

IUPUI 2010 Summer Bridge Program Evaluation Report

Results Highlights

- The purpose of this report is to: 1) determine the characteristics of students participating in the 2010 Summer Bridge program compared to students not participating in the program, 2) enhance understanding of how Summer Bridge participation influences students' academic performance levels and retention rates and, 3) understand the benefits of providing scholarships for African American Summer Bridge students.
- A total of 421 Fall 2010 first-time, full-time (Indianapolis only) students participated in the Summer Bridge program. A total of 90 Summer Bridge students were African American. There were a number of important differences between the students participating in Summer Bridge and the nonparticipants. Fall 2010 first-time, full-time students participating in the Summer Bridge program were more likely to be female. The proportion of African American students participating in the Summer Bridge program was greater compared to the non-participating cohort (21% and 10%, respectively). Results are displayed in Table 1.
- Overall, the Summer Bridge participants had higher levels of academic performance (Fall GPA 2.98) compared to non-participants (Fall GPA 2.77). Students participating in Summer Bridge also had lower DWF rates (13%) compared to non-participants (18%). Results are displayed in Table 2. Summer Bridge participants were significantly more likely to be retained the following year compared to non-participants, even when entering High School GPA, SAT Scores, and Low Income (received a Pell Grant) into the logistic regression model. Results are shown in Table 3.
- African American students who participated in Summer Bridge had notably higher GPAs, lower DFW rates, and higher fall-to-fall retention rates compared to non-participating African American Students. African American students who received the IUPUI Summer Success Uday Sukhatme scholarship and participated in Summer Bridge had notably higher rates of high academic performance (GPAs above a 3.0) (45%) compared to African American students who did not receive this particular IUPUI scholarship and participated in Summer Bridge (35%) as well as African American students not participating in Summer Bridge (24%). It is noteworthy that approximately 25 of the Summer Success Scholarship students participated in the Student African American Brotherhood or Sisterhood (SAAB or SAAS) program and received intrusive advising and mentoring in addition to Summer Bridge. Results are shown in Table 2.
- The higher proportion of African American students participating in Summer Bridge compared to the overall cohort as well as the high levels of academic performance among African American scholarship recipients seems to suggest that scholarships have some positive implications in terms of: 1) attracting under-represented students to the program and 2) serving as an incentive for attaining high levels of academic performance. Results are displayed in Tables 1 and 2.
- There was a great deal of variation between sections in terms of retention rates and first-year cumulative GPAs. Students enrolled in the Liberal Arts Themed Learning Community section, Science, Science Biology, Nursing Themed Learning Community Section 2906, Engineering, and Health Professions sections performed notably better than predicted in terms of their first-year cumulative GPAs (adjusted for SAT scores, High School GPAs, and Gender). Results are displayed in Table 4.
- A noteworthy limitation of this investigation is that students self-select into the Summer Bridge program. It is possible that the positive effects of the Summer Bridge program on academic performance and retention are due to the fact that students who decide to participate may have differed in substantial ways from students who decided to not to participate and these differences (not the program) may have caused the positive outcomes. Thus, the reader should be cautious when attempting to make causal inferences based on the information contained in this report.

Table 1. Fall 2010 Summer Bridge Results: First-Time, Full-Time Cohort Characteristics

Student Academic Preparation and Background Characteristics

	N	Avg. H.S. GPA	Avg. SAT Score	% Female	% African American	% First Generation	% Received Pell Grant	Average Units HS Math	% Awarded Core 40 Honors Diploma
<i>Afr. Amer. Sukhatme Bridge Scholarship Recipients</i> ¹	47	3.19	871	64%	100%	49%	77%	7.36	40%
<i>All Other Afr. Amer. Bridge</i> ²	43	3.12	900	77%	100%	42%	81%	7.89	28%
Afr. Amer. Bridge Participants Total	90	3.16	884	70%	100%	46%	78%	7.65	37%
Af. Amer. Cohort Students - Not Bridge	200	3.11	898	70%	100%	53%	71%	7.66	37%
All Cohort Bridge Participants	421	3.32	1017	63%	21%	43%	47%	8.26	53%
All Cohort Non-Bridge Participants	1974	3.30	1017	58%	10%	40%	41%	8.23	50%
All Cohort Students	2395	3.30	1017	59%	12%	40%	42%	8.23	51%

Note 1: There were 49 African American students who received the Summer Success Uday Sukhatme scholarship in 2010, 2 were not in the Fall 2010 FTFT cohort. One student was part-time (took 11 hours) and another student was a transfer student. Approximately 25 of these students participated in the SAAB or SAAS program and received intrusive advising and mentoring in addition to Summer Bridge.

Note 2: There were 43 African American Summer Bridge students who did not receive the Summer Success Uday Sukhatme Scholarship. However, these students may have received the Diversity Initiatives Grant or the 21st Century Scholarship Grant (9 out of the 43 students received the 21st Century Scholarship Grant).

Table 2. Fall 2010 Summer Bridge Results: First-Time, Full-Time Cohort Academic Success Outcomes

Academic Performance

	N	% Fall GPA above 3.0	% Fall GPA below 2.0	Avg. Fall GPA	DF W Rate	Fall-Spring Retention Rate	Fall-Fall Retention Rate	First Year GPA
<i>Afr. Amer. Sukhatme Bridge Scholarship Recipients</i> ¹	47	45%	21%	2.60	18%	91%	75%	2.34
<i>All Other Af. Amer. Bridge</i> ²	43	35%	14%	2.73	15%	95%	79%	2.38
Afr. Amer. Bridge Participants Total	90	39%	18%	2.66	18%	93%	77%	2.36
Af. Amer. Cohort Students - Non-Bridge	200	24%	34%	2.24	31%	82%	63%	2.07
All Cohort Bridge Participants	421	58%	12%	2.98	13%	93%	81%	2.77
All Cohort Non-Bridge Participants	1974	51%	19%	2.77	18%	88%	71%	2.64
All Cohort Students	2395	53%	18%	2.81	18%	89%	73%	2.66

Table 3. Logistic Regression Predicting One Year Retention

Variable		B	SE	Odds Ratio	95% CI	Wald Statistic	p
Step 1	Z H.S GPA	.54	.06	1.72	[1.54, 1.93]	87.91	.001
	Z SAT Score	.13	.06	1.14	[1.02, 1.28]	5.05	.025
	Low Income	-.16	.10	.86	[.70, 1.04]	2.40	.121
Step 2	H.S GPA	.54	.06	1.72	[2.53, 1.93]	86.31	.001
	SAT Score	.13	.06	1.14	[1.02, 1.28]	5.13	.024
	Low Income	-.19	.10	.83	[.68, 1.01]	3.36	.067
	Summer Bridge	.60	.14	1.83	[1.39, 2.42]	18.13	.001

Note 1: Low Income is a dummy coded variable for received a Pell Grant or not. Summer Bridge is a dummy coded variable for participated in 2010 Summer Bridge or not.

Note 2: Summer Bridge participants have 83% better odds of being retained compared to as non-Summer Bridge participants (based on the odds ratio).

Nagelkerke $R^2 = .094$ for Step 1; Nagelkerke $R^2 = 1.06$ for Step 2

Note 3: H.S. GPA and SAT Score were converted to Z-scores to standardize the continuous variables and aid in the interpretation of results.

Table 4. Fall 2010 Summer Bridge Results: First-Time, Full-Time Cohort By Bridge Section

Summer Bridge Section	Section #	N	Fall-Spring Retention Rate	Fall-Fall Retention Rate	First Year GPA Actual	First Year GPA Expected/Adjusted*
Business	1382	20	100%	65%	2.40	2.68
Nursing	2906	20	95%	90%	3.22	3.01
Nursing	2907	24	92%	88%	3.05	3.06
Nursing	2908	23	96%	83%	3.08	3.09
Psychology	3259	23	96%	83%	2.72	2.71
Public and Environmental Affairs (SPEA)	3471	24	92%	79%	2.41	2.64
UC Health and Wellness	3655	21	71%	70%	2.59	2.83
UC African American Perspectives	3666	20	95%	75%	2.09	2.40
UC Health Professions	3669	22	100%	91%	3.31	3.04
Liberal Arts TLC	4195	23	100%	91%	2.72	2.63
Science Biology	4208	19	100%	95%	2.98	2.69
University College STEM Multicultural	4600	23	100%	91%	2.72	2.73
University College	4601	23	83%	74%	2.99	2.99
Liberal Arts TLC	5365	20	100%	90%	2.87	2.91
UC International	5603	4	100%	100%	3.34	**
Education TLC	5686	23	87%	74%	2.66	2.69
Science	6038	23	96%	78%	3.06	2.66
Dental Hygiene	6815	16	88%	75%	2.37	2.52
Engineering	6849	24	75%	79%	2.53	2.40
Technology	6850	23	100%	70%	2.71	2.90
Overall		418	93%	81%	2.78	

*Adjusted by taking into account the SAT score, HS GPA, and Gender.

** Number too small to calculate adjusted GPAs.