

Preliminary Analysis of the 2010 Beginning University Survey of Student Engagement (BUSSE)

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- Beginning University Survey of Student Engagement (BUSSE) collects data about two main constructs:
 - entering university students' high school academic and co-curricular experiences; and
 - their expectations for participating in educationally purposeful activities during the first college year.
- BUSSE was locally administered by York but the responses and results were collected and provided by the Indiana University Bloomington.
- BUSSE administration usually takes place prior to the start of fall classes and is designed to be paired with a NSSE administration at the end of the first university year, providing an understanding of first-year student engagement.
- York has participated in BUSSE in 2007 and 2010.

- In order to understand the high school experiences and post-secondary expectations of beginning university students, response scales were constructed by clustering relevant questions into six categories:
 - High school academic engagement (HSE)
 - Expected academic engagement (EAE)
 - Expected academic perseverance (EAP)
 - Expected academic difficulty (EAD)
 - Perceived academic preparation (PAP)
 - Importance of campus environment (ICE)
- The scales were built by converting the responses for each question to a 0 - 10 range. A mean scale score was then calculated for each student.
- This report presents the BUSSE 2010 results in terms of these six scales and provides first-generation comparisons.

Mapping questions to scales (I)

Scale	Questions
High school academic engagement (HSE) Engagement in educationally relevant behaviors during the last year of high school	Assigned reading (textbooks or other course materials)
	Writing short papers or reports (5 or fewer pages)
	Writing longer papers or reports (more than 5 pages)
	Preparing for class (studying, doing homework, rehearsing, etc.)
	Asked questions in class or contributed to class discussions
	Made a class presentation
	Discussed grades or assignments with a teacher
	Worked with other students on projects during class
	Worked with classmates outside of class to prepare class assignments
	Prepared two or more drafts of a paper or assignment before turning it in
	Discussed ideas from your readings or classes with teachers outside of class
Discussed ideas from your readings or classes with others outside of class (students, family members, etc.)	
Scale	Questions
Expected Academic Engagement (EAE) Expected engagement in educationally relevant behaviors during the first year of university	Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)
	Ask questions in class or contribute to class discussions
	Make a class presentation
	Work with other students on projects during class
	Work with classmates outside of class to prepare class assignments
	Discuss grades or assignments with an instructor
	Discuss ideas from your readings or classes with faculty members outside of class
Discuss ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)	

Mapping questions to scales (II)

Scale	Questions
Expected Academic Perseverance (EAP) Student certainty that they will persist in the face of academic adversity	Study when there are other interesting things to do
	Find additional information for course assignments when you don't understand the material
	Participate regularly in course discussions, even when you don't feel like it
	Ask instructors for help when you struggle with course assignments
	Finish something you have started when you encounter challenges
	Stay positive, even when you do poorly on a test assignment
Scale	Questions
Expected Academic Difficulty (EAD) Expected academic difficulty during the first year of university	Learning course material
	Managing your time
	Getting help with school work
	Interacting with faculty
Scale	Questions
Perceived Academic Preparation (PAP) Student perception of their academic preparation	Write clearly and effectively
	Speak clearly and effectively
	Think critically and analytically
	Analyze math or quantitative problems
	Use computing and information technology
	Work effectively with others
Learn effectively on your own	
Scale	Questions
Importance of Campus Environment (ICE) Student-rated importance that the institution provides a challenging and supportive environment	A challenging academic experience
	Support to help you succeed academically
	Opportunities to interact with students from different economic, social, and racial or ethnic backgrounds
	Assistance coping with your non-academic responsibilities (work, family, etc.)
	Support to help you thrive socially
	Opportunities to attend campus events and activities

Response rate and demographics

Year	Response rate	Number of responses	Complete responses	Partial responses
2007	17.10%	738		
2010	19.10%	1,469	1,341	128

FG	Non-FG	Total	Missing
619 (46.6%)	709 (53.4%)	1,328	141
F	M	Total	Missing
1,055 (71.8%)	414 (28.2%)	1,469	0

Gender	FG	Non-FG	Total
F	471 (49%)	491 (51%)	962
M	148 (40.4%)	218 (59.6%)	366
Total	619 (46.6%)	709 (53.4%)	1,328

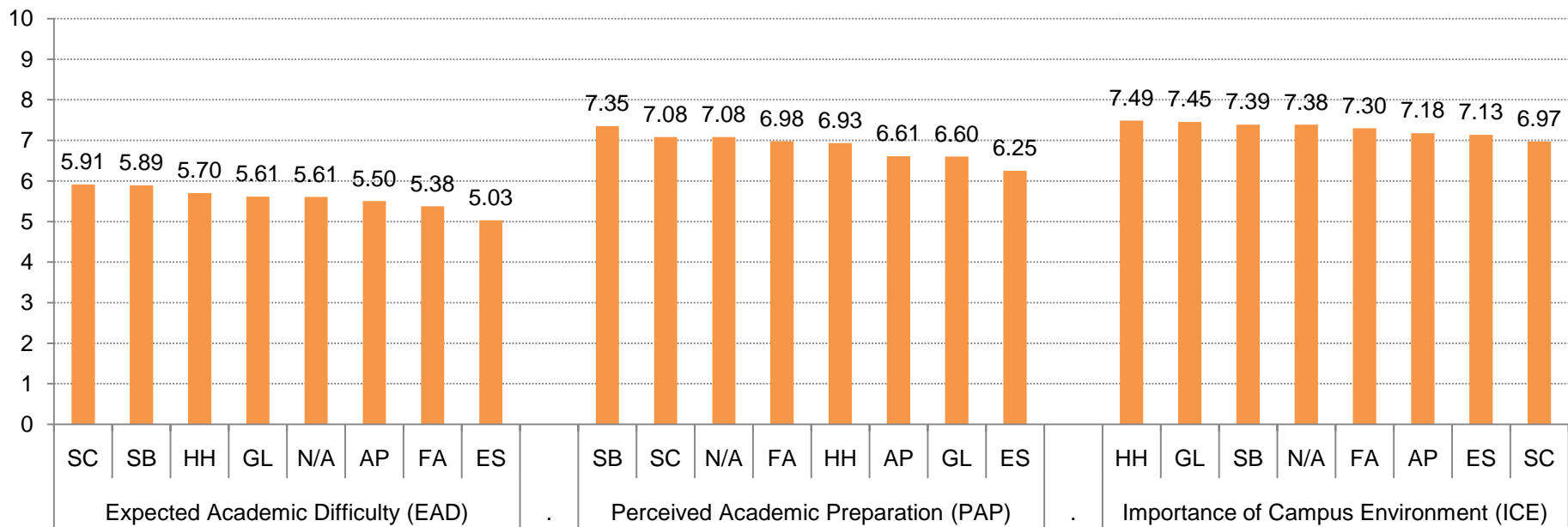
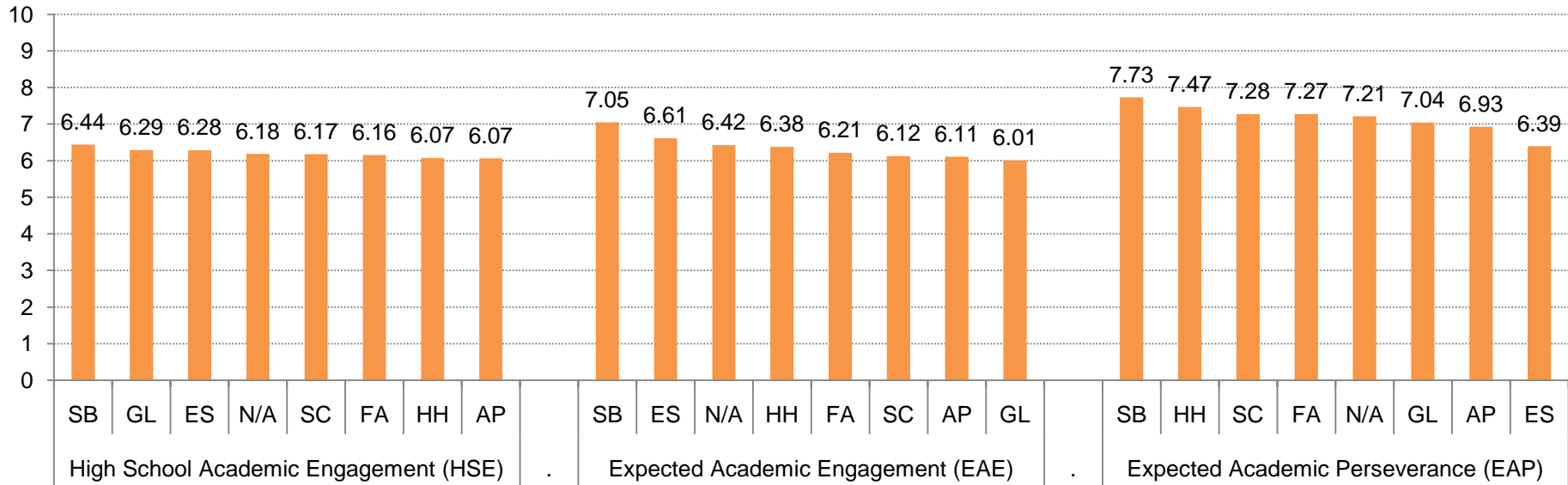
York BUSSE 2010 mean scale scores

BUSSE Scales	All students			Gender Comparisons					First-Generation Comparisons				
	N	Mean s	SD	N Female	N Male	Mean Female	Mean Male	Effect size	FG	Non- FG	Mean FG	Mean Non-FG	Effect size
High School Academic Engagement (HSE)	1,398	6.14	1.40	782	304	6.22 ***	5.92	0.21	619	707	6.00 **	6.24	-0.17
Expected Academic Engagement (EAE)	1,365	6.24	1.68	762	300	6.25	6.20	0.03	618	705	5.99 ***	6.42	-0.26
Expected Academic Perseverance (EAP)	1,356	7.17	1.70	763	295	7.18	7.14	0.03	619	708	7.00 ***	7.33	-0.20
Expected Academic Difficulty (EAD)	1,348	5.59	1.90	757	293	5.66 *	5.42	0.13	617	707	5.75 **	5.47	0.15
Perceived Academic Preparation (PAP)	1,343	6.83	1.60	754	293	6.80	6.90	-0.06	619	705	6.64 ***	7.00	-0.23
Importance of Campus Environment (ICE)	1,336	7.27	1.70	754	289	7.41 ***	6.89	0.30	616	708	7.16 *	7.36	-0.11

T-tests results (2-tailed): * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Effect size is the mean difference divided by pooled standard deviation. It indicates the practical significance of the mean difference (0.2 is considered small, 0.5 moderate, and 0.8 large). A positive sign indicates that females score higher than males and first-generation students score higher than non-first-generation..

York BUSSE 2010 - Mean scale scores by faculty



York BUSSE 2010 mean scale scores by faculty

Faculty	High school academic engagement (HSE)				Expected academic engagement (EAE)				Expected academic perseverance (EAP)			
	N	Fac mean	Mean of others	Effect size	N	Fac mean	Mean of others	Effect size	N	Fac mean	Mean of others	Effect size
LA & PS	515	6.07	6.18	-0.08	504	6.11 *	6.31	-0.12	499	6.93 ***	7.31	-0.22
Env. Studies	18	6.28	6.14		17	6.61	6.23		17	5.03	5.6	
Fine Arts	185	6.16	6.14	0.01	182	6.21	6.24	-0.02	183	7.27	7.15	0.07
Health	237	6.07	6.15	-0.06	233	6.38	6.21	0.1	232	7.47 **	7.11	0.21
Glendon	117	6.29	6.13	0.12	116	6.01	6.26	-0.15	115	7.04	7.18	-0.08
Schulich	70	6.44	6.12	0.23	68	7.05 ***	6.19	0.51	67	7.73 **	7.14	0.35
Science	161	6.17	6.14	0.03	155	6.12	6.25	-0.07	153	7.28	7.15	0.07
N/A	95	6.18	6.14	0.03	90	6.42	6.22	0.12	90	7.21	7.17	0.03

Faculty	Expected academic difficulty (EAD)				Perceived academic preparation (PAP)				Importance of campus environment (ICE)			
	N	Fac mean	Mean of others	Effect size	N	Fac mean	Mean of others	Effect size	N	Fac mean	Mean of others	Effect size
LA & PS	495	5.5	5.65	-0.08	494	6.61 ***	6.96	-0.22	492	7.18	7.33	-0.09
Env. Studies	17	5.03	5.6		17	6.25	6.84		17	7.13	7.27	
Fine Arts	183	5.38	5.63	-0.13	183	6.98	6.81	0.11	181	7.3	7.27	0.02
Health	231	5.7	5.57	0.07	231	6.93	6.81	0.08	231	7.49 *	7.23	0.16
Glendon	113	5.61	5.59	0.01	110	6.6	6.85	-0.16	111	7.45	7.26	0.11
Schulich	67	5.89	5.58	0.16	67	7.35 **	6.8	0.34	67	7.39	7.27	0.07
Science	152	5.91 *	5.55	0.19	152	7.08	6.8	0.18	150	6.97 *	7.31	-0.2
N/A	90	5.61	5.59	0.007	89	7.08	6.81	0.17	87	7.38	7.26	0.07

T-tests results (2-tailed): * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Effect size is the mean difference divided by pooled standard deviation. It indicates the practical significance of the mean difference (0.2 is considered small, 0.5 moderate, and 0.8 large). A positive sign indicates that a particular faculty scores higher than the rest.

York BUSSE 2010 mean scale scores by faculty and first generation status

Faculty	High school academic engagement (HSE)					Expected academic engagement (EAE)					Expected academic perseverance (EAP)				
	FG	Non-FG	Mean FG	Mean non-FG	Effect size	FG	Non-FG	Mean FG	Mean non-FG	Effect size	FG	Non-FG	Mean FG	Mean non-FG	Effect size
LA & PS	262	225	5.93	6.16	-0.16	261	225	5.91 *	6.31	-0.23	262	226	6.74 **	7.21	-0.26
Env. Studies	4	12	7.06	5.97		4	12	7.65	6.25		4	12	5.75	6.42	
Fine Arts	73	107	6.07	6.22	-0.12	73	106	5.97	6.38	-0.27	73	107	7.24	7.29	-0.03
Health	110	119	5.94	6.18	-0.19	110	118	6.23	6.53	-0.18	110	119	7.24 *	7.70	-0.29
Glendon	54	57	6.12	6.44	-0.23	54	57	5.76	6.12	-0.23	54	57	6.85	7.20	-0.23
Schulich	17	50	6.50	6.46	0.03	17	50	6.69	7.11	-0.26	17	50	7.82	7.70	0.08
Science	53	97	5.98	6.22	-0.17	53	97	5.83	6.21	-0.24	53	97	7.32	7.18	0.09
N/A	46	40	6.01	6.48	-0.32	46	40	5.97 *	7.01	-0.66	46	40	7.09	7.43	-0.19

Faculty	Expected academic difficulty (EAD)					Perceived academic preparation (PAP)					Importance of campus environment (ICE)				
	FG	Non-FG	Mean FG	Mean non-FG	Effect size	FG	Non-FG	Mean FG	Mean non-FG	Effect size	FG	Non-FG	Mean FG	Mean non-FG	Effect size
LA & PS	260	226	5.57	5.42	0.07	262	226	6.55	6.67	-0.07	261	226	7.16	7.18	-0.01
Env. Studies	4	12	5.00	4.92		4	12	6.71	6.00		4	12	7.82	6.94	
Fine Arts	73	107	5.64	5.19	0.25	73	107	6.93	7.02	-0.06	73	107	7.03	7.47	-0.29
Health	110	118	5.83	5.58	0.14	110	118	6.54 ***	7.31	-0.54	110	119	7.11 **	7.82	-0.41
Glendon	54	57	5.59	5.58	0.00	54	55	6.37	6.83	-0.31	53	57	7.25	7.62	-0.25
Schulich	17	50	6.32	5.74	0.29	17	50	7.27	7.38	-0.07	17	50	7.98	7.19	0.50
Science	53	97	6.25	5.84	0.23	53	97	6.82	7.16	-0.20	53	97	6.91	7.01	-0.05
N/A	46	40	6.25 **	4.89	0.67	46	40	6.73 **	7.60	-0.61	45	40	7.40	7.44	-0.02

T-tests results (2-tailed): * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Effect size is the mean difference divided by pooled standard deviation. It indicates the practical significance of the mean difference (0.2 is considered small, 0.5 moderate and 0.8 large). A positive sign indicates that first-generation students score higher than non-first-generation.