

The So-Called “Best Practices” for Writing: Do They Make a Difference for Engagement and Learning?

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We describe a partnership between the National Survey of Student Engagement (NSSE) and the Council of Writing Program Administrators (WPA) that studied how student writing experiences related to their engagement and learning. In 2008, 27 supplemental NSSE questions about writing practices were administered to 23,000 students, providing the broadest snapshot so far of undergraduate writing. This session presents findings and implications that are particularly relevant to faculty, writing program administrators, and other academic leaders.

Controlling for student characteristics (gender, race, major, and others) and the amount students write, results show that these “writing-to-learn” practices are positively associated with approaches to deep learning and with students’ self-reports of learning and growth.

Results affirm that when faculty encouraged interactive writing processes, designed intellectually focused writing assignments, and explained writing expectations clearly, the students engaged in more deep learning activities such as analysis, synthesis, and integration of ideas from various sources, and they grappled more with course ideas both in and out of the classroom. In addition, students whose faculty assigned projects with these same characteristics reported greater personal, social, practical, and academic learning and development. Taken together, these findings provide further support for the movement to infuse quality writing-to-learn experiences throughout the curriculum.

The Consortium for the Study of Writing in College (CSWC)

This research will expand into new areas as the number of schools administering the writing questions increases. The CSWC, supported jointly by NSSE and the WPA, currently includes 75 schools that will administer the writing questions in spring 2009, more than doubling the data set. Other schools can join for the 2010 NSSE. To keep up with CSCW activities and relevant publications, learn about using these and other data at your school, and join the CSCW listserv, visit comppile.org/wpa+nsse/.

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The 27 Experimental Writing Questions

1. During the current school year, for how many of your writing assignments have you done each of the following?

5=All assignments, 4=Most assignments, 3=Some assignments, 2=Few assignments, 1=No assignments.

- 1A** Brainstormed (listed ideas, mapped concepts, prepared an outline, etc.) to develop your ideas before you started drafting your assignment
- 1B** Talked with your instructor to develop your ideas before you started drafting your assignment
- 1C** Talked with a classmate, friend, or family member to develop your ideas before you started drafting your assignment
- 1D** Received feedback from your instructor about a draft before turning in your final assignment
- 1E** Received feedback from a classmate, friend, or family member about a draft before turning in your final assignment
- 1F** Visited a campus-based writing or tutoring center to get help with your writing assignment before turning it in
- 1G** Used an online tutoring service to get help with your writing assignment before turning it in
- 1H** Proofread your final draft for errors before turning it in

2. During the current school year, in how many of your writing assignments did you:

5=All assignments, 4=Most assignments, 3=Some assignments, 2=Few assignments, 1=No assignments.

- 2A** Narrate or describe one of your own experiences
- 2B** Summarize something you read, such as articles, books, or online publications
- 2C** Analyze or evaluate something you read, researched, or observed
- 2D** Describe your methods or findings related to data you collected in lab or field work, a survey project, etc.
- 2E** Argue a position using evidence and reasoning
- 2F** Explain in writing the meaning of numerical or statistical data
- 2G** Write in the style and format of a specific field (engineering, history, psychology, etc.)
- 2H** Include drawings, tables, photos, screen shots, or other visual content into your written assignment
- 2I** Create the project with multimedia (web page, poster, slide presentation such as PowerPoint, etc.)

3. During the current school year, for how many of your writing assignments has your **instructor** done each of the following?

5=All assignments, 4=Most assignments, 3=Some assignments, 2=Few assignments, 1=No assignments.

- 3A** Provided clear instructions describing what he or she wanted you to do
- 3B** Explained in advance what he or she wanted you to learn
- 3C** Explained in advance the criteria he or she would use to grade your assignment
- 3D** Provided a sample of a completed assignment written by the instructor or a student
- 3E** Asked you to do short pieces of writing that he or she did not grade
- 3F** Asked you to give feedback to a classmate about a draft or outline the classmate had written
- 3G** Asked you to write with classmates to complete a group project
- 3H** Asked you to address a real or imagined audience such as your classmates, a politician, non-experts, etc.

4. Which of the following have you done or do you plan to do before you graduate from your institution?

Response options:

4=Done, 3=Plan to do, 2=Do not plan to do, 1=Have not decided.

- 4A** Prepare a portfolio that collects written work from more than one class
- 4B** Submit work you wrote or co-wrote to a student or professional publication (magazine, journal, newspaper, collection of student work, etc.)

82 Institutions that Administered the Writing Questions in Spring 2008

These schools were randomly selected from the 774 institutions that administered the 2008 NSSE.

Albright College	Kent State University	Southwestern College
Bethune Cookman University	LaGrange College	The Citadel, The Military College of South Carolina
Brigham Young University	Lamar University	The Richard Stockton College of New Jersey
Bryant University	Lasell College	The University of Texas at Dallas
Cabrini College	Lincoln Memorial University	The University of Texas at San Antonio
Carroll College	Lincoln University	Thiel College
Clarke College	Lindenwood University	Union College
Coker College	Lipscomb University	University of Mary Hardin-Baylor
Colby-Sawyer College	Lyndon State College	University of Michigan-Flint
College of the Atlantic	Martin Methodist College	University of San Diego
Colorado State University	McDaniel College	University of Southern Mississippi
Delaware State University	Medaille College	University of the Incarnate Word
Dixie State College of Utah	Mercer University	University of the Sciences in Philadelphia
Dominiccan University	Misericordia University	University of Vermont
Drew University	Montana State University-Bozeman	Utah Valley State College
East Central University	Northwestern Oklahoma State University	Virginia Commonwealth University
Eastern New Mexico University	Oglethorpe University	Voorhees College
Elizabethtown College	Ohio University	Washington State University
Elon University	Otterbein College	Wentworth Institute of Technology
Franklin W. Olin College of Engineering	Pepperdine University	Western Illinois University
Grinnell College	Polytechnic University	Western Michigan University
Harris-Stowe State University	Queens University of Charlotte	William Jewell College
Hartwick College	Roger Williams University	William Woods University
Houghton College	Rutgers University-Newark	Williams College
Husson College	Sacred Heart University	Wofford College
Jacksonville University	Shawnee State University	Worcester State College
Juniata College	Southern Vermont College	Xavier University of Louisiana

75 Institutions that Will Administer the Writing Questions in Spring 2009

These schools have joined the Consortium for the Study of Writing in College, jointly supported by NSSE and the Council of Writing Program Administrators.

Berry College	Georgian Court University	University of Colorado at Boulder
Calvin College	Graceland University-Lamoni	University of Colorado at Colorado Springs
Carlow University	Husson University	University of Denver
Case Western Reserve University	Indiana University Kokomo	University of Maine at Farmington
Central Michigan University	Indiana University Purdue University-Indianapolis	University of Michigan-Flint
Chowan University	Lafayette College	University of New Mexico
The College of New Jersey	Limestone College	University of North Carolina at Chapel Hill
CUNY Bernard M Baruch College	Marshall University	University of North Carolina Wilmington
CUNY Brooklyn College	McNeese State University	University of Northern Iowa
CUNY City College of New York	Mercer University	University of South Florida
CUNY College of Staten Island	Miami University-Oxford	University of Southern Maine
CUNY Herbert H. Lehman College	Millsaps College	University of Southern Mississippi
CUNY Hunter College	North Carolina State University	The University of Texas at El Paso
CUNY John Jay College Criminal Justice	North Dakota State University	The University of Texas of the Permian Basin
CUNY Medgar Evers College	Occidental College	The University of Texas-Pan American
CUNY New York City College of Technology	Oklahoma City University	University of Toledo
CUNY Queens College	Pittsburg State University	The University of Virginia's College at Wise
CUNY York College	Portland State University	University of Washington Tacoma
Earlham College	Salem State College	University of Wyoming
Eastern Michigan University	Seton Hill University	Western Carolina University
The Evergreen State College	Spring Hill College	Wheaton College
Fayetteville State University	Temple University	William Paterson University of New Jersey
Ferrum College	Towson University	Winthrop University
Fort Hays State University	Trine University	Woodbury University
Francis Marion University	University of Cincinnati	Wright State University

The 2008/2009 NSSE Survey Instrument

The 2008 and 2009 survey instruments are identical.



National Survey of Student Engagement 2008 The College Student Report

1 In your experience at your institution during the current school year, about how often have you done each of the following? Mark your answers in the boxes. Examples: or

	Very often	Often	Some-times	Never		Very often	Often	Some-times	Never
	▼	▼	▼	▼		▼	▼	▼	▼
a. Asked questions in class or contributed to class discussions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	r. Worked harder than you thought you could to meet an instructor's standards or expectations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Made a class presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	s. Worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Prepared two or more drafts of a paper or assignment before turning it in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	t. Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Worked on a paper or project that required integrating ideas or information from various sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	u. Had serious conversations with students of a different race or ethnicity than your own	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	v. Had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Come to class without completing readings or assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
g. Worked with other students on projects during class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
h. Worked with classmates outside of class to prepare class assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
i. Put together ideas or concepts from different courses when completing assignments or during class discussions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
j. Tutored or taught other students (paid or voluntary)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
k. Participated in a community-based project (e.g., service learning) as part of a regular course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
l. Used an electronic medium (listserv, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
m. Used e-mail to communicate with an instructor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
n. Discussed grades or assignments with an instructor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
o. Talked about career plans with a faculty member or advisor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
p. Discussed ideas from your readings or classes with faculty members outside of class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
q. Received prompt written or oral feedback from faculty on your academic performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

2 During the current school year, how much has your coursework emphasized the following mental activities?

	Very much	Quite a bit	Some	Very little
	▼	▼	▼	▼
a. Memorizing facts, ideas, or methods from your courses and readings so you can repeat them in pretty much the same form	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Analyzing the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Synthesizing and organizing ideas, information, or experiences into new, more complex interpretations and relationships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Making judgments about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Applying theories or concepts to practical problems or in new situations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9 About how many hours do you spend in a typical 7-day week doing each of the following?

- a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)
- 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
- Hours per week
- b. Working for pay **on campus**
- 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
- Hours per week
- c. Working for pay **off campus**
- 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
- Hours per week
- d. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)
- 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
- Hours per week
- e. Relaxing and socializing (watching TV, partying, etc.)
- 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
- Hours per week
- f. Providing care for dependents living with you (parents, children, spouse, etc.)
- 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
- Hours per week
- g. Commuting to class (driving, walking, etc.)
- 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
- Hours per week

10 To what extent does your institution emphasize each of the following?

- | | Very much | Quite a bit | Some | Very little |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| a. Spending significant amounts of time studying and on academic work | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Providing the support you need to help you succeed academically | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Encouraging contact among students from different economic, social, and racial or ethnic backgrounds | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Helping you cope with your non-academic responsibilities (work, family, etc.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Providing the support you need to thrive socially | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Attending campus events and activities (special speakers, cultural performances, athletic events, etc.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Using computers in academic work | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

11 To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

- | | Very much | Quite a bit | Some | Very little |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| a. Acquiring a broad general education | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Acquiring job or work-related knowledge and skills | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Writing clearly and effectively | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Speaking clearly and effectively | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Thinking critically and analytically | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Analyzing quantitative problems | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Using computing and information technology | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Working effectively with others | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i. Voting in local, state, or national elections | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| j. Learning effectively on your own | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| k. Understanding yourself | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| l. Understanding people of other racial and ethnic backgrounds | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| m. Solving complex real-world problems | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| n. Developing a personal code of values and ethics | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| o. Contributing to the welfare of your community | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| p. Developing a deepened sense of spirituality | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

12 Overall, how would you evaluate the quality of academic advising you have received at your institution?

- Excellent
- Good
- Fair
- Poor

13 How would you evaluate your entire educational experience at this institution?

- Excellent
- Good
- Fair
- Poor

14 If you could start over again, would you go to the same institution you are now attending?

- Definitely yes
- Probably yes
- Probably no
- Definitely no

15 Write in your year of birth:

16 Your sex:
 Male Female

17 Are you an international student or foreign national?
 Yes No

18 What is your racial or ethnic identification? (Mark only one.)
 American Indian or other Native American
 Asian, Asian American, or Pacific Islander
 Black or African American
 White (non-Hispanic)
 Mexican or Mexican American
 Puerto Rican
 Other Hispanic or Latino
 Multiracial
 Other
 I prefer not to respond

19 What is your current classification in college?
 Freshman/first-year Senior
 Sophomore Unclassified
 Junior

20 Did you begin college at your current institution or elsewhere?
 Started here Started elsewhere

21 Since graduating from high school, which of the following types of schools have you attended other than the one you are attending now? (Mark all that apply.)
 Vocational or technical school
 Community or junior college
 4-year college other than this one
 None
 Other

22 Thinking about this current academic term, how would you characterize your enrollment?
 Full-time Less than full-time

23 Are you a member of a social fraternity or sorority?
 Yes No

24 Are you a student-athlete on a team sponsored by your institution's athletics department?
 Yes No (Go to question 25.)

On what team(s) are you an athlete (e.g., football, swimming)? Please answer below:

25 What have most of your grades been up to now at this institution?
 A B+ C+
 A- B C
 B- C- or lower

26 Which of the following best describes where you are living now while attending college?
 Dormitory or other campus housing (not fraternity/sorority house)
 Residence (house, apartment, etc.) within walking distance of the institution
 Residence (house, apartment, etc.) within driving distance of the institution
 Fraternity or sorority house

27 What is the highest level of education that your parent(s) completed? (Mark one box per column.)

Father	Mother	
<input type="checkbox"/>	<input type="checkbox"/>	Did not finish high school
<input type="checkbox"/>	<input type="checkbox"/>	Graduated from high school
<input type="checkbox"/>	<input type="checkbox"/>	Attended college but did not complete degree
<input type="checkbox"/>	<input type="checkbox"/>	Completed an associate's degree (A.A., A.S., etc.)
<input type="checkbox"/>	<input type="checkbox"/>	Completed a bachelor's degree (B.A., B.S., etc.)
<input type="checkbox"/>	<input type="checkbox"/>	Completed a master's degree (M.A., M.S., etc.)
<input type="checkbox"/>	<input type="checkbox"/>	Completed a doctoral degree (Ph.D., J.D., M.D., etc.)

28 Please print your major(s) or your expected major(s).

a. Primary major (Print only one.):

b. If applicable, second major (not minor, concentration, etc.):

THANKS FOR SHARING YOUR RESPONSES!

After completing the survey, please put it in the enclosed postage-paid envelope and deposit it in any U.S. Postal Service mailbox. Questions or comments? Contact the National Survey of Student Engagement, Indiana University, 1900 East Tenth Street, Eigenmann Hall Suite 419, Bloomington IN 47406-7512 or nsse@indiana.edu or www.nsse.iub.edu. Copyright © 2007 Indiana University.

Scale Items

Best Practices for Using Writing to Learn

Encourage
Interactive
Writing
Processes

For how many writing assignments have you:

- Brainstormed to develop your ideas before you started drafting your assignment
- Talked with your instructor to develop your ideas before you started drafting your assignment
- Talked with a classmate, friend, or family member to develop your ideas before you started drafting your assignment
- Received feedback from your instructor about a draft before turning in your final assignment
- Received feedback from a classmate, friend, or family member about a draft before turning in your final assignment
- Visited a campus-based writing or tutoring center to get help with your writing assignment before turning it

Design
Intellectually
Focused
Writing
Assignments

In how many of your writing assignments did you:

- Summarize something you read, such as articles, books, or online publications
- Analyze or evaluate something you read, researched, or observed
- Describe your methods or findings related to data you collected in lab or field work, a survey project, etc.
- Argue a position using evidence and reasoning
- Write in the style and format of a specific field (engineering, history, psychology, etc.)
- Explain in writing the meaning of numerical or statistical data
- Include drawings, tables, photos, screen shots, or other visual content into your written assignment
- Create the project with multimedia (web page, poster, slide presentation such as PowerPoint, etc.)

Explain Writing
Expectations
Clearly

In how many of your writing assignments has your instructor:

- Provided clear instructions describing what he or she wanted you TO DO
- Explained in advance what he or she wanted you TO LEARN
- Explained in advance the criteria he or she would use to grade your assignment

NSSE Instrument Writing Questions

Total Written
Pages

During the current school year, about how much reading and writing have you done?

- Number of written papers or reports of **20 pages or more**
 - Number of written papers or reports **between 5 and 19 pages**
 - Number of written papers or reports of **fewer than 5 pages**
-

Deep Learning Scales and Items

Higher-Order
Learning
Activities

During the current school year, how much has your coursework emphasized the following mental activities?

- ANALYZING the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components
- SYNTHESIZING and organizing ideas, information, or experiences into new, more complex interpretations and relationships
- MAKING JUDGMENTS about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions
- APPLYING theories or concepts to practical problems or in new situations

Integrative
Learning
Activities

In your experience at your institution during the current school year, about how often have you done each of the following?

- Worked on a paper or project that required integrating ideas or information from various sources
- Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments
- Put together ideas or concepts from different courses when completing assignments or during class discussions
- Discussed ideas from your readings or classes with faculty members outside of class
- Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)

Reflective
Learning
Activities

During the current school year, about how often have you done each of the following?

- Examined the strengths and weaknesses of your own views on a topic or issue
- Tried to better understand someone else's views by imagining how an issue looks from his or her perspective
- Learned something that changed the way you understand an issue or concept

Deep Learning
Overall

Sum of all twelve items in the three scales above.

Self-Reported Gains Scales and Items

Practical Competencies *To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?*

- Acquiring job or work-related knowledge and skills
- Working effectively with others
- Using computing and information technology
- Analyzing quantitative problems
- Solving complex real-world problems

Personal and Social Development *To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?*

- Developing a personal code of values and ethics
- Understanding yourself
- Understanding people of other racial and ethnic backgrounds
- Voting in local, state (provincial), or national (federal) elections
- Learning effectively on your own
- Contributing to the welfare of your community
- Developing a deepened sense of spirituality

General Education *To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?*

- Writing clearly and effectively
 - Speaking clearly and effectively
 - Acquiring a broad general education
 - Thinking critically and analytically
-