

INTERNATIONAL EDUCATION & STUDENT SUCCESS

UNIVERSITY OF WYOMING

AUGUST 6, 2019

Anthony C. Ogden, Ph.D.
Global Engagement Office
[<http://www.uwyo.edu/geo/>]

Anupma Singh, Ph.D.
Office of Institutional Analysis
[<http://www.uwyo.edu/oia/>]

INTERNATIONAL EDUCATION & STUDENT SUCCESS
UNIVERSITY OF WYOMING

OVERVIEW

The National Survey of Student Engagement (NSSE) annually collects information at universities and colleges across the country about first-year and senior students' participation in programs and activities that institutions provide for their learning and personal development. The results provide an estimate of how undergraduates spend their time and what they gain from higher education.¹ Institutions such as the University of Wyoming (UW) may use this data to identify aspects of the undergraduate experience inside and outside the classroom that can be improved through changes in policies and practices more consistent with best practices in undergraduate education.

This report presents findings from an examination of UW's 2015 and 2018 NSSE results in relation to international education and student success. Specifically, education abroad programming is analyzed as a high-impact practice in relation to student engagement by comparing NSSE responses of those who planned to or actually studied abroad with those who did not. Similarly, international students responses are reviewed relative to those of domestic students to understand how UW's international students differently engage as undergraduates. The findings discussed herein are based only on comparative analyses. More sophisticated research is needed to account for self-selection bias and to determine the extent to which differences are based on causative variables.

NATIONAL SURVEY OF STUDENT ENGAGEMENT

The NSSE survey is organized around ten indicators within four academic engagement themes: *Academic Challenge*, *Learning with Peers*, *Experiences with Faculty*, and *Campus Environment*.

1. *Higher-Order Learning*. Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities promote high levels of student achievement by calling on students to engage in complex cognitive tasks requiring more than mere memorization of facts. This Engagement Indicator captures how much students' coursework emphasizes challenging cognitive tasks such as application, analysis, judgment, and synthesis.
2. *Reflective & Integrative Learning*. Personally connecting with course material requires students to relate their understandings and experiences to the content at hand. Instructors emphasizing reflective and integrative learning motivate students to make connections between their learning and the world around them, reexamining their own beliefs and considering issues and ideas from others' perspectives.
3. *Learning Strategies*. College students enhance their learning and retention by actively engaging with and analyzing course material rather than approaching learning as absorption. Examples of effective learning strategies include identifying key information in readings, reviewing notes after class, and summarizing course material. Knowledge about the prevalence of effective learning strategies helps colleges and universities target interventions to promote student learning and success.
4. *Quantitative Reasoning*. Quantitative literacy—the ability to use and understand numerical and statistical information in everyday life—is an increasingly important outcome of higher education. All students, regardless of major, should have ample opportunities to develop their ability to reason quantitatively—to evaluate, support, and critique arguments using numerical and statistical information.
5. *Collaborative Learning*. Collaborating with peers in solving problems or mastering difficult material deepens understanding and prepares students to deal with the messy, unscripted problems they encounter during and after college. Working on group projects, asking others for help with difficult material or explaining it to others, and working through course material in preparation for exams all represent collaborative learning activities.
6. *Discussions with Diverse Others*. Colleges and universities afford students new opportunities to interact with and learn from others with different backgrounds and life experiences. Interactions across difference, both inside and

¹ National Survey of Student Engagement (NSSE), <http://nsse.indiana.edu/html/about.cfm>

outside the classroom, confer educational benefits and prepare students for personal and civic participation in a diverse and interdependent world.

7. *Student-Faculty Interaction.* Interactions with faculty can positively influence the cognitive growth, development, and persistence of college students. Through their formal and informal roles as teachers, advisors, and mentors, faculty members model intellectual work, promote mastery of knowledge and skills, and help students make connections between their studies and their future plans.
8. *Effective Teaching Practices.* Student learning is heavily dependent on effective teaching. Organized instruction, clear explanations, illustrative examples, and effective feedback on student work all represent aspects of teaching effectiveness that promote student comprehension and learning.
9. *Quality of Interactions.* College environments characterized by positive interpersonal relations promote student learning and success. Students who enjoy supportive relationships with peers, advisors, faculty, and staff are better able to find assistance when needed, and to learn from and with those around them.
10. *Supportive Environment.* Institutions that are committed to student success provide support and involvement across a variety of domains, including the cognitive, social, and physical. These commitments foster higher levels of student performance and satisfaction. This Engagement Indicator summarizes students' perceptions of how much an institution emphasizes services and activities that support their learning and development.

EDUCATION ABROAD

NSSE findings suggest that UW freshman are increasingly expecting to be more academically and socially engaged during their time at the University of Wyoming. For the 2015 and 2018 reporting years, those students planning to study abroad are much more engaged as indicated on all four engagement themes of the NSSE report, thus further emphasizing the need to better showcase education abroad opportunities to prospective students. Coupled with the potential of enrolling high-achieving students by strategically promoting education abroad, these data suggest that students who opt to study abroad are more active and engaged. Such students are more likely to be successfully retained and persist to graduation.

Freshman Participants		N	Academic Challenge	Learning with Peers	Experiences with Faculty	Campus Environment
2015	Not decided or do not plan	92	35.57	36.31	29.23	40.53
	Plan to or studied abroad	73	36.79	39.70	32.66	41.26
2018	Not decided or do not plan	91	32.10	34.03	27.67	37.62
	Plan to or studied abroad	61	32.87	37.28	29.78	38.51
2 years	Not decided or do not plan	183	33.86	35.18	28.46	39.09
	Plan to or studied abroad	134	35.01	38.60	31.35	40.01

Similarly, a comparison of senior students who studied abroad with those who did not shows that education abroad participants are significantly more academically and socially engaged students. Findings suggest that these students are academically challenged, are connected to course material and adopt strategies that support effective learning. They are more collaborative in their learning and are generally more welcoming of other people and ways of knowing. They report significantly more involvement with faculty members and academic advisors, particularly with research projects beyond program requirements, discussions outside of the classroom, and with career planning. Those who studied abroad are more adept at leveraging campus support and are also significantly more likely to be involved in enriching activities such as campus activities and social events. Perhaps an ideal talking point for both admissions and advancement officers alike, these students report that UW is providing them with the support they need to thrive socially and succeed academically.

Senior Participants		N	Academic Challenge	Learning with Peers	Experiences with Faculty	Campus Environment
2015	Not decided or do not plan	92	37.92	35.42	31.17	37.88
	Plan to or studied abroad	73	39.83	39.29	36.15	38.56
2018	Not decided or do not plan	91	34.49	33.13	28.54	34.29
	Plan to or studied abroad	61	35.11	36.92	32.17	36.10
2 years	Not decided or do not plan	183	36.23	34.30	29.88	36.11
	Plan to or studied abroad	134	37.63	38.18	34.30	37.42

Senior Participants, NSSE 2015 and 2018	Weighted Mean for those who <i>did not</i> study abroad	Weighted Mean for those <i>did</i> study abroad	Mean difference	*-< 0.05 **< 0.01
Academic Challenge				
Higher-Order Learning	39.29	40.33	-1.04	*
Applying facts, theories, or methods to practical problems or new situations	42.40	43.49	-1.09	*
Analyzing an idea, experience, or line of reasoning in depth by examining its parts	40.29	40.28	0.01	0.98
Evaluating a point of view, decision, or information source	36.92	38.47	-1.55	*
Forming a new idea or understanding from various pieces of information	37.51	39.05	-1.54	**
Reflective and Integrative Learning	37.61	40.50	-2.89	**
Combined ideas from different courses when completing assignments	40.10	42.35	-2.25	**
Connected your learning to societal problems or issues	35.59	38.74	-3.15	**
Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	31.15	34.67	-3.52	**
Examined the strengths and weaknesses of your own views on a topic or issue	36.41	39.31	-2.90	**
Tried to better understand someone else's views by imagining how an issue looks from his or her perspective	37.80	40.64	-2.84	**
Learned something that changed the way you understand an issue or concept	38.19	41.69	-3.50	**
Connected ideas from your courses to your prior experiences and knowledge	44.00	46.08	-2.08	**
Learning Strategies:	38.25	37.99	0.26	.80
Identified key information from reading assignments	31.49	32.80	-1.31	*
Reviewed your notes after class	27.79	26.84	0.95	.169

Senior Participants, NSSE 2015 and 2018	Weighted Mean for those who <i>did not</i> study abroad	Weighted Mean for those <i>did</i> study abroad	Mean difference	*-< 0.05 **< 0.01
Summarized what you learned from class or from course materials	28.07	27.38	0.68	.308
<i>Quantitative Reasoning</i>	<i>29.77</i>	<i>32.06</i>	<i>-2.28</i>	<i>*</i>
Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	26.65	26.90	-0.26	.710
Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	23.94	25.06	-1.12	.119
Evaluated what others have concluded from numerical information	24.13	26.02	-1.89	**
Learning with Peers				
<i>Collaborative Learning</i>	<i>31.30</i>	<i>35.26</i>	<i>-3.96</i>	<i>**</i>
Asked another student to help you understand course material	28.46	32.67	-4.21	**
Explained course material to one or more students	33.41	37.66	-4.25	**
Prepared for exams by discussing or working through course material with other students	27.93	32.67	-4.74	**
Worked with other students on course projects or assignments	35.39	38.04	-2.65	**
<i>Discussions with Diverse Others</i>	<i>37.27</i>	<i>41.32</i>	<i>-4.05</i>	<i>**</i>
People with a race or ethnicity other than your own	26.71	26.90	-0.19	**
People from an economic background other than your own	28.88	25.06	3.82	*
People with religious background other than your own	29.33	26.02	3.32	**
People with political views other than your own	29.54	31.56	-2.02	**
Experiences with Faculty				
<i>Student-Faculty Interaction</i>	<i>21.58</i>	<i>28.83</i>	<i>-7.26</i>	<i>**</i>
Talked about career plans with a faculty member	22.73	25.91	-3.18	**
Worked with faculty on activities other than coursework (committees, student groups, etc.)	18.27	22.73	-4.46	**
Discussed course topics ideas or concepts with a faculty member outside of class	20.87	25.02	-4.15	**
Discussed your academic performance with a faculty member	21.41	23.96	-2.55	**
<i>Effective Teaching Practices</i>	<i>38.18</i>	<i>39.76</i>	<i>-1.58</i>	<i>.70</i>
Clearly explained course goals and requirements	30.60	30.81	-0.20	.719

Senior Participants, NSSE 2015 and 2018	Weighted Mean for those who <i>did not</i> study abroad	Weighted Mean for those <i>did</i> study abroad	Mean difference	*-< 0.05 **< 0.01
Taught course sessions in an organized way	30.62	31.26	-0.65	.245
Used examples or illustrations to explain difficult points	30.11	31.57	-1.46	*
Provided feedback on a draft or work in progress	26.34	27.84	-1.50	.812
Provided prompt and detailed feedback on tests or completed assignment	27.76	27.91	-0.15	.812
Campus Environment				
<i>Quality of Interaction</i>	<i>43.44</i>	<i>42.85</i>	<i>0.59</i>	<i>.18</i>
Students	45.80	44.38	1.41	**
Academic Advisors	41.70	43.01	-1.31	*
Faculty	44.03	44.79	-0.77	.14
Student Services Staff	46.41	43.39	3.02	**
Other Administrative Staff	39.29	38.65	0.64	.34
<i>Supportive Campus Environment</i>	<i>31.11</i>	<i>33.62</i>	<i>-2.51</i>	<i>**</i>
Providing support to help students succeed academically	37.83	39.60	-1.77	**
Using learning support services (tutoring services, writing center, etc.)	35.20	38.18	-2.97	**
Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)	27.11	27.59	-0.47	.47
Providing opportunities to be involved socially	35.36	38.37	-3.01	**
Providing support for your overall well-being (recreation, health care, counseling, etc.)	34.62	37.76	-3.14	**
Helping you manage your non-academic responsibilities (work, family, etc.)	18.94	20.25	-1.31	*
Attending campus activities and events (performing arts, athletic events, etc.)	33.59	38.43	-4.85	**
Attending events that address important social, economic, or political issues	26.21	28.79	-2.58	**

Although these findings suggest a positive relationship between education abroad participation and student success, the findings neither account for self-selection bias nor determine the extent to which differences are in result of education abroad participation. However, related research in this area² is beginning to demonstrate that students who study abroad are 1.) more likely to graduate in 4 years compared with students who do not study abroad, 2.) earn more credit hours upon graduation, 3.) graduate with higher GPAs and 4.) finish their degrees much faster. Moreover, these outcomes are even more robust among traditionally underrepresented minorities and students with financial need.

² The Consortium for Analysis of Student Success through International Education (CASSIE), <https://www.usg.edu/cassie>

INTERNATIONAL STUDENTS

Not dissimilar to domestic students, international students also expect to be academically and socially engaged during their time at the University of Wyoming. In Spring 2019, the Global Engagement Office reported findings from the International Student Barometer (ISB), an international student experience survey covering arrival, learning, living, support, etc. Findings suggested that the overall satisfaction of international students at UW was lower than national and international benchmarks, with students being primarily unhappy with the quality of instruction and interaction with the faculty. They were generally less satisfied with academic quality and the learning support they received and do not “feel part of a student community committed to learning”.³

Although less reliable due to the small sample size, UW’s 2015 and 2018 NSSE results suggest similar findings. During their first year at UW, international students are generally more satisfied than their domestic peers. Similarly, ISB findings indicate that first year international students are pleased with their arrival information, social orientation, ability to make friends, etc. They find on campus and in the community “a friendly attitude towards international students at the city/location where my institution is based (local population)”.

Freshman Participants		N	Academic Challenge	Learning with Peers	Experiences with Faculty	Campus Environment
2015	International Students	11	42.01	37.18	32.28	40.18
	Domestic Students	152	35.68	37.85	30.63	40.89
2018	International Students	4	32.87	37.28	29.78	38.51
	Domestic Students	147	32.10	34.03	27.67	37.62
2 years	International Students	15	35.01	38.60	31.35	40.01
	Domestic Students	299	33.86	35.18	28.46	39.09

After the first year, however, international students are increasingly less satisfied and by the time they graduate they are less favorable toward the institution. According to the ISB findings, UW’s international students fall well below national and international benchmarks in their propensity to recommend UW to future students. International students believe UW has a strong infrastructure for learning, an excellent learning management system and library, and potential for collaborative learning, but somehow the delivery of high-quality academic programming is falling short. The NSSE results, although limited by sample size, similarly suggest (though not significantly) that international students have fewer positive interactions with UW faculty that support their learning and development. Specifically, international students are significantly less engaged in reflective and integrative learning that encourages them to make connections between their learning and the world around them. The NSSE results, however, do suggest that international students enjoy learning alongside other UW students and find that their coursework emphasizes challenging cognitive tasks and their ability to reason quantitatively.

Senior Participants		N	Academic Challenge	Learning with Peers	Experiences with Faculty	Campus Environment
2015	International Students	19	38.52	36.35	32.61	38.02
	Domestic Students	472	36.62	40.13	31.16	39.41

³ More information on the ISB can be accessed through: <https://portal.i-graduate.org/>. (Username: Wyoming; Password: yyCNL542cC8CDgUA). Data will be accessible until December 31, 2019.

Senior Participants		N	Academic Challenge	Learning with Peers	Experiences with Faculty	Campus Environment
2018	International Students	27	35.13	35.05	28.60	35.04
	Domestic Students	442	34.62	34.05	29.52	34.74
2 years	International Students	46	35.75	37.15	29.66	36.84
	Domestic Students	914	36.65	35.25	31.13	36.44

Senior Participants, NSSE 2015 and 2018	Weighted Mean for Domestic Students	Weighted Mean for International Students	Mean difference	*. < 0.05 **. < 0.01
Academic Challenge				
Higher-Order Learning	34.44	39.81	-5.37	*
Reflective and Integrative Learning	38.53	34.35	4.18	*
Learning Strategies	38.19	38.20	-0.01	.99
Quantitative Reasoning	30.11	35.85	-5.74	*
Learning with Peers				
Collaborative Learning	32.18	35.06	-2.88	*
Discussions with Diverse Others	38.31	39.24	-0.93	.68
Experiences with Faculty				
Student-Faculty Interaction	23.66	20.49	3.18	.18
Effective Teaching Practices	38.59	38.88	-0.29	.9
Campus Environment				
Quality of Interaction	41.11	41.80	-0.69	.71
Supportive Campus Environment	31.78	31.89	-0.11	**

RECOMMENDATIONS

This internal analysis of UW's 2015 and 2018 NSSE results suggests multiple areas where UW can further leverage international education programming to support student academic and social engagement and thereby enhance overall student success. What follows are some recommendations based on these findings.

1. **Integrate education abroad learning across undergraduate education.** To understand the full potential of education abroad participation for UW students, it is important that it not be viewed in isolation of the other high-impact practices. Rather, education abroad must be understood as an interrelated experience among many that advances and propels students along in their education. Purposeful pathways that encourage students to make connections with the learning that occurred while abroad to other experiences upon return is essential.
2. **Enhance faculty-directed, education abroad programming.** Faculty-directed programming provides an ideal context to further enhance student-faculty interaction and promote collaborative learning with diverse peers across intercultural contexts. Developing robust academic learning outcomes and conducting targeted outcomes assessment are essential to maximizing and documenting student learning through education abroad.
3. **Offer high-quality, first-year education abroad programming.** As incoming students today are increasingly expecting to be more academically and socially engaged, more institutions are offering well-designed and intentional education abroad programming targeting first-year students. The promise of such programming reportedly increases admission yield rates and boosts first-to-second year retention.

4. ***Offer a strategically diverse portfolio of education abroad programs.*** Increasing student participation and access to education abroad programming supports overall student success. Thus, it is necessary to further expand offerings beyond traditional study abroad to include undergraduate research abroad, international internships, global service-learning, etc.
5. ***Embed education abroad learning into the academic curriculum of each major.*** Education abroad is less about where one travels and more about what one studies. Embedding education abroad into the undergraduate curriculum at the level of each academic major will encourage (although not require) students to complement their degree studies through international learning.
6. ***Track student participation in high-impact practices.*** UW is currently not consistently or centrally tracking student participation in high-impact educational practices such as education abroad. The availability of such information would enable UW to better identify aspects of the undergraduate experience inside and outside the classroom that can be improved to enhance overall student success.
7. ***Enhance ongoing orientation and support for international students after year one.*** International students require a high level of support, from initial inquiry through their successful transition into mainstream degree studies and beyond. UW provides well-structured and well-received orientation programming for new students but falls short in programming that supports students ongoing acculturation, learning and development needs beyond year one.
8. ***Provide faculty development programming on working with international students.*** Meaningful interactions with faculty can positively influence the cognitive growth, development, and persistence of international students. UW should seek ways to enhance programming that supports current faculty (and staff) and their formal and informal roles as teachers, advisors, and mentors to international students.
9. ***Seek ways to foster a more supportive campus and community environment for international students.*** A supportive campus and community environment, collaborative learning opportunities with other students, and a pervasive acknowledgement of the importance of cultural and linguistic diversity as demonstrated through programming and activities are all factors that support international student success.