- Deep learning, rather than surface learning, is recognized as an important skill for students as they approach learning tasks. The development of deep learning skills enables students to make enhanced connections to course material by emphasizing activities such as integration, synthesis, and reflection. With these deeper and more lasting connections, students are able to focus on both the substance and underlying meaning of their studies, taking them much further than simply memorizing and repeating the material. This affords the opportunity to apply the knowledge gained to “real life situations” and successfully integrate earlier learning in a meaningful way (National Survey of Student Engagement, 2012).

Do students who participate in service learning courses at IUPUI report higher levels of deep learning? Data from the 2012 National Survey of Student Engagement (NSSE) provided an opportunity for CSL to explore the impact of participation in a service learning course on a student’s reported level of deep learning.

We explored the three deep learning subscales from NSSE data, including:

- Higher order learning
- Integrative learning
- Reflective learning

Differences in deep learning skills were evaluated between students who participated in one or more service learning courses and those students who did not participate in service learning. All three domains of deep learning skills were significantly higher for both freshmen and seniors. Students who participated in service learning courses reported significantly higher levels of deep learning than the campus mean for these measures. Of particular note, integrative learning appeared to show the greatest gains.

These results on student outcomes are consistent with prior research on participation in service learning courses. For additional information on an upcoming research brief on this topic, please email Tom Hahn, research associate, at tomhahn@iupui.edu.

Seniors

Construct	# of Items	Mean (Overall) N=998	Mean (Service Learning) N=588, 59%	Mean (No Service Learning) N=410, 41%	Mean Difference (SL and No SL)	Reliability (Alpha)	Effect Size	Sig (2-Tailed)
Higher Order Learning	4	3.23	3.36	3.03	.33	.858	.24	.000*
Integrative Learning	5	2.81	2.99	2.57	.42	.721	.34	.000*
Reflective Learning	3	2.86	2.96	2.72	.24	.826	.16	.000*

Freshmen

Construct	# of Items	Mean (Overall) N=524	Mean (Service Learning) N=305, 58%	Mean (No Service Learning) N=219, 42%	Mean Difference (SL and No SL)	Reliability (Alpha)	Effect Size	Sig (2-Tailed)
Higher Order Learning	4	3.05	3.09	2.99	.1	.826	.08	.085
Integrative Learning	5	2.62	2.75	2.43	.32	.730	.27	.000*
Reflective Learning	3	2.72	2.82	2.58	.24	.824	.16	.000*

*Significant at .05

References:

National Survey of Student Engagement. (2012). Annual Report. Retrieved July 31, 2013, from http://nsse.iub.edu/NSSE_2012_Results/pdf/NSSE_2012_Annual_Results.pdf