

# The Adelman Model

An Alternative, More Inclusive Model for Monitoring Student Retention and Graduation Rates

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Indiana University

Degrees of Excellence Regional Campus Planning Seminar

Indianapolis, IN

**IU Southeast**

## Using the “Adelman Model” to Track Graduation and Persistence Rates at IU Regional Campuses

In March 2007, Clifford Adelman, retired researcher for the U.S. Department of Education and now on staff at the Institute for Higher Education Policy, disseminated a method for calculating college graduation rates that was intended to address the deficiencies of the common approach that focuses exclusively on first-time full-time beginners. A full description of the approach is included as an appendix to this report. The methodology is outlined below as adopted for the present analysis

1. The base year cohort is defined as all degree-seeking, undergraduate students who enter the institution for the first time **between July 1 and June 30** of a fiscal/academic year and enroll for **at least 6 credits of academic work** in their first regular session (fall or spring) semester.
2. The students are categorized into one of three entry mode groups: traditional beginners (under age 24); nontraditional beginners (age 24+); and transfers<sup>1</sup>
3. The students are tracked through six and nine years to determine if they are either still actively pursuing an undergraduate degree (i.e., enrolled in either the fall or spring semester of the sixth and ninth year after entering) or have received an undergraduate degree or certificate. **In other words, this is a year-to-year as opposed to fall-to-fall tacking model;**
4. Students are also tracked to other campuses, using the services of the National Student Clearinghouse

For the present analysis, the first three steps of this methodology were employed for students entering the regional campuses of Indiana University between academic years 1996-97 and 2001-02. The first two cohorts (1996-97 and 1997-98) were tracked through **nine years** and all five cohorts were tracked through **six years**. The IU regional campuses will soon have the services available to expand this analysis to include the fourth step of the methodology.

The first page of tables shows the size of the cohorts included in this analysis and the distribution across the tracking groups for each IU regional campuses. This is followed by a set of tables showing the available tracking rates for these five cohorts.

Because of the long time lag inherent in this model, a second set of tables was constructed using the base cohort and categorizing specifications of the Adelman model for more recent cohorts (2004-05 through 2006-07), with a slight modification to the grouping strategy. Specifically, instead of using only age to determine traditional/non-traditional status among first-time-in-college students, their financial dependency status was also taken into account. The non-traditional group includes all students who either filed a financial aid application (FAFSA) as financially independent or who are financially dependent but age 24 or older. If the student did not file for financial aid, only age is used to determine the status.

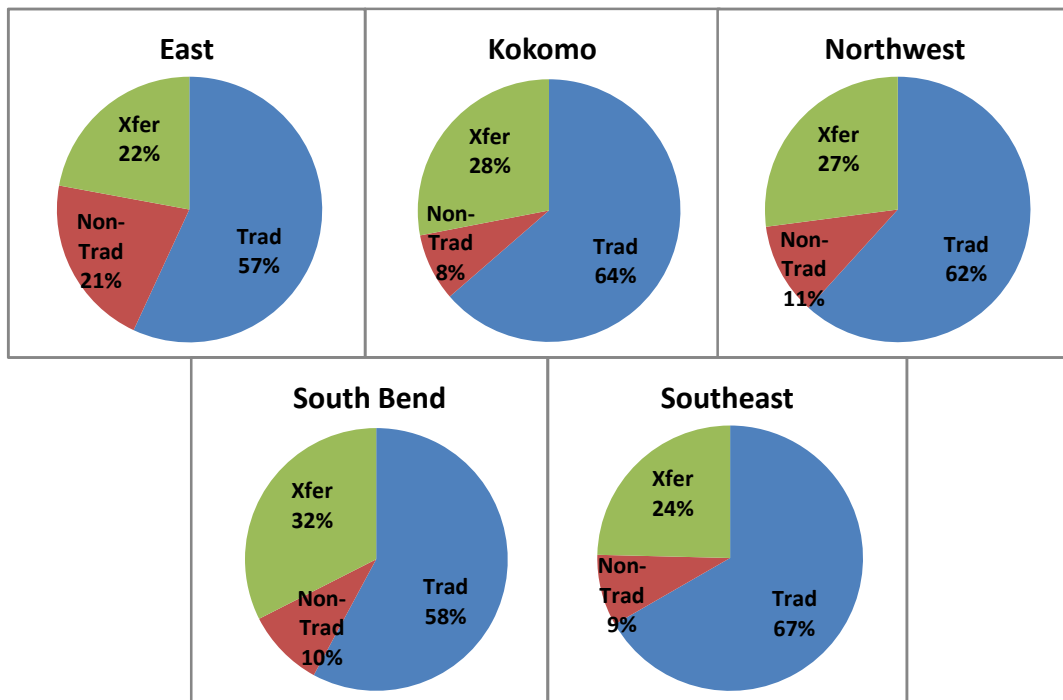
These cohorts were tracked for between one to three subsequent years depending on their starting point. The second set of tables in this report shows the number of students in these cohorts and their distribution by category overall and for each regional campus. This is followed by a set of tables and charts for all and each campus, showing persistence rates to the second, third and fourth years as appropriate.

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<sup>1</sup> For the present analysis, this only includes “external transfers,” and not students who transferred from another IU campus, since those are part of that originating campuses tracking cohort.

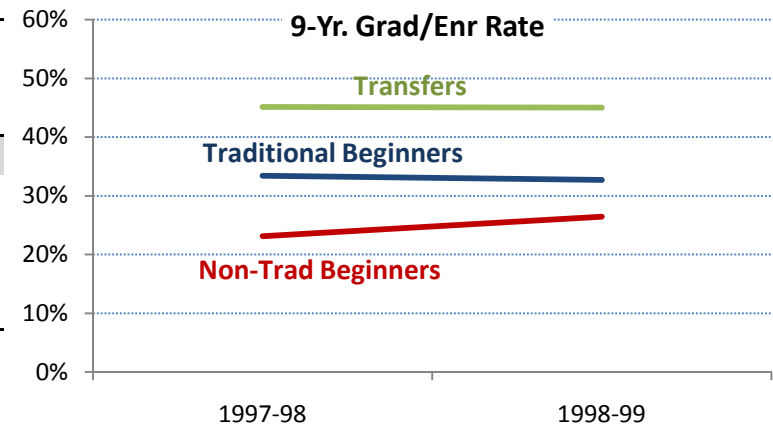
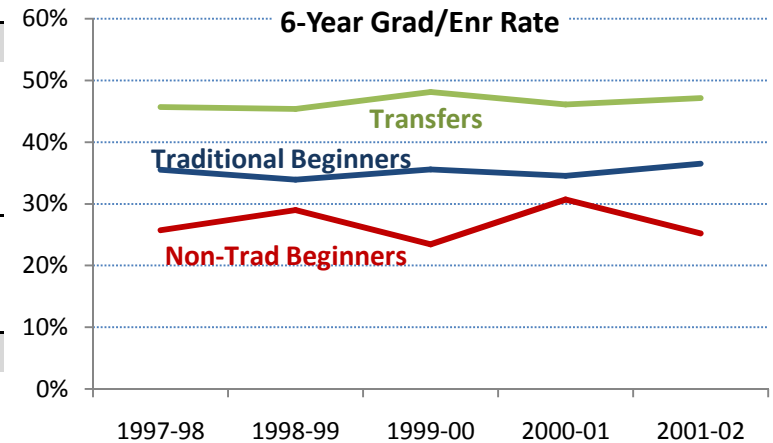
**The Adelman Entry Groups, AY 1997-98 through AY 2001-02, Combined**

	Beginners			Annual Total
	Traditional	Non-Trad.	Transfers	
<b>Number of Annual New Students</b>				
East	1,732	639	673	3,044
Kokomo	2,189	286	964	3,439
Northwest	3,081	560	1,351	4,992
South Bend	4,068	679	2,280	7,027
Southeast	4,132	539	1,525	6,196
<b>Percent of Annual New Students</b>				
East	57%	21%	22%	100%
Kokomo	64%	8%	28%	100%
Northwest	62%	11%	27%	100%
South Bend	58%	10%	32%	100%
Southeast	67%	9%	25%	100%



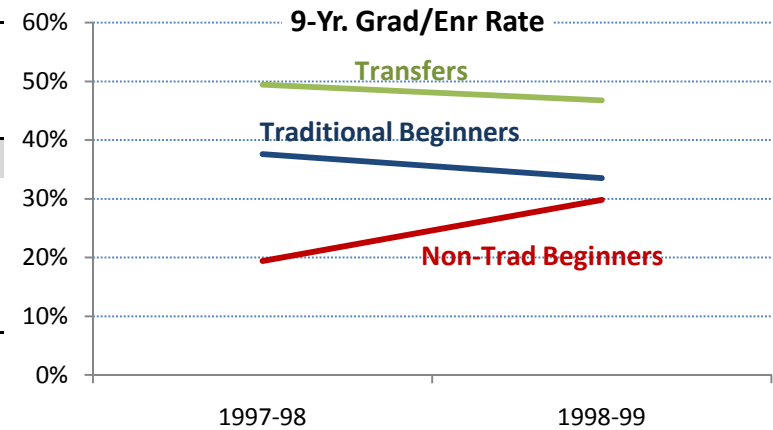
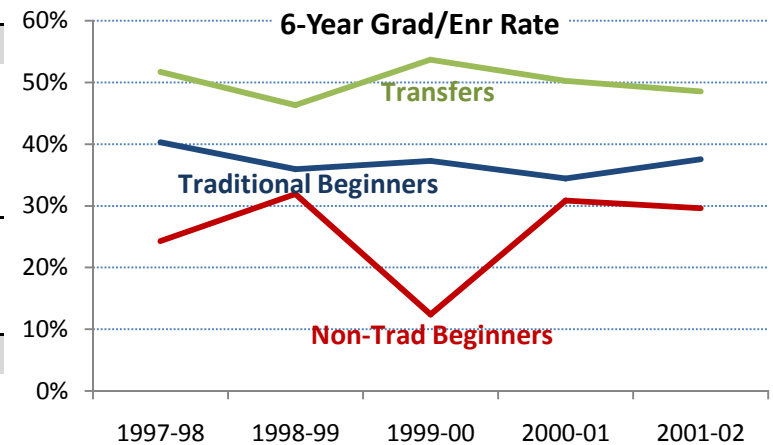
**Trend in Six- and Nine-Year Adelman Persistence Rates by Entry Mode  
All Campuses Combined**

	1997-98	1998-99	1999-00	2000-01	2001-02
<b>Traditional Beginners</b>					
Cohort N	2880	3111	2958	3066	3187
Six-Year Rate	<b>36%</b>	<b>34%</b>	<b>36%</b>	<b>35%</b>	<b>36%</b>
Graduated	24%	22%	24%	24%	26%
Still Enrolled	12%	12%	11%	10%	11%
Nine-Year Rate	<b>33%</b>	<b>33%</b>			
Graduated	29%	28%			
Still Enrolled	4%	5%			
<b>Non-Traditional Beginners</b>					
Cohort N	498	462	495	534	714
Six-Year Rate	<b>26%</b>	<b>29%</b>	<b>23%</b>	<b>31%</b>	<b>25%</b>
Graduated	16%	19%	16%	20%	15%
Still Enrolled	10%	10%	8%	11%	10%
Nine-Year Rate	<b>23%</b>	<b>26%</b>			
Graduated	20%	23%			
Still Enrolled	3%	3%			
<b>Transfers</b>					
Cohort N	1162	1205	1303	1507	1616
Six-Year Rate	<b>46%</b>	<b>45%</b>	<b>48%</b>	<b>46%</b>	<b>47%</b>
Graduated	38%	38%	42%	39%	40%
Still Enrolled	8%	7%	6%	7%	7%
Nine-Year Rate	<b>45%</b>	<b>45%</b>			
Graduated	42%	42%			
Still Enrolled	3%	3%			

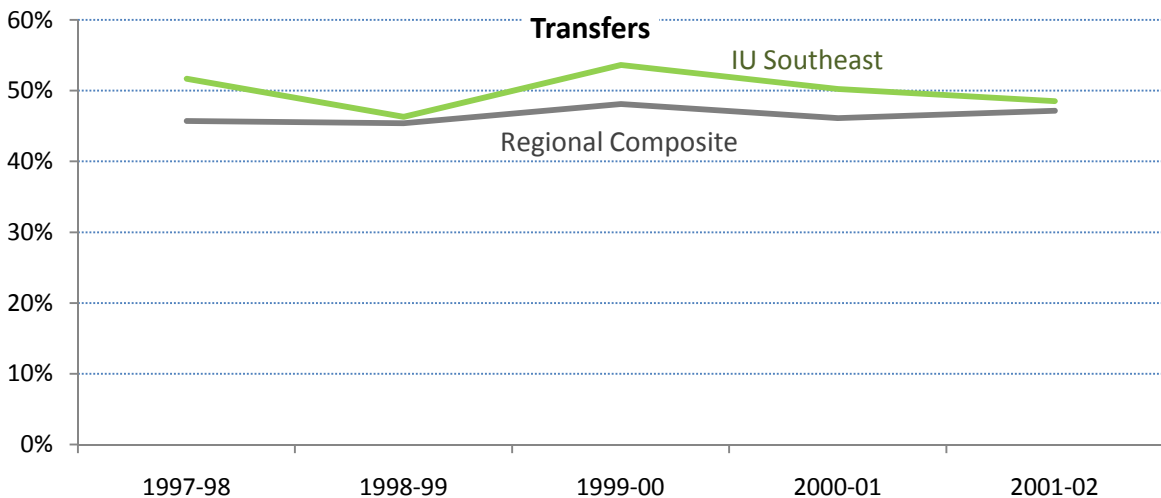
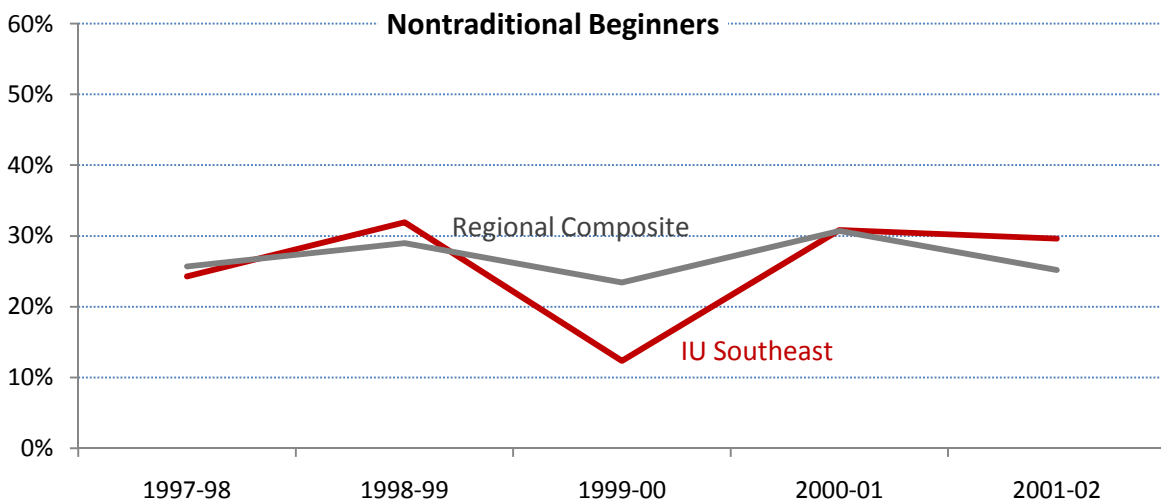
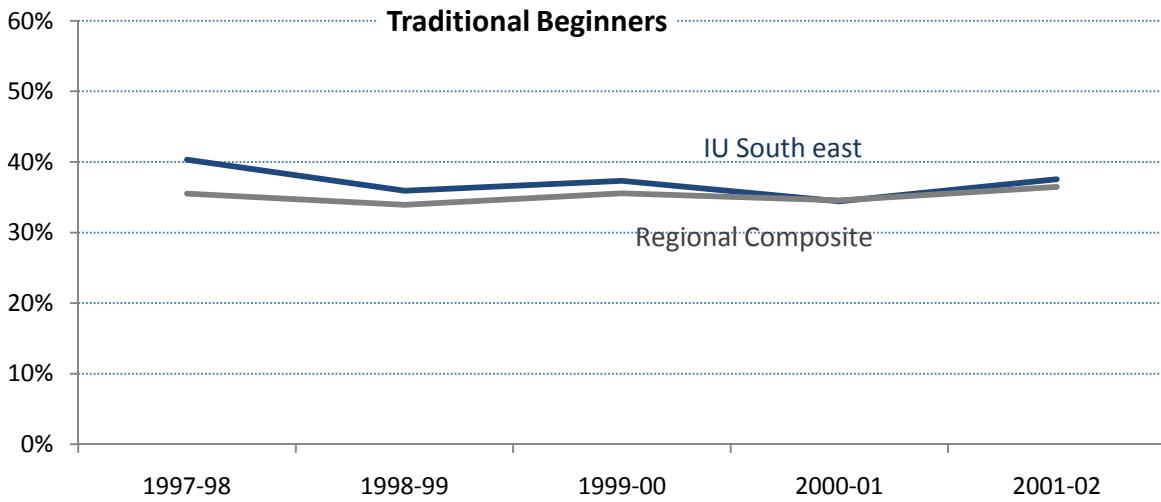


**Trend in Six- and Nine-Year Adelman Persistence Rates by Entry Mode**  
**IU Southeast**

	1997-98	1998-99	1999-00	2000-01	2001-02
<b>Traditional Beginners</b>					
Cohort N	769	863	823	854	823
Six-Year Rate	<b>40%</b>	<b>36%</b>	<b>37%</b>	<b>34%</b>	<b>38%</b>
Graduated	26%	23%	27%	24%	25%
Still Enrolled	14%	13%	11%	10%	13%
Nine-Year Rate	<b>38%</b>	<b>33%</b>			
Graduated	33%	28%			
Still Enrolled	4%	5%			
<b>Non-Traditional Beginners</b>					
Cohort N	103	94	97	120	125
Six-Year Rate	<b>24%</b>	<b>32%</b>	<b>12%</b>	<b>31%</b>	<b>30%</b>
Graduated	13%	16%	10%	18%	14%
Still Enrolled	12%	16%	2%	13%	16%
Nine-Year Rate	<b>19%</b>	<b>30%</b>			
Graduated	17%	22%			
Still Enrolled	3%	7%			
<b>Transfers</b>					
Cohort N	176	244	315	386	404
Six-Year Rate	<b>52%</b>	<b>46%</b>	<b>54%</b>	<b>50%</b>	<b>49%</b>
Graduated	43%	39%	45%	43%	41%
Still Enrolled	9%	8%	9%	7%	7%
Nine-Year Rate	<b>49%</b>	<b>47%</b>			
Graduated	44%	43%			
Still Enrolled	6%	4%			

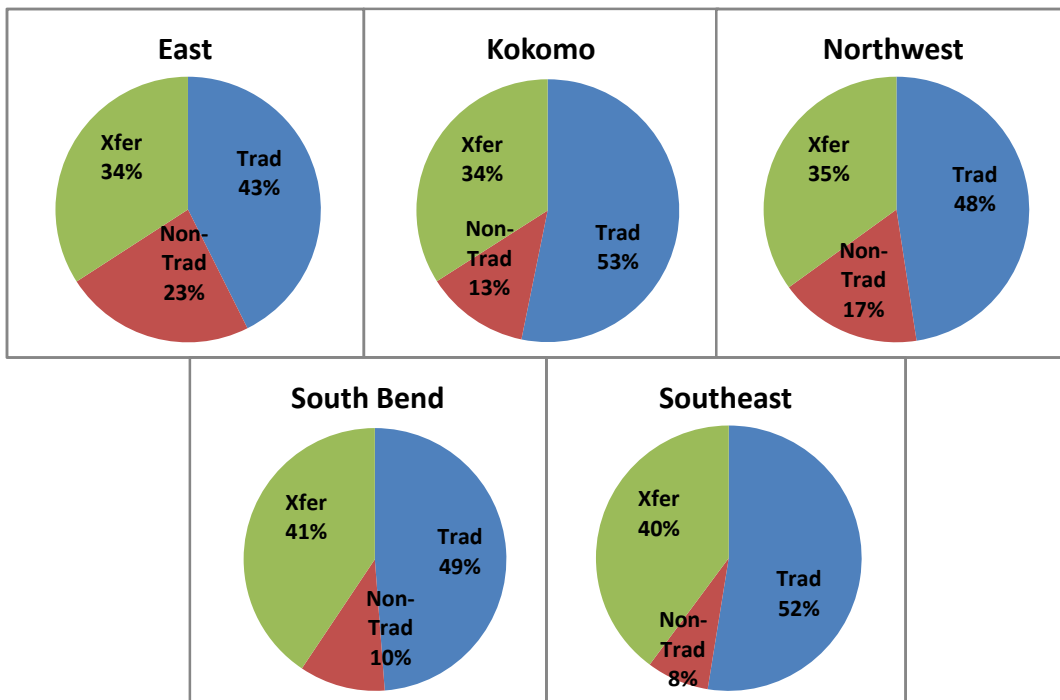


**Adelman Model Early Year Cohorts - Six-Year Persistence  
Comparison to Regional Campus Composite Rates by Entry Mode  
IU Southeast**



**The Adelman Entry Groups, AY 2004-05 through AY 2006-07, Combined**

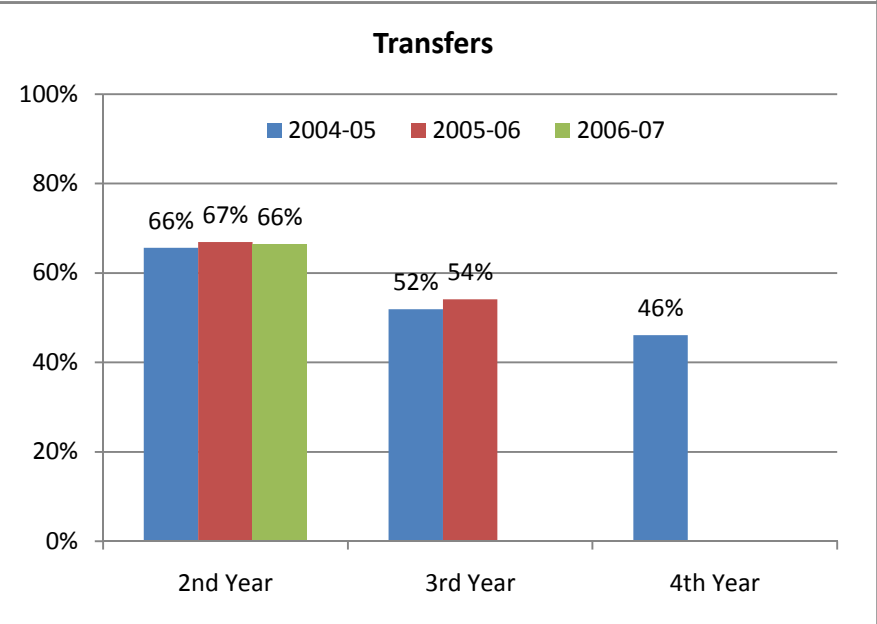
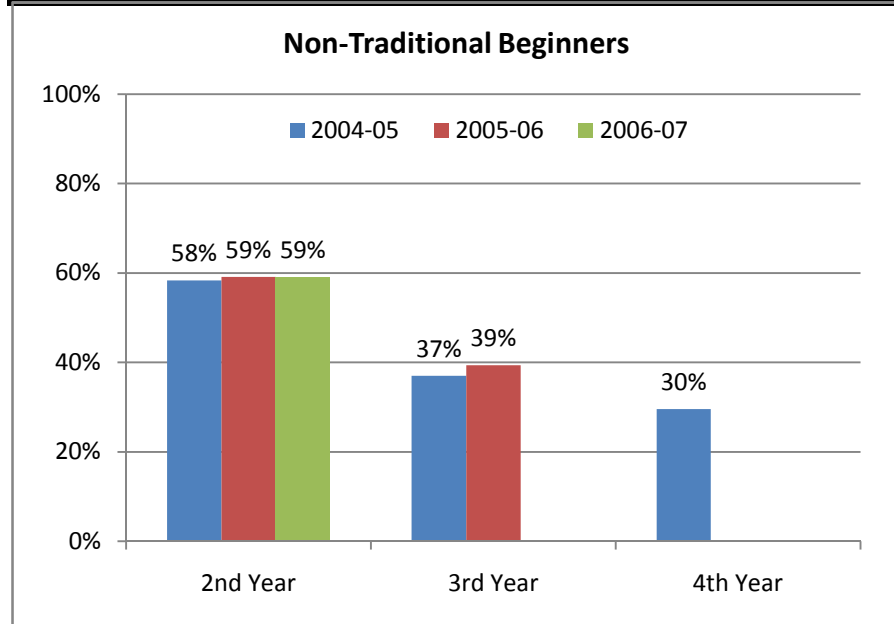
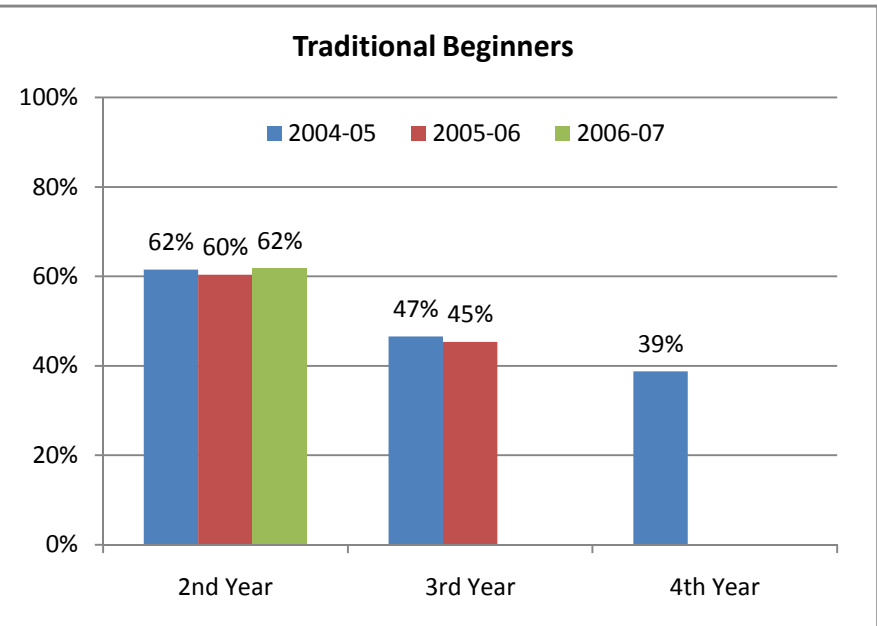
	Beginners			Annual Total
	Traditional	Non-Trad.	Transfers	
Number of Annual New Students				
East	835	456	669	1,960
Kokomo	1,198	287	766	2,251
Northwest	1,757	645	1,292	3,694
South Bend	2,571	557	2,137	5,265
Southeast	2,321	337	1,759	4,417
Percent of Annual New Students				
East	43%	23%	34%	100%
Kokomo	53%	13%	34%	100%
Northwest	48%	17%	35%	100%
South Bend	49%	11%	41%	100%
Southeast	53%	8%	40%	100%



**Retention to the Second, Third and Fourth Years: 2004-05 thru 2006-07 Adelman Cohorts**

**All Campuses Combined**

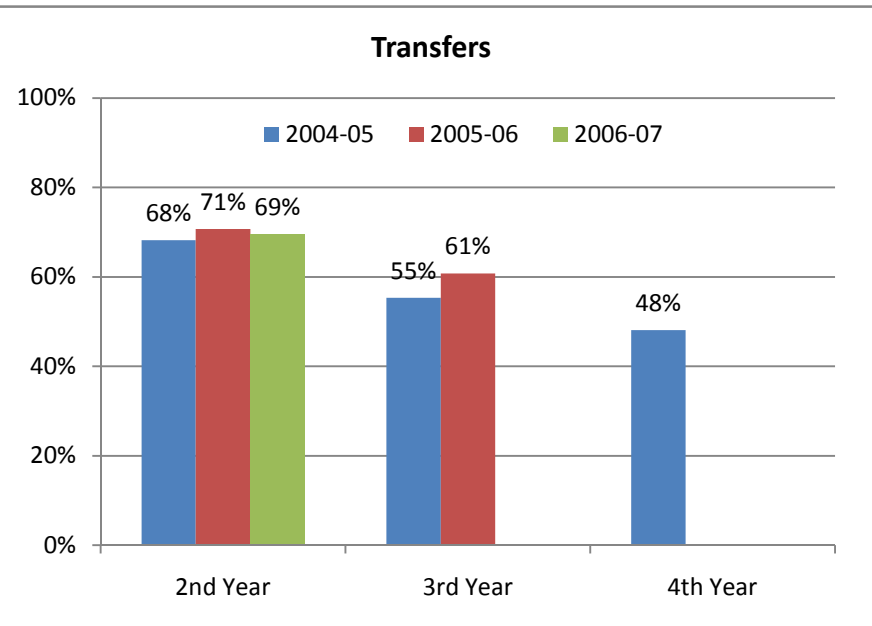
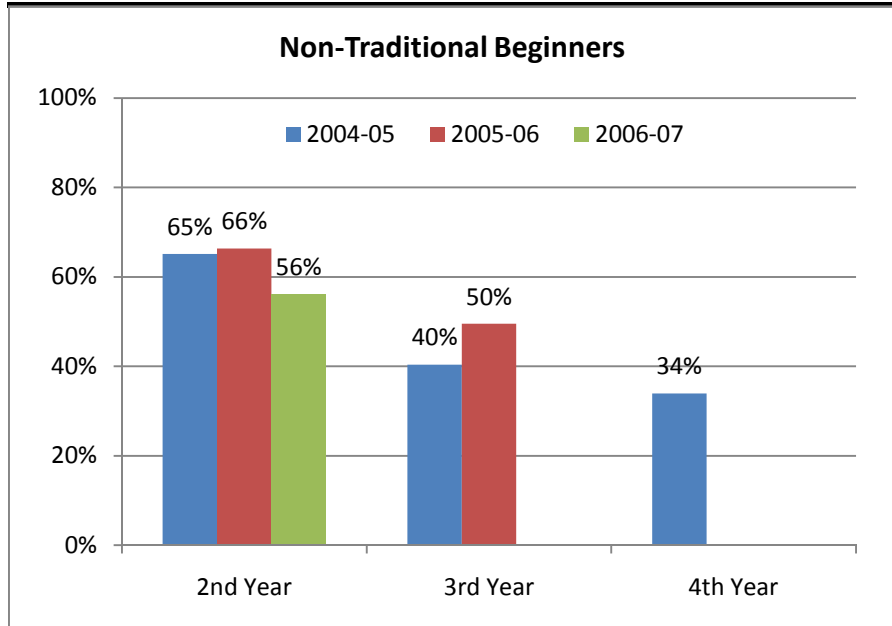
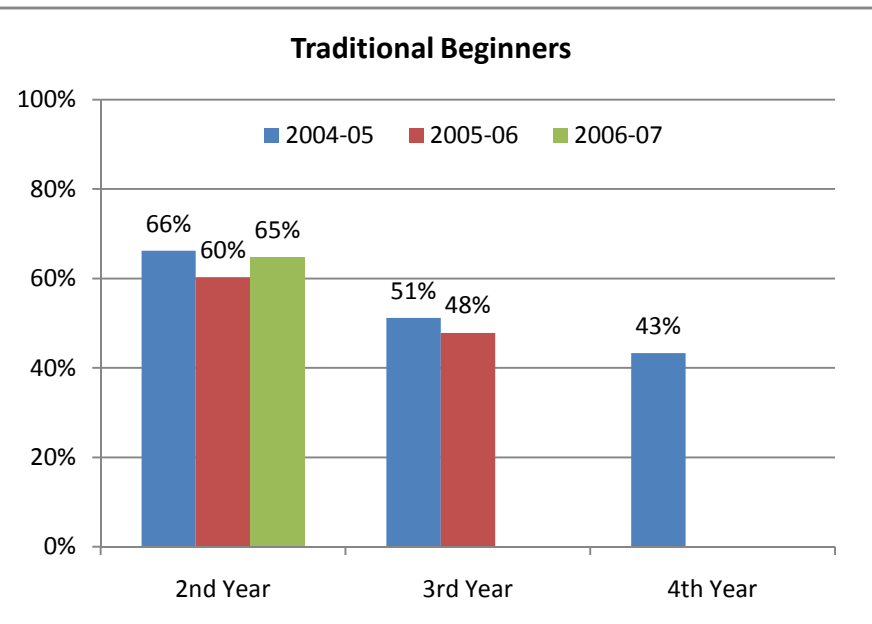
	Cohort N	2nd Year	3rd Year	4th Year
<b>Traditional Beginners</b>				
2004-05	2,820	62%	47%	39%
2005-06	2,909	60%	45%	
2006-07	2,953	62%		
Combined	8,682	61%	46%	39%
<b>Non-Traditional Beginners</b>				
2004-05	795	58%	37%	30%
2005-06	785	59%	39%	
2006-07	702	59%		
Combined	2,282	59%	38%	30%
<b>Transfers</b>				
2004-05	2,095	66%	52%	46%
2005-06	2,241	67%	54%	
2006-07	2,287	66%		
Combined	6,623	66%	53%	46%



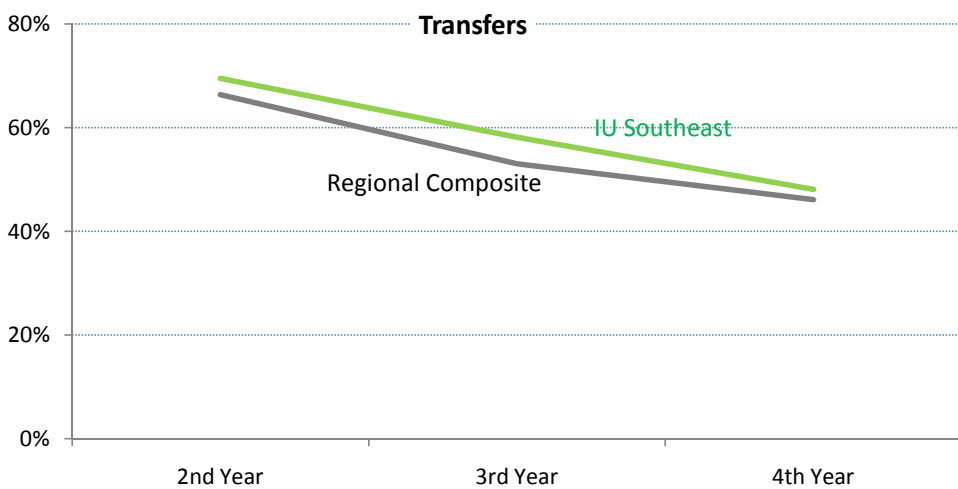
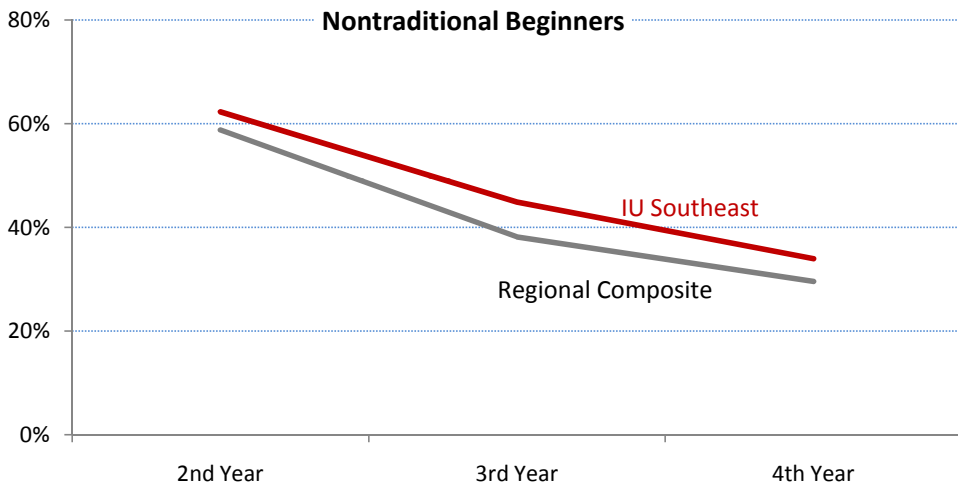
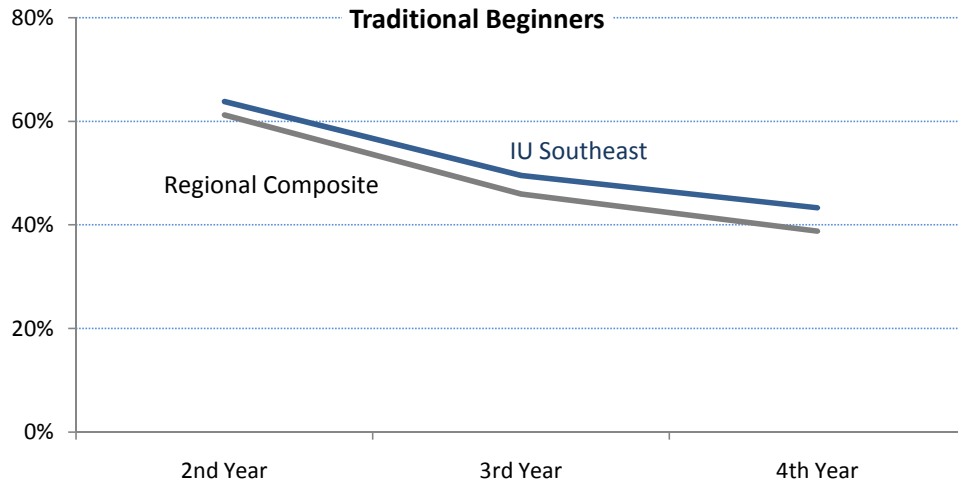
**Retention to the Second, Third and Fourth Years: 2004-05 thru 2006-07 Adelman Cohorts**

**IU Southeast**

	Cohort N	2nd Year	3rd Year	4th Year
<b>Traditional Beginners</b>				
2004-05	778	66%	51%	43%
2005-06	740	60%	48%	
2006-07	803	65%		
Combined	2,321	64%	50%	43%
<b>Non-Traditional Beginners</b>				
2004-05	109	65%	40%	34%
2005-06	107	66%	50%	
2006-07	121	56%		
Combined	337	62%	45%	34%
<b>Transfers</b>				
2004-05	526	68%	55%	48%
2005-06	574	71%	61%	
2006-07	659	69%		
Combined	1,759	70%	58%	48%



**Adelman Model More Recent Year Cohorts - Persistence through the 2nd 3rd, and 4th Years  
Comparison to Regional Campus Composite Rates by Entry Mode  
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March 12, 2007

## Making Graduation Rates Matter

By [Clifford Adelman](#)

Education Secretary Margaret Spellings recently wrote [a letter to the editor](#) of *The Detroit News* in defense of her higher education commission's proposal for [a national "student unit record" system](#) to track all college entrants to produce a more accurate picture of degree completion. "Currently," she said, "we can tell you anything about first-time, full time college students who have never transferred—about half of the nation's undergraduates." It took a long time to bring Education Department officials to a public acknowledgment of what its staff always knew: that the so-called "Congressional Methodology" of our national college graduation rate survey doesn't pass the laugh test. If the Secretary's [Commission on the Future of Higher Education](#) made one truly compelling recommendation, it was for a fuller and better accounting through student unit records.

But it was well known that the establishment of a national student unit record system was a non-starter in Congress due to false worries about privacy and data security. So one wonders why the department hasn't simply proposed a serious revision of the process and formula for determining graduation rates. Having edited and analyzed most of the d-department's postsecondary data sets, may I offer an honest and doable formula?

There are four bins of graduates in this formula, and they account for just about everyone the Secretary justly wants us to count. They count your daughter's friends who start out as part-time students — who are not counted now. They count your 31-year-old brother-in-law who starts in the winter term — who is not counted now. They count active duty military whose first college courses are delivered by the University of Maryland's University College at overseas locations — who are not counted now. They count your nephew who transferred from Oklahoma State University to the University of Rhode Island when he became interested in marine biology — and who is not counted now. And so forth. How do you do it, dear Congress, when you reauthorize the Higher Education Amendments this year?

First, define an "academic calendar year" as July 1 through the following June 30, and use this as a reference period instead of the fall term only. Second, define the tracking cohort as all who enter a school (college, community college, or trade school) as first time students at any point during that period, and who enroll for 6 or more semester-equivalent credits in their first term (thus excluding incidental students).

Automatically, institutions would be tracking students who enter in winter and spring terms and those who enter part-time. Your brother-in-law, along with other non-traditional students, is now in the denominator along with your daughter. Ask our colleges to divide this group between dependent traditional age beginners (under age 24) and independent student beginners (age 24 and up), and to report their graduation rates separately. After all, your daughter and your brother-in-law live on different planets, in case you haven't noticed. You now have two bins.

Third, establish another bin for all students who enter a school as formal transfers. The criteria for entering that

bin are (a) a transcript from the sending institution and (b) a signed statement of transfer by the student (both of which are usually part of the application protocol). These criteria exclude the nomads who are just passing through town.

At the present moment, community colleges get credit for students who transfer, but the four-year colleges to which they transfer get no credit when these transfer students earn a bachelor's degree, as 60 percent of traditional-age community college transfers do. At the present moment, 20 percent of the bachelor's degree recipients who start in a four-year school earn the degree from a different four-year school. That we aren't counting any of these transfers-in now is a travesty — and makes it appear that the U.S. has a much lower attainment rate than, in fact, we do. All this hand-wringing about international comparisons that puts us on the short end of the stick just might take a different tone.

Fourth, ask our postsecondary institutions to report all students in each of the three bins who graduate at two intervals: for associate degree granting institutions, at 4 years and 6 years; for bachelor's degree granting institutions at 6 years and 9 years. For institutions awarding less than associate degrees, a single two-year graduation rate will suffice. Transfers-in are more difficult, because they enter an institution with different amounts of credits, but we can put them all on the same reporting schedule as community colleges, i.e., 4 and 6 years.

These intervals will account for non-traditional students (including both active duty military and veterans) who move through the system more slowly due to part-time terms and stop-out periods, but ultimately give due credit to the students for persisting. These intervals will also present a more accurate picture of what institutions enrolling large numbers of non-traditional students, e.g. the University of Texas at Brownsville, DePaul University in Chicago, and hundreds of community colleges, actually do for a living.

Colleges, community colleges, and trade schools have all the information necessary to produce this more complete account of graduation rates now. They have no excuse not to provide it. With June 30 census dates for both establishing the tracking cohort and counting degrees awarded, the algorithms are easy to write, and data systems can produce the core reports within a maximum of two months. It's important to note that the tracking cohort report does not not replace the standard fall term enrollment report, the purposes of which are very different.”

But there is one more step necessary to judge institutions' contribution to the academic attainment of the students who start out with them.

So, in rewriting the graduation rate formula in the coming reauthorization of the Higher Education Amendments, Congress should also ask all institutions to make a good faith effort to find the students who left their school and enrolled elsewhere to determine whether these students, too, graduated. The National Student Clearinghouse will help in many of these cases, the Consortium for Student Retention Data Exchange will help in others, state higher education system offices will help in still others, and we might even get the interstate compacts (e.g. the Western Interstate Commission on Higher Education) into the act. Require our postsecondary institutions to report the students they find in a fourth bin. They will not be taking credit for credentials, but will be acknowledged as contributing to student progress.

No, this is not as full an account as we would get under a student unit record system, but it would be darned close — and all it takes is a rewriting of a bad formula.

After 27 years of research for the U.S. Department of Education, Clifford Adelman recently left to be a senior associate at the Institute for Higher Education Policy. His last monograph for the department was *The Toolbox Revisited: Paths to Degree Completion from High School Through College* (2006).

*The original story and user comments can be viewed online at*  
<http://insidehighered.com/views/2007/03/12/adelman>.