

## **NSSE 2018 Engagement Indicators**

# Academic Challenge University of Houston

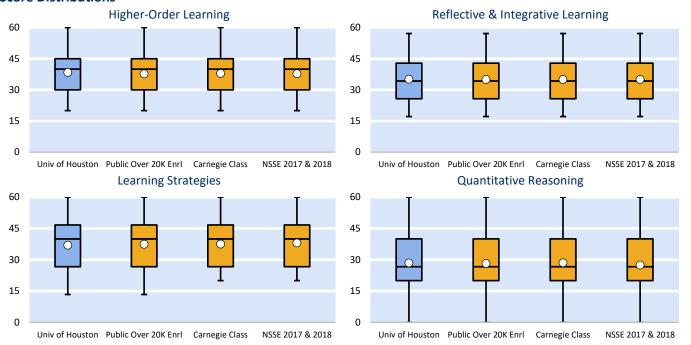
#### **Academic Challenge: First-year students**

Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities promote student learning by challenging and supporting them to engage in various forms of deep learning. Four Engagement Indicators are part of this theme: *Higher-Order Learning, Reflective & Integrative Learning, Learning Strategies,* and *Quantitative Reasoning*. Below and on the next page are three views of your results alongside those of your comparison groups.

Mean Comparisons	Univ of	Your first-year students compared with						
	Houston	Public Over 20K Enrl  Effect		Carnegie Class  Effect		NSSE 2017 & 2018 Effect		
Engagement Indicator	Mean	Mean	size	Mean	size	Mean	size	
Higher-Order Learning	38.4	37.7	.05	38.0	.03	37.8	.04	
Reflective & Integrative Learning	35.2	35.0	.01	35.0	.01	35.1	.01	
Learning Strategies	37.0	37.4	04	37.5	04	38.1 **	08	
Quantitative Reasoning	28.4	28.2	.02	28.6	01	27.5 *	.06	

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); Effect size: Mean difference divided by pooled standard deviation; Symbols on the Overview page are based on effect size and p before rounding; \*p < .05, \*\*p < .01, \*\*\*p < .001 (2-tailed).

#### **Score Distributions**



Notes: Each box-and-whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot represents the mean score. Refer to Detailed Statistics for your institution's sample sizes.



## **NSSE 2018 Engagement Indicators**

#### Academic Challenge University of Houston

## **Academic Challenge: First-year students (continued)**

#### **Performance on Indicator Items**

The table below displays how your students responded to each EI item, and the difference, in percentage points, between your students and those of your comparison group. Blue bars indicate how much higher your institution's percentage is from that of the comparison group. Dark red bars indicate how much lower your institution's percentage is from that of the comparison group.

Higher-Order Learning  Percentage responding "leary much" or "Quite a bit" about how much coursework emphasized  4b. Applying facts, theories, or methods to practical problems or new situations  73 +1			Percentage point difference <sup>a</sup> between your FY students and			
Percentage responding "Pory much" or "Quite a bit" about how much coursework emphasized  4b. Applying facts, theories, or methods to practical problems or new situations  4c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts  4d. Evaluating a point of view, decision, or information source  69 +1 +3 +4 +3 +0    4d. Evaluating a point of view, decision, or information source  69 +1 +3 +3 +0    4d. Evaluating a point of view, decision, or information source  69 +2 +3 +1    8e. Forming a new idea or understanding from various pieces of information  8e. Forming a new idea or understanding from various pieces of information  8e. Forming a new idea or understanding from various pieces of information  8e. Forming a new idea or understanding from various pieces of information  8e. Forming a new idea or understanding from various pieces of information  8e. Forming a new idea or understanding from various pieces of information  8e. Forming a new idea or understanding from various pieces of information  8e. Forming a new idea or understanding from various pieces of information  8e. Forming a new idea or understanding from various pieces of information  8e. Forming a new idea or understanding from various pieces of information  8e. Forming a new idea or understanding from various pieces of information  8e. Forming a new idea or understanding from various pieces of information  8e. Forming a new idea or understanding from various pieces of information (numbers, pieces)  8e. Reached various pieces of various pieces of information promerical information (numbers, pieces)  8e. Reached various pieces of various provers or various pieces of information pieces pieces and various pieces pieces and various pieces p	Higher Order Learning			C	NSSE 2017 &	
the Applying facts, theories, or methods to practical problems or new situations  73 +1   -2 +2   4c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts  74 +1   +3   4d. Evaluating a point of view, decision, or information source  75 +1   +3   +0   4d. Evaluating a point of view, decision, or information source  869 +1   +3   +0   4d. Forming a new idea or understanding from various pieces of information  87 +2   +1   +3   4d. Evaluating a point of view, decision, or information source  87 +1   +1   +1   48   -4   -4   -4   49   -4   -4   -4   40   -4   -4   41   -4   -4   42   -4   -4   43   -4   -4   44   -4   -4   45   -5   46   Combined ideas from different courses when completing assignments  48   -4   -4   -4   40   -4   41   -4   -4   42   -4   43   -4   44   -4   -4   45   -4   46   -4   -4   47   -4   48   -4   -4   49   -4   40   -4   40   -4   41   -4   41   -4   42   -4   43   44   -4   44   -4   45   -4   46   -4   47   -4   48   -4   49   -4   40   -4   40   -4   41   -4   41   -4   42   -4   43   44   -4   44   -4   45   46   -4   47   -4   48   -4   49   -4   40   -4   40   -4   41   -4   41   -4   42   -4   43   44   -4   44   -4   45   46   -4   47   -4   48   -4   49   -4   40   -4   40   -4   41   -4   41   -4   42   -4   43   44   -4   44   -4   45   46   -4   47   -4   48   -4   49   -4   40   -4   40   -4   41   -4   41   -4   42   -4   43   44   -4   44   -4   45   -4   46   -4   47   -4   48   -4   49   -4   40   -4   41   -4   41   -4   42   -4   43   44   -4   44   -4   45   -4   46   -4   47   -4   48   -4   49   -4   40   -4   41   -4   41   -4   42   -4   43   44   -4   44   -4   44   -4   45   -4   46   -4   47   -4   48   -4   49   -4   40   -4   41   -4   41   -4   42   -4   43   44   -4   44   -4   45   -4   46   -4   47   -4   48   -4   49   -4   40   -4   41   -4   41   -4   42   -4   43   -4   44   -4   44   -4   45   -4   46   -4   47   -4   48   -4   48   -4   49   -4   40   -4   41   -4   41   -4   41   -4   41   -4   42   -4   43   -4		Univ of Houston	Enri	Carnegie Class	2018	
4c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts  4d. Evaluating a point of view, decision, or information source  4e. Forming a new idea or understanding from various pieces of information  69 +2 +3 +1  11  Reflective & Integrative Learning  Percentage of students who responded that they "Very often" or "Often"  2a. Combined ideas from different courses when completing assignments  2b. Connected your learning to societal problems or issues  5c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments  2c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments  2c. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective  2c. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective  2f. Learned something that changed the way you understand an issue or concept  69 +3 +3 +3 +4 +3 +3 +3 +4 +3 +3 +3 +4 +3 +3 +4 +5 +5 +4 +5 +4 +5 +5 +5 +5 +5 +5 +5 +5 +5 +5 +5 +5 +5	Percentage responding "Very much" or "Quite a bit" about how much coursework emphasized	%	L			
4d. Evaluating a point of view, decision, or information source  4e. Forming a new idea or understanding from various pieces of information  4e. Forming a new idea or understanding from various pieces of information  4e. Forming a new idea or understanding from various pieces of information  4e. Forming a new idea or understanding from various pieces of information  4e. Forming a new idea or understanding from various pieces of information  4e. Forming a new idea or understanding from various pieces of information  4e. Forming a new idea or understanding from various pieces of information  4e. Forming a new idea or understanding from various pieces of information  4e. Forming a new idea or understand that they "Very often" or "Often"  2e. Combined ideas from different courses when completing assignments  2f. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course  2f. Learning that strengths and weaknesses of your own views on a topic or issue  2f. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective  2f. Learned something that changed the way you understand an issue or concept  2f. Learned something that changed the way you understand an issue or concept  2g. Connected ideas from your courses to your prior experiences and knowledge  7f. +0  -1  -2  Learning Strategies  7f3  -4  -5  9g. Reviewed your notes after class  63  -0  +0  -1  -2  30  Quantitative Reasoning  Percentage of students who responded that they "Very often" or "Often"  6a  Reached conclusions based on your own analysis of numerical information (numbers, gardens) who responded that they "Very often" or "Often"  6a  Reached conclusions based on your own analysis of numerical information (numbers, gardens) who responded that they "Very often" or "Often"  6b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	4b. Applying facts, theories, or methods to practical problems or new situations	73	+1	-2	+2	
Ae. Forming a new idea or understanding from various pieces of information  Reflective & Integrative Learning  Percentage of students who responded that they "Very often" or "Often"  2a. Combined ideas from different courses when completing assignments  48  48  4  4  4  4  3  2b. Connected your learning to societal problems or issues  52  40  11  41  41  41  41  42  2c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments  2d. Examined the strengths and weaknesses of your own views on a topic or issue  66  42  43  44  43  43  44  43  44  43  43	4c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts	72	+2	+1	+3	
Reflective & Integrative Learning  Percentage of students who responded that they "Very often" or "Often"  2a. Combined ideas from different courses when completing assignments  2b. Connected your learning to societal problems or issues  5c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments  2c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments  2c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments  2d. Examined the strengths and weaknesses of your own views on a topic or issue  66	4d. Evaluating a point of view, decision, or information source	69	+1	+3	+0	
Percentage of students who responded that they "Very often" or "Often"  2a. Combined ideas from different courses when completing assignments  48  48  40  41  40  32  2b. Connected your learning to societal problems or issues  52  40  41  40  21  22c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments  2d. Examined the strengths and weaknesses of your own views on a topic or issue  66  72  2c. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective  2f. Learned something that changed the way you understand an issue or concept  69  43  43  43  44  43  43  26. Connected ideas from your courses to your prior experiences and knowledge  77  40  71  72  73  74  74  75  76  76  76  77  76  76  77  77  78  79  79  79  70  70  70  70  70  70  70	4e. Forming a new idea or understanding from various pieces of information	69	+2	+3	+1	
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2b. Connected your learning to societal problems or issues  2c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments  2d. Examined the strengths and weaknesses of your own views on a topic or issue  2e. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective  2f. Learned something that changed the way you understand an issue or concept  2g. Connected ideas from your courses to your prior experiences and knowledge  77 +0	Percentage of students who responded that they "Very often" or "Often"					
2c. included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments  2d. Examined the strengths and weaknesses of your own views on a topic or issue  2e. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective  2f. Learned something that changed the way you understand an issue or concept  2g. Connected ideas from your courses to your prior experiences and knowledge  77 +0  1 -1  -0  Learning Strategies  Percentage of students who responded that they "Very often" or "Often"  9a. Identified key information from reading assignments  71 -3 -4 -5  9b. Reviewed your notes after class  63 -0 +0  -2  9c. Summarized what you learned in class or from course materials  59 -1 -2 -3  Quantitative Reasoning  Percentage of students who responded that they "Very often" or "Often"  6a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)  6b. Used numerical information to examine a real-world problem or issue (unemployment, dumerical information to examine a real-world problem or issue (unemployment, dumerical information, etc.)	2a. Combined ideas from different courses when completing assignments	48	-4	-4	-3	
discussions or assignments  2d. Examined the strengths and weaknesses of your own views on a topic or issue  2e. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective  2f. Learned something that changed the way you understand an issue or concept  2g. Connected ideas from your courses to your prior experiences and knowledge  77 +0 -1 -0  Learning Strategies  Percentage of students who responded that they "Very often" or "Often"  9a. Identified key information from reading assignments  71 -3 -4 -5  9b. Reviewed your notes after class  9c. Summarized what you learned in class or from course materials  59 -1 -2 -3  Quantitative Reasoning  Percentage of students who responded that they "Very often" or "Often"  6a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)  6b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	2b. Connected your learning to societal problems or issues	52	+0	+1	+0	
2e. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective 2f. Learned something that changed the way you understand an issue or concept 6g +3 +3 +3 +3 +3 +3 +3 +3 +3 +3 +3 +3 +3	AC.	52	+1	+1	+1	
26. Connected ideas from your courses to your prior experiences and knowledge  27. How the perspective 28. Connected ideas from your courses to your prior experiences and knowledge  29. Connected ideas from your courses to your prior experiences and knowledge  29. Connected ideas from your courses to your prior experiences and knowledge  29. Connected ideas from your courses to your prior experiences and knowledge  29. Connected ideas from your courses to your prior experiences and knowledge  29. Connected ideas from your courses to your prior experiences and knowledge  29. Learning Strategies  20. Learning Strate	2d. Examined the strengths and weaknesses of your own views on a topic or issue	66	+2	+3	+2	
2g. Connected ideas from your courses to your prior experiences and knowledge 77 +0 -1 -0  Learning Strategies  Percentage of students who responded that they "Very often" or "Often"  9a. Identified key information from reading assignments 71 -3 -4 -5  9b. Reviewed your notes after class 63 -0 +0   -0   -2  9c. Summarized what you learned in class or from course materials 59 -1   -2   -3  Quantitative Reasoning  Percentage of students who responded that they "Very often" or "Often"  6a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)  6b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	<b>78</b> .	73	+3	+4	+3	
Learning Strategies  Percentage of students who responded that they "Very often" or "Often"  9a. Identified key information from reading assignments  71  -3  -4  -5  9b. Reviewed your notes after class  63  -0 +0  -2  9c. Summarized what you learned in class or from course materials  59  -1  -2  -3  Quantitative Reasoning  Percentage of students who responded that they "Very often" or "Often"  6a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)  6b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	2f. Learned something that changed the way you understand an issue or concept	69	+3	+3	+3	
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9a. Identified key information from reading assignments  71  -3  -4  -5  9b. Reviewed your notes after class  63  -0  +0  -2  9c. Summarized what you learned in class or from course materials  59  -1  -2  -3  Quantitative Reasoning  Percentage of students who responded that they "Very often" or "Often"  6a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)  Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	Learning Strategies					
9b. Reviewed your notes after class  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials  9d. Summarized what you learned in class or from course materials	Percentage of students who responded that they "Very often" or "Often"					
9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in class or from course materials  9c. Summarized what you learned in c	9a. Identified key information from reading assignments	71	-3	-4	-5	
Quantitative Reasoning  Percentage of students who responded that they "Very often" or "Often"  6a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)  Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	9b. Reviewed your notes after class	63	-0	+0	-2	
Percentage of students who responded that they "Very often" or "Often"  6a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)  6b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	9c. Summarized what you learned in class or from course materials	59	-1	-2	-3	
Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)  Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	Quantitative Reasoning					
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6b. climate change, public health, etc.)	ha i i i i i i i i i i i i i i i i i i i	56	+2	+1	+4	
6c. Evaluated what others have concluded from numerical information 43 +2 +1 +1 +4	6h.	42	+2	+2	+3	
	6c. Evaluated what others have concluded from numerical information	43	+2	+1	+4	

Notes: Refer to your Frequencies and Statistical Comparisons report for full distributions and significance tests. Item numbering corresponds to the survey facsimile included in your Institutional Report and available on the NSSE website.

a. Percentage point difference = Institution percentage - Comparison group percentage. Because results are rounded to whole numbers, differences of less than 1 point may or may not display a bar. Small, but nonzero differences may be represented as +0 or -0.