

### **Introduction**

The IUPUI Summer Bridge program plays an integral role in introducing new students to the college campus and classroom. The goal of this research brief is to provide administrators, faculty, staff, and other stakeholders with an assessment of how students' opinions and perceptions of the program have changed over time. Quantitative and qualitative data obtained from students' self-reported, end-of-program questionnaires are examined across three program years (2009, 2010, and 2011). Findings help identify specific program aspects that students' identified as being helpful in their learning and adjustment to campus.

### **Program Overview**

The Summer Bridge program has been in existence at IUPUI for over ten years and has been the focus of several on-going evaluation initiatives ([research.uc.iupui.edu](http://research.uc.iupui.edu)). It is estimated that approximately 500 students will participate in the upcoming Summer Bridge program scheduled to take place from August 6-16, 2012.

The purpose of the Summer Bridge program is described on the program's web site as follows:

“Students participating in the Summer Bridge program are divided into groups of approximately 25 based on their interest in pursuing a particular major or in exploring various major options. Student participants establish networks for success with faculty, advisors, student mentors, and librarians; make friends with other students; learn to handle college-level expectations for reading and writing; receive individual support for math; begin connecting with a school and major; become acquainted with the campus; and gain experience using instructional technology” ([bridge.uc.iupui.edu](http://bridge.uc.iupui.edu)).

### **Highlights**

- The Summer Bridge program has seen a relative three-year growth in the number of student participants; serving 389 students in 2009 and 455 students in 2011
- A vast majority of students in both program years (99%) indicated that they would recommend the Summer Bridge program to other first-year students (p.3).
- 2011 Summer Bridge students indicated a higher level of agreement, than 2009 program students, that the program helped them improve in several areas:

**Page 3: Overall Program Satisfaction**

**Page 4: Campus Navigation and Locating Resources & Support Centers**

**Page 5: Diversity Awareness and Appreciation**

**Page 6: Academic Success: Critical Thinking, Writing, Math, & Speaking**

Starting in 2001, groups of students participating in the Summer Bridge program were allowed to stay together and matriculate into a First-year Seminar (FYS) course or Themed Learning Community (TLC) in the fall semester. This continuity allows for an easier transition into the first semester by keeping students' initial connections with peers and faculty intact. In recent years the Summer Bridge program has more keenly focused on fostering an awareness and appreciation of diversity, promoting a sense of college-faculty expectations, and developing study skills and academic success strategies in its students.

## Student Participants

The Summer Bridge program has seen a relative three-year growth in the number of student participants; serving 389 students in 2009 and 455 students in 2011 (Figure 1).

**Figure 1: Three Year Program Growth**

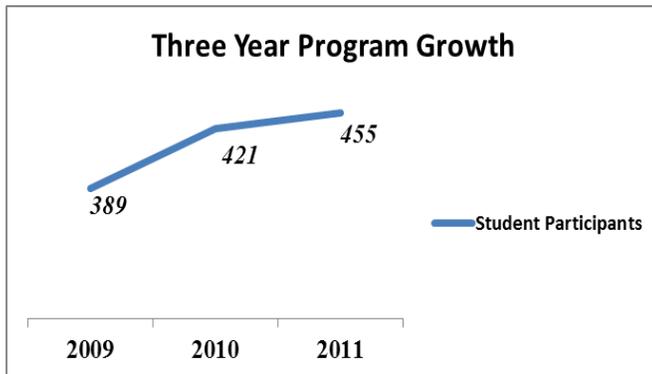


Table 1 provides a demographic overview of students who participated in the Summer Bridge program from 2009 - 2011. In general, student participants tended to be Female and White across all program years.

However, it is important to note that the 2011 Summer Bridge program saw a larger percentage of non-white, minority students participating compared to previous years; an increase of approximately 10%. Specifically, a larger percentage of students self-reported being Hispanic / Latino(a); or Other / Two or More Races in 2011 compared to previous program years.

**Table 1: Student Participants' Demographic Characteristics**

Summer Bridge Program	2009		2010		2011	
	N	%	N	%	N	%
<b>Total Student Participants</b>	<b>389</b>	<b>100%</b>	<b>421</b>	<b>100%</b>	<b>455</b>	<b>100%</b>
<b>Gender</b>						
<i>Female</i>	262	67%	265	63%	310	68%
<i>Male</i>	127	33%	156	37%	145	32%
<b>Ethnicity</b>						
<i>White</i>	286	73.5%	285	67.7%	286	62.9%
<i>Black / African American</i>	61	15.7%	80	19.0%	76	16.7%
<i>Hispanic / Latino(a)</i>	16	4.1%	23	5.5%	48	10.5%
<i>Asian</i>	11	2.8%	10	2.4%	11	2.4%
<i>American Indian / Alaska Native</i>	1	0.3%	0	0.7%	1	0.9%
<i>Non-Resident</i>	5	1.3%	3	0.7%	2	0.4%
<i>Other / *Two or More</i>	1	0.3%	17	4.0%	27	5.9%
<i>Refused to Answer</i>	5	1.3%	0	0.0%	0	0.0%
<i>Missing</i>	3	0.3%	3	0.7%	4	0.9%

### Methodology – Mixed Method Design

Upon completion of the Summer Bridge program students were asked to voluntarily complete an anonymous end-of-program questionnaire. Students who completed the questionnaire were instructed to rate their agreement with 52 separate items using a Likert scale ranging from 1 = *Strongly Disagree* to 5 = *Strongly Agree*, with a midpoint of 3 = *Neutral*.

The questions gauged students’ agreement with how they perceived the Summer Bridge program as helping them improve in several areas including: overall program satisfaction; campus navigation and locating resources & support centers; diversity awareness and appreciation; and academic success – critical thinking, writing, math & speaking.

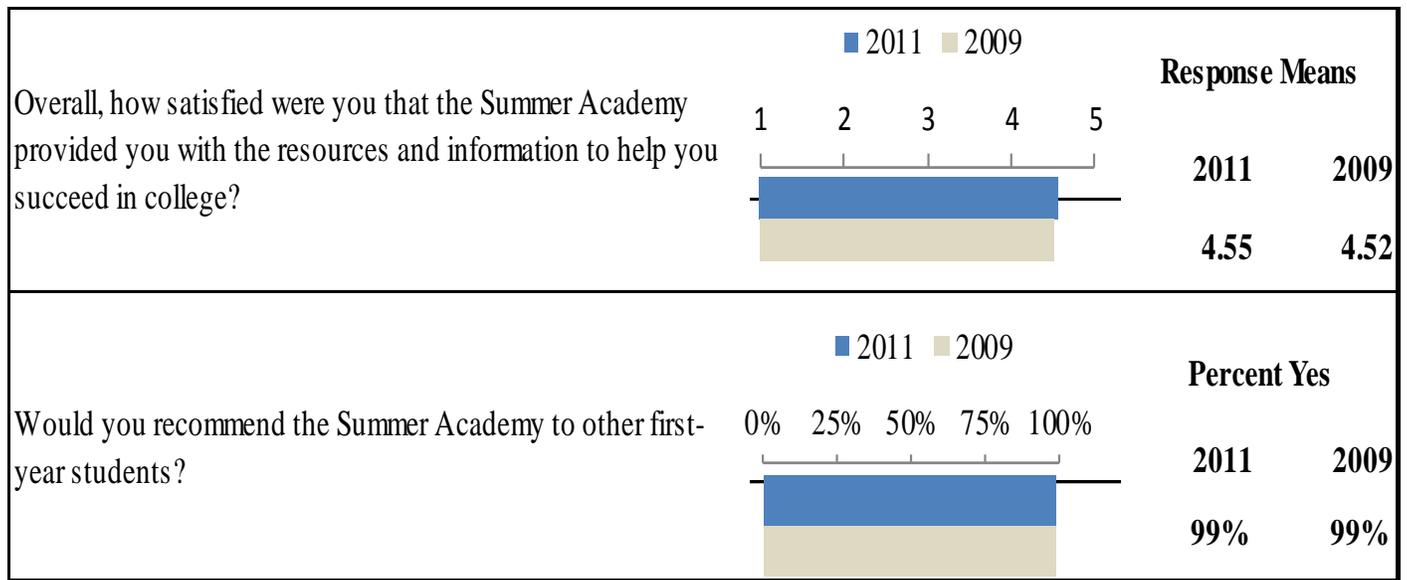
Changes in students’ responses to Likert items from the 2009 to 2011 program years were identified using independent samples t-tests of significance. These tests showed that changes in students Likert responses across program years was unlikely due to chance alone at a moderate ( $p < .05$ ) and high level ( $p < .01$ ) of statistical significance.

Qualitative data is also considered in an effort to further understand the intricacies of changes in students’ responses and to triangulate findings. As part of the end-of-program questionnaire students were instructed to respond to a series of open-ended questions. Examples of actual student comments describing what they found to be most valuable about the 2011 Summer Bridge program are included to provide a more holistic understanding of participants’ expressed experiences.

### Findings: Student Participants’ Self-Reported Opinions & Perceptions

Students participating in the Summer Bridge program in both 2009 and 2011 indicated a strong sense of overall program satisfaction as indicated in Table 1. Participants indicated a strong level of agreement that the Summer Bridge program provided them with resources and information to succeed in college. The vast majority of students in both program years (99%) also responded that they would recommend the Summer Bridge program to other first-year students.

**Table 2: Overall Program Satisfaction**



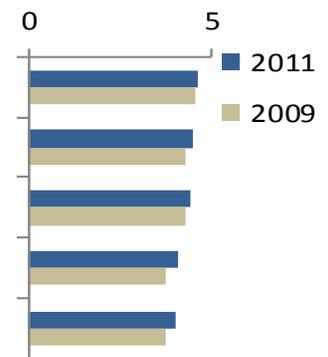
*Note:* Student participants responses were given on a Likert scale ranging from 1 = *Strongly Disagree* to 5 = *Strongly Agree*, with a mid-point of 3 = *Neutral*

Students' opinions and perceptions of the program changed over time (2009 – 2011). As shown in Table 3, 2011 Summer Bridge students indicated a higher level of agreement that the program helped them in their ability to navigate campus and locate

resources and support centers than 2009 program students. For example, 2011 program students responded that they could “find what I need at the library” at a higher level (M = 4.09) than 2009 students (M = 3.77).

**Table 3**

<b>Campus Navigation and Locating Resources / Support Centers</b>		
<b>Participating in the Summer Bridge improved my ability to or understanding of....</b>	<b>Response Means</b>	
	<b>2009</b>	<b>2011</b>
Find my way around campus*	4.57	4.67
Campus resources available to me (e.g., Writing Center, Math Assistance Center, Learning Center)**	4.33	4.48
Feel connected to IUPUI*	4.32	4.41
Find what I need at the library**	3.77	4.09
Beneficial interactions with librarian**	3.78	4.04



Notes: Responses provided on a Likert scale ranging from 1 = *Strongly Disagree* to 5 = *Strongly Agree*.

\*p < .05; \*\* p < .01.

### Examples of Student Comments from 2011 Summer Bridge

*Please describe what you found most valuable about the Summer Bridge program:*

- “Learning about the campus, where rooms are, organizations”.
- “I found that walking from place to place on campus was the most valuable because I now know my way around”.
- “What I found most valuable would be that I know how to get around the campus without getting lost”.
- “Learning about the MAC and other resources”.
- “The information about all the resources”.
- “I think learning about all the resources available to students”.

Students participating in 2011 Summer Bridge also specified that their participation in the program helped them to gain an awareness and appreciation for diversity (Table 4). When asked to indicate their level of agreement with how Summer Bridge improved their ability to “appreciate cultural and social diversity” 2011 program students responded higher on average (M = 4.45) than 2009 students (M = 4.30). It is important to note that changes in students' self-reported responses related to diversity

were not limited to traditional indicators (i.e., race and ethnicity) but also included other areas of diversity such as varying religious beliefs, political affiliations, and ways of thinking. For example, 2011 students also self-reported that their participation in the program improved their ability to “exchange ideas with a student whose views were different than their own” (M = 4.22) at a higher level than 2009 students (M = 4.01).

**Table 4**

<b>Diversity Awareness &amp; Appreciation</b>		
<b>Participating in the Summer Bridge improved my ability to or understanding of....</b>	<b>Response Means</b>	
	<b>2009</b>	<b>2011</b>
Appreciate cultural & social diversity**	4.30	4.45
Instructional team members that were committed to promoting an environment that respects and celebrates diversity**	4.22	4.40
Activities and or classroom discussions that incorporated diversity awareness and appreciation**	4.11	4.34
Developed and appreciation of social and cultural diversity**	4.06	4.27
Had a serious conversation with students of a different race or ethnicity**	3.75	3.97

Notes: Responses provided on a Likert scale ranging from 1 = *Strongly Disagree* to 5 = *Strongly Agree*.  
 \*p < .05; \*\* p < .01.

**Examples of Student Comments from 2011 Summer Bridge**

***“Please describe what you found most valuable about the Summer Bridge program:***

- “Diversity”.
- “Learning college etiquette, exploring diversity, study skills”.
- “Meeting amazing new people and appreciating diversity”.
- “The cultural diversity”.
- “Experiences with diversity”.

As shown in Table 5, 2011 Summer Bridge students responded that their participation in the program helped them in their understanding of academic success and their abilities in critical thinking, writing, math, and public speaking. In general, 2011 program participants responded with a higher level of agreement with these items than did 2009 program students. For example, in 2011 students

responded that Summer Bridge helped them to “succeed academically” at a higher level of agreement (M = 4.48) than 2009 students (M = 4.48). 2011 Summer Bridge students also indicated that their participation in the program helped them to see “multiple sides of an issue”, “understand faculty expectations of students”, and “critically examine ideas and issues”.

Table 5

<b>Academic Success: Critical Thinking, Writing, Math, &amp; Speaking</b>		
<b>Participating in the Summer Bridge improved my ability to or understanding of....</b>	<b>Response Means</b>	
	<b>2009</b>	<b>2011</b>
Faculty expectations of students**	4.37	4.48
Succeed academically**	4.27	4.39
Feel able to meet the demands and expectations of college*	4.19	4.30
See multiple sides of an issue**	4.05	4.21
Critically examine ideas and issues**	4.01	4.15
Communicate my thoughts in speaking*	4.02	4.14
Think critically about what I read**	3.92	4.08
Do research projects effectively*	3.89	4.01
Do well in math courses**	3.73	3.95

Notes: Responses provided on a Likert scale ranging from 1 = *Strongly Disagree* to 5 = *Strongly Agree*.

\*p < .05; \*\* p < .01.

### Examples of Student Comments from 2011 Summer Bridge

*Please describe what you found most valuable about the Summer Bridge program*

- “Lives up to its name, bridge between high school and college”.
- “After being out of school for a year, it eased me back into the life of a scholar”.
- “Helped get me into the college mindset and show me college level skills”.
- “Expectations of how college was going to be liked were changed”.
- “Learning what to expect in college and how to be an organized student”.
- “Sitting through the Bio lecture because I got first-hand experience what to expect when classes start”.

## Discussion and Implications

Through examining questionnaire responses meaningful changes in students’ opinions and perceptions of the Summer Bridge program across program years (2009 – 2011) were identified. These changes focused on three main areas: Campus Navigation and Locating Resources and Support Centers, Diversity Awareness and Appreciation, and Academic Success – Critical Thinking, Writing, Math and Public Speaking.

2011 student Summer Bridge participants indicated a statistically significant higher level of agreement than 2009 program participants that the Bridge program helped them in these areas in their transition and adjustment to IUPUI.

There are several possible reasons for the relative increase in positive student responses regarding the Summer Bridge program from 2009 to 2011. First, it is important to consider that starting in 2009 the

Summer Bridge program experienced some restructuring in its curriculum and faculty and staff responsibilities. More time and resources were also devoted to ensuring that students' understood how to navigate campus well and begin to develop academic success strategies and study skills through participation in the program. During this time a more focused and committed approach to appreciating and understanding diversity was also intentionally adopted.

It is also noteworthy that starting in 2009 small monetary scholarships were introduced by Dr. Uday Sukhatme as a way to recruit minority students to participate in the program. This may help explain, in part, why non-white minority student participation in the program has increased (by approximately 10%) from 2009 to 2011. Finally, over the past three years the Summer Bridge program has been the focus of numerous formative and summative assessment initiatives led by the University College Office of Research, Planning, and Evaluation and the IUPUI Program Review and Assessment Committee (PRAC). In summary, these initiatives have allowed Summer Bridge leaders and

stakeholders to continually identify aspects of the program that are doing well, or not so well and in need of improvement.

## Conclusion

Findings show a significant favorable increase in students' opinions and perceptions of the Summer Bridge program from 2009 - 2011. These changes may be a cumulative result of program leaders' intentional use of assessment data to continually improve Summer Bridge; thus closing the proverbial assessment loop. The IUPUI Summer Bridge program is continually growing and serving more students each year. Future evaluation initiatives will benefit from further focusing on the areas of student learning and success identified in this brief. This information will further help identify what students are learning and experiencing in the program and provide avenues for continued improvement.



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