

IMIR

Research Brief

Volume 1 Number 2, June 1993

Undergraduate Student Progress: Getting Into and Through a Major

Table of Contents

Introduction	Highlights	The First Two Years (Fall 1988-1990)
The Second Two Years (Fall 1990-1992)	The Four Years (Fall 1988-Fall 1992)	Implications

Tables and Figures

- [Table 1. Student Progress in the First Two Years, 1988 Beginner Cohort](#)
 - [Table 2. Class Level Progress of Fall 1990 Persisters](#)
- [Table 3. Student Progress in the Second Two Years, 1990-92](#)
 - [Table 5. Student Progress through Four Years, 1988-92](#)
- [Figure 1. First-Two Year Retention Rates by Entry Program](#)
- [Figure 2. Class Level Progress Among Fall 1990 Persisters by Entry Program](#)
- [Figure 3. First and Second Two year Retention Rates by Academic Program](#)
 - [Figure 4. Source of Students by School](#)

Introduction

This is the first of several reports that will examine the progress of students through IUPUI. The general purpose of these reports is to provide a clearer understanding of how IUPUI students progress toward completing academic programs. These reports should help provide a context for official statistics on campus retention and graduation rates that are released by the University Office of Enrollment Services. We begin here by focusing on two and four year retention, inter-school migration, class progression, and four year graduation rates of a cohort of new beginning students who started at IUPUI in the Fall of 1988.

The Fall 1988 beginner cohort was tracked over a four year period, until Fall 1992. The cohort includes students from both the Indianapolis and the Columbus campuses. This study does not compare the progress of different types of students, but looks at the way all beginning students flow through the institution. Future research will address how student characteristics, including course

load, ethnicity, and level of preparation, impact student progress.

The [previous edition of Research Brief](#), indicated that new beginners represented about three-fifths (61.3%) of all new students in Fall 1988 at IUPUI (including students who have transferred from other IU campuses). This analysis focuses on beginning students to parallel traditional retention tracking efforts as a point of departure. Future tracking efforts will move toward including all undergraduate students at IUPUI.

(Back to [Table of Contents](#), [List of Displays](#))

Highlights

- Less than one-half (46%) of the Fall 1988 first-time freshman cohort was enrolled or had graduated with a certificate or associate degree after two years. The two year retention rate was highest among those directly admitted to Indianapolis Schools (57.1%) followed by those beginning in University Division (UDIV, 48.3%), at Columbus (45.0%) and in the Guided Study Program/University Access Center (GSP/UAC, 40.4%).
- The vast majority (83.8%) of Indianapolis School students who persisted for two years had progressed to at least sophomore standing. Slightly fewer UDIV students (80.9%) and many fewer Columbus (65%) and GSP/UAC students (59.1%) made similar progress.
- Over two-thirds (67.3%) of the students who persisted for the first two years persisted for another two years. The only students for which the persistence rate went down were those at the Columbus campus and those who remained in GSP/UAC.
- Overall, only 5.6% of Fall 1988 new beginning students graduated in four years but 30.5% were still enrolled. Students directly admitted to Indianapolis Schools had the highest four year graduation rate (10.3%) followed by students who started in UDIV (8.2%), at Columbus (7.5%), and in GSP/UAC (1.8%).
- Over three-quarters (76%) of the students who started in Indianapolis Schools and persisted for two calendar years remained enrolled in their original school. Fifteen percent moved to other academic units, and nine percent moved to other IU campuses. Virtually all students (97%) in Indianapolis Schools who persisted for another two years remained in the same school.

(Back to [Table of Contents](#), [List of Displays](#))

The First Two Years (Fall 1988-1990)

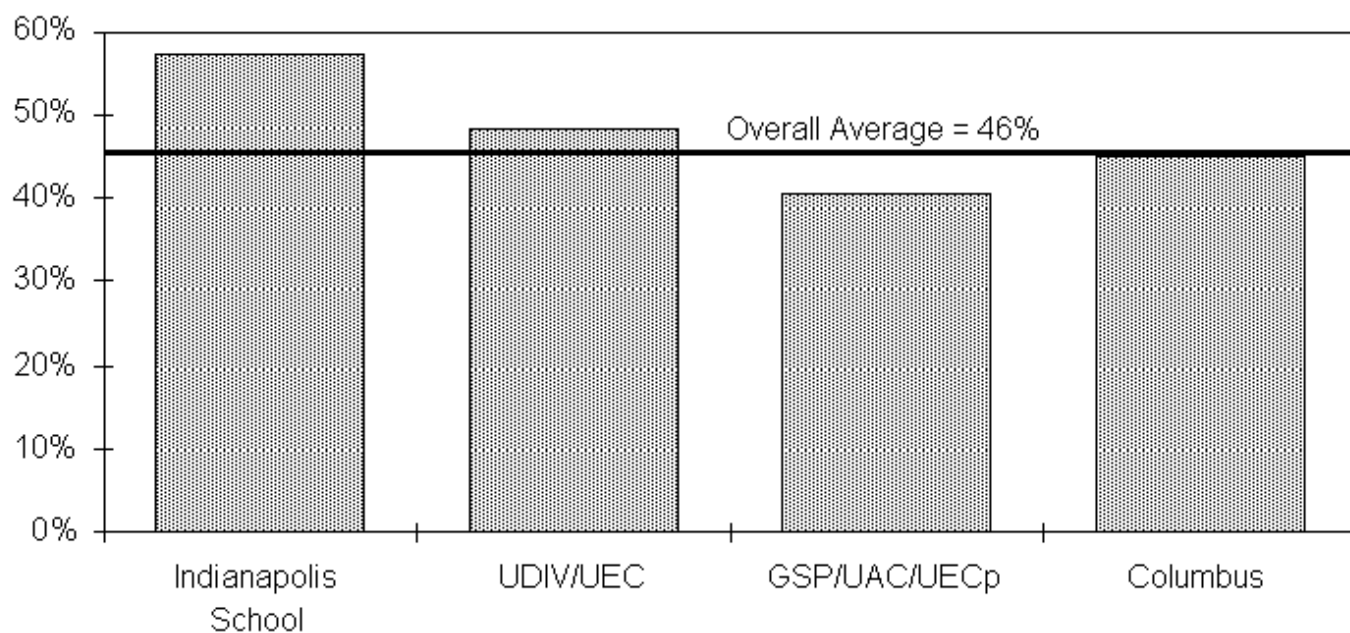
What happens to beginning students during the first two years at IUPUI? How many are still enrolled, how many are still in the same unit, and how have they progressed in terms of class standing? Table 1 shows the Fall 1990 enrollment status of Fall 1988 beginning students according to entry program. Entry programs are categorized as: degree-granting schools of the IUPUI Indianapolis Campus (Indianapolis Schools); non-degree granting programs in Indianapolis--the University Division (UDIV/UEC (Fall 1988 students not directly admitted to Indianapolis Schools entered into either the University Division, the Guided Study Program, or the University Access Center. These students were tracked into Schools or the programs now affiliated with the Undergraduate Education Center.)), or the Guided Study Program or University Access Center (GSP/UAC/UECp (Fall 1988 students not directly admitted to Indianapolis Schools entered into either the University Division, the Guided Study Program, or the University Access Center. These students were tracked into Schools or the programs now affiliated with the Undergraduate Education Center.)); and all programs at the Columbus Campus.

Table 1. Student Progress in the First Two Years, 1988 Beginner Cohort

	Total		Entry Program (1988)							
	N	%	Indianapolis School		Indianapolis Non-Degree Program				Columbus Campus	
			N	%	UDIV/UEC		GSP/UAC/UECp		N	%
Beginning Cohort (Fall 1988)	2479		406	100.0%	833	100.0%	1120	100.0%	120	100.0%
Percent of Row Total	100%		16.4%		33.6%		45.2%		4.8%	
Enrolled Total (Fall 1990)	1131	45.6%	223	54.9%	401	48.1%	453	40.4%	54	45.0%
		% of Enr.		% of Enr.		% of Enr.		% of Enr.		% of Enr.
Same School	485	42.9%	170	76.2%	140	34.9%	147	32.5%	28	51.9%
Other IUPUI	520	46.0%	34	15.2%	205	51.1%	269	59.4%	12	22.2%
IUPUI Total	1005	88.9%	204	91.5%	345	86.0%	416	91.8%	40	74.1%
Other IU	126	11.1%	19	8.5%	56	14.0%	37	8.2%	14	25.9%
Graduated (Assoc. Degree)	10	0.4%	9	2.2%	1	0.1%	0	0.0%	0	0.0%
Total Enrolled or Graduated	1141	46.0%	232	57.1%	402	48.3%	453	40.4%	54	45.0%
Not Enrolled or Graduated	1338	54.0%	174	42.9%	431	51.7%	667	59.6%	66	55.0%

(Back to [Table of Contents](#), [List of Displays](#))

Overall, less than one-half (46%) of the cohort persisted within the IU system beyond two calendar years (see second to last row of Table 1). Students who were directly admitted into degree-granting schools at Indianapolis (16.4% of all beginners) had the highest two year retention rate of 57%, compared to 48% for UDIV/UEC, 45% for Columbus, and 40% for GSP/UAC/UECp students. These differences are illustrated in Figure 1.

Figure 1. First-Two Year Retention Rates by Entry Program

(Back to [Table of Contents](#), [List of Displays](#))

Nearly one-half of those still enrolled in Fall 1990 had moved from their original school into another

one. As expected, the major movement was out of UDIV/UEC and GSP/UAC/UECp into a degree-granting school: roughly two-thirds of persisting students who started in the non-degree granting units had moved into another unit whereas over three-quarters of the persisters who started in a degree-granting school remained in their original school. Just over one in ten persisting students (11.1%) moved to another IU campus.

By the end of the first two year period (Fall 1990) students advanced to varying degrees in terms of class standing. Table 2 shows that 71.8% of the two year persisters reached a class standing of sophomore or beyond and 16.5% attained a class standing of junior or beyond. These statistics affirm the large proportions of part-time students at IUPUI.

Table 2. Class Level Progress of Fall 1990 Persisters

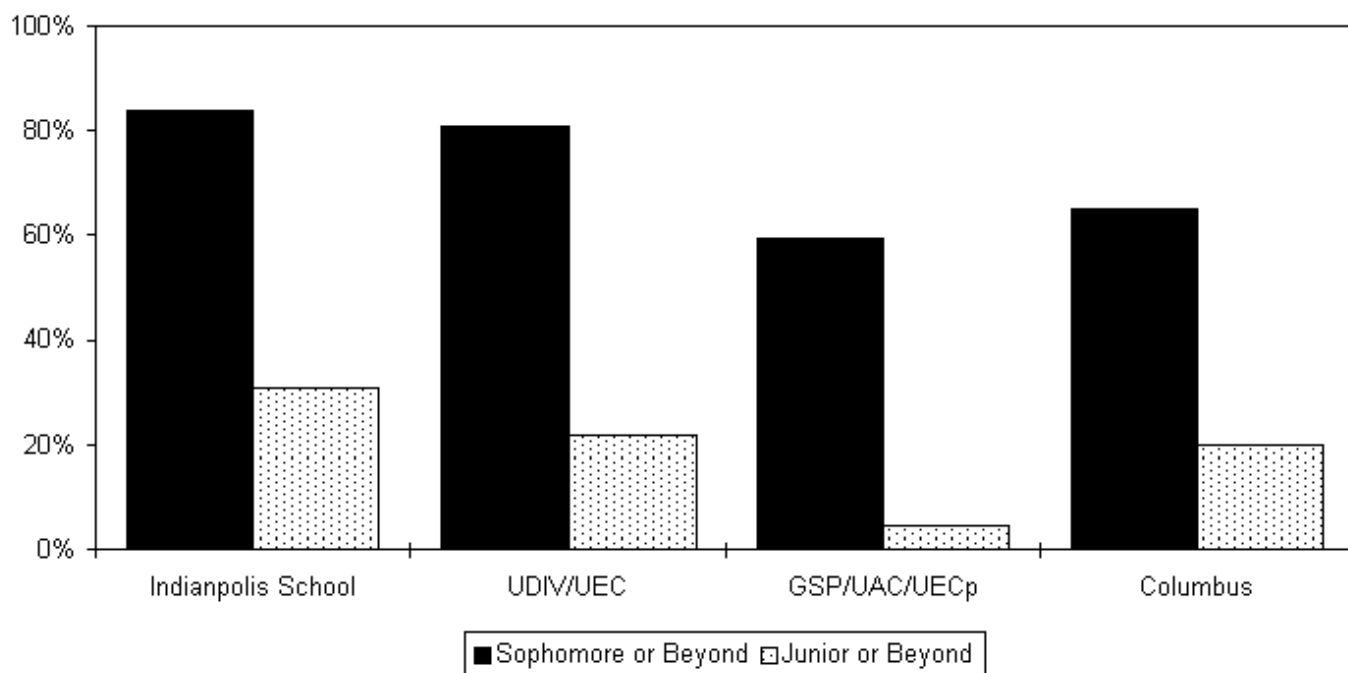
	Total		Entry Program (1988)							
	N	%	Indianapolis School		Indianapolis Non-Degree Program		Columbus Campus			
			N	%	UDIV/UEC	GSP/UAC/UECp	N	%		
Fall 1990 IUPUI Survivors	1005		204		345		416		40	
Percent of Row Total			20.3%		34.3%		41.4%		4.0%	
Sophomore or Beyond	722	71.8%	171	83.8%	279	80.9%	246	59.1%	26	65.0%
Junior or Beyond	166	16.5%	63	30.9%	76	22.0%	19	4.6%	8	20.0%

(Back to [Table of Contents](#), [List of Displays](#))

Students who were directly admitted to an Indianapolis school progressed to the sophomore level at the highest rate (83.8%), followed closely by UDIV/UEC students (80.9%). Lower rates of progress to at least sophomore standing were attained by students at the Columbus Campus (65%) and students in preparatory programs at Indianapolis (59.1%).

The effects of entry program are even more dramatic when progress to the junior level is considered. Almost one-third (30.9%) of students who started in Indianapolis Schools reached the junior level or beyond, compared to only one-fifth of UDIV/UEC (22%) and Columbus (20%) students and only 4.6% of the GSP/UAC/UECp persisters. Figure 2 portrays these differences.

Figure 2. Class Level Progress Among Fall 1990 Persisters by Entry Program



(Back to [Table of Contents](#), [List of Displays](#))

The Second Two Years (Fall 1990-1992)

In terms of migration and academic progress, the second two year period is marked by greater stability (lower inter-school migration), and higher retention and degree completion rates for those students who persisted to Fall 1990. Table 3 shows the Fall 1992 enrollment status of Fall 1990 persisters according to the type of program in which they were enrolled during Fall 1990.

Table 3. Student Progress in the Second Two Years, 1990-92

Fall 1992 Enrollment Status	Total		Fall 1990 Program							
	N	%	Indianapolis School		Indianapolis Non-Degree Program				Columbus Campus	
			N	%	UDIV/UEC		GSP/UAC/UECp		N	%
Surviving Cohort (Fall 1990)	1005		549	100.0%	273	100.0%	149	100.0%	34	100.0%
Percent of Row Total	100.0%		54.6%		27.2%		14.8%		3.4%	
Enrolled Total (Fall 1992)	562	55.9%	327	59.6%	164	60.1%	58	38.9%	13	38.2%
		% of Enr.		% of Enr.		% of Enr.		% of Enr.		% of Enr.
Same School	360	64.1%	318	97.2%	21	12.8%	16	27.6%	5	38.5%
Other IUPUI	182	32.4%	1	0.3%	136	82.9%	39	67.2%	6	46.2%
IUPUI Total	542	96.4%	319	97.6%	157	95.7%	55	94.8%	11	84.6%
Other IU	20	3.6%	8	2.4%	7	4.3%	3	5.2%	2	15.4%
Graduated Total	114	11.3%	107	19.5%	3	1.1%	0	0.0%	4	11.8%
Associate Degree	38	3.8%	35	6.4%	1	0.4%	0	0.0%	2	5.9%
Bachelor's Degree	76	7.6%	72	13.1%	2	0.7%	0	0.0%	2	5.9%
Total Enrolled or Graduated	676	67.3%	434	79.1%	167	61.2%	58	38.9%	15	44.1%
Not Enrolled or Graduated	329	32.7%	115	20.9%	106	38.8%	91	61.1%	19	55.9%

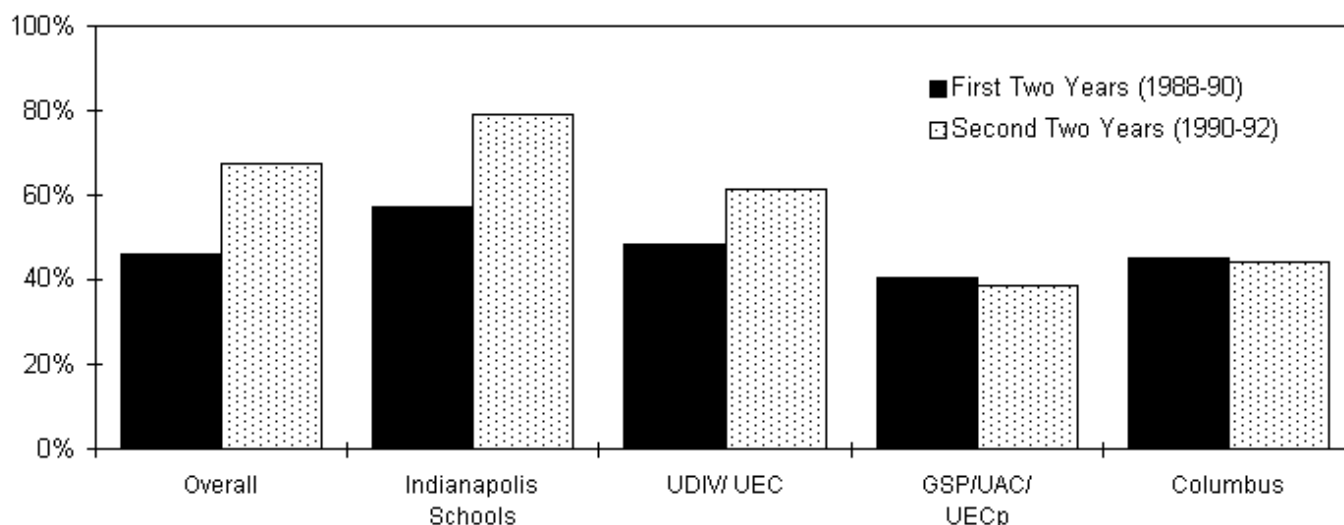
(Back to [Table of Contents](#), [List of Displays](#))

In the second two year period, students enrolled in Indianapolis Schools were less likely to move to another school at IUPUI or to another IU campus. A comparison of tables 2 and 3 reveals that 97% of these students remained in the same school between 1990 and 1992 compared to 76% between 1988 and 1990. The rate of movement to other IU campuses among members of this group declined from 8.5% to 2.4%.

Among the Fall 1990 persisters, slightly more than two-thirds (67.3%) either were retained or graduated (from any IU campus) at the end of four years. This represents a substantial increase over the first two year period where 46% were either retained or graduated.

While retention rates are higher overall for persisters during this second two year period, the effects of academic program are still evident, and even more pronounced than they were during the first two year period. Further comparison of Tables 2 and 3 shows a marked increase in retention/graduation rates through Fall 1992 for students in the Indianapolis Schools from 57.1% to 79.1% and a somewhat smaller, but nevertheless sizable increase, from 48.3% to 61.2% for UDIV/UEC students. Preparatory program students who persisted to Fall 1990 but had not migrated to an academic unit and Columbus Campus persisters were slightly less likely to be retained during the second two year period than they were during the first period. Figure 3 illustrates these differences.

Figure 3. First and Second Two year Retention Rates by Academic Program



(Back to [Table of Contents](#), [List of Displays](#))

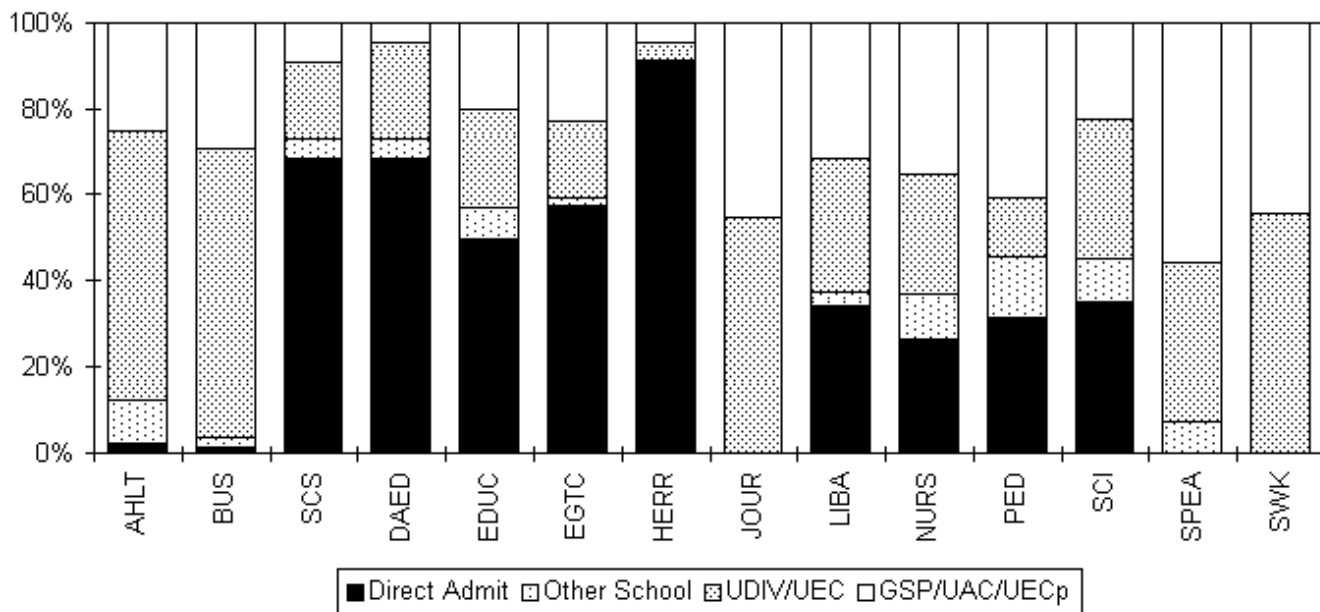
The Four Years (Fall 1988-Fall 1992)

We now turn our attention from a two year time-frame to a four year time-frame in order to examine the migration, retention, and graduation rates of all students included in the Fall 1988 beginner cohort. How did all members of the cohort, not just the Fall 1990 persisters, fare at the end of four years? Also, how do academic programs receive students from this cohort?

Figure 4 shows the proportion of students in this cohort who enrolled in an Indianapolis School in either 1988, 1990, or 1992, according to where they started. Schools that did not directly admit students (e.g., Business, Journalism, SPEA, and Social Work) received most students from UDIV/UEC and GSP/UAC/UECp. Even schools that did directly admit students (e.g., Education and Engineering & Technology) received a large proportion of students from the non-degree granting

units. Note that these figures do not reflect the large numbers of new transfer students who enter the schools.

Figure 4. Source of Students by School



(Back to [Table of Contents](#), [List of Displays](#))

Table 5 provides information on retention and graduation over the full four year period for all students included in the cohort by their school of origin. Four years after they started at IUPUI, 139 of 2479 students (5.6%) had graduated with either a certificate or associate (1.6%) or bachelor's (4.0%) degree, and 30.5% were still enrolled. The four year retention/graduation rate for this cohort of students is 36.1%.

Table 5. Student Progress through Four Years, 1988-92

Fall 1992 Enrollment Status	Total		Entry Program							
	N	%	Indianapolis School		Indianapolis Non-Degree Program		Columbus Campus			
			N	%	UDIV/UEC	GSP/UAC/UECp	N	%		
Enrolling Cohort (Fall 1988)	2479		406	100.0%	833	100.0%	1120	100.0%	120	100.0%
Percent of Row Total	100.0%		16.4%		33.6%		45.2%		4.8%	
Enrolled Total (Fall 1992)	756	30.5%	144	35.5%	269	32.3%	314	28.0%	29	24.2%
		% of Enr.		% of Enr.		% of Enr.		% of Enr.		% of Enr.
Same School	205	27.1%	128	88.9%	39	14.5%	29	9.2%	9	31.0%
Other IUPUI	465	61.5%	5	3.5%	200	74.3%	249	79.3%	11	37.9%
IUPUI Total	670	88.6%	133	92.4%	239	88.8%	278	88.5%	20	69.0%
Other IU	86	11.4%	11	7.6%	30	11.2%	36	11.5%	9	31.0%
Graduated Total	139	5.6%	42	10.3%	68	8.2%	20	1.8%	9	7.5%
Associate Degree	40	1.6%	3	0.7%	20	2.4%	12	1.1%	5	4.2%
Bachelor's Degree	99	4.0%	39	9.6%	48	5.8%	8	0.7%	4	3.3%
Total Enrolled or Graduated	895	36.1%	186	45.8%	337	40.5%	334	29.8%	38	31.7%
Not Enrolled or Graduated	1584	63.9%	220	54.2%	496	59.5%	786	70.2%	82	68.3%

(Back to [Table of Contents](#), [List of Displays](#))

As with the retention statistics reported earlier, the four year retention and graduation rates were highest among students directly admitted into Indianapolis Schools, followed by students admitted into University Division, the Columbus Campus, and the Guided Study/UAC programs, respectively.

(Back to [Table of Contents](#), [List of Displays](#))

Implications

The major quantitative findings from this study are summarized in the [highlights](#) section. Beyond these statistics is a fundamental question relevant to policy and practice: is the retention rate among IUPUI beginning students as high as we can expect it to be? If not, what can be done about it? While the current analysis does not reveal any "causes" of unwanted attrition, it does suggest that approaches to improving IUPUI's rates must take into account how students enter into and subsequently progress through degree programs.

Students with the highest retention "prognosis" are those who enter directly into Indianapolis Schools. This is not surprising given the higher admissions profile of students who enter IUPUI in this way. At the other extreme, is the much lower retention rate among students who enter into IUPUI's preparatory program. This analysis makes clear the need to distinguish between "prepared" and "remedial" students when considering what our retention rate is and what we can do about it.

Statistics from the University Office of Enrollment Services, based on a cohort of 1986 matriculants, show that IUPUI's six-year graduation rates differ significantly between students who start out with full-time course loads (30.5%) and those who start out with part-time course loads (11.4%). Other research sponsored by the IU Vice President for Planning and Financial Management shows that students' employment situations and levels of preparation significantly impact retention rates.

Just as the single measure "sections taught per year" does little to further understanding of faculty productivity, one or even several aggregate retention statistics do little to elucidate student progress toward degree completion. The local research referred to in this analysis suggests large variation among students in their levels of preparation for college, the goals they seek, and the context in which they pursue these goals.

The role of departments and schools in improving retention is complicated by the variety of points at which students enter these programs. For most schools, it makes little sense to think of student progress in terms of entering freshman cohorts: most students transfer into degree programs from non-degree granting units, other IUPUI schools, other IU campuses, or other colleges and universities.

The current analysis provides further support for the importance of the initial years in determining overall college persistence. This factor was paramount in the formation of the Undergraduate Education Center (UEC). Whereas UEC's development came after the 1988 cohort entered, its success will be judged at least partly by improvement in these rates over time. Unfortunately, several factors are working against UEC's success. First and foremost, the level of preparation among entering students declined steadily between Fall 1988, when 47% of beginners were placed in the remedial program (Guided Study Program and the University Access Center) (This figure is slightly higher than the percentages in Tables 1 and 5 because it includes Columbus campus students in the preparatory program.) and Fall 1992 when 56% were placed in the UEC-preparatory program. In response to these declines, entry standards were raised beginning with the Spring 1993 entering

class. The effects of these changes will not show up in six-year graduation rates until the year 1999.

Because of federal mandates, including NCAA reporting regulations and the Student Right-to-Know Act, significant attention will continue to focus on simplistic aggregate retention statistics. For reasons just cited, these statistics will not prove particularly useful in deciding how to improve students' academic and non-academic experiences at IUPUI. Retention and graduation rates can only serve as a "barometer" of change if they are measured at levels appropriate to the programs and policies being evaluated.

(Back to [Table of Contents](#), [List of Displays](#))

Research Brief is a periodic publication of the Office of Information Management and Institutional Research at
Indiana University Purdue University Indianapolis.

Go to [Office of Information Management and Institutional Research](#) Home Page