





Western Carolina UNIVERSITY 

Reporting Program-Level Retention and Graduation

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AIR 2014

- 10,107 students
- Master's Comprehensive
- Mountain location
- Residential and Distance



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The Problem

- **We are asked for program-level data**
 - Lack of program-level retention and graduation rates
 - Complicated (particularly for undergrads)
 - Different programs serve different purposes
 - High stakes – program prioritization (AA driven)
- **Reports lumped all non-retained together (whether they graduated or stopped out)**

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Background

- **Historically reported on freshmen cohort**
 - University-level only
 - Only one segment of our population
 - No info on grad students
 - No info on transfers
 - No info on those who start part-time



What We Wanted

- **Solid & simple approach (easy to explain and defend)**
- **Fair**
 - Useful for all types of programs
- **Meaningful for decision-making (high- and low-level)**
- **Not overly complicated display**
- **Illuminates**
 - Overall performance
 - Historic trends
 - When are students lost
- **Something that can be generated yearly w/o too much effort**



5 Outcomes

- **Five possible outcomes for each student that declares a given major**
 - Retained in program
 - Graduated in program
 - Retained in different program
 - Graduated in different program
 - Not retained (stop-out/drop-out)
- **Exclusive and exhaustive**



General Approach

- **Based on cohorts:**
 - A student is placed in a program cohort the 1st time they declare a given program
 - Each student in the cohort is flagged as one of the 5 possible outcomes for each ½ year interval (each regular semester)
 - At each interval we report where the members of the cohort fall
 - Each student will only appear in one cohort for a program (usually)



Why this works

- **Students are not double-counted (usually)**
- **We can report data on any interval, if asked**
- **If a student stops-out, then returns, they are picked back up**
- **Bridges the gap between retention reports and graduation reports**



Technical Approach

- **Used SAS to generate data set**
- **Data put in Excel sheet**
- **There is one report built per level**
 - Drop down lists shows all the programs at that level
 - Formulas reference program code, and populate report based on that code (sumifs, countifs, averageifs, etc.)
 - Expanded on techniques used for our Fact Book automation



Multiple Iterations

Started with term-level data

This is helpful for programs, in the context of program history, but NOT administrators



Academic Year

Next combined data into academic years

Year	New Cohort	@1 year					@2 years						
		Prg Ret	Prg Grad	WCU Ret	WCU Grad	Not Retained	Total	Prg Ret	Prg Grad	WCU Ret	WCU Grad	Not Retained	Total
2003-2004	15	73%	7%	0%	0%	20%	100%	47%	33%	0%	0%	20%	100%
2004-2005	15	67%	0%	13%	0%	20%	100%	33%	33%	0%	7%	27%	100%
2005-2006	25	64%	0%	0%	4%	24%	100%	33%	33%	0%	4%	24%	100%
2006-2007	16	44%	13%	13%	0%	31%	100%	0%	44%	25%	0%	31%	100%
2007-2008	16	81%	0%	0%	0%	19%	100%	31%	44%	0%	0%	25%	100%
2008-2009	25	64%	4%	4%	0%	28%	100%	33%	40%	4%	0%	24%	100%
2009-2010	18	78%	0%	0%	0%	17%	100%	33%	44%	0%	6%	17%	100%
2010-2011	23	70%	0%	0%	0%	30%	100%						



Summary

All students lumped into 3 groups

Year	New Cohort	@1 year			@2 years		
		Program Success	Non-program Success	Not Retained	Program Success	Non-program Success	Not Retained
2003-2004	15	60%	20%	20%	60%	0%	20%
2004-2005	15	67%	13%	20%	67%	7%	27%
2005-2006	25	73%	4%	24%	64%	13%	24%
2006-2007	16	56%	13%	31%	44%	25%	31%
2007-2008	16	81%	0%	19%	78%	0%	25%
2008-2009	25	68%	4%	28%	72%	6%	24%
2009-2010	18	78%	0%	17%	78%	6%	17%
2010-2011	23	70%	0%	30%			

This is the most summarized data we can (read: are willing to) provide.
The bottom line = Bold 3-group number



But how does that compare?

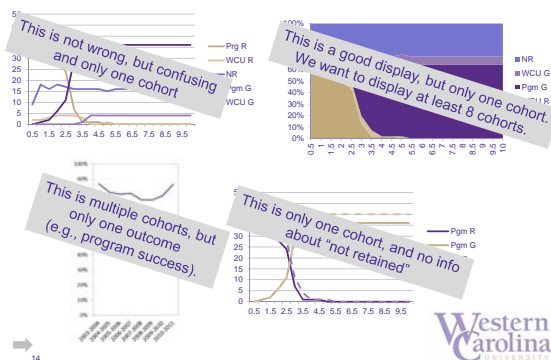
This is average program data to use as a comparison

Year	New Cohort	@1 year			@2 years		
		Program Success	Non-program Success	Not Retained	Program Success	Non-program Success	Not Retained
2003-2004	10.74	72%	4%	24%	65%	7%	28%
2004-2005	12.52	69%	8%	27%	58%	13%	22%
2005-2006	12.33	61%	20%	20%	48%	28%	24%
2006-2007	12.71	62%	13%	25%	58%	12%	30%
2007-2008	12.53	73%	9%	24%	68%	2%	30%
2008-2009	12.95	72%	2%	26%	65%	7%	28%
2009-2010	13.53	78%	8%	20%	62%	7%	31%
2010-2011	13.70	75%	1%	24%	63%	4%	34%

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Visual Representation

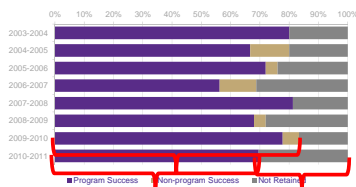


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Horizontal stacked bar

- Normally we would never do this, but



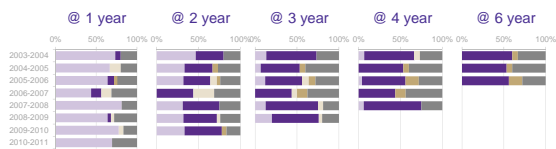
What are people asking:

- How is the program performing?
- How are students performing overall at institution?
- How many are dropping out?

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We graph 5 Flags too



This works because:

Horizontally

- See people transitioning to completers and drop-outs over time
- Follow specific cohorts

Vertically

- Compare performance of different cohorts at the same intervals



Why this report is REALLY awesome

- Use a special approach with a named range to find a list of all unique programs, and populate drop-down box with this list (http://www.datawright.com.au/excel_resources/excel_dynamic_ranges.htm)
- VBA to cycle through, do calculations, print PDF out to a directory (by department and college) and move on to next report



Expanding the Idea

- **Changing the reporting level**
 - CIP code (groups up old and new program codes)
 - Department (helpful if similar programs that students transfer between)
 - College



Ideas for Next Steps

- True Success Rate (VSA, incorporating of Clearinghouse Data)
- Consider rolling averages or other approaches to smooth turbulent data on small groups
- Compare retention data against unit-level goals



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