

IUPUI 2009 Summer Bridge Program Evaluation Report

- The purpose of this report was 1) to determine the characteristics of students participating in the 2009 Summer Bridge program compared to students not participating in the program and 2) to enhance understanding of how Summer Bridge influences students' academic performance levels and retention rates.
- A total of 382 Fall 2009 first-time, full-time (Indianapolis only) students participated in Summer Bridge. There were a number of important differences between the students participating in Summer Bridge and the nonparticipants. Fall 2009 first-time, full-time (Indianapolis only) students participating in the Summer Bridge program had significantly higher high school grade point averages (GPAs) and the proportion earning high school honor's diplomas was also higher. Summer Bridge students tended to be female and younger. There was a higher proportion of African American students who participated in Summer Bridge (16%) compared to the cohort of nonparticipants (8%). Approximately 25% of the first-time, full-time African American students participated in Summer Bridge (see Table 1 for more detailed information about students participating in the Summer Bridge Program compared to nonparticipating students).
- Analysis of covariance (ANCOVA) results suggested that students participating in Summer Bridge had significantly higher fall adjusted semester GPAs (2.96) compared to nonparticipants (2.78), even after High School GPAs, SAT scores, Age, Gender, Ethnicity, and First Generation Status were entered as covariates ($p < .001$). Please see Table 2.
- Results of a logistic regression analysis suggested that the Fall 2009 first-time, full-time students participating in Summer Bridge had significantly higher Spring-to-Fall retention rates (95%) compared to students not participating (89%), even when High School GPAs, SAT scores, Gender, Age, Ethnicity, and First-Generation status were entered as the first step in the model ($p = .012$).
- Results suggest that the combination of Bridge and Themed Learning Community (TLC) participation may be particularly beneficial for students. Participants had higher levels of academic performance and retention rates compared to students who participated in Bridge or TLC only. Please see Table 3.
- The Fall 2009 first-time, full-time students participating in the Summer Bridge-Themed Learning Community program had significantly higher fall adjusted semester GPAs (3.00) compared to TLC-only participants (2.77), even after High School GPAs and SAT scores were entered as covariates ($p < .001$). Please see Table 4.
- The Fall 2009 first-time, full-time students participating in the Summer Bridge-Themed Learning Community program had significantly higher fall adjusted semester GPAs (3.09) compared to Bridge-only participants (2.82), even after High School GPAs and SAT scores were entered as covariates ($p < .001$). Please see Table 5.
- The Fall 2009 first-time, full-time African American students participating in Summer Bridge had significantly higher fall semester GPAs (2.67) compared to nonparticipants (2.34) (Based on an independent samples t-test, $p < .05$). Please see Table 6.
- The Fall 2009 first-time, full-time African American students who received the IUPUI Twenty-first Century Scholars Pledge Grant and participated in Summer Bridge had notably better outcomes in terms of academic performance and retention rates compared to those who received the grant but did not participate in Bridge. Please see Table 7.

- There were trivial differences between Twenty-First Century Scholars and Twenty-First Century Scholars who received the IUPUI Pledge Grant and participated in Bridge compared to Twenty-first Century Scholars who were nonparticipants. It is important to note that almost half (49%) of the nonparticipants who received the IUPUI Pledge Grant participated in another intervention: peer mentoring. Please see Tables 8 and 9.
- The Fall 2009 first-time, full-time Latino students participating in Summer Bridge had notably better academic success outcomes compared to nonparticipants. All of the 16 participants had a fall semester GPA above a 2.0. Please see Table 10.
- A remarkable trend is that 98%-99% of the students participating in Summer Bridge during the years 2006-2010 reported that they would recommend the program to other students when asked the question on the anonymous end-of-course evaluation. This finding suggests that the students are very satisfied with their experiences during the program.
- 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 rates 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. Additionally, the effect sizes of Summer Bridge participation on academic performance were all in the small-to-moderate range.

Table 1. 2009 Summer Bridge Program: Student Characteristics and Academic Success Indicators (First-Time, Full-time Fall Beginners)

	N	Avg. H.S. GPA	Avg. SAT Score	% H.S. Honors Diploma	Avg. Course Load	Avg. Age	Avg. Fall GPA	% Fall GPA below a 2.0	Fall DFW Rate	Fall –Spring Retention Rate	Fall- to-Fall Retention Rate
Summer Bridge	382	3.37	1005	60%	14.09	18.82	2.98	12%	11.14%	95%	N/A
Non-Participants	2125	3.30	1018	48%	13.92	19.15	2.76	19%	18.08%	89%	N/A
Overall	2507	3.31	1016	50%	13.95	19.10	2.79	18%	17.02%	90%	N/A

	Female		African American		Latino		Twenty-First Century Scholars		IUPUI 21st Pledge Grant		Themed Learning Community Participant	
	N	%	N	%	N	%	N	%	N	%	N	%
Summer Bridge	257	67%	58	16%	16	4%	96	25%	87	23%	229	60%
Non-Participants	1241	58%	159	8%	73	3%	127	6%	90	4%	504	24%
Overall	1498	60%	217	9%	89	4%	223	9%	177	7%	733	29%

Note 1: Missing cases were excluded from analyses.

Note 2: Students who Withdrew from Bridge or who were Administratively Withdrawn from Bridge were excluded (N=9 students).

Note 2: Bolded items are significantly different based on independent samples t-test or chi-square results ($p < .05$).

Table 2. Fall 2009 First-Time Students: Summer Bridge and First Semester Grade Point Average

	N	Average Fall GPA	Adjusted Fall GPA
Summer Bridge	348	2.99	2.96
Non-Participants	1829	2.77	2.78
Overall	2177	2.80	

Note 1: Missing cases were excluded from the analysis.

Note 2: Students who Withdrew from Bridge or who were Administratively Withdrawn from Bridge were excluded (N=9 students).

Note 3: ANCOVA results suggested that students participating in Summer Bridge had significantly higher fall semester GPAs compared to students not participating, even after High School GPAs, SAT scores, Age, Gender, Ethnicity, and First Generation Status were entered as covariates ($p < .001$).

Table 3. 2009 Summer Bridge-Themed Learning Community (TLC) Program: Student Characteristics and Academic Success Indicators (First-Time, Full-time Fall Beginners)

	N	Avg. H.S. GPA	Avg. SAT Score	% H.S. Honors Diploma	Avg. Course Load	Avg. Age	Avg. Fall GPA	% Fall GPA below a 2.0	Fall DFW Rate	Fall –Spring Retention Rate	Fall- to-Fall Retention Rate
Summer Bridge-TLC	228	3.35	992	59%	14.10	18.84	3.04	10%	8.96%	95%	N/A
TLC Only	493	3.27	1008	49%	14.15	18.86	2.74	18%	16.76%	89%	N/A
Summer Bridge Only	153	3.42	1021	62%	14.07	18.80	2.88	14%	14.43%	93%	N/A

Note 1: Missing cases were excluded from analyses.

Note 2: Students who Withdrew or who were Administratively Withdrawn from Bridge or the TLC were excluded (n=21 students).

Note 3: Bolded items are significantly different based on independent samples t-test or chi-square results ($p < 05$).

Table 4. Fall 2009 First-Time Students: Summer Bridge-Themed Learning Community First Semester Grade Point Average

	N	Average Fall GPA	Adjusted Fall GPA
Summer Bridge-TLC	215	3.05	3.00
TLC Only	464	2.75	2.77
Overall	679	2.84	

Note 1: Missing cases were excluded from the analysis.

Note 2: Students who Withdrew or who were Administratively Withdrawn from Bridge or the TLC were excluded (n=21 students).

Note 3: ANCOVA results suggested that students participating in Summer Bridge-TLC had significantly higher fall semester GPAs compared to TLC only students, even after High School GPAs and SAT scores were entered as covariates ($p < .001$).

Table 5. Fall 2009 First-Time Students: Summer Bridge-Themed Learning Community First Semester Grade Point Average

	N	Average Fall GPA	Adjusted Fall GPA
Summer Bridge-TLC	215	3.05	3.09
Summer Bridge Only	140	2.87	2.82
Overall	355	2.98	

Note 1: Missing cases were excluded from the analysis.

Note 2: Students who Withdrew or who were Administratively Withdrawn from Bridge or the TLC were excluded (n=21 students).

Note 3: ANCOVA results suggested that students participating in Summer Bridge-TLC had significantly higher fall semester GPAs compared to Bridge only students, even after High School GPAs and SAT scores were entered as covariates ($p < .001$).

Table 6. Fall 2009 First-Time, Full-time African American Students: Summer Bridge and First Semester Academic Success Indicators

	N	Avg. H.S. GPA	Avg. SAT Score	% H.S. Honors Diploma	Avg. Course Load	Avg. Age	Avg. Fall GPA	% Fall GPA below a 2.0	Fall DFW Rate	Fall –Spring Retention Rate	Fall- to-Fall Retention Rate
Summer Bridge	58	3.19	891	55%	13.60	18.83	2.67	17%	18.45%	90%	N/A
Non-Participants	159	3.12	912	34%	13.53	19.34	2.34	32%	27.01%	86%	N/A

Note 1: Missing cases were excluded from analyses.

Note 2: Students who Withdrew from Bridge or who were Administratively Withdrawn from Bridge were excluded (N=3 students).

Note 3: Bolded items are significantly different based on independent samples t-test or chi-square results ($p < 05$).

Table 7. Fall 2009 First-Time, Full-Time African American Students who Received the IUPUI Twenty-First Century Scholars Pledge Grant: Summer Bridge and First Semester Academic Success Indicators

	N	Average Fall GPA	% Fall GPA below a 2.0	Fall –Spring Retention Rate
Summer Bridge	24	2.58	17%	96%
Non-Participants	13	2.27	31%	85%

Note 1: Missing cases were excluded from analyses.

Note 2: Students who Withdrew from Bridge or who were Administratively Withdrawn from Bridge were excluded (N=2 students).

Note 3: Statistical tests were not performed due to the small sample size.

Table 8. Fall 2009 First-Time, Full-time Twenty First Century Scholar ^a: Summer Bridge and First Semester Academic Success Indicators

	N	Avg. H.S. GPA	Avg. SAT Score	% H.S. Honors Diploma	Avg. Course Load	Avg. Age	Avg. Fall GPA	% Fall GPA below a 2.0	Fall DFW Rate	Fall –Spring Retention Rate	Fall- to-Fall Retention Rate
Summer Bridge	96	3.27	933	65%	13.85	18.87	2.67	18%	16.52%	92%	N/A
Non-Participants	127	3.22	957	50%	13.96	18.86	2.58	22%	20.36%	91%	N/A

^a actually received 21st Century Scholarship from the State Student Assistance Commission of Indiana (SSACI).

Note 1: Missing cases were excluded from analyses.

Note 2: Students who Withdrew from Bridge or who were Administratively Withdrawn from Bridge were excluded (N=3 students).

Note 3: It is important to note that 46 (36%) of the non-participating students participated in peer mentoring.

Note4: Bolded items are significantly different based on independent samples t-test or chi-square results ($p < .05$).

Table 9. Fall 2009 First-Time, Full-time Twenty First Century Scholars who Received the Pledge Grant: Summer Bridge and First Semester Academic Success Indicators

	N	Avg. H.S. GPA	Avg. SAT Score	% H.S. Honors Diploma	Avg. Course Load	Avg. Age	Avg. Fall GPA	% Fall GPA below a 2.0	Fall DFW Rate	Fall –Spring Retention Rate	Fall- to-Fall Retention Rate
Summer Bridge	87	3.27	937	64%	13.86	18.86	2.68	19%	16.68%	93%	N/A
Non-Participants	90	3.20	946	49%	13.98	18.87	2.59	20%	20.78%	91%	N/A

Note 1: Missing cases were excluded from analyses.

Note 2: Students who Withdrew from Bridge or who were Administratively Withdrawn from Bridge were excluded (N=2 students).

Note 3: It is important to note that 44 (49%) of the non-participating students participated in peer mentoring.

Note 4: Bolded items are significantly different based on independent samples t-test or chi-square results ($p < .05$).

Table 10. Fall 2009 First-Time, Full-Time Latino Students: Summer Bridge and First Semester Academic Success Indicators

	N	Average Fall GPA	% Fall GPA below a 2.0	Fall –Spring Retention Rate
Summer Bridge	16	3.06	0%	94%
Non-Participants	73	2.61	17%	86%

Note 1: Missing cases were excluded from analyses.

Note 2: No Latino/a students Withdrew or were Administratively Withdrawn from Summer Bridge.

Note 3: Statistical tests were not performed due to the small sample size.

Table 11. Fall 2009 First-Time, Full-Time Summer Bridge Participants by School or Department

	N	Average Fall GPA	Adjusted Fall GPA	Fall –Spring Retention Rate
Business	22	2.87	3.04	95%
Dental Hygiene	18	2.72	2.69	83%
Education	20	2.77	3.01	100%
Engineering	24	2.86	2.70	96%
Nursing	65	3.32	3.09	98%
Psychology	22	3.22	3.16	100%
Science	39	2.99	2.69	92%
School of Liberal Arts	22	3.22	3.36	100%
SPEA	20	2.60	2.66	95%
Technology	25	3.14	3.15	100%
University College	105	2.82	3.03	89%
Overall	382	2.98		95%

Note 1: Missing cases were excluded from analyses.

Note 2: Students who Withdrew from Bridge or who were Administratively Withdrawn from Bridge were excluded (N=9 students).

Note 3: Adjusted GPAs with High School GPAs and SAT scores entered as covariates.