

7.0 FACULTY PROFILE AND PRODUCTIVITY

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7.0 FACULTY PROFILE AND PRODUCTIVITY

Of the 12 Regent performance indicators related to faculty profile and productivity, only one – Common Data Set 12 – focuses on a profile of the faculty. All five institutions report annually on the number of tenured and tenure-track faculty resigning and retiring, as well as the number of new hires. Two of the indicators, or Common Data Sets, #18 on sponsored funding per year, and #22, the number of intellectual property disclosures, are reported by the three universities. The remaining indicators come from the strategic plans of the universities and either relate to data on scholarly publication, research funding, or the results of research, i.e., licensure of technologies.

This series of indicators relate to the Key Result Area of Quality in the Board's strategic plan.

Faculty Resignations, Retirements, and New Hires Common Data Set (Indicator #12a, 12b, and 12c)

Originally, Common Data Set #12 compiled data only on faculty resignations, from the Annual Report on Resignations. To reflect a more accurate picture of the changes of institutional faculty, a work group recommended that it be expanded to include the number of retirements, as well as the number of new hires annually. Additional data are found in the Faculty Tenure report and institutional strategic plans. Assuming the status quo for an institution, one might conclude that the total number of new hires would be equal to the sum of the number of resignations and retirements. Factors that impact that formula include: an atypical number of early retirements offset by delays in hiring, growth or decline in programs, and increased use of non-tenured faculty.

The past three years have indicated higher percentages in the number of resignations, replacing a pattern of relatively stable numbers of resignations over the previous decade. The number and percentage of retirements have risen also during the past several years. The increases in enrollment at the universities have resulted in a need to hire new faculty.

The special schools do not have the same patterns of resignations as have the universities. The size of the faculties are much smaller.

**Tenured and Tenure-Track Faculty
Resignations, Retirements and New Hires
Common Data Set (Indicator #12a, #12b, #12c)**

Regent Universities

Related Action Step -- Quality	University of Iowa*				Iowa State University				University of Northern Iowa			
1.1.1.7												
12a Resignations		<u>No.</u>	<u>Total</u>	<u>Pct.</u>		<u>No.</u>	<u>Total</u>	<u>Pct.</u>		<u>No.</u>	<u>Total</u>	<u>Pct.</u>
	93-94	55	1783	3.1%	93-94	32	1455	2.2%	93-94	13	604	2.2%
	94-95	53	1803	2.9%	94-95	24	1455	1.6%	94-95	15	610	2.5%
	95-96	66	1789	3.7%	95-96	28	1455	1.9%	95-96	12	619	1.9%
	96-97	55	1748	3.1%	96-97	26	1453	1.8%	96-97	11	623	1.8%
	97-98	55	1712	3.2%	97-98	42	1427	2.9%	97-98	25	608	4.1%
	98-99	79	1702	4.6%	98-99	39	1439	2.5%	98-99	20	596	3.4%
	99-00	76	1702	4.5%	99-00	45	1423	3.2%	99-00	32	593	5.4%
12b** Retirements												
	93-94	20	1783	3.1%	93-94	NA	1455	NA	93-94	12	604	2.0%
	94-95	26	1803	1.4%	94-95	NA	1455	NA	94-95	11	610	1.8%
	95-96	31	1789	1.7%	95-96	24	1455	1.6%	95-96	12	619	1.9%
	96-97	68	1748	3.9%	96-97	23	1453	1.6%	96-97	20	623	3.2%
	97-98	30	1712	1.8%	97-98	41	1427	2.9%	97-98	29	608	4.8%
	98-99	52	1702	3.1%	98-99	39	1439	2.6%	98-99	26	596	4.4%
	99-00	36	1702	2.1%	99-00	28	1423	2.0%	99-00	20	593	3.4%
12c New Hires												
	93-94	106	1783	5.9%	93-94	49	1455	3.4%	93-94	26	604	4.3%
	94-95	102	1803	5.7%	94-95	40	1455	2.7%	94-95	35	610	5.7%
	95-96	70	1789	3.9%	95-96	58	1455	4.0%	95-96	36	619	5.8%
	96-97	70	1748	4.0%	96-97	59	1453	4.1%	96-97	30	623	4.8%
	97-98	118	1712	6.9%	97-98	70	1427	4.9%	97-98	29	608	4.8%
	98-99	85	1702	5.0%	98-99	92	1439	6.4%	98-99	50	596	8.4%
	99-00	97	1702	5.7%	99-00	105	1423	7.3%	99-00	50	593	8.4%

Notes: *Currently, clinical track faculty are not included at the University of Iowa.

**Retirements are "full" retirements. Data for #12b do not include early or phased retirements.

**Faculty Resignations, Retirements, and New Hires
Common Data Set (Indicator #12a, #12b, #12c)**

Special Schools

	Related Action Step – Quality	ISD			IBSSS				
		No.	Total	Pct.	No.	Total	Pct.		
12	1.1.1.7								
12a		94-95	3	54	5.5%	94-95	1	30	3.3%
Resignations		95-96	1	55	1.8%	95-96	4	31	12.9%
		96-97	1	55	1.8%	96-97	1	30	3.3%
		97-98	2	56	3.6%	97-98	6	32	18.8%
		98-99	1	61	1.6%	98-99	5	33	15.2%
		99-00	1	61	1.6%	99-00	1	34	2.9%
12b		94-95	0	54	0.0%	94-95	1	30	3.3%
Retirements		95-96	1	55	1.8%	95-96	1	31	3.2%
		96-97	2	55	3.6%	96-97	0	30	0.0%
		97-98	1	56	6.5%	97-98	0	32	0.0%
		98-99	4	61	6.5%	98-99	1	33	3.0%
		99-00	1	61	1.6%	99-00	0	34	0.0%
12		94-95	5	54	9.3%	94-95	1	30	3.3%
New Hires		95-96	0	55	0.0%	95-96	5	31	16.1%
		96-97	4	55	7.3%	96-97	4	30	13.3%
		97-98	6	56	10.7%	97-98	8	32	25.0%
		98-99	7	61	11.5%	98-99	7	33	21.2%
		99-00	2	61	11.5%	99-00	6	34	17.6%

**Sponsored Funding Per Year in Dollars
Common Data Set (Indicator #18)**

Regent Universities

The data indicate that the trend during the past seven years has been one of growth. The common data set below report on the total dollars of sponsored research. Those dollar amounts, cited in millions, include funding primarily from federal agencies, foundations, and corporations.

A significant portion of sponsored research funds are from corporate-sponsored projects. While not detailed in charts here, these amounts are worth noting. They are reported in the Annual Report on Technology Transfer and Economic Development which focuses only on non-governmental funding for projects related to technology transfer and economic development. In 1999-2000, each university exceeded its target. In FY 2000 the universities reported a total of 967 corporate-sponsored research contracts, compared to 1,086 in FY 1999 and 976 in FY 1998. The dollar amount of these corporate-sponsored research projects totaled \$49.7 million, compared with \$62.4 million in FY 1999, but higher than the \$44.7 million in FY 1998. The universities reported 198 intellectual property disclosures in FY 2000, compared to 244 in FY 1999. The number of patents filed in FY 2000 was 143, compared to 175 the previous year. The number of patents issued in FY 2000 was 83, compared with 76 in FY 1999.

Related Action Step -- Quality	University of Iowa		Iowa State University		University of Northern Iowa	
1.1.4.2	93-94	\$187.6 m	93-94	\$175.7 m	93-94	\$9.9 m
	94-95	\$189.3 m	94-95	\$168.9 m	94-95	\$11.7 m
	95-96	\$198.0 m	95-96	\$142.9 m	95-96	\$10.5 m
	96-97	\$212.0 m	96-97	\$190.9 m	96-97	\$10.4 m
	97-98	\$217.0 m	97-98	\$156.2 m	97-98	\$11.9 m
	98-99	\$259.5 m	98-99	\$199.2 m	98-99	\$10.1 m
	99-00	\$252.6 m	99-00	\$211.2 m	99-00	\$18.1 m
	Target	\$250.0 m	Target	\$180.0 m	Target	\$18.0 m

Number of Intellectual Property Disclosures Common Data Set (Indicator #22)

Regent Universities

The three universities report annually on the number of intellectual property disclosures received by the faculty. The varying lengths of time needed for research projects, funding patterns, and changing assignments of faculty are some of the factors that impact the number of intellectual property disclosures submitted and received annually. For more information on this common data set, see the universities' strategic plan and the Annual Report on Technology Transfer.

Related Action Step – Quality	University of Iowa		Iowa State University		University of Northern Iowa	
1.1.4.1	93-94	69	93-94	139	93-94	0
	94-95	53	94-95	141	94-95	0
	95-96	74	95-96	155	95-96	1
	96-97	86	96-97	115	96-97	3
	97-98	90	97-98	158	97-98	4
	98-99	79	98-99	160	98-99	5
	99-00	84	99-00	114	99-00	0
	Target	90	Target	NP	Target	NP

**Relevant Annual Publication Indices
Indicator #15**

University of Iowa

In its strategic plan for 1995-2000, the University of Iowa developed a measure of faculty productivity related to publication. Using a national database for comparative purposes, SUI established a target that a full-time equivalent (FTE) faculty member should have 7.8 articles published in scholarly journals in a five-year period. The last year for which data are available is 1998-99. From the baseline year of 1995-96, the five-year average number of articles published has risen. The University is proposing replacing this indicator in its new strategic plan.

Related Action Step -- Quality	University of Iowa
1.1.4.1	<u>No. of pub. per FTE (5 yrs.)</u> 95-96 6.8 (baseline year) 96-97 7.1 97-98 7.4 98-99 7.5 99-00 TBP Target 7.8 per FTE

**Relevant Citation Indices
Indicator #16**

University of Iowa

This indicator, like the previous one, uses the principle of the five-year "rolling" average to determine another measure of faculty productivity. It seeks to assess the significance or impact of the articles written. Using the Institute of Science Information (ISI) listing of journals, the University determines how many times journal articles by faculty have been cited by peers in other academic periodicals. The last year that data are available is 1998-99. The University plans to replace this indicator in its new strategic plan. From the baseline year of 1995-96, when the number of citations per full-time equivalent (FTE) faculty member was 35.0, the number rose to 43.8 citations over a five-year period. The last average is 1.7 citations below the target of 45.5 for a five-year period.

Related Action Step -- Quality	University of Iowa
1.1.4.1	<u>No. of articles cited (5 yr. Avg.)</u> 95-96 35.0 citations per (FTE) 96-97 38.9 citations per (FTE) 97-98 43.1 citations per (FTE) 98-99 43.8 citations per (FTE) 99-00 TBP Target 45.5 citations per (FTE)

**Number of External Funding Proposals Submitted Per Year
Indicator #19**

University of Iowa

One mark of faculty productivity is engagement in funded research. During the past five years, the University of Iowa has used as an indicator the number of proposals submitted to external (i.e., non-University) funding agencies annually. Over the five-year period, the total number of submitted proposals has risen from 2,427 to 2,682, short of the target of 3,000 annual submissions. Because SUI believes it more important to measure the number and quality of proposals receiving funding, it proposes to replace this indicator in its new strategic plan.

Related Action Step – Quality	University of Iowa	
1.1.4.2	95-96	2,427
	96-97	2,529
	97-98	2,672
	98-99	2,659
	99-00	2,682
	Target	3,000

**Percentage of Faculty Having One Scholarly Work Published
During Last Three Years
Indicator #17**

Iowa State University

During the four years that data has been collected, the percentage of faculty having a scholarly work published during the last three years rose from 83.5% to 88.4%. The target set was 90%. ISU is proposing that this indicator be replaced in its new strategic plan.

Related Action Step – Quality	Iowa State University	
1.1.4.1	95-96	NC
	96-97	83.5%
	97-98	87.0%
	98-99	86.8%
	99-00	88.4%
	Target	90.0%

**Percentage of Faculty as Principal or Co-Principal
Investigators for Sponsored Funding Awards
Indicator #20**

Iowa State University

Data are available for six years for this indicator from the ISU strategic plan of 1995-2000. In the first year data was collected, 54% of the faculty were identified as the principal or co-principal investor of sponsored funding projects that were awarded. For the last three reporting years, the percentage remained virtually the same, either 58% or 59%. The University is proposing replacing this indicator in its new strategic plan.

Related Action Steps -- Quality	Iowa State University	
1.1.4.1 and 1.1.4.2	93-94	NA
	94-95	54%
	95-96	58%
	96-97	58%
	97-98	59%
	98-99	59%
	99-00	58%
	Target	67%

**Sponsored Funding Per Faculty Member
(Per Full-time Equivalent or FTE)
Indicator #21**

Iowa State University

The target for this ISU strategic plan benchmark, \$120,000 per full-time equivalent (FTE) faculty member, has been exceeded the past two years and in two additional years data has been collected. The University will retain this indicator in its 2000-2005 strategic plan.

Related Action Step -- Quality	Iowa State University	
1.1.4.2	93-94	\$122,969 per FTE
	94-95	\$118,419 per FTE
	95-96	\$101,100 per FTE
	96-97	\$135,900 per FTE
	97-98	\$111,100 per FTE
	98-99	\$143,000 per FTE
	99-00	\$153,500 per FTE
	Target	\$120,000 per FTE

Number of New Technologies Licensed Indicator #23

Iowa State University

In the seven years that ISU has reported data for this indicator from its strategic plan, the target of 55 technology licenses has been met or surpassed three times. In addition to being reported in the ISU strategic plan, these data are found in the Annual Report on Technology Transfer and Economic Development.

Related Action Step -- Quality	Iowa State University	
1.1.4.1	93-94	50
	94-95	42
	95-96	48
	96-97	57
	97-98	70
	98-99	55
	99-00	35
	Target	55

Number of New Licenses Generating Revenues and Total Revenues Indicator #24

Iowa State University

The target for this indicator, 30 new licenses annually generating at least \$1.5 million, has been exceeded in the last three reporting years. In 1993-94, and the next two years, the number of new licenses generating revenues was 20 or 21 and the amount of revenues was under or just over \$1 million.

Related Action Step -- Quality	Iowa State University	
1.1.4.1	93-94	21 for \$0.6 m
	94-95	20 for \$0.7 m
	95-96	20 for \$1.1 m
	96-97	23 for \$1.5 m
	97-98	33 for \$2.2 m
	98-99	39 for \$2.3 m
	99-00	44 for \$1.5 m
	Target	30 for \$1.5 m

**Number of External Grants and Contracts Awarded
Indicator #34**

Iowa State University

The Board of Regents' Action Step 1.2.1.5 relates to this benchmark or indicator from Iowa State University's strategic plan of 1995-2000. Similar to SU's indicator (#19), this benchmark compiles the number of external grants and contracts actually awarded annually. The University has not provided a target for this indicator, due in part to the fluctuation that was likely to occur. In the seven years of reporting, the lowest number was in the first year (2,040) and the highest number of external grants and contracts awarded was in 1998-99 (2,392).

Related Action Step -- Quality	Iowa State University	
1.2.1.5	93-94	2,040
	94-95	2,113
	95-96	2,049
	96-97	2,209
	97-98	2,206
	98-99	2,392
	99-00	2,211
	Target	2,390