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2006-2007 Process Outcome Survey Results

Descriptive Statistics Compiled from Industry and Faculty Surveys

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REPORT PROCESSING & DATA ISSUES

This report provides basic descriptive statistics on the evaluator Process Outcome Questionnaires. Data were collected during the fall of 2007 and refer to the Center activity for FY 2006-2007.

Since most evaluators use this report to benchmark their Center compared to a program-wide “norm”, we have reported “Center-level” means and standard deviations, with the exception of question #5 on the Industry Questionnaire (see below). Means for each center were used to calculate a Center-level mean and are therefore unweighted aggregate means. Because questions that require a numeric answer (e.g. number of dollars) often have highly skewed distributions, we also reported the medians for these variables. For forced choice questions, frequencies and standard deviations for individual respondents were also reported.

Industry Questionnaires

The industry questionnaire was revised for 2006-2007 data collection. All data were collected using a single industry questionnaire form; the short and long versions of industry questionnaires used in past data collection were not utilized this year. The current industry questionnaire has been significantly shortened (from 44 (L) and 27 (S) to 16 questions). Domains of data collected still pertain to satisfaction with center processes, benefits resulting from industries’ center involvement and industry member characteristics. However, fewer items within those domains are presented in the current questionnaire. For example, the items dropped in the industry member characteristics domain include those that asked about industry research areas, the number of years the industry has been involved with the center and the industry’s financial status.

Question #5 on the Industrial Member survey (the dollar value of center-stimulated projects) is reported based on forced choice categories for the first time. This change was made to avoid coding questions raised with open-ended answers. It is reported in two ways. First, we report individual-level mean, median, and standard deviation for dollar values for all cases with a valid response. Also, we report an individual-level mean, median, and standard deviation for dollar value for cases reporting at least one project. Individual-level statistics were used for these variables because unweighted center means were highly skewed and misleading.

Faculty Questionnaires

The faculty questionnaire was revised for 2006-2007 data collection. The primary changes made include: some questions used in past questionnaires were dropped (old version was 29 questions), and two versions of the faculty questionnaire were created – a long version (13 items) that will be used by centers in year 1-5 and a short version (6 items) that will be used by centers in year 6-10. Since both the faculty long and faculty short questionnaires share some of the same questions, data for these shared questions

were pooled for analysis. In the tables below, questions only included in the long version are noted as follows: (L).

RESPONSE RATES

Category	Center Level		Individual Level	
	Industry	Faculty	Industry	Faculty
<i>Response Frequency</i>				
Population from CD report	34	34	621	496
Retired/Defunct Centers	1	1	16	32
Retired/Defunct Centers Reporting ^a	0	0	0	0
New Centers Reporting	+1	+1	+5	0
Population ^b	34	34	610	464
Centers Excused from Evaluation ^c	2	4	46	32
Centers that did not return data	1	1	12	8
Available Population ^d	31	29	552	424
Data Received	31	29	266	192
Received / Population	91.2%	85.3%	42.8%	38.7%
Received / Available Population	100%	100%	48.2%	45.3%

- a. Retired, defunct, and new Centers that are not required to submit data, but some do submit some data. If relevant, those data were included in the analysis.
- b. Population was defined as centers that were at least 1 year old.
- c. Centers were excused for reasons such as being in the midst of center restructuring and respondent refusal to complete surveys.
- d. Numbers based on population minus excused and not returned counts.

LONG FACULTY FORM VS. SHORT FACULTY FORM

	Long Form	Short Form
# of items	13	6
# of questions in common	6	6
# of unique questions	7	0
# of Centers using form	10*	19
Sample size	69	123

*includes 4 centers that completed an older version of the faculty questionnaire. This older form is more similar to the current long faculty form than to the current short faculty form.

Industry Results: 2006-2007

Table 1: Research Program

1. What percentage of Center research projects do you take an active interest in?											<u>Center Level</u>	
0-19%		20-39%		40-59%		60-79%		80-100%		Missing Data		
(1)		(2)		(3)		(4)		(5)				
N	%	N	%	N	%	N	%	N	%	N	Mean	S.D.
34	13.2	72	28.0	62	24.1	65	25.3	24	9.3	9	2.91	.63

3. During the past year, how satisfied were you with the following features of the Center's research program?

	<u>Individual Frequencies</u>											<u>Center Level</u>	
	Not Satisfied		Slightly Satisfied		Somewhat satisfied		Quite Satisfied		Very Satisfied		Missing Data		
	1		2		3		4		5		N	Mean	S.D.
	N	%	N	%	N	%	N	%	N	%	N		
a. Capabilities of the researchers & quality of the research program*	0	0	1	.4	21	8.0	130	49.8	109	41.8	5	4.33	.35
b. Breadth of the research topics covered	2	.8	9	3.4	48	18.1	140	52.8	66	24.9	1	4.02	.47
c. Focus of the research	2	.8	8	3.0	63	23.8	134	50.6	58	21.9	1	3.93	.48
d. Relevance of research to my organization's needs*	3	1.1	18	6.8	83	31.3	115	43.4	46	17.4	1	3.74	.47

* Item presented for the first time on the 2006-2007 Industry Questionnaire

Table 2: Benefits

5. During the past year, approximately how many Center-stimulated research projects were supported by your organization (include internal projects and projects contracted to outside performers)? Please estimate the dollar value of all Center-stimulated research projects. Exclude Center membership fee.

	<u>Center Level</u>		
	Mean	Median	S.D.
Includes All Cases			
a. Number of center-stimulated research projects supported by your organization <i>Sample: N of members = 183; N of centers = 27</i>	1.41	1.33	.94
b. Average dollar value of center-stimulated projects (in thousands) per organization <i>Sample: all respondents: N of members =225 ; N of Centers=30</i>	698.58*	50.00*	5202.51*
Includes Cases Citing 1 or more projects			
c. Number of center-stimulated research projects supported by your organization <i>Sample: N of members = 119; N of Centers = 24</i>	2.19	2.00	.80
d. Average dollar value of center-stimulated projects (in thousands) per organization <i>Sample: N of members = 106; N of Centers = 24</i>	870.61*	100.00*	5834.83*
e. Average dollar value of each center-stimulated project (in thousands) <i>Sample: N of members = 106; N of Centers = 24</i>	453.56*	50.00*	2924.44*

f. Dollar value of center-stimulated projects (in thousands) **Total: 157,180.00**

*Calculated at the individual-level, not at the center-level.

<u>Individual Frequencies</u>	<u>Center Level</u>	
	Mean	S.D.
6. During the past year, how many students trained in the Center projects were hired by your organization?	.54	1.77

7. During the past year, to what extent has participation in the Center contributed to the following benefits for your organization?

	<u>Individual Frequencies</u>													<u>Center Level</u>	
	No Impact 1		Slight Impact 2		Moderate Impact 3		High Impact 4		Very High Impact 5		N/A		Missing Data		
	N	%	N	%	N	%	N	%	N	%	N	%	N	Mean	S.D.
a. Research & Development: Enhanced via increased technical awareness, accelerated or new projects or development of intellectual property in my organization	16	6.1	43	16.4	88	33.6	73	27.9	31	11.8	11	4.2	4	3.18	.66
b. Commercialization: Enhanced via improved or new products, processes, services, improved sales, or new or retained jobs.	84	32.4	53	20.5	45	17.4	25	9.7	8	3.1	44	17.0	7	2.27	.70
c. Professional Networking: Enhanced via improved ability to recruit students, increased cooperation with other industrial members and scientists outside my organization	10	3.9	30	11.8	83	32.5	80	31.4	41	16.1	11	4.3	11	3.53	.54

Table 3: Center Administration and Operations

	<u>Individual Frequencies</u>											<u>Center Level</u>	
	Not Satisfied (1)		Slightly Satisfied (2)		Satisfied (3)		Quite Satisfied (4)		Very Satisfied (5)		Missing Data	Mean	S.D.
	N	%	N	%	N	%	N	%	N	%	N		
9. During the past year, how satisfied were you with center administrative operations?	0	0	5	2.0	38	14.8	135	52.7	78	30.5	10	4.13	.38

Table 4: General Evaluation

	<u>Individual Frequencies</u>											<u>Center Level</u>	
	Definitely Not (1)		Probably Not (2)		Uncertain (3)		Probably Yes (4)		Definitely Yes (5)		Missing Data	Mean	S.D.
	N	%	N	%	N	%	N	%	N	%	N		
11. Will your organization renew its membership?	5	1.9	6	2.3	38	14.6	132	50.8	79	30.4	6	4.01	.46

13. Organization Type/Size

	<u>Individual Frequencies</u>	
	N	%
1. For-Profit Large (> 500 employees)	169	65.5
2. For-Profit Small (< 500 employees)	39	15.1
3. Non-Profit/Government	50	19.4
Missing Data	8	

Faculty Results: 2006-2007

1. Compared to the research projects that you typically conduct outside the Center, would you describe your Center-funded research as: (L)

Individual Frequencies										Center Level		
Much more basic (1)		More basic (2)		Same (3)		More Applied (4)		Much more applied (5)		Missing Data*		
N	%	N	%	N	%	N	%	N	%	N	Mean	S.D.
0	0	5	7.6	30	45.5	27	40.9	4	6.1	3	3.50	.48

2. During the past year, how satisfied were you with the following?

	Individual Level										Center Level		
	Not Satisfied (1)		Slightly Satisfied (2)		Somewhat Satisfied (3)		Quite Satisfied (4)		Very Satisfied (5)		Missing Data		
	N	%	N	%	N	%	N	%	N	%	N	Mean	S.D.
a. Quality of the Center-supported research program	3	1.6	7	3.7	35	18.3	73	38.2	73	38.2	1	4.13	.55
b. Relevance of the Center's research program to my professional goals	8	4.2	10	5.2	32	16.8	71	37.2	70	36.6	1	4.01	.80

4. During the past year, what impact has participation in the Center had for YOU in the following areas? (L)

	<u>Individual Level</u>											<u>Center Level</u>	
	No Impact (1)		Somewhat Positive Impact (2)		Moderately Positive Impact (3)		Very Positive Impact (4)		Extremely Positive Impact (5)		Missing Data	Mean	S.D.
	N	%	N	%	N	%	N	%	N	%	N		
a. The feeling of accomplishment I get from the research I do.	3	4.3	8	11.6	14	20.3	28	40.6	16	23.2	0	3.58	.55
b. Opportunities for research contracts/grants.	1	1.4	7	10.1	16	23.2	25	36.2	20	29.0	0	3.75	.53
c. Recognition I receive for the work I do.	7	10.3	11	16.2	17	25.0	20	29.4	13	19.1	1	3.13	.90
d. Access to useful equipment.	12	19.7	6	9.8	10	16.4	20	32.8	13	21.3	8	2.95	1.02
e. Ability to support graduate students.	4	6.5	10	16.1	10	16.1	22	35.5	16	25.8	7	3.62	.44
f. Ability to publish my work in quality proceedings and journals. * **	3	11.1	5	18.5	7	25.9	6	22.2	6	22.2	6	3.22	.77

*Because faculty for four centers completed an older version of the faculty questionnaire that did not include this question, the N size for this question is much smaller than for other questions on the long faculty questionnaire.

**Item presented for the first time on the long form of the 2006-2007 Faculty Questionnaire.

5. Which option best expresses your current intentions?

	Individual Frequencies											Center Level	
	Definitely Not (1)		Probably Not (2)		Uncertain (3)		Probably Yes (4)		Definitely Yes (5)		Missing Data	Mean	S.D.
	N	%	N	%	N	%	N	%	N	%	N		
Next year I will submit my best research ideas in a center funded proposal* **	4	2.6	14	9.0	38	24.5	60	38.7	39	25.2	1	3.87	.48

*Because faculty for four centers completed an older version of the faculty questionnaire that did not include this question, the N size for this question is much smaller than for other questions on the long faculty questionnaire.

**Item presented for the first time on the long form of the 2006-2007 Faculty Questionnaire.

6. During the past year, how satisfied were you with center administrative operations?

Individual Frequencies											Center Level	
Not Satisfied (1)		Slightly Satisfied (2)		Somewhat Satisfied (3)		Quite Satisfied (4)		Very Satisfied (5)		Missing Data	Mean	S.D.
N	%	N	%	N	%	N	%	N	%	N		
7	3.7	11	5.8	23	12.1	76	40.0	73	38.4	2	4.11	.53