STEP 3: FROM FACULTY LITERACY TO CURRICULUM INTEGRATION

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Introduction

The plan for American University (AU) was simple:

Step 1. Get the faculty computer literate;

Step 2. Faculty, having overcome their computer-anxiety, appreciate the power of computers; and,

Step 3. Students coming to class find teachers using computers to teach.

The results were initially promising, but upon investigation showed that getting to Step 3 was the biggest challenge:

Step 1 went according to plan; and

Step 2 went even better than expected.

But, during the 1984-85 academic year, and again in 1985-86, surveys were taken of Freshman literature classes to measure the computer experiences of our undergraduates. The results indicated we were making progress when measured in terms of faculty who were computer literate. But, when measuring the use of computers for instructional purposes (i.e. in the classroom), we made little progress toward Step 3. Faculty literacy training may have been successful when measured in terms of the number of faculty who were trained on using computers. The building of microcomputer laboratories provided hardware. But, instructional use of computers had not increased.

A department by department study was undertaken to ascertain what was happening Of 38 teaching units at AU, every one (100%) had some faculty members who actively used computers, but not one was using instructional software interactively. Two departments used simulations, but the students were only allowed to watch, or to submit

transactions in writing for a teaching assistant to enter. There was significant use of statistical packages (21% of the departments), but only one (2.7%) used an interactive package -- the other seven departments used a batch-oriented mainframe package (i.e. they had not modified their use as a result of literacy training, so we couldn't take credit). Interviews explained the phenomenon -- with little investment of personal time or energy, faculty members realized significant gains in their personal productivity from using computers in their writing and research. No similar investment:benefit ratio existed for revamping courses to provide instructional computing.

Having identified the problem two avenues toward a solution exist -- increase the benefit faculty can expect to gain from their investment in redesigning courses, or reduce the amount of investment faculty have to make to achieve the benefit. Toward these ends, AU is now in the process of creating an environment that fosters the adoption of instructional computing. The procedures currently in progress include:

1. Adding computer-related activities to the factors included in annual faculty reviews;

2. Creating research grants and released time for modifying courses to use instructional computing;

3. Incorporating instructional computer expenses into the normal budget and planning procedures and documents of instructional units;

4. Inviting faculty members from non-computer disciplines (e.g. history, political science, arts) of other universities to lead discussions and workshops;

5. Setting up a regular roundtable where AU faculty who are successfully using computers in instruction can show off and provide advice to other faculty;

6. Encouraging the establishment of user groups defined by geographic location (e.g. Clark Hall, Hurst Hall) or broad discipline areas (e.g. business, arts, languages); and, most important,

7. Getting support for instructional computing from the leadership of AU (President, Provost and college deans).

At this point the impact of these strategies is unknown. One thing is certain -- we learned that the move from faculty literacy to classroom utilization is a bigger challenge than the initial one of overcoming the faculty's computer illiteracy.