and opportunistic in responding to opportunities while minimizing risk. We have already made a substantial investment in Blackboard and our Jenzabar information system is fully integrated with our financial data and our student data. The result is that the infrastructure is in place to allow us to expand our on-line or blended instruction options. But while we are well positioned to take advantage of opportunities, we must recognize that additional faculty development and training will be necessary as we capture opportunities to expand the use of on-line instruction. Fortunately, our new Center for Teaching and Learning is now beginning to provide that training, since SSU has recently been identified by the Ohio Learning Network as an institutional leader in the use of technology as a teaching tool. The Ohio Learning Network has established five regional centers across the state to coordinate Learning Communities Initiative projects. The Southeast Regional Center is located at Shawnee State University in Portsmouth and is working through the SSU Teaching and Learning Center to expand faculty and professional learning communities in the region.

We are about to undertake a major new academic planning effort called project 20/20, which will identify possible new academic programs and initiatives leading to substantial enrollment growth. As part of this new planning effort we will be working on a comprehensive distance learning plan. Our goal is to determine how best to build upon various non-traditional modes of instruction in order to take advantage of opportunities while avoiding pitfalls.