New Traditions: End-of-semester "before-&-after" Survey

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Introduction:

This survey is for those instructors who wish to administer only one survey at the end of the semester and obtain related "before-and-after" information. Students are asked (at the end of the semester) to compare, e.g., their confidence levels at the beginning of the semester with those at the end of the semester. For those instructors who wish to administer both a beginning-of-semester and end-of-semester survey, the versions of these surveys are available as well.

This survey was developed by the LEAD (The Learning through Evaluation, Adaptation and Dissemination) Center at the University of Wisconsin-Madison for the education reform project, "New Traditions Systemic Reform Project." This study is funded by the "New Traditions: Revitalizing the Curriculum" grant, DUE-9455928, administered by the National Science Foundation and awarded to the University of Wisconsin Chemistry Department.

Chemistry Course Survey Consent Form for Students

The Learning through Evaluation, Adaptation and Dissemination (LEAD) Center is conducting a survey of some of the Chemistry Department's undergraduate courses. The survey is designed to assist faculty in understanding the effects of course innovations on students' learning experiences and may lead to improvements in the teaching of chemistry nationwide.

We are asking students who are enrolled in the participating lectures to complete a brief survey about their learning experiences in the course. The survey should take about ten minutes to complete. In order to correlate responses with demographic data and measures of achievement we are asking you to write your Student I.D. number on the survey.

All student responses will be held strictly confidential. The LEAD Center will generalize about student responses so as to obscure the identity of any particular students before reporting any survey findings. The LEAD Center may publish papers based on the results of this survey, but these materials will contain no information that would identify particular students.

Participation is completely voluntary. (Students choosing not to participate may simply return a blank survey). Refusal to participate will have no effect on your grade. There are no formal benefits or risks associated with participation.

Any questions you have you may ask now, or you may call Dr. Susan Millar, Director, LEAD Center, at 265-5943.

I have read the above and give my consent to participate in the study.

Signature _____

Date _____

STUDENT I.D. Number _____

(Please write your I.D. both here and fill it in on the upper left corner of the "bubble" sheet)

The LEAD Center wishes to thank you for participating in this national study of how students learn in college chemistry courses. The questions in the survey are intended to help LEAD Center researchers understand your experiences in the chemistry course in which this survey is being administered. Your thoughtful responses to the questions in this survey will enable us to help faculty across the nation improve chemistry education.

Copies of this consent form can be obtained at the LEAD Center room 427, 1402 University Ave.

Please fill in your responses on the separate bubble sheet or write in the space provided as indicated.

BACKGROUND:

1)	**Institution**	Course number (write in here): _____		
	For...	UW-Madison	Madison Area Technical College	San Jose State University
	Fill in...	0	1	2
2)	**Sex**			
	For...	female	male	
	Fill in...	0	1	
3)	**Citizenship**			
	For...	U.S.	Other	
	Fill in...	0	1	
4)	**U.S. Ethnic Code**			
	For...	**Fill in...**		
	white (not Hispanic) or other	0		
	Cambodian, Laotian, Vietnamese after 1975	1		

other Asian or Pacific Islander	2										
American Indian or Alaskan Native	3										
Hispanic/Latino	4										
Black/Afro-American	5	0	1	2	3	4	5				
5) College rank:											
For...	**Fill in...**										
no college rank	0										
freshman	1										
sophomore	2										
junior	3										
senior	4	0	1	2	3	4					
6) semesters of high school chemistry:		0	1	2	3	4	over 3 fill in bubble 4				
7) semesters of college level chemistry completed		0	1	2	3	4	5	6	7	8	

For each group of factors below please fill in a number on the bubble sheet to indicate the ***relative impact*** of each factor on your ***LEARNING*** overall in this course.

		relative impact on your ***LEARNING*** overall							
	PEOPLE	**not applicable**	**negative**			**neutral**	**positive**		
8)	professor	0	1	2	3	4	5	6	7
9)	TA/lab instructor	0	1	2	3	4	5	6	7
10)	friends/informal groups	0	1	2	3	4	5	6	7
11)	course organized groups	0	1	2	3	4	5	6	7
12)	other people specify here: _____	0	1	2	3	4	5	6	7
		relative impact on your ***LEARNING*** overall							
	ACTIVITIES	**not applicable**	**negative**			**neutral**	**positive**		
13)	lecture	0	1	2	3	4	5	6	7
14)	lab	0	1	2	3	4	5	6	7
15)	discussion/problem sessions	0	1	2	3	4	5	6	7
16)	exams	0	1	2	3	4	5	6	7
17)	quizzes	0	1	2	3	4	5	6	7
18)	homework/exercises	0	1	2	3	4	5	6	7
19)	other people specify here: _____	0	1	2	3	4	5	6	7
		relative impact on your ***LEARNING*** overall							
	MATERIALS	**not applicable**	**negative**			**neutral**	**positive**		
20)	textbook(s)	0	1	2	3	4	5	6	7
21)	lab book(s)	0	1	2	3	4	5	6	7
22)	computer materials	0	1	2	3	4	5	6	7
23)	other materials specify	0	1	2	3	4	5	6	7

	here: _____								

For each group of factors below please fill in a number on the bubble sheet to indicate the ***relative impact*** of each factor on your ***CONFIDENCE*** in your ability to understand and do chemistry.

		relative impact on your ***CONFIDENCE***							
	PEOPLE	**not applicable**	**negative**			**neutral**	**positive**		
24)	professor	0	1	2	3	4	5	6	7
25)	TA/lab instructor	0	1	2	3	4	5	6	7
26)	friends/informal groups	0	1	2	3	4	5	6	7
27)	course organized groups	0	1	2	3	4	5	6	7
28)	other people specify here: _____	0	1	2	3	4	5	6	7
		relative impact on your ***CONFIDENCE***							
	ACTIVITIES	**not applicable**	**negative**			**neutral**	**positive**		
29)	lecture	0	1	2	3	4	5	6	7
30)	lab	0	1	2	3	4	5	6	7
31)	discussion/problem sessions	0	1	2	3	4	5	6	7
32)	exams	0	1	2	3	4	5	6	7
33)	quizzes	0	1	2	3	4	5	6	7
34)	homework/exercises	0	1	2	3	4	5	6	7
35)	other people specify here: _____	0	1	2	3	4	5	6	7
		relative impact on your ***CONFIDENCE***							
	MATERIALS	**not applicable**	**negative**			**neutral**	**positive**		
36)	textbook(s)	0	1	2	3	4	5	6	7
37)	lab book(s)	0	1	2	3	4	5	6	7
38)	computer materials	0	1	2	3	4	5	6	7
39)	other materials specify here: _____	0	1	2	3	4	5	6	7

For each group of factors below please fill in a number on the bubble sheet to indicate the ***relative impact*** of each factor on your ***ENTHUSIASM*** for learning chemistry.

		relative impact on your ***CONFIDENCE***							
	PEOPLE	**not applicable**	**negative**			**neutral**	**positive**		
40)	professor	0	1	2	3	4	5	6	7
41)	TA/lab instructor	0	1	2	3	4	5	6	7
42)	friends/informal groups	0	1	2	3	4	5	6	7
43)	course organized groups	0	1	2	3	4	5	6	7
44)	other people specify here: _____	0	1	2	3	4	5	6	7
		relative impact on your ***CONFIDENCE***							
	ACTIVITIES	**not applicable**	**negative**			**neutral**	**positive**		
45)	lecture	0	1	2	3	4	5	6	7

46)	lab	0	1	2	3	4	5	6	7
47)	discussion/problem sessions	0	1	2	3	4	5	6	7
48)	exams	0	1	2	3	4	5	6	7
49)	quizzes	0	1	2	3	4	5	6	7
50)	homework/exercises	0	1	2	3	4	5	6	7
51)	other people specify here: _____	0	1	2	3	4	5	6	7
		relative impact on your ***CONFIDENCE***							
	MATERIALS	**not applicable**	**negative**			**neutral**	**positive**		
52)	textbook(s)	0	1	2	3	4	5	6	7
53)	lab book(s)	0	1	2	3	4	5	6	7
54)	computer materials	0	1	2	3	4	5	6	7
55)	other materials specify here: _____	0	1	2	3	4	5	6	7

Please compare your ***CONFIDENCE*** levels in the areas below ***BEFORE*** and ***AFTER*** taking this course. **(Fill in a number on the bubble sheet for each row.)**

			confidence level					
CONFIDENCE IN YOUR ABILITY TO...			**low**					**high**
understand key concepts of chemistry.....	**56)**	**before**	0	1	2	3	4	5
	57)	**after**	0	1	2	3	4	5
solve chemistry problems.....	**58)**	**before**	0	1	2	3	4	5
	59)	**after**	0	1	2	3	4	5
understand the chemistry underlying lab experiments.....	**60)**	**before**	0	1	2	3	4	5
	61)	**after**	0	1	2	3	4	5
perform lab experiments.....	**62)**	**before**	0	1	2	3	4	5
	63)	**after**	0	1	2	3	4	5
visualize key concepts of chemistry.....	**64)**	**before**	0	1	2	3	4	5
	65)	**after**	0	1	2	3	4	5
apply your knowledge of chemistry to the real world.....	**66)**	**before**	0	1	2	3	4	5
	67)	**after**	0	1	2	3	4	5
understand other areas of science.....	**68)**	**before**	0	1	2	3	4	5
	69)	**after**	0	1	2	3	4	5
succeed in another chemistry course.....	**70)**	**before**	0	1	2	3	4	5
	71)	**after**	0	1	2	3	4	5
succeed in a chemistry-related discipline.....	**72)**	**before**	0	1	2	3	4	5
	73)	**after**	0	1	2	3	4	5

Please compare your ***INTEREST*** levels in the areas below ***BEFORE*** and ***AFTER*** taking this course. **(Fill in a number on the bubble sheet for each row.)**

			interest level	
INTEREST IN...			**low**	**high**

studying chemistry in general.....	**74)**	**before**	0	1	2	3	4	5
	75)	**after**	0	1	2	3	4	5
taking more chemistry.....	**76)**	**before**	0	1	2	3	4	5
	77)	**after**	0	1	2	3	4	5
pursuing a chemistry-related major.....	**78)**	**before**	0	1	2	3	4	5
	79)	**after**	0	1	2	3	4	5
pursuing a science-related field.....	**80)**	**before**	0	1	2	3	4	5
	81)	**after**	0	1	2	3	4	5
working with others to learn science.....	**82)**	**before**	0	1	2	3	4	5
	83)	**after**	0	1	2	3	4	5
chemistry in industry.....	**84)**	**before**	0	1	2	3	4	5
	85)	**after**	0	1	2	3	4	5
chemistry in agriculture.....	**86)**	**before**	0	1	2	3	4	5
	87)	**after**	0	1	2	3	4	5
chemistry in medicine.....	**88)**	**before**	0	1	2	3	4	5
	89)	**after**	0	1	2	3	4	5
chemistry in athletics.....	**90)**	**before**	0	1	2	3	4	5
	91)	**after**	0	1	2	3	4	5
chemistry in the environment.....	**92)**	**before**	0	1	2	3	4	5
	93)	**after**	0	1	2	3	4	5
science in general.....	**94)**	**before**	0	1	2	3	4	5
	95)	**after**	0	1	2	3	4	5

For each row please fill in **one** number on the bubble sheet which best represents your view.

	LECTURE	**strongly disagree**					**strongly agree**
96)	I enjoyed the lectures.	0	1	2	3	4	5
97)	The organization of the lectures was important for my learning.	0	1	2	3	4	5
98)	The professor was concerned about my learning chemistry.	0	1	2	3	4	5
99)	The professor made students feel comfortable asking questions.	0	1	2	3	4	5
100)	The applications of chemistry discussed in this course made certain concepts easier to understand.	0	1	2	3	4	5
101)	The applications of chemistry discussed in this course made learning chemistry interesting.	0	1	2	3	4	5
	EXAMS	**strongly disagree**					**strongly agree**
102)	The lectures and assigned work adequately prepared me for exams.	0	1	2	3	4	5
103)	Taking the exams increased my understanding of the course material.	0	1	2	3	4	5
104)	I sometimes developed new insights from taking the exams.	0	1	2	3	4	5
	LABS	**strongly disagree**					**strongly agree**

105)	I enjoyed the labs.	0	1	2	3	4	5
106)	I understood the chemistry behind the labs before I did them.	0	1	2	3	4	5
107)	Eventually I understood the chemistry behind the labs.	0	1	2	3	4	5
108)	The labs helped me understand important concepts in this course.	0	1	2	3	4	5
109)	The labs related well to the lecture material.	0	1	2	3	4	5
110)	Enough time was allowed for labs.	0	1	2	3	4	5
111)	The lab instructor was helpful.	0	1	2	3	4	5

GENERAL: (Fill in the appropriate response)

112)	average hours each week spent on this course					
	for...	0-5 hr.	5-10 hr.	10-15 hr.	15-20 hr.	over 20 hr.
	fill in...	0	1	2	3	4

		no					**highly recommend**
113)	Would you recommend this course to a friend?	0	1	2	3	4	5

Please complete this item. (in the space provided below)

The three most important aspects of this course for my learning were...

1. _____

   _____

2. _____

   _____

3. _____

   _____

THANK YOU!