Where are business schools in the computerization process?

In order to provide key decision makers in business schools with an answer to this question, you are invited to participate in this Thirteenth Annual Survey. This survey replicates major portions of the Fifth and Ninth Surveys. To answer “where” a series of life cycle graphs are used in addition to checklists and rankings. The life cycle graphs incorporate developmental phases from investigation to phase out, sub-divided into steps. A definition of each step is on the back page. Please use these definitions as a guide to answering the questions.

Complete each phase diagram by circling the number which most closely corresponds to where your business school is today relative to where it has been and where it is going. This response is to reflect today’s reality at your school. Even though you may not have all the information, complete the questionnaire from the orientation of the individual(s) responsible for all computer, communication, and information resources for your business school. Use your general knowledge, assuming a school-wide perspective.

Please complete as many of the items as possible. If you do not know an exact response, an approximation is better than no answer. Feel free to add, comment, or elaborate on any item. We have incorporated many past suggestions into the annual surveys.

A copy of the final report will be sent to all participating schools in September, 1996. A presentation based on the preliminary results of this survey will be made at the AACSBI Annual Meeting in April and at the AACSBI Learning Technology Workshop later this year. Please return this questionnaire by Monday, March 18, 1996, to:

Jason L. Frand, Ph.D.
Assistant Dean, Computer and Information Services
Anderson School of Management
UCLA
Los Angeles, CA 90095-1481 FAX 310-825-4835

Thank you for your forthcoming support.
**BUSINESS SCHOOL DEMOGRAPHICS: 1995-1996**

(1) Type of business school:  
(check one)  
___ Public (primarily government funded)  
___ Private (primarily student tuition funded)

(2) At your business school, how many in each category?  
Please use full-time equivalents (FTE), not "head-counts."

<table>
<thead>
<tr>
<th>Students</th>
<th>Fulltime FTE</th>
<th>Parttime FTE</th>
<th>Total FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executives MBA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ph.D., DBA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty, academic staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrators, secretaries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computing support staff</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(3) Number of business school owned microcomputers available to:

<table>
<thead>
<tr>
<th></th>
<th>Student/ Public</th>
<th>Faculty</th>
<th>Staff</th>
<th>Network Server</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple desktops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apple PowerBooks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOS only desktops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOS only laptops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOS/Window desktops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOS/Window laptops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNIX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(4) Student ownership: Does your business school recommend/require students to own a microcomputer?  

Undergraduates ___ no ___ yes, recommend ___ yes, require*  
MBAs ___ no ___ yes, recommend ___ yes, require*  
Executive MBAs ___ no ___ yes, recommend ___ yes, require*  

* Make(s) of required systems:  
  desktop:  
laptop:  

2
Business School Computer Operating Budget

5a. Total 1995-96 business school computer operating budget from all sources: US $________

including: staff salaries/benefits, software/data acquisition and licenses, supplies, operating overhead, computer recharge funds, equipment maintenance

excluding: faculty salaries, capital expenditures where list value is greater than $2000 and depreciated 3 years or more (e.g., microcomputer purchases), and lease payments

5b. Phase of your computer operating budget:

<table>
<thead>
<tr>
<th>NA</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Rejuvenation</th>
<th>10</th>
<th>11 Phase out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigation</td>
<td>Startup</td>
<td>Growth</td>
<td>Stability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Strategic Plans

6a. Phase of strategic planning process for computer, communications, and information at your business school:

<table>
<thead>
<tr>
<th>NA</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Rejuvenation</th>
<th>10</th>
<th>11 Phase out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigation</td>
<td>Startup</td>
<td>Growth</td>
<td>Stability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6b. Strategic Computing Issues
Please rank the six (6) most pressing issues with 1 = most critical to 6 = least critical.

1. Lack of goals and/or strategic planning
2. Short term planning
3. Planning the move to a new building or renovating the computer facility
4. Business school's computing services organizational structure
5. Appropriate curriculum development utilizing computing
6. Values/benefits of computing to the school
7. Faculty incentives for coursework development/ integration
8. Disillusionment with what computing can do
9. Managing user expectations
10. Obtaining hardware/software donations
11. Adequate funding for operational support
12. Student computing fees
13. Schoolwide standards for hardware or software
14. Keeping current on what technology is appropriate
15. Vendor relationships (cooperation, support, responsiveness)
16. Computer/library cooperative projects or convergence planning
17. Web site development
18. Distance education/learning/teleconferencing
19. Requiring student computer ownership
20. Administrative systems development
21. Other:

6c. New business school building/addition or extensive computer facility renovation
   — Not applicable
   — Initial planning stage
   — Moved 2 - 5 years ago
   — Moved last academic year
   — Moving this or next academic year
   — Move planned within 2 - 5 years

Business School Computer Center Operations

6d. Phase of business school computer center/services organization development:

<table>
<thead>
<tr>
<th>NA</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Rejuvenation</th>
<th>10</th>
<th>11 Phase out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigation</td>
<td>Startup</td>
<td>Growth</td>
<td>Stability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6e. Operational Issues

Please rank the ten (10) most pressing issues with 1 = most critical to 10 = least critical.

1. Providing adequate faculty training
2. Equipment maintenance
3. Not enough hardware to meet demand
4. Incompatible hardware
5. Not enough software to meet demand
6. Acquiring software site licenses for school
7. Incompatible operating systems
8. Illegal copying of software
9. Sufficient space for computing facilities
10. Creating a realistic budget, identifying the real costs
11. Role of mini/mainframes
12. Providing adequate student training
13. Matching technology to user needs
14. When to upgrade equipment
15. Finding and/or retaining technical staff
16. Finding and/or retaining consulting (user-support) staff
17. Computer staff burn-out/morale
18. Computer staff management
19. Unauthorized access to equipment and/or labs
20. AV and networking support for computers in classroom
21. Equipment theft/insurance/security devices
22. Implementation of school standards vs individual preferences
23. Supporting student computer ownership
24. Computer staff training/keeping current
25. Controlling printing costs
26. Proliferation of multiple versions of the same software
27. Administrative staff training when high turnover rates
28. Disposal of obsolete equipment
29. Establish Web site standards
30. Providing help desk/general consulting
31. Selection of e-mail/collaborative work systems
32. Other:
Mini/Mainframe Computers

7a. Phase of business school owned mini/mainframe use in instruction:

7b. Phase of business school owned mini/mainframe use in research:

7c. Phase of business school owned mini/mainframe use in administrative support:

7d. Phase of business school owned mini/mainframe use as a communication server:

7e. Phase of client/server technology use:

7f. Allocation of business school owned mini/mainframe use:

Instruction %
Research %
Administrative support %
Communications server %
Total 100 %

Microcomputers

This set of questions refers to use of the microcomputer systems listed on page 2.

8a. Phase of number of business school owned desktop microcomputers:

8b. Phase of number of business school owned laptop/notebook computers (over 5 lbs):

8c. Phase of number of business school owned subnotebook computers (under 5 lbs):

8d. Are there generally sufficient microcomputers at your business school to meet current demand (excluding exam time or end of term)?

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Ugrads</th>
<th>MBAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, but occasional waiting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes, never any waiting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No, usually a wait for access</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No, always a wait for access</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8e. Phase of number of microcomputer lab(s) in business school:

8f. Phase of Windows implementation in business school:
8g. Phase of microcomputer usage as a productivity tool (e.g., word processing, basic spreadsheets):

Faculty

Students

8h. Phase of microcomputer usage as an analytic tool (e.g., modeling, advanced spreadsheets, statistics):

Faculty

Students

8i. Phase of microcomputer usage for desktop publishing:

Faculty

Students

8j. Phase of microcomputer usage for presentation graphics and/or multimedia:

Faculty

Students

8k. Phase of computer literacy:

Faculty

Students

8l. Phase of CD-ROM usage:

Faculty

Students
8m. Phase of e-mail usage:

Faculty

Students

8n. Phase of Internet/Web (non E-mail) usage/"surfing":

 Faculty

Students

8o. Phase of on-line library database (e.g., ABI Inform, Disclosure) usage:

Faculty

Students

8p. Phase of actual LAN (local area network) usage:

Faculty

Students

8q. Phase of computer services support to users (training, consulting, programming, etc.):

Faculty

Students

8r. Phase of computer usage in classroom:

Faculty

Students
Communications and Networks

9a. Phase of development of local area networks (physical implementation):

9b. How general is access to the LAN?

<table>
<thead>
<tr>
<th>Student labs</th>
<th>None</th>
<th>Some</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty offices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative offices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classrooms</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Are these LANs bridged together?</th>
<th>None</th>
<th>Some</th>
<th>All</th>
</tr>
</thead>
</table>

9c. Communication and Network Issues
Please rank the seven (7) most pressing issues with 1 = most critical to 7 = least critical.

1. Software availability for use on a network
2. Software not designed for use on networks
3. Software licenses for use on a network
4. Which network operating system to adopt
5. Laptop connectivity to network
6. Which network technology to adopt
7. Incompatibility of competing network technologies
8. Microcomputer to microcomputer connections
9. Microcomputer to mini/mainframe connections
10. Access to wide area networks
11. Topology (network layout)
12. Expansion (adding nodes to network)
13. Network management
14. Operating network in lab setting
15. Obtaining output over network
16. Access security/password encryption/firewall
17. Data security
18. Response time on network
19. Reliability of network
20. Remote individual connectivity (PPP, SLIP, telnet)
21. Multimedia over network
22. Desktop teleconferencing over network
23. ISDN access/services
24. Other:

9d. Phase of business school overall Web infrastructure development:

9e. Phase of business school overall Web content development:

9f. What media do you have on your Web site?

<table>
<thead>
<tr>
<th>Media</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphics</td>
<td></td>
</tr>
<tr>
<td>Text</td>
<td></td>
</tr>
<tr>
<td>Animation</td>
<td></td>
</tr>
<tr>
<td>Video</td>
<td></td>
</tr>
<tr>
<td>Sound</td>
<td></td>
</tr>
</tbody>
</table>

9g. Who is responsible for your Web site:

<table>
<thead>
<tr>
<th>Role</th>
<th>Development</th>
<th>Updating content</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-school</td>
<td>getting started</td>
<td>keeping current</td>
</tr>
<tr>
<td>Computing services</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>External affairs</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Faculty members</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Students</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Administrative staff</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Central campus group(s)</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Outsourced</td>
<td>%</td>
<td>%</td>
</tr>
</tbody>
</table>

9h. Are these content areas available on your Web site?

<table>
<thead>
<tr>
<th>Content Area</th>
<th>Access</th>
<th>No decision yet</th>
<th>Internal only</th>
<th>Unrestricted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching materials (eg, syllabi, old exams)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student resume pages</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student personal pages</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty resume pages</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty personal pages</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff resume pages</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff personal pages</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student club materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catalog materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job postings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alumni news</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9i. Which of these Web related services are provided by your business school?

<table>
<thead>
<tr>
<th>Service</th>
<th>No decision yet</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page development training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access/surfing training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-line admissions form</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial server</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User guide/documentation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9j. Why is your business school developing a Web site?
Please rank the four (4) most important reasons with
1 = most important to 4 = least important
___ 1 Recruit perspective students
___ 2 Keep up with the competition
___ 3 Build a virtual community within your business
    school
___ 4 Develop stronger relationships with business
    community
___ 5 Develop stronger relationships with recruiters
___ 6 Increase visibility with media/popular business press
___ 7 Increase information access
___ 8 Improve internal information dissemination
___ 9 Improve alumni relationship and communication
___ 10 Increase technical ability of students and faculty
___ 11 To just have for people to use - surf the web
___ 12 Other:

Curriculum Integration

10a. Phase of computer integration
      into business school curriculum:

10b. Phase of computer integration impact
      on the curriculum:

10c. Phase of computer-linked equipment availability in
     classrooms (e.g., video displays, LCD/overhead devices, etc.):

10d. Instructional Issues
     Please rank the five (5) most pressing issues with
     1 = most critical to 5 = least critical.
___ 1 Defining an appropriate level of “curriculum integration”
___ 2 Selection of courses to be “integrated”
___ 3 Faculty incentives for developing courseware
___ 4 Inability to use computers in classrooms
___ 5 Teaching style/motivation to use technology
___ 6 Lack of courseware
___ 7 Courseware design
___ 8 Courseware development support
___ 9 Lack of access to authoring systems
___ 10 Courseware available, but not appropriate or “good”
___ 11 Lack of databases for curriculum support
___ 12 Lack of funds for curriculum support
___ 13 Inability of faculty to keep up with technological
    change
___ 14 Protecting faculty intellectual property rights
___ 15 Other:

Instructions: Complete each phase diagram by circling the number which most closely corresponds to where your
business school is today relative to where it has been and where it is going. This response is to reflect today’s
reality at your school. Even though you may not have all the information, complete the questionnaire from
the orientation of the individual(s) responsible for all computer, communication, and information resources for your
business school. Use your general knowledge, assuming a school-wide perspective. Please use these definitions
as a guide to answering the questions

0  Not applicable: not appropriate for our business school at this time, no interest or use
1  Investigation: gathering information, thinking about ideas
2  Initial action: selection between alternatives, seeking support, grant activities, obtaining bids, general preparation,
    one/two experimenters
3  Start-up: initial installation, testing, working out bugs, several users
4  Introduction to users: developing support, identifying day-to-day needs
5  Slow growth: minimal expansion, initial acceptance, insufficient resources to meet demand
6  Fast growth: rapid expansion of resource, growing demands and expectations
7  Maturity: beginning of steady state, continuity of services, routine patterns have emerged, stable user base,
    resource usually meets demand
8  Institutionalized: little expansion, routine replacement of obsolete technology or system, expectation is “this is the
    way it ought to be”
9  Choice point or decline: technology or system in place is declining in use or resource is not effectively being used
    prompting a review of the status quo and consideration of alternatives
10  Rejuvenation: renewed interest, excitement, new expansion, new applications and users
11  Phase out: discontinued use, replaced by new technology or system