MEMORANDUM

To: Board of Regents
From: Board Office
Subject: Report of Professional Development Assignments for FY 2002
Date: January 6, 2003

| Recommended Action: | Receive the report. |

**Executive Summary**

| Purpose of Report | Professional development assignments are one of the ways that the Board of Regents and the universities ensure that faculty vitality remains at a high level and that quality instruction and research take place on the campuses. The Regent universities provide professional development assignments as an investment in faculty to develop new course materials, expand their areas of expertise, and explore new aspects of their disciplines. |

| Application Process | Each year, faculty members apply through their academic departments and colleges for professional development assignments. During the application process, each faculty member identifies the activities and intended outcomes of the proposed assignment. After review and recommendations by appropriate university committees and institutional officials, the requests for professional development assignments are presented to the Board for approval in accordance with Iowa Code §262.9(13). |

| Definition of Professional Development Assignments | Professional development assignments are usually for one semester. Occasionally, assignments may be granted for periods of time greater than one semester. Compensation in these cases is limited to the compensation the faculty member would have received during a semester-long assignment. Typically, colleges and departments are responsible for identifying resources to pay for replacement costs of instruction. Where this is not possible, the provost's office may supplement available resources. |

During professional development assignments, faculty members are excused from classroom and other obligations at their respective universities. Following the assignments, the faculty members are responsible for reporting the results of their assignments to the Board.
New Costs

Total new\(^1\) costs for professional development assignments include replacement costs (paid by either the department/college or the provost's office) and research expenses. Total costs for professional development assignments during FY 2002 were $647,087.

Participating Faculty

A total of 135 faculty members from Regent universities undertook professional development assignments during FY 2002, which was a decrease of 10.6% in the number of professional development assignments undertaken during the previous fiscal year.

Activities

During their professional development assignments, faculty members wrote books and articles, created new works of art and compositions, presented papers, worked in industry, developed modeling systems, conducted extensive research, and developed grant proposals, software, course materials, and multimedia resources for their disciplines.

Link to Strategic Plan:

This report addresses the following Key Result Areas (KRAs) in the Board’s Strategic Plan:

- **KRA 1.0.0.0**  
  Become the best public education enterprise in the United States.

- **Strategy 1.1.3.0**  
  Include meritorious teaching as part of the reward structure relating to salary increases, promotion, tenure, and professional development leaves.

- **Action Step 1.1.3.2**  
  Report data in the relevant governance reports and presentations to the Board.

- **Action Step 1.2.1.1**  
  Each institution maintain the confidence and support of the public by utilizing existing financial resources efficiently and effectively.

- **KRA 4.0.0.0**  
  Meet the objectives of the Board and institutional strategic plans and provide effective stewardship of the institutions’ state, federal, and private resources.

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\(^1\) Prior Professional Development Assignment reports included salaries and fringe benefits of faculty members on professional development assignments. However, as a result of the organizational review, it was suggested that it was not pertinent to report these numbers because they were not new costs to the institutions, due to the assignments.
Background: Professional development assignments are one of the tools available to the Board of Regents and the universities to ensure vitality and quality among the faculty at Regent universities. Professional development assignments are competitively administered; the objectives of individual faculty members for a particular assignment are examined in relation to the strategic needs of the university.

Selection Process: Faculty members submit plans for professional development assignments that specify goals and intended outcomes. The professional development assignment includes a temporary release from campus duties. The professional development assignment may involve one or more of several purposes:

* prepare a faculty member for new teaching responsibilities;
* spend greater amounts of time in research or curriculum development;
* create artistic work; and/or
* pursue other professional opportunities that enhance the reputation of the faculty member and the university.

The selection process includes peer reviews and recommendations within departments and colleges as well as recommendations from the provost of the university. Faculty members who receive professional development assignments are required by law to return to the institution for a period of two years\(^2\) after the assignment or to repay the salary costs of the assignment to the university.

Analysis: This report covers 135 faculty professional development assignments that occurred during FY 2002. There was a decrease of 10.6% in the number of professional development assignments undertaken in FY 2002 from the previous fiscal year. Fluctuations tend to occur due to the number of faculty who are eligible for professional development assignments each year; for example, in a year when the number of new hires increases, the number of professional development assignments tends to decrease.

\(^2\) An opinion from the Iowa Attorney General (Appeal, February 26, 1979) indicated that the required payback period is twice the length of the professional development assignment, e.g., one semester requires one year of service after the assignment.
Faculty members on professional development assignments during FY 2002 included:

- 6.7% of the eligible faculty at SUI;
- 2.8% of the eligible faculty at ISU; and
- 4.0% of the eligible faculty at UNI.

### Distribution of Faculty on Professional Development Assignment at Regent Universities 1991-1992 to 2001-2002

<table>
<thead>
<tr>
<th>Year</th>
<th>SUI</th>
<th>ISU</th>
<th>UNI</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991-1992</td>
<td>125</td>
<td>43</td>
<td>21</td>
<td>189</td>
</tr>
<tr>
<td>1992-1993</td>
<td>116</td>
<td>40</td>
<td>21</td>
<td>177</td>
</tr>
<tr>
<td>1993-1994</td>
<td>95</td>
<td>43</td>
<td>20</td>
<td>158</td>
</tr>
<tr>
<td>1994-1995</td>
<td>72</td>
<td>50</td>
<td>19</td>
<td>141</td>
</tr>
<tr>
<td>1995-1996</td>
<td>87</td>
<td>48</td>
<td>22</td>
<td>157</td>
</tr>
<tr>
<td>1996-1997</td>
<td>85</td>
<td>43</td>
<td>24</td>
<td>152</td>
</tr>
<tr>
<td>1997-1998</td>
<td>86</td>
<td>56</td>
<td>20</td>
<td>162</td>
</tr>
<tr>
<td>1998-1999</td>
<td>102</td>
<td>49</td>
<td>18</td>
<td>169</td>
</tr>
<tr>
<td>1999-2000</td>
<td>95</td>
<td>44</td>
<td>19</td>
<td>158</td>
</tr>
<tr>
<td>2000-2001</td>
<td>86</td>
<td>48</td>
<td>17</td>
<td>151</td>
</tr>
<tr>
<td>2001-2002</td>
<td>78</td>
<td>40</td>
<td>17</td>
<td>135</td>
</tr>
</tbody>
</table>

New Costs

Total new costs for professional development assignments include replacement costs and research expenses.

- The replacement costs include those costs covered by either the department/college or the provost's office. The costs may vary between Regent universities for a number of reasons. One reason for this variance is the size of the affected department. A larger department at one university has more resources to assume the teaching load of a faculty member on professional development assignment than a smaller department that may need to hire a temporary faculty member to cover the teaching load. Another reason might be the specific discipline and current teaching load of each faculty member on assignment, which may vary considerably.

- Research expenses are typically associated only with faculty scholars and global scholars at the University of Iowa.

- Total new costs for professional development assignments during FY 2002 were $647,087.
New Professional Development Assignment Costs  
2001-2002

<table>
<thead>
<tr>
<th></th>
<th>Replacement Costs</th>
<th>Research Expenses</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Iowa</td>
<td>$331,501</td>
<td>$78,703</td>
<td>$410,204</td>
</tr>
<tr>
<td>Iowa State University</td>
<td>$68,461</td>
<td>$68,461</td>
<td>$68,461</td>
</tr>
<tr>
<td>University of Northern Iowa</td>
<td>$166,446</td>
<td>$1,976</td>
<td>$168,422</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$566,408</strong></td>
<td><strong>$80,679</strong></td>
<td><strong>$647,087</strong></td>
</tr>
</tbody>
</table>

Reasons for Cancellations/Deferrals

- Due to budget constraints and faculty resignations, scheduled offerings had to be maintained, resulting in cancellations or deferrals of assignments.
- To some extent, the events of September 11, 2001 resulted in cancellations of travel plans and concerns about international travel.
- Some faculty members left the university.

University of Iowa

The University sponsors three programs of professional development for its faculty: Faculty Scholars; Global Scholars; and regular professional development assignments (now called career development assignments). Faculty members are eligible for an initial or subsequent one-semester professional development assignment after 10 semesters of full-time academic service.

Faculty Scholars

The Faculty Scholars program gives leading scholars the opportunity for creative work of the highest quality. Faculty Scholar assignments provide faculty of great promise with opportunities for extended and concentrated work. Faculty Scholar applicants typically must be associate professors. Full professors within three years of their promotion to that rank may be considered in exceptional circumstances. This program allows faculty members to receive professional development assignments for three semesters in a three-year period.

In 2001-2002, 15 individuals were designated Faculty Scholars (three professors and 12 associate professors). Seven Faculty Scholars were men and eight were women.
Global Scholars

The Global Scholars program has grown out of SUI’s strategic planning process. This program provides the opportunity for tenured faculty members with established records of research and teaching to consider their research and teaching in relation to significant globalizing trends. Faculty members receive professional development assignments for two semesters in a two-year period during which they are able to revise their research, teaching, and service to include international perspectives.

The program is designed to support a maximum of four Global Scholars during any one year. In 2001-2002, one female associate professor and one male professor were designated as Global Scholars.

Number of Assignments

Eighty-two faculty members received professional development assignments for FY 2002. However, only 77 faculty members participated in professional development assignments during 2001-2002.

- Two faculty members declined their 2001-2002 professional development assignments.
- Nine faculty members deferred their 2001-2002 professional development assignments to a later time.
- Six faculty members who had deferred their professional development assignments from prior years completed their assignments in 2001-2002.

Number of Reports Submitted

The University submitted 78 reports because one faculty member who participated in a professional development assignment during 2000-2001 and was unable to complete a report last year due to medical leave has now submitted a report.

One faculty member left the University after completing the professional development assignment and repaying the University for all compensation received; no report of the assignment is included in this report.
Forty-four professors, 33 associate professors, and one assistant professor undertook professional development assignments during 2001-2002.

Of the 59 male faculty members who applied, 50 (84.7%) received professional development assignments during 2001-2002. Sixty-four percent of the faculty members on professional development assignment were male.

Of the 34 female faculty members who applied, 28 (82.4%) received professional development assignments during 2001-2002. Thirty-six percent of the faculty members on professional development assignment were female.

Thirteen (86.7%) of the 15 racial/ethnic minority faculty members who applied for professional development assignments participated in professional development assignments during 2001-2002. Seventeen percent of the faculty members on professional development assignment were racial/ethnic minorities.

<table>
<thead>
<tr>
<th>University of Iowa</th>
<th>Professional Development Assignments by Race/Ethnicity and Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2001-2002</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Number of Faculty</th>
<th>Number Eligible for Program</th>
<th>Number Applied for Program</th>
<th>Number Completing Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>White</td>
<td>980</td>
<td>361</td>
<td>788</td>
<td>246</td>
</tr>
<tr>
<td>African-American</td>
<td>16</td>
<td>15</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Asian-American</td>
<td>110</td>
<td>17</td>
<td>83</td>
<td>9</td>
</tr>
<tr>
<td>Native-American</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hispanic-American</td>
<td>22</td>
<td>14</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>1,129</td>
<td>410</td>
<td>897</td>
<td>268</td>
</tr>
</tbody>
</table>

3 Faculty become eligible for an initial or subsequent one-semester assignment after 10 semesters of full-time service, so approximately one-fifth of these faculty members are eligible to apply in a given year. Actual numbers of eligible faculty differ by an unknown amount for a variety of reasons, including (1) not all eligible faculty, especially in the health science colleges, apply for an assignment at the first opportunity, which increases the pool of eligible faculty; (2) service as a collegiate or central administrator, which decreases the pool.
Twenty-five professional development assignments were taken during Fall 2001.

Forty-four professional development assignments were taken during Spring 2002.

Nine professional development assignments were taken during both semesters of the 2001-2002 academic year.

The new costs of professional development assignments in 2001-2002 were $410,204. Replacement costs accounted for $331,501\(^4\) and research-related expenses accounted for $78,703. The average replacement cost per faculty at SUI during 2001-2002 was $4,250.

The following are examples of activities conducted by faculty members during their professional development assignments in FY 2002:

- Completed research examining early thermal environment influences on the development and expression of thermal regulation behavior.
- Investigated the physics of the aurora borealis (northern lights) by focusing on a NASA rocket flight launched near Fairbanks, Alaska.
- Showed that for a wide range of reactants, electron transfer reaction rates (and electrical currents) increase when magnetic micro particles coat electrode surfaces.
- Developed a program of research on school health and school nursing.
- Developed new network-based approaches for tempering the effects of error in large-scale, complex product-supply chains, methodologies for improving the design of supply chains, and medical collaborations using virtual reality for 3-D images.

The following are examples of the value of the professional development assignments conducted in FY 2002 to the University and to students:

- Incorporated research findings into undergraduate and graduate courses.
- Broadened research interests, enhanced teaching skills, and revised graduate course, “Nonlinear Analysis and Differential Equations.”
- Upgraded laboratory computers, obtained and learned how to use new data acquisition software, which resulted in developing new research on psycho-physiological assessment of motivational and attentional bias in anxiety.

\(^4\) Paid by either the department/college or the provost’s office.
- Incorporated concept of fetal programming into lectures for Human Organ Systems.
- Updated old courses and incorporated research findings into undergraduate and graduate courses.

### Iowa State University

ISU recognizes that faculty members require significant opportunities for professional growth and development and that the Professional Development Assignments Program is one of the best ways to achieve such growth and development.

All faculty members employed half-time or more are eligible to apply for an assignment; no restriction applies on length of service to qualify for an assignment. However, priority may be given to tenured faculty over adjunct and non-tenured faculty, and to faculty members who have not received a professional development assignment in the past five years.

<table>
<thead>
<tr>
<th>Number of Assignments</th>
<th>Forty-six faculty members received professional development assignments for FY 2002. Seven faculty members canceled their assignments.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Reports Submitted</td>
<td>Forty reports were submitted because one faculty member who had postponed the assignment from a prior year completed the assignment in 2001-2002.</td>
</tr>
<tr>
<td>Professional Development Assignment Recipients</td>
<td>Two faculty members on professional development assignment were distinguished professors, 26 were professors, and 12 were associate professors.</td>
</tr>
<tr>
<td></td>
<td>Eleven of the 15 (73.3%) female faculty members who applied received professional development assignments during 2001-2002. This represents 27.5% of the total number of participants.</td>
</tr>
<tr>
<td></td>
<td>Twenty-nine of the 35 (82.9%) male faculty members who applied received professional development assignments during 2001-2002. This represents 72.5% of the total number of participants.</td>
</tr>
<tr>
<td></td>
<td>Five of the six (83.3%) racial/ethnic minority faculty members who applied for professional development assignments received assignments during 2001-2002. This represents 12.5% of the total number of faculty members on professional development assignment.</td>
</tr>
</tbody>
</table>
Iowa State University
Professional Development Assignments by Race/Ethnicity and Gender
2001-2002

<table>
<thead>
<tr>
<th>Number of Faculty</th>
<th>Number Eligible for Program</th>
<th>Number Applied for Program</th>
<th>Number Completing Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>White</td>
<td>1,067</td>
<td>473</td>
<td>914</td>
</tr>
<tr>
<td>African-American</td>
<td>20</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>Asian-American</td>
<td>128</td>
<td>27</td>
<td>113</td>
</tr>
<tr>
<td>Native-American</td>
<td>7</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Hispanic-American</td>
<td>24</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>1,246</td>
<td>533</td>
<td>1,064</td>
</tr>
</tbody>
</table>

Schedule of Professional Development Assignments

Eighteen professional development assignments were taken during Fall 2001; 16 were taken during Spring 2002; and six were taken during both semesters of the 2001-2002 academic year.

New Cost

The new cost of professional development assignments in 2001-2002 was $68,461, which was used to pay for teaching replacements for faculty members on assignment. The average replacement cost per faculty at ISU during 2001-2002 was $1,712.

Activities

The following are examples of activities conducted by faculty members during their professional development assignments in 2001-2002:

- Researched historic soil classifications using the Geographic Information System (GIS), which provided an explanation of Iowa historic pioneer settlement patterns and understanding of current agricultural suitability classifications.
- Gained an in-depth understanding of the health concerns of people living in the community of livestock facilities and expanded skills in computer-aided design for teaching light frame structures to engineering students.
- Learned about robotic research.

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5 From 2000 Tenure Report; number represents all faculty.
6 Paid by the provost’s office. Salary savings from faculty members on assignment might also have been used by the departments/colleges for replacement costs. However, those data were not reported.
Evaluated an evolving model of the role of social, structural, and cultural factors affecting the emergence and viability of entrepreneurial business ventures in rural communities.

Worked on the mathematical modeling of tumor angiogenesis and learned about current applications of mathematics to biology.

The following are examples of the value of the professional development assignments conducted in 2001-2002 to the University and students:

- Provided an opportunity to train graduate students in low energy nuclear reactions.
- Developed strategies to incorporate written, oral, verbal, and electronic communication skills into the First Year Composition and upper level courses.
- Developed Summer Academy for community college leaders; developed two certificate programs.
- Developed better understanding of the physics involved during the performance of percussion instruments, resulting in teaching revitalization.
- Developed a co-algebraic approach to permutation representation theory for quasigroups, resulting in enhanced teaching of graduate mathematics courses.

A professional development assignment is a paid semester or academic year assignment awarded to a tenured faculty member to undertake approved programs of study, research, or other professional activity. A recipient of an assignment is ineligible for a subsequent assignment during the three years following an assignment.

Eighteen faculty members received professional development assignments for FY 2002. Two faculty members deferred the assignments to the following year.

Seventeen reports were submitted. One faculty member who had deferred the assignment from the previous year completed it in 2001-2002.
Eight professors, eight associate professors, and one assistant professor completed professional development assignments in 2001-2002.

Fourteen males out of 20 (70.0%) applicants received professional development assignments during 2001-2002. This represents 77.8% of the total number of participants.

Four females out of 15 (26.7%) applicants received professional development assignments during 2001-2002. This represents 22.2% of the total number of participants.

One racial/ethnic minority faculty member out of three (33.3%) who applied received a professional development assignment during 2001-2002. This represents 5.5% of the total number of participants.

University of Northern Iowa
Professional Development Assignments by Race/Ethnicity and Gender
2001-2002

<table>
<thead>
<tr>
<th></th>
<th>Number of Faculty</th>
<th>Number Eligible for Program</th>
<th>Number Applied for Program</th>
<th>Number Completing Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>White</td>
<td>341</td>
<td>228</td>
<td>251</td>
<td>133</td>
</tr>
<tr>
<td>African-American</td>
<td>13</td>
<td>9</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Asian-American</td>
<td>22</td>
<td>9</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>Native-American</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Hispanic-American</td>
<td>13</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>391</td>
<td>255</td>
<td>282</td>
<td>147</td>
</tr>
</tbody>
</table>

Schedule of Professional Development Assignments

Four professional development assignments were taken during Fall 2001; 12 were taken during Spring 2002; and one was taken during both semesters of the 2001-2002 academic year.

New Costs

The new costs of professional development assignments in 2001-2002 were $168,422. Replacement costs accounted for $166,446\textsuperscript{7} and research-related expenses accounted for $1,976. The average replacement cost per faculty at UNI during 2001-2002 was $9,791.

\textsuperscript{7} Paid by the provost’s office. According to the University, there were no other replacement costs.
Activities

The following are examples of activities conducted by faculty members during professional development assignments in 2001-2002:

- Conducted research on the electromagnetic properties of novel composites, particularly metalized epoxy resin composites.
- Conducted research to test the hypothesis that phi thickenings could be inducted under environmental conditions favoring lignification; namely, water saturation, the presence of a fungal association, and soil compaction.
- Translated a sacred Rwandan document from Kinyarwanda into English.
- Conducted research into adapting laser-cutting processes to etch photographic images into metal.
- Addressed the spatial distribution of an alluvial fill within the Loup River basin (NE) and compared it to the Todd Valley in eastern Nebraska. Radiocarbon dating demonstrates that the Todd Valley contains an older late Wisconsin fill than the Loup River basin.

Value of Professional Development Assignments to University

The following are examples of the value of the professional development assignments conducted in 2001-2002 to the University and students:

- Developed interventions that are appropriate for professionals working with children and adolescents in clinical practice and as school counselors.
- Prepared a manual for the design, implementation, and management of study abroad programs at the university level, particularly in the area of modern foreign languages.
- Developed a process model to assess presidential power in the Andean region during reforms, including the role of diversity of interests and economic elites.
- Laser etching techniques will add a new process to coursework for students in sculpture courses.

Regent Exhibit Book

A complete listing of professional development assignments for 2001-2002 is available in the Regent Exhibit Book.

Diana Gonzalez

Approved: Gregory S. Nichols