COST STUDY OF DISTANCE EDUCATION TECHNOLOGIES AT THE REGENT UNIVERSITIES

**Action Requested:** Receive the cost study of distance education technologies at the Regent universities.

**Executive Summary:** Following discussion in November 2005 of the technologies/delivery modes used by the Regent universities for distance education, the Board of Regents directed the Board Office to conduct a cost study of the distance education technologies used by the Regent institutions. The Board Office, in consultation with academic and technology representatives at the Regent universities, designed and conducted a distance education cost study.

The earlier study looked at the process used by the Regent universities to select technologies/delivery modes for distance education. That study revealed that technologies/delivery modes are selected to fit the programmatic and student needs and that no one single technology is sufficient to compete in the current distance education environment.

The current study calculated an average cost for each of the primary technologies/delivery modes at the Regent universities in 2004-05 using five cost components – faculty salaries, instructional development (non-faculty), instructional technology, marketing/promotion, and miscellaneous costs (travel, supplies, etc.). A number of indirect expenditures were not included in the average cost because the amount that would be allocated to distance education either was not material or was not relevant to a comparison of the unit costs of each technology (e.g., administrative overhead).

**Details of Study:**

- A cost accounting system unique to distance education is not currently available; existing accounting models do not provide allocation data sufficient to reflect precise distance education costs.
- For the purpose of this study, the planning team developed general definitions to guide simplified cost allocation; the institutions obtained cost allocations from course and program administrators for FY 2005. While the lack of standardization may have affected the accuracy and comparability of the data, it allowed the universities to use their existing costing models.
- The costs included on Table 1 (Attachment 1) describe an average cost per course for each primary technology/delivery mode used by the Regent universities in 2004-05. They include expenditures typically incurred to maintain and use each of the technologies/delivery modes. The single largest expenditure for any of the primary technologies/delivery modes is for faculty salaries. It is important to note, however, that the universities and individual colleges use different formulas to allocate faculty time to distance education offerings.
- If the Regent universities increase their distance education offerings during the next few years, the fixed costs will be pro-rated over a larger number of courses. Some costs, such as instructional development, may decrease because of efficiencies and improved methodologies in course development/conversion and the ability to re-use some learning content, while some costs, such as marketing/promotion, may increase as the universities increase their advertising of distance education offerings.
- The information included on Attachment 2 describes the process used by the Regent universities to offer distance education.
### TABLE 1 - REGENCY UNIVERSITIES DISTANCE EDUCATION TECHNOLOGY COST AVERAGES FOR 2004-05
February 2006

<table>
<thead>
<tr>
<th>Primary Technology Used to Deliver Distance Education</th>
<th>Number of Courses¹</th>
<th>Faculty Salaries²³</th>
<th>Instructional Development (non-faculty)</th>
<th>Instructional Technology (IT)</th>
<th>Marketing/Promotion</th>
<th>Miscellaneous (travel, supplies)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Face-to-Face (FTF)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Iowa</td>
<td>184</td>
<td>$19,538</td>
<td>$1,340</td>
<td>$3,431</td>
<td>$542</td>
<td>$2,677</td>
<td>$27,528</td>
</tr>
<tr>
<td>Iowa State University</td>
<td>198</td>
<td>$7,800</td>
<td>$0</td>
<td>$14</td>
<td>$519</td>
<td>$129</td>
<td>$8,462</td>
</tr>
<tr>
<td>University of Northern Iowa</td>
<td>102</td>
<td>$5,372</td>
<td>$0</td>
<td>$0</td>
<td>$160</td>
<td>$400</td>
<td>$5,932</td>
</tr>
<tr>
<td><strong>Iowa Communications Network (ICN)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Iowa</td>
<td>26</td>
<td>$11,632</td>
<td>$3,475</td>
<td>$5,777</td>
<td>$180</td>
<td>$685</td>
<td>$21,749</td>
</tr>
<tr>
<td>Iowa State University</td>
<td>17</td>
<td>$9,957</td>
<td>$0</td>
<td>$6,532</td>
<td>$252</td>
<td>$179</td>
<td>$16,920</td>
</tr>
<tr>
<td>University of Northern Iowa</td>
<td>45</td>
<td>$6,513</td>
<td>$225</td>
<td>$4,165</td>
<td>$260</td>
<td>$350</td>
<td>$11,513</td>
</tr>
<tr>
<td><strong>World Wide Web (WWW)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Iowa</td>
<td>68</td>
<td>$8,431</td>
<td>$3,477</td>
<td>$910</td>
<td>$227</td>
<td>$59</td>
<td>$13,104</td>
</tr>
<tr>
<td>Iowa State University</td>
<td>260</td>
<td>$5,331</td>
<td>$1,714</td>
<td>$636</td>
<td>$363</td>
<td>$114</td>
<td>$8,158</td>
</tr>
<tr>
<td>University of Northern Iowa</td>
<td>10</td>
<td>$6,291</td>
<td>$450</td>
<td>$40</td>
<td>$260</td>
<td>$100</td>
<td>$7,141</td>
</tr>
<tr>
<td><strong>Guided Independent Study (GIS)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Iowa</td>
<td>119</td>
<td>$5,924</td>
<td>$1,492</td>
<td>$627</td>
<td>$433</td>
<td>$274</td>
<td>$8,750</td>
</tr>
<tr>
<td>Iowa State University</td>
<td>0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>University of Northern Iowa</td>
<td>55</td>
<td>$3,530</td>
<td>$300</td>
<td>$40</td>
<td>$160</td>
<td>$25</td>
<td>$4,055</td>
</tr>
<tr>
<td><strong>Mailed Media (video/audio tape, etc.)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Iowa</td>
<td>0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Iowa State University</td>
<td>50</td>
<td>$9,783</td>
<td>$2,810</td>
<td>$1,889</td>
<td>$254</td>
<td>$1,702</td>
<td>$16,438</td>
</tr>
<tr>
<td>University of Northern Iowa</td>
<td>0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

¹The number of three-credit hour distance education courses at UNI for which additional salary was paid in 2004-05.
²SUI faculty salaries represent a combination of overload payments and, especially for face-to-face classes, an assigned portion of the faculty members’ regular load.
³GIS instructors at UNI are paid for correcting on a per-student basis.
DISTANCE EDUCATION AT THE REGENT UNIVERSITIES

iamond Description of distance education. Board Policy §6.13 defines distance education as follows:

"a formal educational process in which instruction occurs (1) when student and instructor are
not in the same location, or (2) when in-person instruction is provided at off-campus locations.
Distance education may employed guided independent study, or audio, video, or computer
technologies; instruction may be synchronous or asynchronous.

Distance education initiatives are included within the missions of the Regent institutions and
shall be undertaken to the extent that resources allow. The Regent institutions shall seek to
anticipate and respond to educational needs, especially those of individuals who may not be
able to attend classes on campus.

Programs offered by the Regent universities shall be of high quality regardless of where
offered and the methodology or technology used. Similarly, the Regent universities shall seek
to undertake high-quality cooperative and collaborative efforts with both Regent and
non-Regent institutions of higher education where such cooperation will benefit citizens.”

iamond Methods to identify needs for distance education offerings. Each Regent university has a
system of ongoing data collection regarding distance education needs and of using the results
to inform decisions about off-campus programmatic offerings. Educational needs may be
identified by any of the following at the Regent universities:

☑ Student and employer market demand, including formal general market studies; informal
general market studies; competitor market analyses; industry information; analyses of
enrollment data and trends; and formal target market studies.

☑ Assessments of educational needs, including academic research; professional and
industry associations; and industry assessments.

☑ Assessments of economic/workforce development requirements, including demographic
data; studies (e.g., Battelle report); and industry groups.

☑ Academic and institutional needs.

☑ Information provided by advisory committees to the professional colleges.

☑ Identification of needs through active liaisons with licensure boards.

diamond Process to determine programming potential. The distance education units exist within the
decision-making system of each university and are influenced by a number of factors in
determining programming potential, including the following:

☑ Existence of a “champion.” Such a person might be a faculty member or a continuing
education staff member who proposes that a program be offered by distance education.

☑ Review by the academic unit. The academic unit that receives a proposal for a distance
education program analyzes its capacity (including faculty capacity) to offer the program
by distance education and its capacity to develop and teach the course(s). The unit also
considers the demand for the program and conducts a cost-benefit and market analysis.

☑ Further analysis. This might include a formal target market study; development of a
detailed program plan; development of a promotion plan; development of a delivery plan;
allocation of teaching time for content development and delivery; development of a project
plan and budget for the program; and allocation of content development and support
resources.
☑ Academic unit decision. If the unit decides to proceed, it may be necessary to develop a new academic program which must be approved by the Board of Regents.

☑ Development and delivery. If an affirmative decision is made, the initiating unit and the distance education department proceed with program development and delivery.

☑ Key decision-making factors.

- The goal of the Regent universities is to provide accessible and affordable educational opportunities to the citizens of Iowa. However, while distance education supports that goal, it is not feasible to offer all on-campus programs off-campus.

- The Regent universities strive to meet institutional and departmental goals within the constraints of available funding, including tuition. However, the quality standards established by the universities generally require the use of campus-based faculty, rather than off-campus temporary faculty, to develop and teach distance education. This affects the overall costs of delivering distance education. In some instances, tenure-track, clinical and/or adjunct faculty are used to provide local instruction and contact with distance learners; in other instances, such appointments are made to provide specific expertise.

- To the extent possible, responsiveness to stakeholders is factored into distance education program selection and content decisions.

- The role played by the Regent universities in the use of leading-edge distance education technologies is reflected in the choice of distance education technologies that support programmatic offerings.

◊ Selection of technology/delivery modes for programmatic offerings. A number of factors are considered in assessing distance education delivery technology, including the following:

☑ Student access. The institution selects the media that will provide students the best access to the distance education content; it considers geographic proximity and students’ technological resources and skills.

☑ Pedagogical requirements. The institution determines the best match between the content to be delivered, the teaching and learning experiences, and the devices that will best communicate the content.

☑ Market requirements. The institution considers the expectations of students for quality, cost, convenience, interaction, and other competitive factors.

☑ Institutional capacity. The institution considers the availability of the knowledge, technical resources, and skills of the academic unit, the instructor, and the content developer.

☑ Cost/value. The institution considers the value to the course or program of more expensive modes of delivery and the budget constraints of the course to use a particular technology.

☑ Technology characteristics. The institution considers capacity for asynchronous/synchronous delivery, allocation of capital cost, remote site cost, production cost, per-unit delivery unit, support cost, video quality, audio quality, presentation quality (digital materials), interactivity, reach, convenience, and use limitations.