

# A Closer Look at Service-Learning at IU Bloomington



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## Service-Learning Summary

In 2012, the National Survey of Student Engagement (NSSE) focused on service-learning (SL) in their annual report, *Promoting Student Learning and Institutional Improvement: Lessons from NSSE at 13* (p.22). Unfortunately, IUB was not part of that project; however, using NSSE data in conjunction with student record data we have found similar results as reported by NSSE in their 2012 annual report.

Indiana University has participated in the National Survey of Student Engagement (NSSE) since 2000. Starting in 2009, all FY and Senior students were sent an invitation to share their experiences at IU. In 2012, NSSE worked with 42 institutions interested in service-learning; unfortunately, IU did not participate in this study. Using the NSSE data we compared our results to the findings from the 42 institutions as found that our students report similar gains (see tables 1 and 2). When FY students are compared to the NSSE SL group, IU students report slightly higher gains in solving complex real-world problems and understanding people of other racial and ethnic backgrounds when participating in SL and no similar responses for working effectively with others. IU students who participated in SL reported slightly lower gains in contributing to the welfare of their community and developing a personal code of values and ethics. A similar pattern occurs for seniors as well; however, seniors report higher gains except for understanding people of other racial and ethnic backgrounds in which this item seniors report a slightly lower gain than FY IU students. The final comparison looks at differences between IU FY and seniors by gain items. As one would hope, as students progress through college, they gain various skills and knowledge, which is evident in the self-reported NSSE gain items (see table 3). Overall, our senior students report higher gains accept for understanding people of other racial and ethnic backgrounds. Without more research, understanding this phenomenon is beyond the scope of this project. What is humbling to see are the gains IU students reported in working effectively with others. Both FY and seniors who participated in a SL reported gaining more skills than their counter-parts who did not participate in SL and FY.



Table 1:

A Comparison of the 2012 IU FY Students to NSSE Students for Substantial Perceived Gains by SL Participation

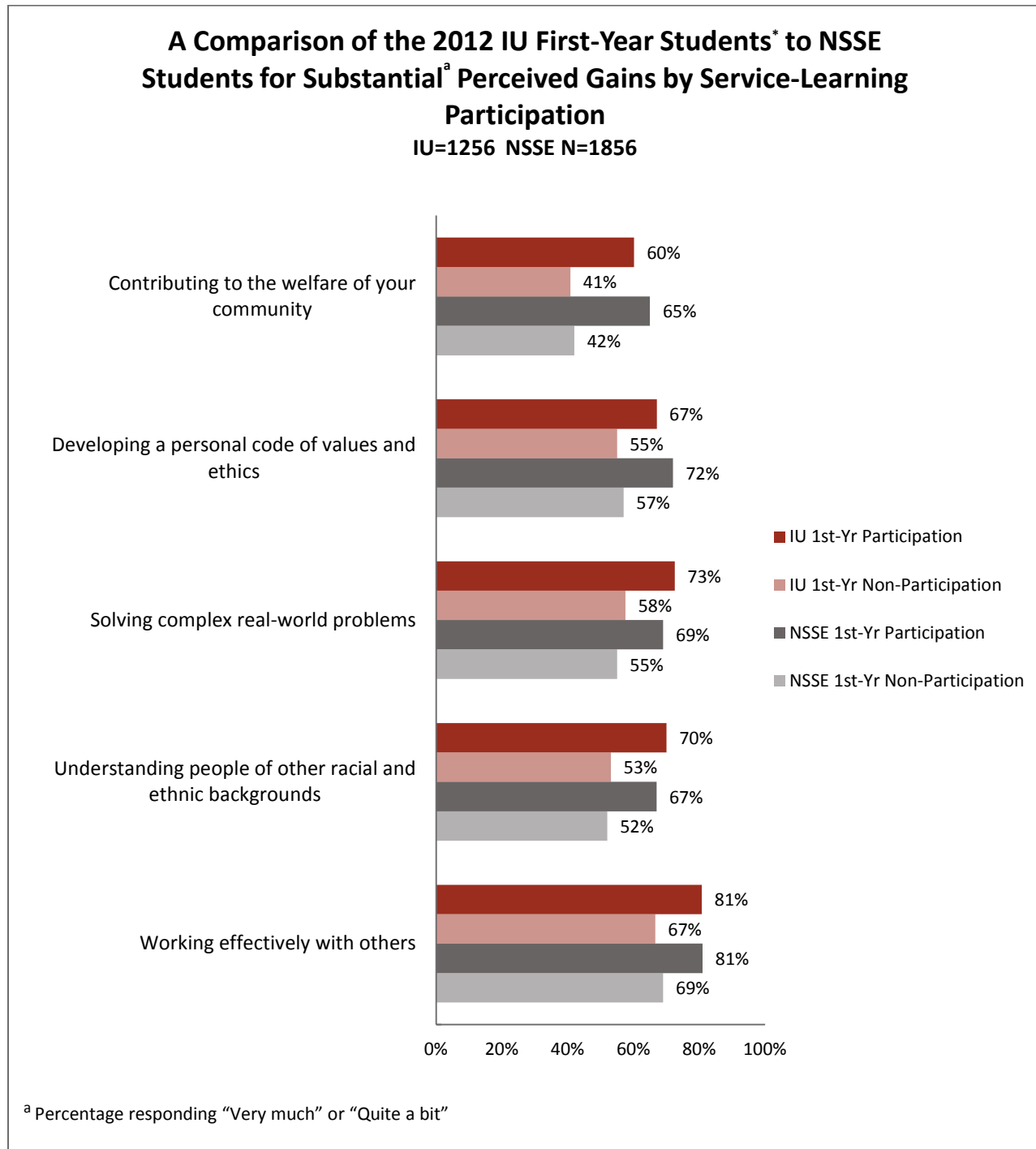


Table 2:

A Comparison of the 2012 IU Senior Students to NSSE Students for Substantial Perceived Gains by SL Participation

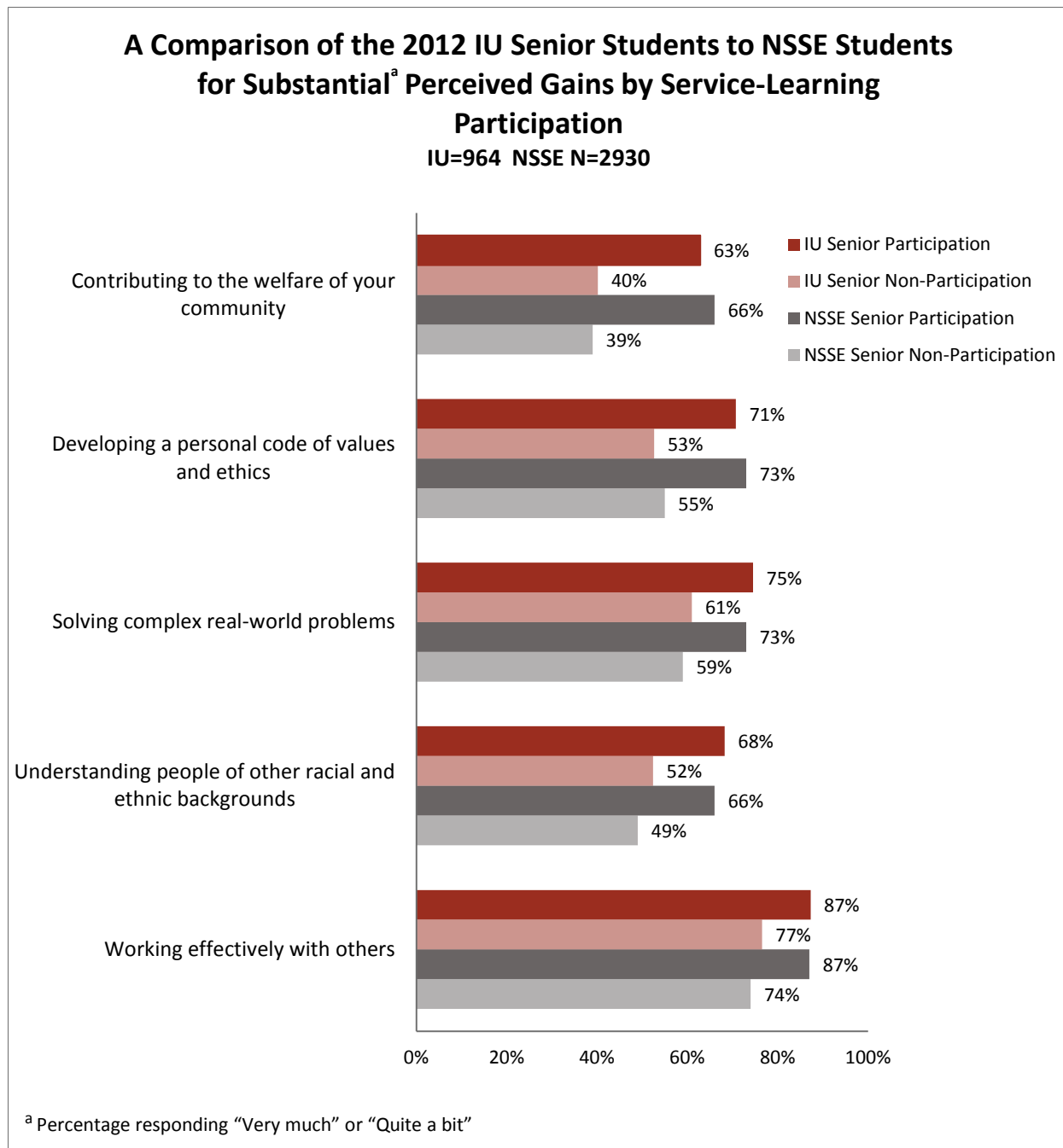
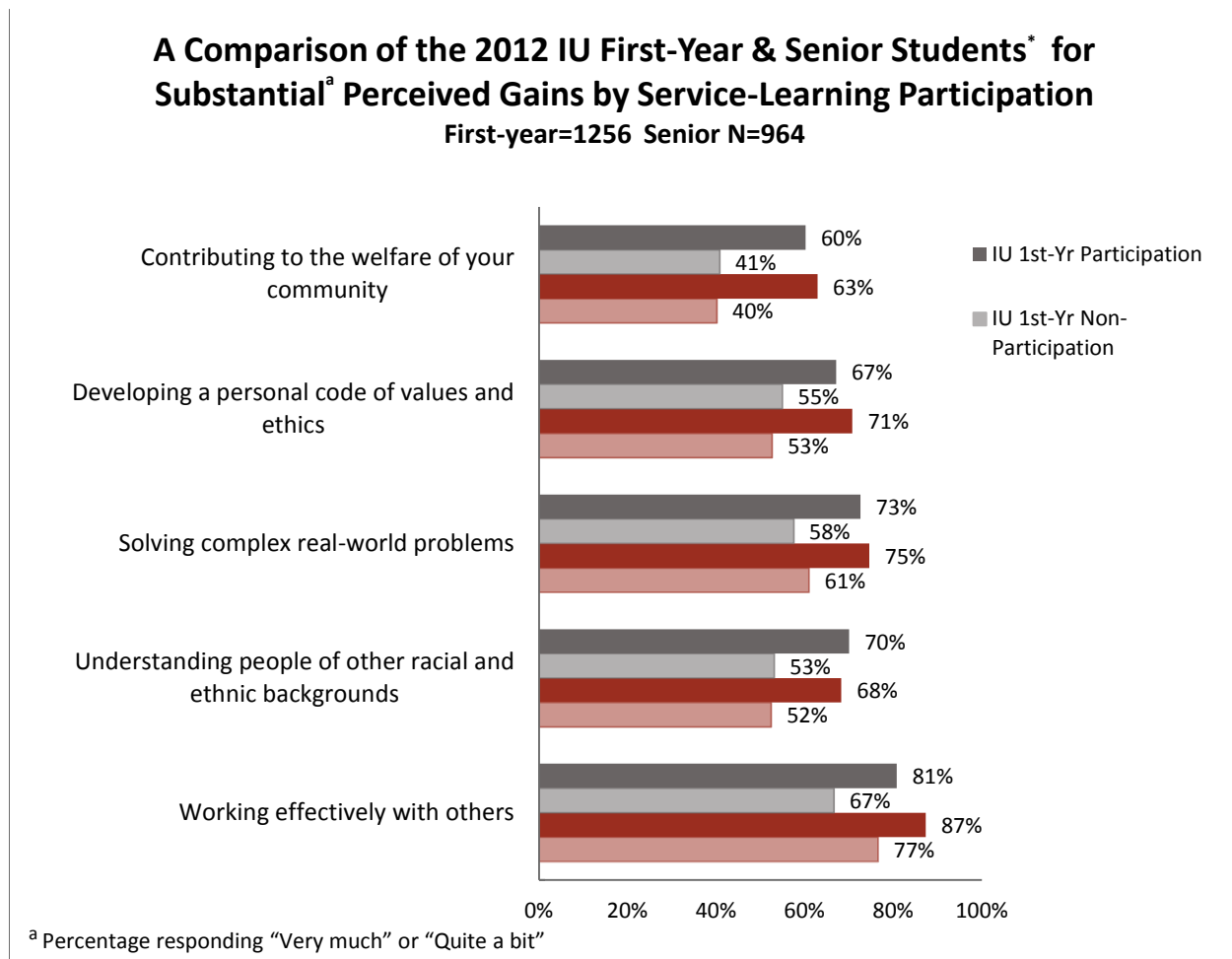


Table 3:

A Comparison of the 2012 IU FY and Senior Students Using NSSE Gains Items by SL Participation



Another question addressed was, who takes service-learning classes? Data were analyzed from undergraduate enrollments at the time of corrected grades for each semester from Fall 2007 to Fall 2012, excluding summers. Approximately 4% of IUB students enroll in a class that incorporates a service-learning component; slightly more women than men enrolled in a service-learning class, 4.6%, 3.2%, respectively ( $\chi^2 = 463, p < .0001$ ).

Next, the focus was to determine if participating in a service-learning course at IUB, which is considered a *high-impact practice* (NSSE Annual Report, 2012), influences student self-reported gains, as reported by students on the NSSE survey. The student enrollment data was merged with three years of NSSE Data (2010 to 2012). Using a study conducted by NSSE in 2010 (McCormick et. al.) as a model, we used the items that asked students to reflect on their gains in various areas. The data file had over 11,100 students with 5,377 first-years responding and 5,847 seniors responding to the survey of which 550 (10%) first-year and 1501 (25.7%) seniors reported participating in a service-learning activity.

Two statistical tests were conducted using the gain items and class level. First, First-Year (FY) students who participated in SL activities reported higher gains than their FY peers who did not participate in SL courses in the following ways: job knowledge and skills, speaking skills, computer skills, working effectively with others, solving real-world problems and contributing to the welfare of their community (see Table 1). Linear regression

confirmed these results and suggested that these differences exist even when controlling for gender and ACT/SAT scores. Similarly seniors who participated in SL reported higher gains in all of the same items as FY students. In addition, seniors had higher gains in self-understanding and developing a personal code of values and ethics. Figures 1 and 2 display the mean differences by items for FY and Seniors. These figures demonstrate that although some items are statistically significant, for seniors, the practical significance is nominal, specially acquiring job or work-related knowledge and skills and using computing and information technology as these items were significant at the .05 level.

Table 1:

T-test Results for NSSE Gain Items by Service-Learning Participation and Non-Participation for First-Year & Seniors from 2010 to 2012

<i>Respondents</i>	<i>First-Year (FY)</i>		<i>Senior (SR)</i>	
	<i>Did Not</i>	<i>Participated</i>	<i>Did not</i>	<i>Participated</i>
<b><i>ITEMS</i></b>				
<i>Acquiring job or work-related knowledge and skill</i>	2.90***a	3.09***a	3.08*	3.14*
<i>Speaking clearly and effectively</i>	2.79***a	3.01***a	3.00***	3.14***
<i>Using computing and information technology</i>	3.08***a	3.37***a	3.22*	3.27*
<i>Working effectively with others</i>	2.99***a	3.19***a	3.22***a	3.40***a
<i>Understanding yourself</i>	2.82	2.83	2.96**	3.04**
<i>Understanding people of other racial and ethnic backgrounds</i>	2.68	2.72	2.77	2.78
<i>Solving complex real-world problems</i>	2.73***a	2.91***a	2.89**	2.96**
<i>Developing a personal code of values and ethics</i>	2.69	2.74	2.76***	2.88***
<i>Contributing to the welfare of your community</i>	2.46***	2.58***	2.52***a	2.74***a

\* p < .05 \*\* p < .01 \*\*\* p < .001 p value indicates statistical significance of mean differences.

a = small effect size

Figure 1:  
2010 -2012 NSSE First-year Mean Gain-Item Scores by Service-Learning Participation

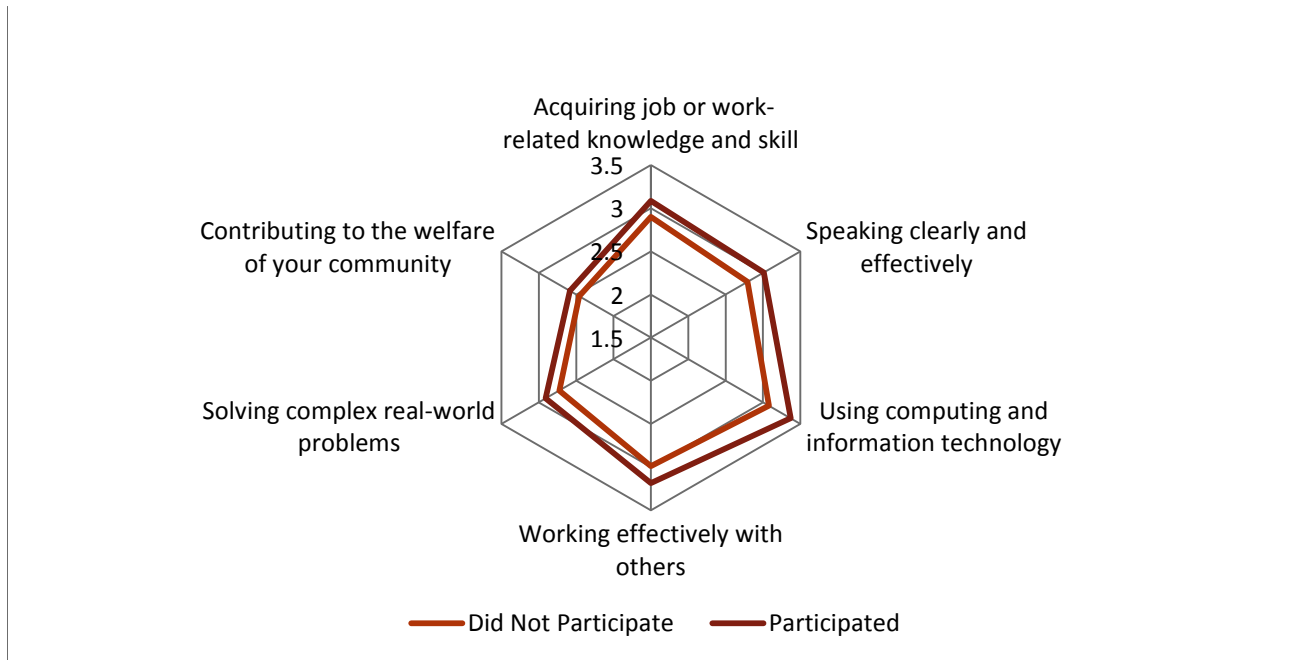
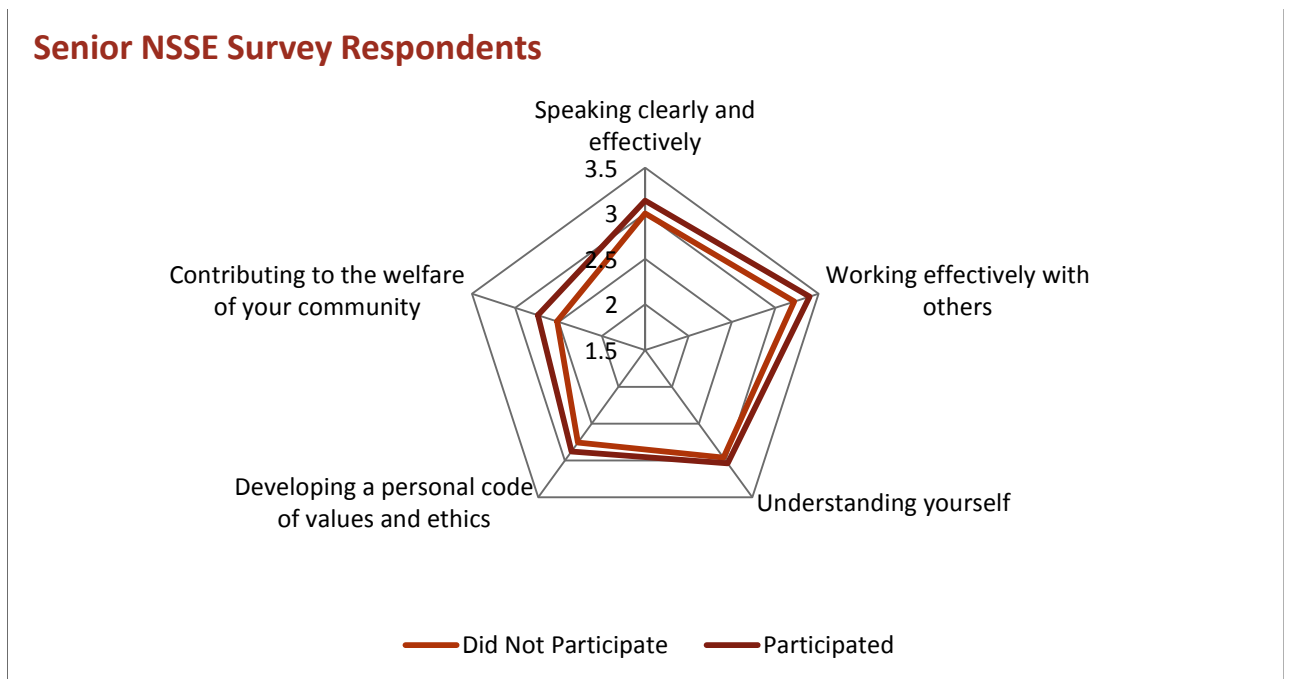


Figure 2:  
2010 -2012 NSSE Senior Mean Gain-Item Scores by Service-Learning Participation



## References

McCormick, A.C., & Cole, J. S., Bureau, D.A. (2010). Frequent Participation in Service-Learning: Examining Institutional Differences and Individual Benefits. (unpublished).

*National Survey of Student Engagement. (2012). Promoting Student Learning and Institutional Improvement: Lessons from NSSE at 13. Bloomington, IN: Indiana University Center for Postsecondary Research.*