NSSE 2013

Development of Transferable Skills

Outline

- NSSE 2013 survey data

- Development of Transferable Skills Survey Data

- Development of Transferable Skills Questions

- Analysis

NSSE 2013 Survey Data

- More than 1.5 million first year and senior students were invited to participate from 613 institutions (586 in the US and 27 in Canada).

- 364,193 students responded of which 41% were first year students and 59% were seniors.

- Average response rate for the U.S. was 27% while the rate reached 37% in Canada.

NSSE 2013 Survey Data

- 2,982 LAU students were invited to participate in NSSE 2013 and 932 responded yielding a response rate of 31%.

	Survey Sample	Total Respondents	Response Rate
First-year	2,053	640	31%
Senior	929	292	31%
Total	2,982	932	31%

Development of Transferable Skills Survey Data

- The development of transferable skills module examines engagement in activities that develop useful and transferable skills for the workplace such as verbal and written fluency and analytic inquiry. The module was adopted from the Degrees of Preparation survey (American Association of State Colleges and Universities).

- 80 institutions opted to participate in the module.

Survey Analysis

For each survey item the following is provided:

- The mean and the standard deviation for each student group (LAU, all NSSE peers)

- Tests of significance for mean differences between students at LAU and those at comparison groups whereby:

  $*$ $p < 0.05$; $**$ $p < 0.01$; $***$ $p < 0.001$.

- The effect size which indicates the practical importance of an observed difference. An effect size of 0.2 is considered small, 0.5 medium, and 0.8 large.

Key: 1=Very little; 2=Some; 3=Quite a bit; 4= very much; - =N/A

Development of Transferable Skills Questions

1. **During the current school year, whether course-related or not, about how often have you done the following?**

   (Key: 1=Never; 2=Sometimes; 3=Often; 4=Very Often)

   a. Discussed or debated an issue of social, political, or philosophical importance

   b. Made a speech to a group

   c. Worked in a group with people who differed from you in terms of background, political orientation, points of view, etc.

   d. Discussed the ethical consequences of a course of action

   e. Creatively thought about new ideas or about ways to improve things

   f. Critically evaluated multiple solutions to a problem

   g. Discussed complex problems with others to develop a better solution

Development of Transferable Skills Questions

2. **During the current school year, whether course-related or not, about how often have you written something (paper, report, article, blog, etc.) that:**
(Key: 1=Never; 2=Sometimes; 3=Often; 4=Very Often)

a. Used information from a variety of sources (books, journals, Internet, databases, etc.)

b. Assessed the conclusions of a published work

c. Included ideas from more than one academic discipline

d. Presented multiple viewpoints or perspectives

Analysis: First Year LAU Students

- Aspects in the development of transferable skills that were considered regular (M≥ 3) by First Year LAU students:
    - Used information from a variety of sources (books, journals, Internet, databases, etc.)

- Aspects in the development of transferable skills that were considered uncommon (2 ≤M< 3) by First Year LAU students:
    - Discussed or debated an issue of social, political, or philosophical importance
    - Made a speech to a group
    - Worked in a group with people who differed from you in terms of background, political orientation, points of view, etc.
    - Discussed the ethical consequences of a course of action
    - Creatively thought about new ideas or about ways to improve things
    - Critically evaluated multiple solutions to a problem
    - Discussed complex problems with others to develop a better solution
    - Assessed the conclusions of a published work
    - Included ideas from more than one academic discipline
    - Presented multiple viewpoints or perspectives

Key: 1=Never; 2=Sometimes; 3=Often; 4=Very Often

Analysis: Senior LAU Students

- Aspects in the development of transferable skills that were considered regular (M$\geq$ 3) by Senior LAU students:
  - Worked in a group with people who differed from you in terms of background, political orientation, points of view, etc.
  - Creatively thought about new ideas or about ways to improve things
  - Critically evaluated multiple solutions to a problem
  - Used information from a variety of sources (books, journals, Internet, databases, etc.)
  - Included ideas from more than one academic discipline
  - Presented multiple viewpoints or perspectives

- Aspects in the development of transferable skills that were considered uncommon (2 $\leq$M$<$ 3) by Senior LAU students:
  - Discussed or debated an issue of social, political, or philosophical importance
  - Made a speech to a group
  - Discussed the ethical consequences of a course of action
  - Discussed complex problems with others to develop a better solution
  - Assessed the conclusions of a published work

Key: 1=Never; 2=Sometimes; 3=Often; 4=Very Often

LAU vs All NSSE (N=81)
First Year Students

- Aspects in the development of transferable skills where LAU First Year students' perceptions were significantly *lower* than all NSSE institutions:
  - Made a speech to a group
    (M_{LAU}=2.0, SD_{LAU}=0.9; $M_{ALL\ NSSE}$ = 2.2 , $SD_{All\ NSSE}$= 0.9; $p< 0.001$)
  - Discussed the ethical consequences of a course of action
    (M_{LAU}=2.3, SD_{LAU}=0.9; $M_{ALL\ NSSE}$ = 2.4, $SD_{All\ NSSE}$= 0.9; $p< 0.01$)
  - Assessed the conclusions of a published work
    (M_{LAU}=2.3, SD_{LAU}=1.0; $M_{ALL\ NSSE}$ = 2.6, $SD_{All\ NSSE}$= 1.0; $p< 0.001$)

Key: 1=Never; 2=Sometimes; 3=Often; 4=Very Often

LAU vs All NSSE (N=81)
Senior Students

- Aspects in the development of transferable skills where LAU Senior students' perceptions were significantly *higher* than all NSSE institutions:
  - Made a speech to a group
    (M_{LAU}=2.7, SD_{LAU}=1.0; $M_{ALL\ NSSE}$ = 2.5 , $SD_{All\ NSSE}$= 0.9; p< 0.01)
  - Worked in a group with people who differed from you in terms of background, political orientation, points of view, etc.
    (M_{LAU}=3.1, SD_{LAU}=0.8; $M_{ALL\ NSSE}$ = 2.9 , $SD_{All\ NSSE}$= 0.9; p< 0.001)
  - Used information from a variety of sources (books, journals, Internet, databases, etc.)
    (M_{LAU}=3.3, SD_{LAU}=0.7; $M_{ALL\ NSSE}$ = 3.2 , $SD_{All\ NSSE}$= 0.8; p< 0.05)
  - Included ideas from more than one academic discipline
    (M_{LAU}=3.1, SD_{LAU}=0.8; $M_{ALL\ NSSE}$ = 2.9, $SD_{All\ NSSE}$= 0.9; p< 0.001)
  - Presented multiple viewpoints or perspectives
    (M_{LAU}=3.1, SD_{LAU}=0.8; $M_{ALL\ NSSE}$ = 2.8 , $SD_{All\ NSSE}$= 0.9; p< 0.001)

Key: 1=Never; 2=Sometimes; 3=Often; 4=Very Often

LAU – Senior Students

Item	Mean	
	First Year Students	Senior Students
During the current school year, whether course-related or not, about how often have you done the following? Key: 1=Never; 2=Sometimes; 3=Often; 4=Very Often		
Worked in a group with people who differed from you in terms of background, political orientation, points of view, etc.	2.8	3.1
Creatively thought about new ideas or about ways to improve things	2.8	3.0
Critically evaluated multiple solutions to a problem	2.8	3.0
Discussed complex problems with others to develop a better solution	2.7	2.9
Discussed or debated an issue of social, political, or philosophical importance	2.5	2.7
Discussed the ethical consequences of a course of action	2.3	2.7
Made a speech to a group	2.0	2.7
During the current school year, whether course-related or not, about how often have you written something (paper, report, article, blog, etc.) that: Key: 1=Never; 2=Sometimes; 3=Often; 4=Very Often		
Used information from a variety of sources (books, journals, Internet, databases, etc.)	3.0	3.3
Included ideas from more than one academic discipline	2.7	3.1
Presented multiple viewpoints or perspectives	2.6	3.1
Assessed the conclusions of a published work	2.3	2.8

Development of Transferable Skills

During the current school year, whether course-related or not, about how often have you done the following?

Development of Transferable Skills

First Year Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*[1]	*Effect size*
2.5	1.0	2.6	0.9		-0.05
(1) * p< 0.05; ** p< 0.01; *** p< 0.001 (2-tailed)					

Senior Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*[1]	*Effect size*
2.7	1.0	2.7	1.0		0.05
(1) * p< 0.05; ** p< 0.01; *** p< 0.001 (2-tailed)					
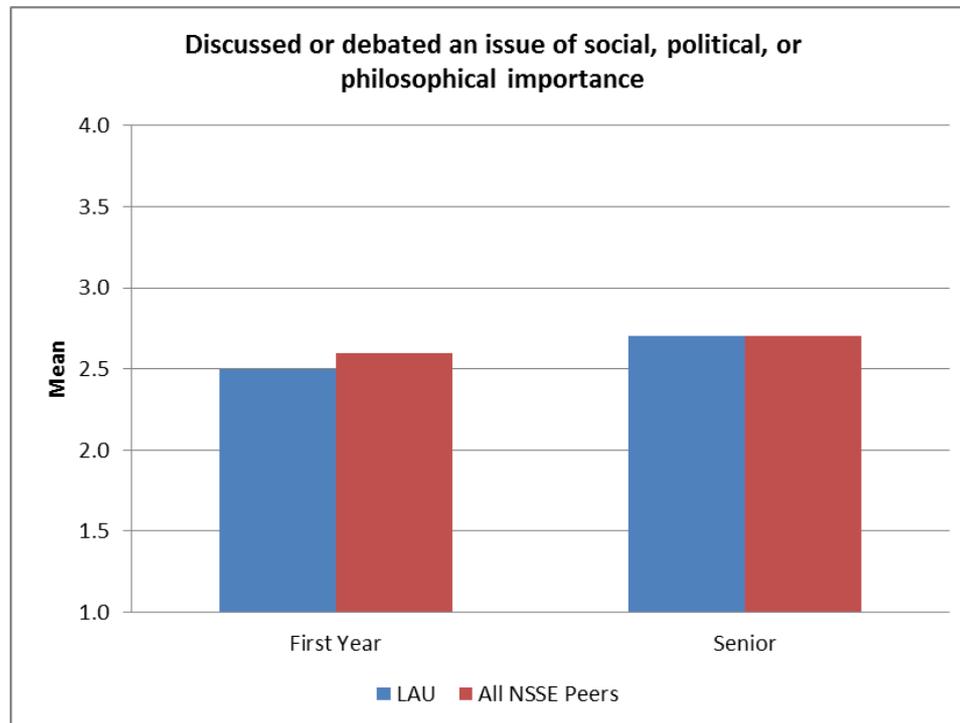
Discussed or debated an issue of social, political, or philosophical importance

Key: 1=Never; 2=Sometimes; 3=Often; 4=Very Often

Development of Transferable Skills

First Year Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*	*Effect size*
2.0	0.9	2.2	0.9	***	-0.20
(1) * p< 0.05; ** p< 0.01; *** p< 0.001 (2-tailed)					

Senior Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*	*Effect size*
2.7	1.0	2.5	0.9	**	0.18
(1) * p< 0.05; ** p< 0.01; *** p< 0.001 (2-tailed)					
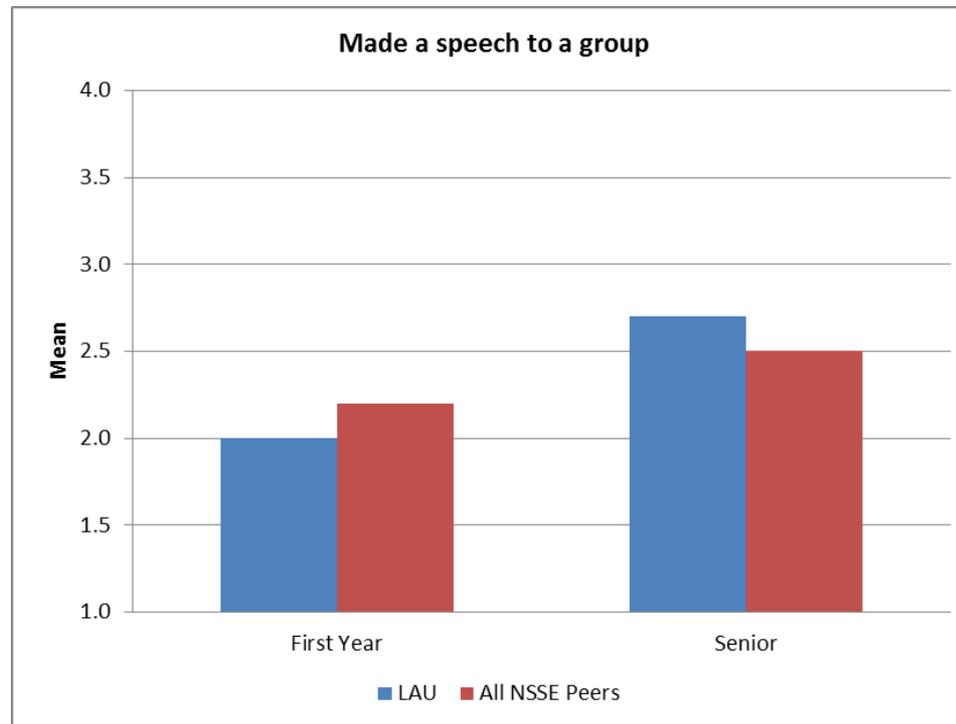
Key: 1=Never; 2=Sometimes; 3=Often; 4=Very Often

Development of Transferable Skills

First Year Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*	*Effect size*
2.8	1.0	2.7	0.9		0.08
(1) * p< 0.05; ** p< 0.01; *** p< 0.001 (2-tailed)					

Senior Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*	*Effect size*
3.1	0.8	2.9	0.9	***	0.29
(1) * p< 0.05; ** p< 0.01; *** p< 0.001 (2-tailed)					
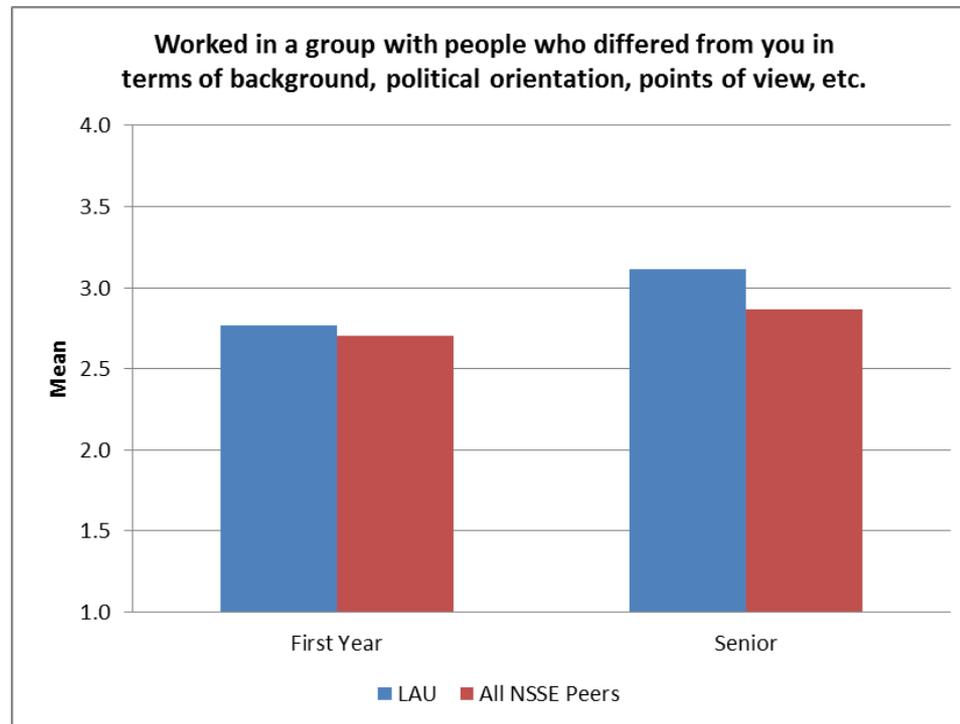
Key: 1=Never; 2=Sometimes; 3=Often; 4=Very Often

Development of Transferable Skills

First Year Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*	*Effect size*
2.3	0.9	2.4	0.9	**	-0.15
(1) * p< 0.05; ** p< 0.01; *** p< 0.001 (2-tailed)					

Senior Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*	*Effect size*
2.7	0.9	2.6	0.9		0.09
(1) * p< 0.05; ** p< 0.01; *** p< 0.001 (2-tailed)					
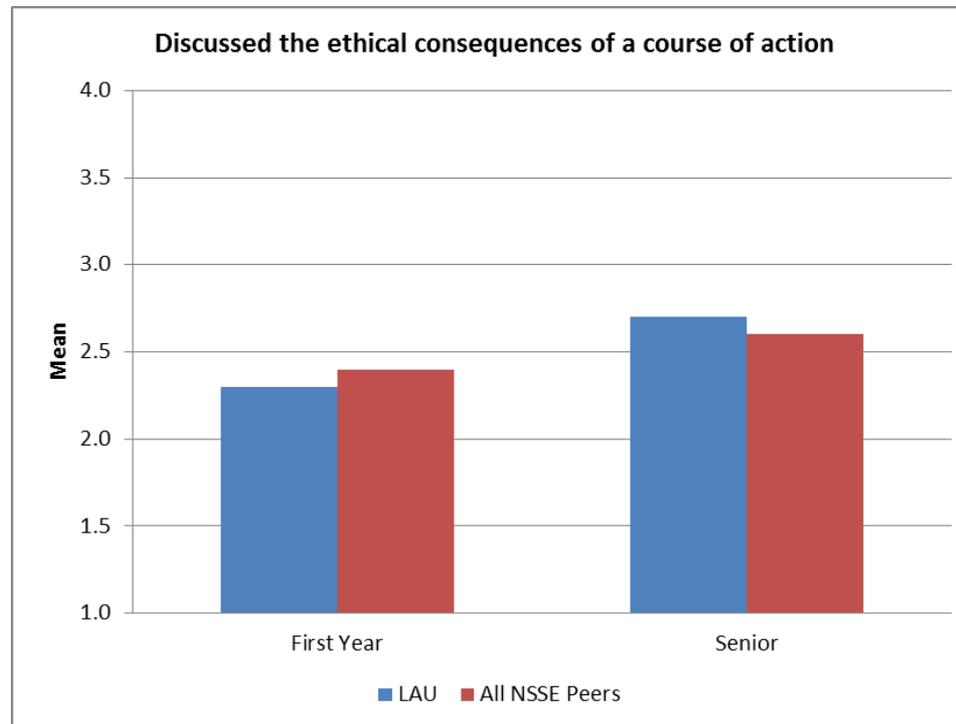
Key: 1=Never; 2=Sometimes; 3=Often; 4=Very Often
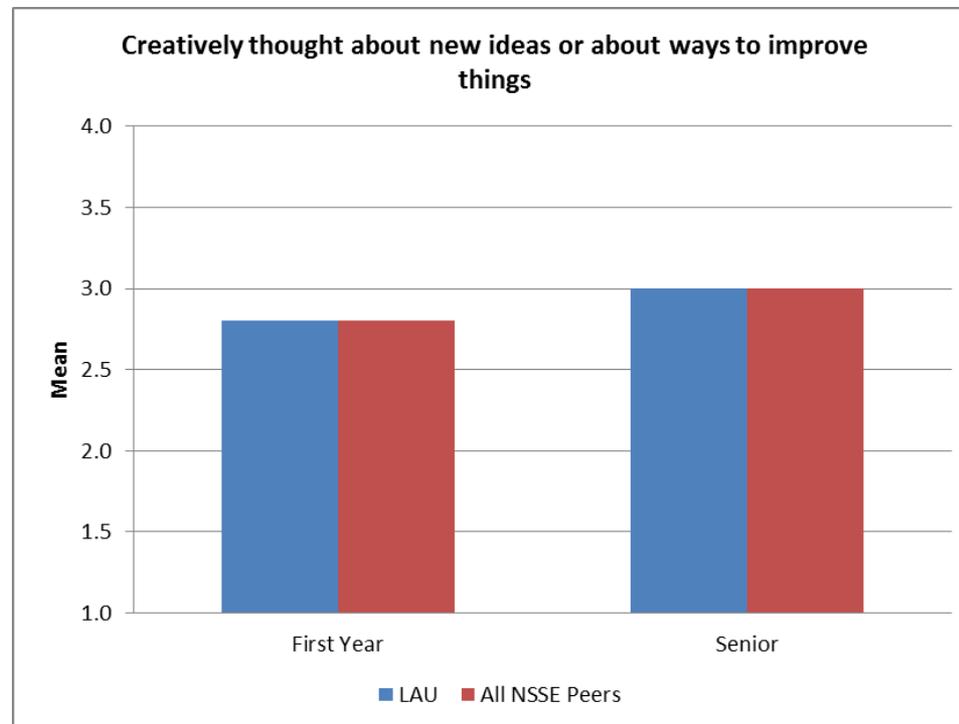
Development of Transferable Skills

First Year Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*	*Effect size*
2.8	0.9	2.8	0.9		-0.01
(1) * p< 0.05; ** p< 0.01; *** p< 0.001 (2-tailed)					

Senior Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*	*Effect size*
3.0	0.9	3.0	0.8		-0.06
(1) * p< 0.05; ** p< 0.01; *** p< 0.001 (2-tailed)					

Key: 1=Never; 2=Sometimes; 3=Often; 4=Very Often
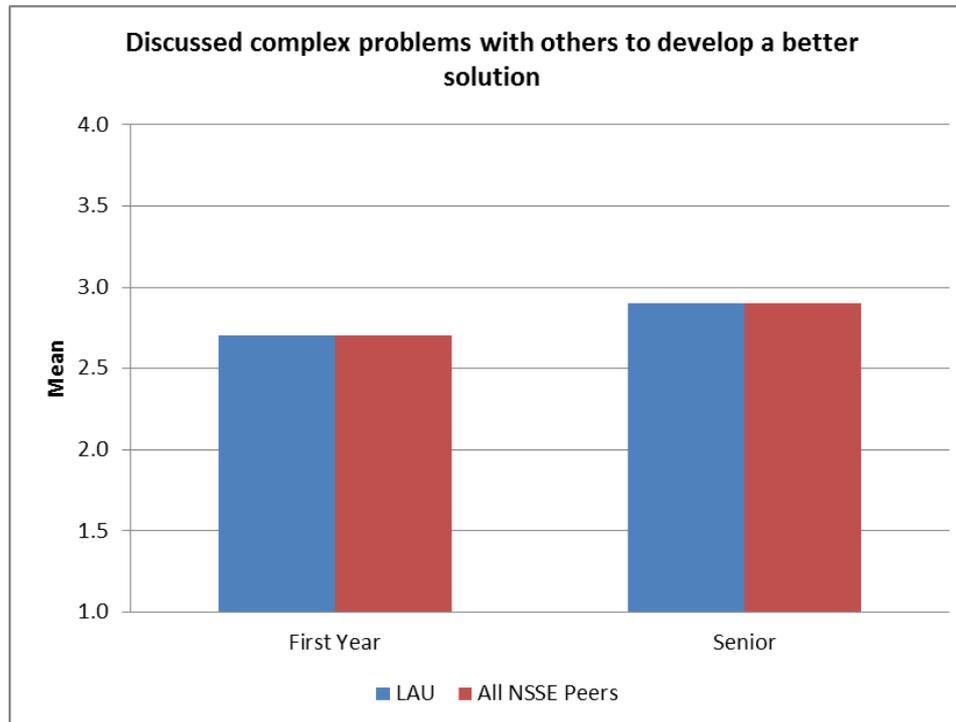
Development of Transferable Skills

First Year Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*	*Effect size*
2.7	0.9	2.7	0.9		0.02
Sig: *p<0.5; **p<0.01; ***p<0.001					

Senior Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*	*Effect size*
2.9	0.8	2.9	0.9		-0.02
Sig: *p<0.5; **p<0.01; ***p<0.001					

Discussed complex problems with others to develop a better solution

Key: 1=Never; 2=Sometimes; 3=Often; 4=Very Often

Development of Transferable Skills

During the current school year, whether course-related or not, about how often have you written something (paper, report, article, blog, etc.) that:

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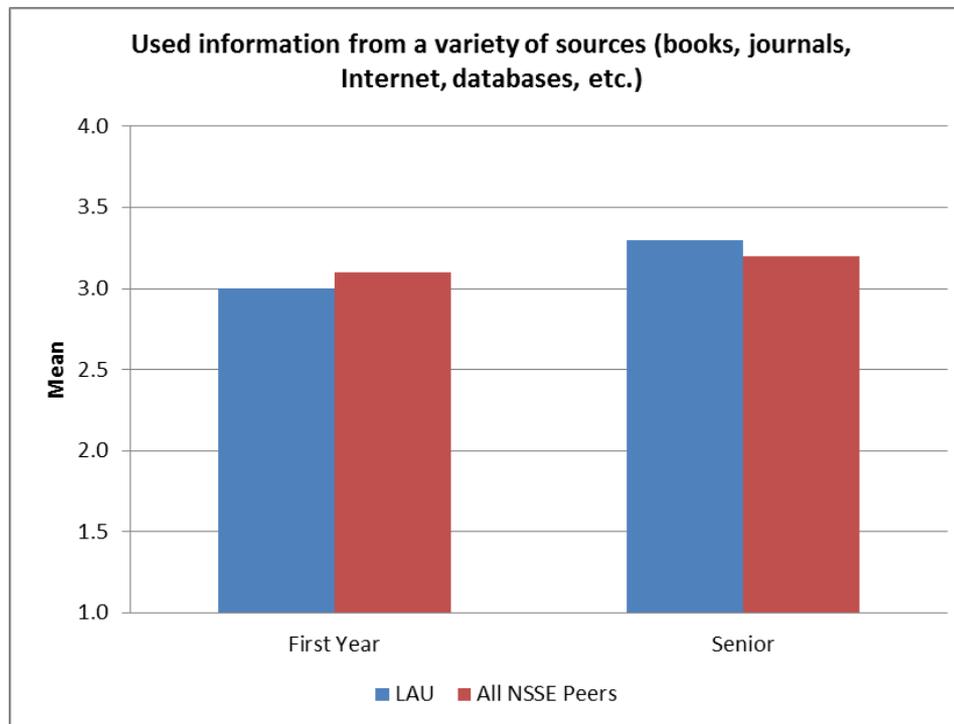
First Year Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*	*Effect size*
3.0	0.9	3.1	0.9		-0.08
(1) * p< 0.05; ** p< 0.01; *** p< 0.001 (2-tailed)					

Senior Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*	*Effect size*
3.3	0.7	3.2	0.8	*	0.13
(1) * p< 0.05; ** p< 0.01; *** p< 0.001 (2-tailed)					

Used information from a variety of sources (books, journals, Internet, databases, etc.)

Key: 1=Never; 2=Sometimes; 3=Often; 4=Very Often

Development of Transferable Skills

First Year Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*	*Effect size*
2.3	1.0	2.6	1.0	***	-0.29
(1) * p< 0.05; ** p< 0.01; *** p< 0.001 (2-tailed)					

Senior Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*	*Effect size*
2.8	0.9	2.8	1.0		0.04
(1) * p< 0.05; ** p< 0.01; *** p< 0.001 (2-tailed)					
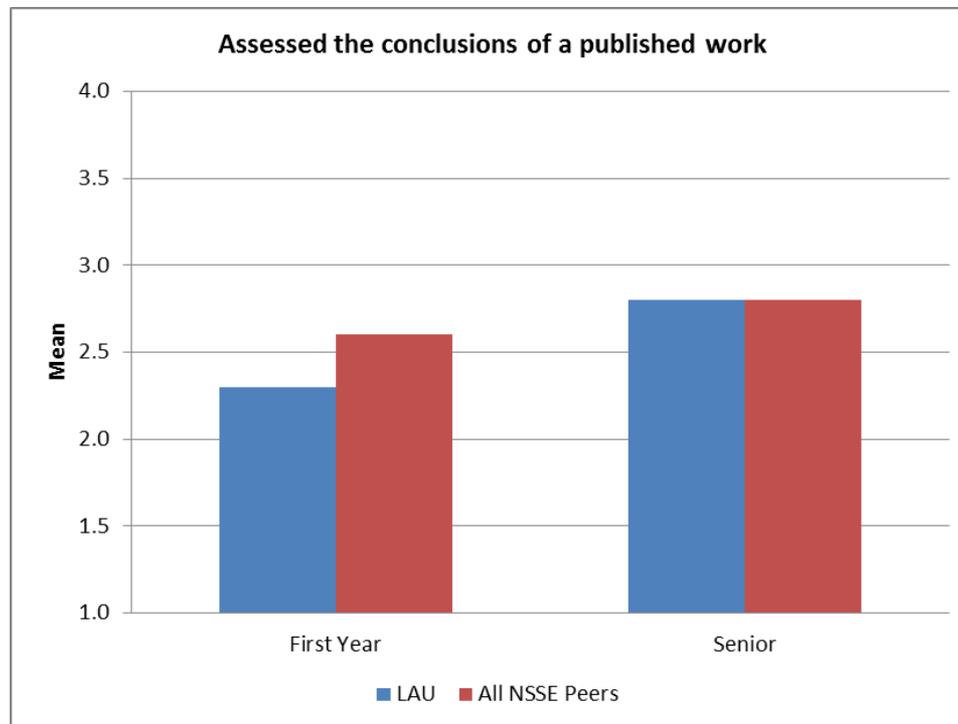
Key: 1=Never; 2=Sometimes; 3=Often; 4=Very Often
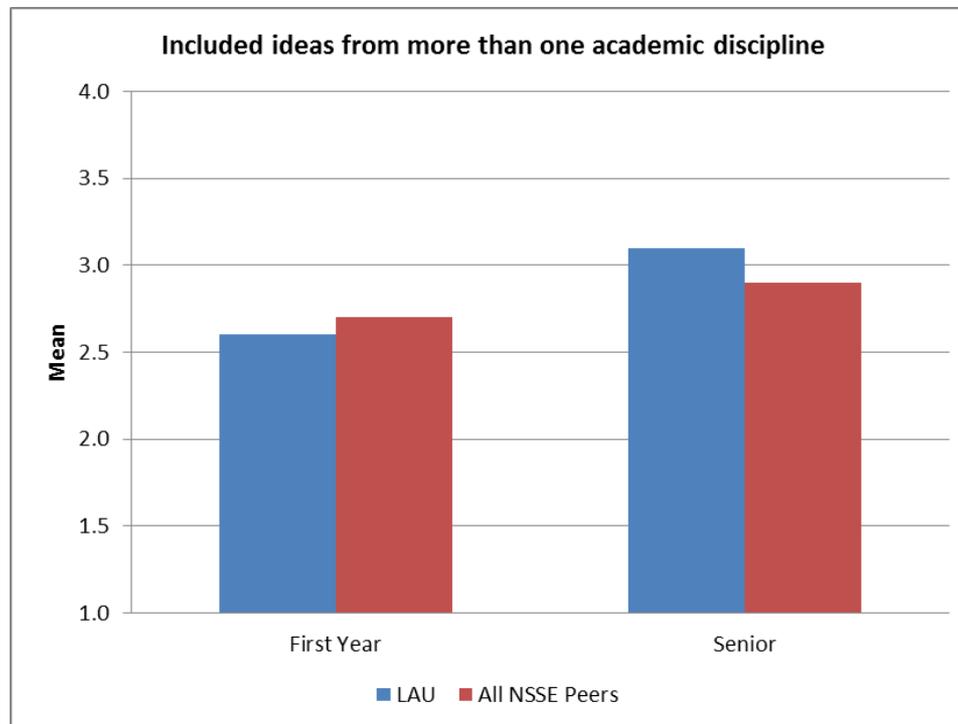
Development of Transferable Skills

First Year Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*	*Effect size*
2.6	0.9	2.7	0.9		-0.07
(1) * p< 0.05; ** p< 0.01; *** p< 0.001 (2-tailed)					

Senior Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*	*Effect size*
3.1	0.8	2.9	0.9	***	0.23
(1) * p< 0.05; ** p< 0.01; *** p< 0.001 (2-tailed)					

Key: 1=Never; 2=Sometimes; 3=Often; 4=Very Often

Development of Transferable Skills

First Year Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*	*Effect size*
2.7	0.9	2.7	0.9		-0.02
(1) * p< 0.05; ** p< 0.01; *** p< 0.001 (2-tailed)					

Senior Students

LAU		All NSSE Peers			
Mean	*SD*	*Mean*	*SD*	*Sig*	*Effect size*
3.1	0.8	2.8	0.9	***	0.27
(1) * p< 0.05; ** p< 0.01; *** p< 0.001 (2-tailed)					

Key: 1=Never; 2=Sometimes; 3=Often; 4=Very Often