

A background image showing a large group of graduates in black caps and gowns, some with colorful stoles, seated in rows during a graduation ceremony. The image is slightly blurred, focusing on the overall scene rather than individual faces.

**WASC Senior College and University Commission**

# **The Graduation Rate Dashboard**

**Henry Hernandez  
Kristina Powers  
Kelly Wahl  
Dmitri Rogulkin  
W. Ken Nelson  
John Stanley**

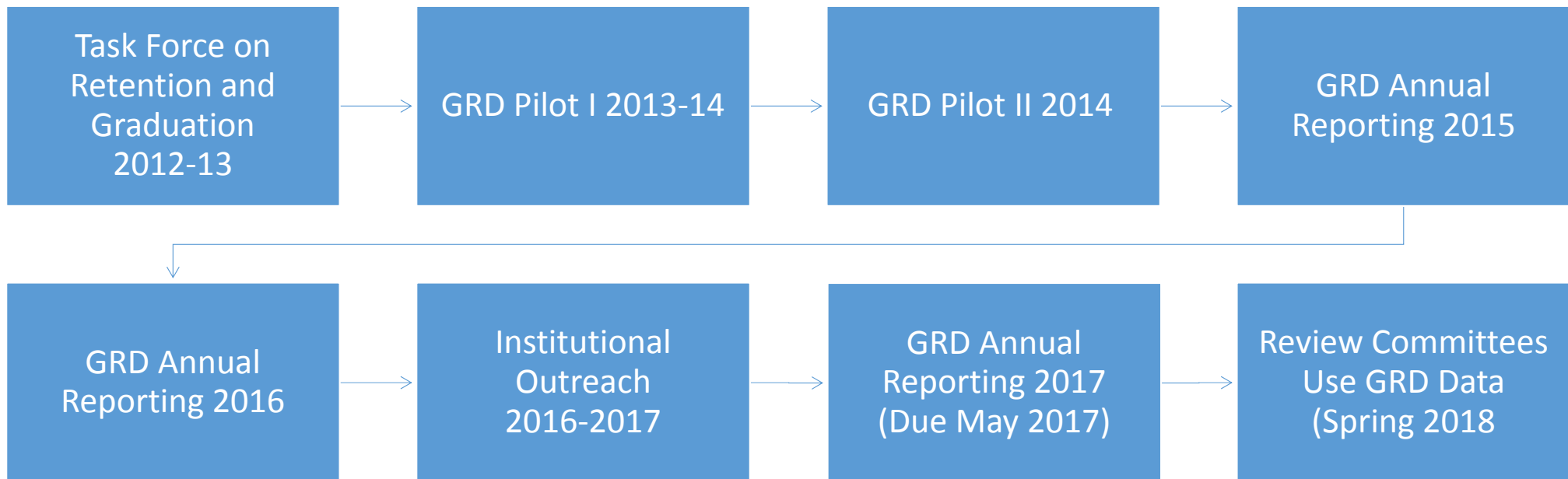
# 90-Minute Workshop Agenda

1. Brief background info from WSCUC
2. Introduction to the four institution use cases
3. Institutional examples using the GRD from four different institutions – University of California, California State University, Independent, and University of Hawaii.
4. Attendee Discussion -
  - Questions for all presenters
  - Audience work in groups to discuss institutional examples already being done or they plan to do
  - Report out from groups

# Brief Background Info from WSCUC

Henry Hernandez,  
WSCUC

# The GRD So Far...



# What is the Graduation Rate Dashboard?

6- data points

8- years of trend

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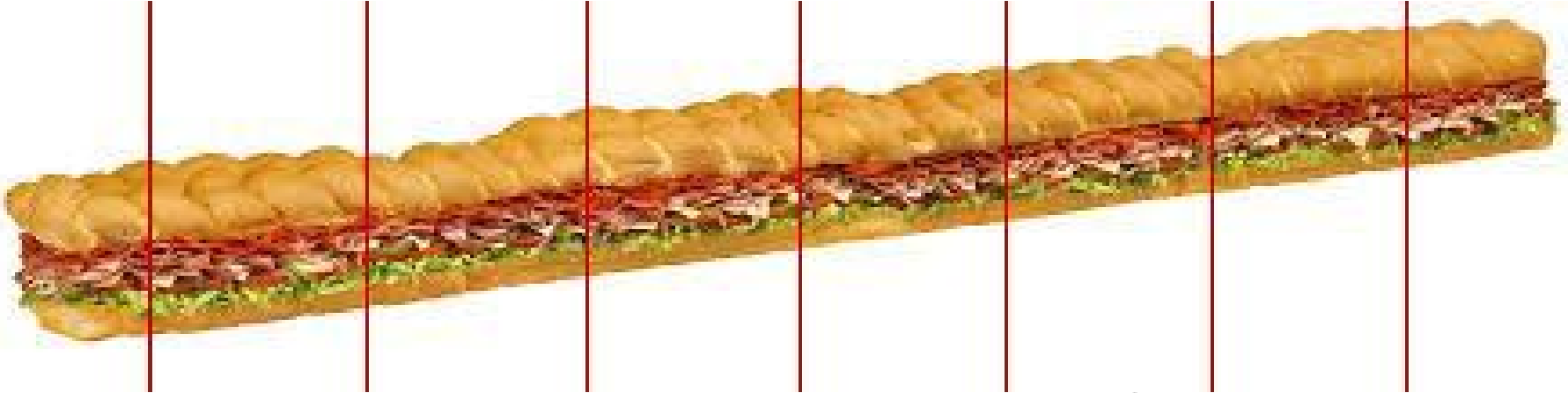
2 completion measures



# How is this different than IPEDS?

~~Cohort~~

# Student Success Year-to-Year



# The 6 Data Points

1. Unduplicated headcount of undergraduate *degree seeking* students
2. Total of number of successfully completed undergraduate units awarded by the institution
3. Undergraduate *degree recipient* headcount
4. Cumulative total of successfully completed undergraduate units awarded by the institution to graduating students
5. Non-continuing student headcount
6. Total institutional units of non-continuing students





The background of the slide is a close-up, high-angle photograph of numerous gold bars stacked together. The bars are rectangular and have a metallic sheen, with some showing faint markings. The lighting is warm, highlighting the texture and color of the gold.

## Unit Redemption Rate (URR)

The **unit redemption rate (URR)** is the proportion of units granted by an institution that are eventually 'redeemed' for an undergraduate degree from that institution.

## ***Q: How do you calculate the URR?***

**A:**

**URR =**

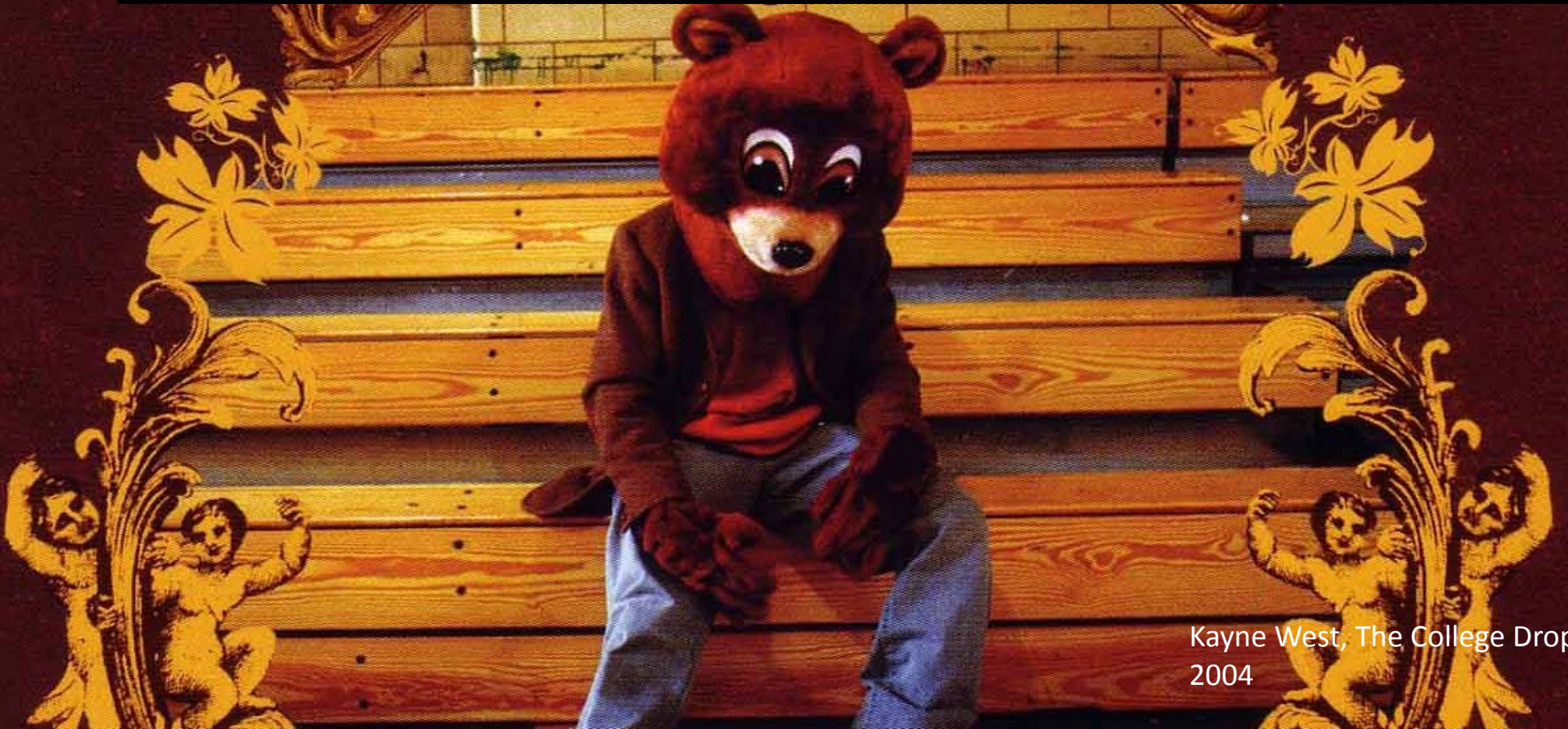
4- Cumulative total of successfully completed undergraduate units awarded by the institution to graduating students

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2- Total of successfully completed undergraduate units awarded by the institution during that period



# Non-continuing students



Kayne West, The College Dropout  
2004

# Non-continuing students may include



- Inactive
- Drop Out
- Stop Out
- Withdrawn
- (Transfer Out)

**Non-continuing students are those for the reporting year who:**

- 1) Successfully completed at least one unit in the previous year**
- 2) Did not graduate with a degree by the end of the previous year or in this year**
- 3) Completed no units in this reporting year.**

***Q: How does the dashboard account for non-continuing students?***

***A: 'd' the 'unit count ratio'***

$$\text{'d'} = \frac{\text{average non-continuing student's cumulative units}}{\text{average graduating student's cumulative units}}$$





## Absolute Graduation Rate (AGR)

The **absolute graduation rate (AGR)** is the proportion of undergraduate degree-seeking students entering an institution who eventually graduate from that institution.

***Q: How do you calculate the AGR?***

**A:** **AGR** = 
$$\frac{R}{R + \frac{(U - R)}{d}}$$

# Definitions

- **'d'** - is the ratio of the **average *non-continuing student's* total completed units** to the **average *graduate's* total completed units** (the “unit count ratio”)
- ***U*** - is the **number of units granted** by the institution during the measurement period
- ***R*** – is the **number of units redeemed by graduates** during the measurement period



# The Graduation Rate Dashboard is:

**Unit  
Focused**

**'Sees' non-  
continuing  
students**

**Works on  
multiple time  
periods**

**~~Cohort~~**

# Continuing the GRD Work

- Outreach to institutions with problematic data (WSCUC Research Fellow)
- Customized Institutional Dashboards and comparative tool
- Export of immediate dashboard calculations as part of the 2016 Annual Report
- National Student Clearinghouse project results
- Training peer evaluators to review GRD reports

# Introduction to Four Institution Use Cases

Kristina Powers, Ph.D.,  
WSCUC Fellow

# Institutional Outreach and Examples

- Effort to reach out to institutions – 2016-2017
- Questions about definitions and missing data
- Biggest question...
  - “Can I see some examples how other institutions have used the data?”

# Four Institutional Examples

- Actively sought out different types of institutions:
  - University of California
  - California State University
  - Independent
  - University of Hawaii
- Creative and/or informative ways to use the data at their institutions

# Four Institutional Examples

- Four presenters will share examples that address:
  - Presenting info to different audiences
  - Displaying data differently
  - Disaggregating data – and the challenges
  - Issues or challenges encountered – and responses
  - Closing the loop
  - Understanding the GRD vs IPEDS
  - Improving student success and creating interventions

# Institutional Example Using the GRD

Kelly Wahl,  
University of California, Los Angeles



Undergraduate Degree Recipients

Unduplicated Headcount	6,942	7,203	7,757	7,467	7,580	7,372	7,478	8,183	59,982
Total Institutional Graduation Units Completed	997464	1034498	1129799	1075423	1098123	1059410	1077600	1212543	8684860
Average Institutional Graduation Units Per Student	144	144	146	144	145	144	144	148	145
Y/Y Enrollment Change		2.52%	0.38%	-1.87%	3.82%	2.94%	2.58%	2.87%	
Y/Y Graduation Headcount Change		3.76%	7.69%	-3.74%	1.51%	-2.74%	1.44%	9.43%	
Ratio - Grad Headcount/Annual Units	26%	26%	28%	27%	27%	25%	25%	26%	
Unit Redemption Rates (URR)	91%	91%	101%	97%	96%	89%	88%	96%	93%
URR 2-year average		93%	100%	97%	97%	90%	89%	97%	
URR 3-year average			101%	96%	98%	92%	91%	99%	
URR 4-year average				96%	97%	93%	92%	100%	
Calculation for numerator of 'd'									
Total institutional units completed by non-continuing students=	112775	103055	113305	125082	108300	102746	104438	109303	
Headcount of non-continuing students =	1254	1183	1270	1347	1187	1173	1263	1248	
Average institutional units for non-continuing students=	89.93	87.11	89.22	92.86	91.24	87.59	82.69	87.58	88.53
d' (ratio of average non-continuing units to average graduating units)	0.625	0.605	0.611	0.645	0.629	0.608	0.574	0.592	0.611
Absolute Graduation Rates (AGR)	86%	86%	102%	95%	93%	83%	81%	93%	90%
AGR 2-year average		88%	101%	95%	96%	85%	82%	95%	
AGR 3-year average			102%	94%	96%	88%	85%	98%	
AGR 4-year average				95%	96%	89%	87%	100%	
AGR 5-year average					97%	89%	88%	103%	

	2008	2009	2010	2011	2012	2013	2014	2015	
Available IPEDS 6-year graduation rates	89%	89%	90%	90%	92%	90%	0%	0%	90%
IPEDS Graduates	3795	3809	3341	3977	4400	4120			23442
IPEDS Cohort	4254	4268	3721	4421	4808	4562			26034
Proportion of graduating cohort in IPEDS	54.67%	52.88%	43.07%	53.26%	58.05%	55.89%	0.00%	0.00%	52.97%

Bottom Corner of the WSCUC Graduation Rate Dashboard



2.52% 0.38% -1.87% 3.82% 2.94% 2.58% 2.87%  
 3.76% 7.69% -3.74% 1.51% -2.74% 1.44% 9.43%

26% 28% 27% 27% 25% 25% 26%

91% 101% 97% 96% 89% 88% 96%  
 93% 100% 97% 97% 90% 89% 97%  
 101% 96% 98% 92% 91% 99%  
 96% 97% 93% 92% 100%

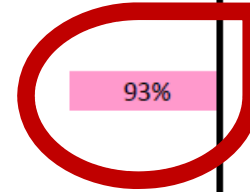
103055	113305	125082	108300	102746	104438	109303
1183	1270	1347	1187	1173	1263	1248

87.11 89.22 92.86 91.24 87.59 82.69 87.58

0.605 0.611 0.645 0.629 0.608 0.574 0.592

86% 102% 95% 93% 83% 81% 93%  
 88% 101% 95% 96% 85% 82% 95%  
 102% 94% 96% 88% 85% 98%  
 95% 96% 89% 87% 100%  
 97% 89% 88% 103%

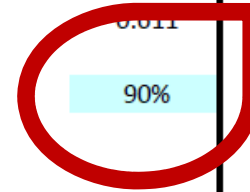
2009	2010	2011	2012	2013	2014	2015
89%	90%	90%	92%	90%	0%	0%
3809	3341	3977	4400	4120		
4268	3721	4421	4808	4562		
52.88%	43.07%	53.26%	58.05%	55.89%	0.00%	0.00%



93%

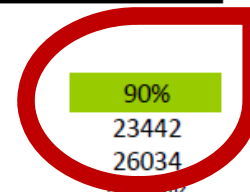
Unit  
Redemption  
Rate

**CONSISTENT**



90%

Absolute  
Graduation  
Rate

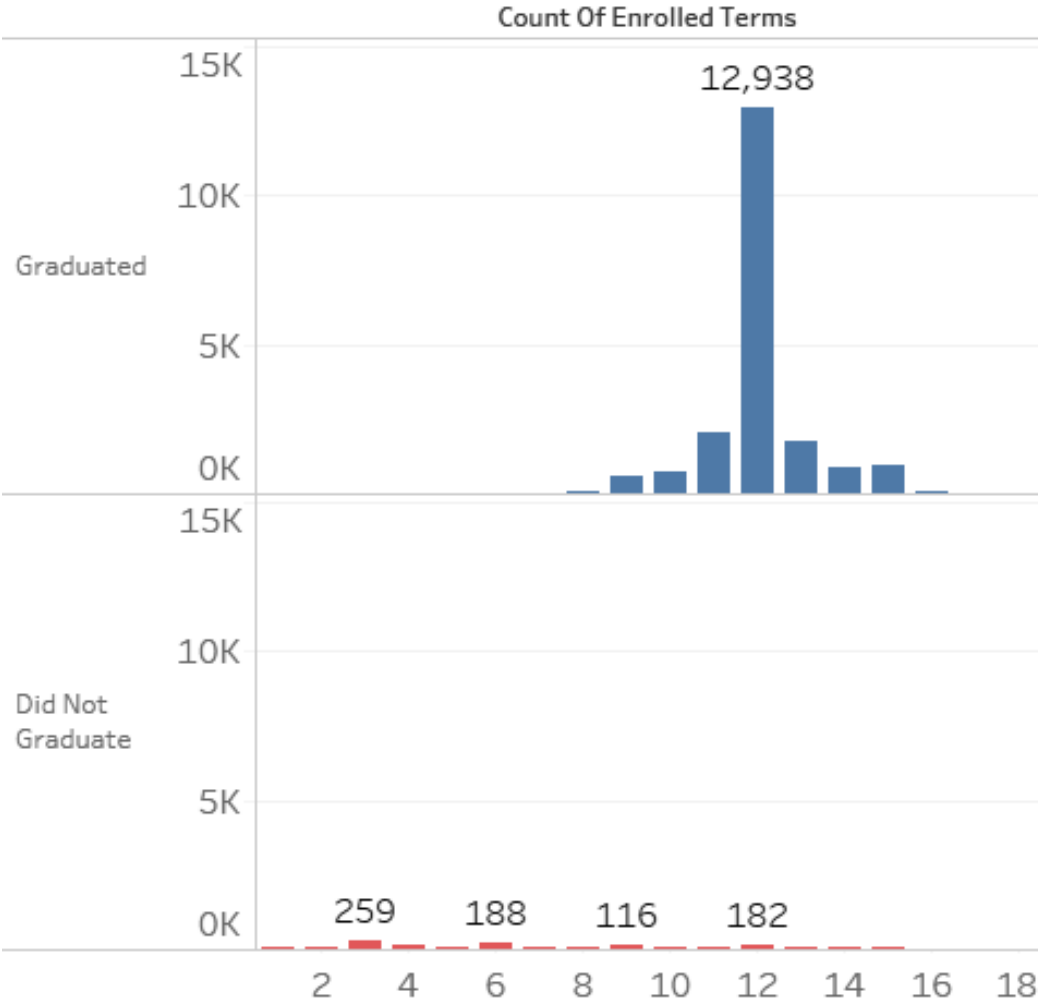


90%

23442  
26034  
52.97%

IPEDS 6-Year  
Graduation  
Rate

# Five Entering Freshman Cohorts Combined





## Dashboard Data Reorientation Process

	Year 1	Year 2	Year 3	Year 4	Year 5
Redeemed Units (SCH)	1,075,423	1,098,123	1,059,410	1,077,600	1,212,543
	Year 1	Year 2	Year 3	Year 4	Year 5
Per Graduating Student	145 151 141 148...	150 152 145 143...	151 139 145 144...	140 149 150 144...	153 149 140 145...
	Year 1	Year 2	Year 3	Year 4	Year 5
Unredeemed Units (SCH)	125,082	108,300	102,746	104,428	109,303
	Year 1	Year 2	Year 3	Year 4	Year 5
Per Departing Student	91 95 43 15...	25 101 45 62...	125 29 45 45...	15 35 100 18...	28 110 14 56...
	Cohort 1	Cohort 2	Cohort 3	Cohort 4	Cohort 5
Reassembled by Entering Frosh Cohort	150 43 15 145...	151 101 12 140...	139 28 155 143...	25 145 144 151...	10 140 141 156...
	Cohort 1	Cohort 2	Cohort 3	Cohort 4	Cohort 5
Categorize Graduation Status	150 43 15 145...	151 101 120 140...	139 28 155 143...	25 145 144 151...	104 140 141 156...

Categorize  
Graduation Status

Cohort 1	Cohort 2	Cohort 3	Cohort 4	Cohort 5
150 43 15 145...	151 101 120 140...	139 28 155 143...	25 145 144 151...	104 140 141 156...

Burst SCH by Division  
Per Student

Social Sciences

Physical Sciences

Humanities

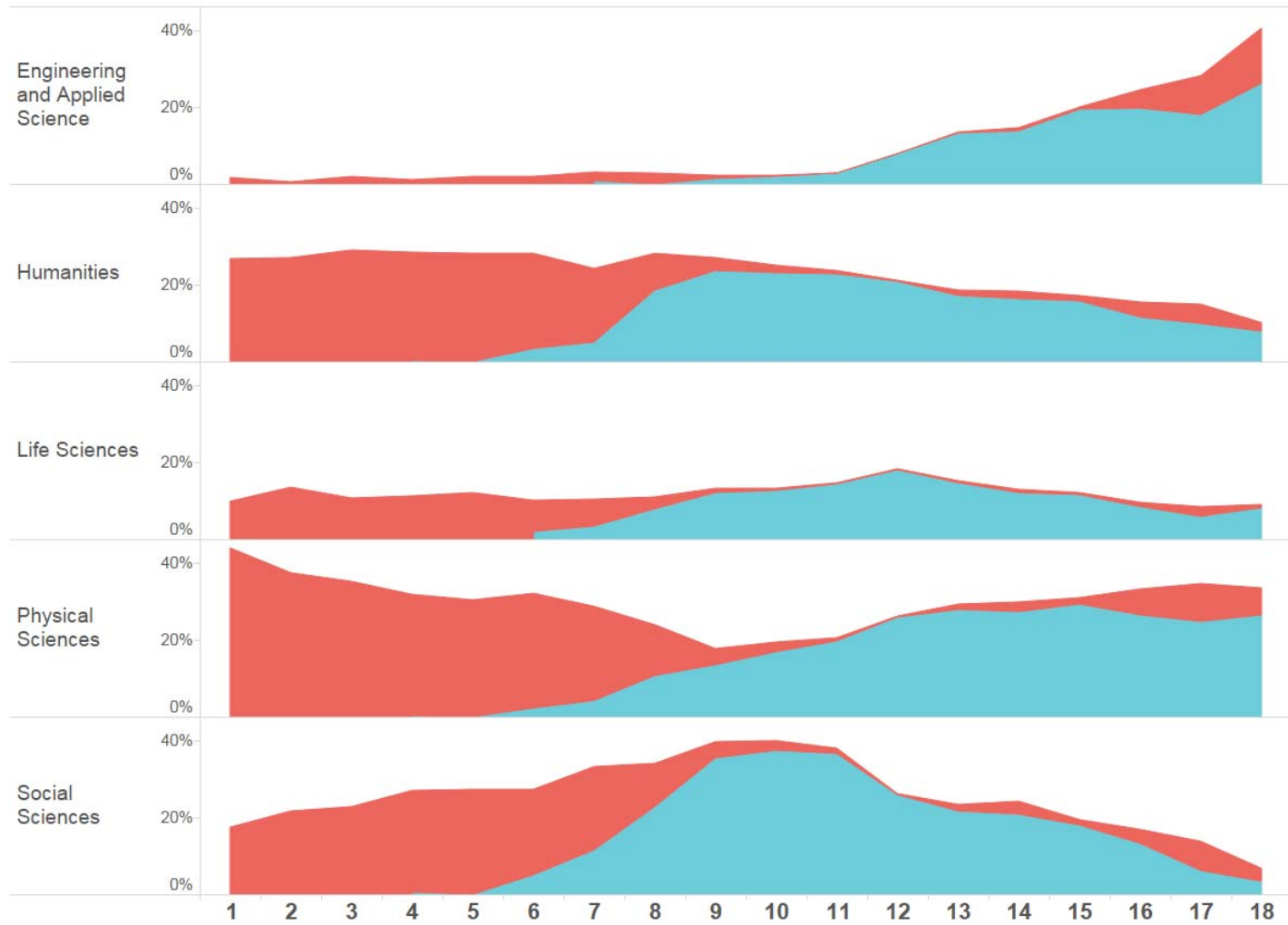
Life Sciences

Cohort 1	Cohort 2	Cohort 3	Cohort 4	Cohort 5
10	114	51	11	20
104	21	8	8	101
28	7	14	101	14
16	4	75	8	4

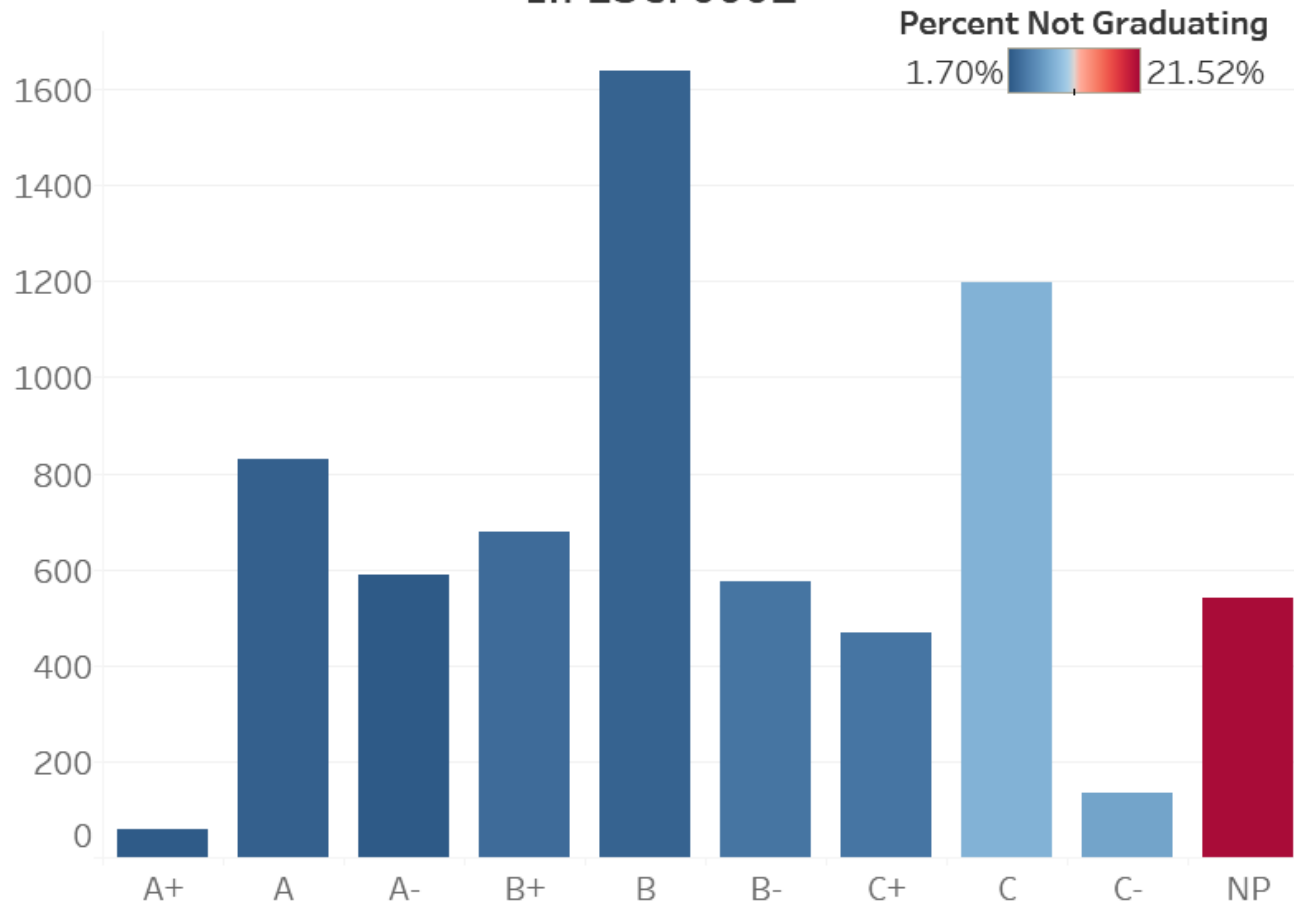
Burst SCH into Courses  
and Grades

Cohort 1	Cohort 2	Cohort 3	Cohort 4	Cohort 5
Life Sci 001	A-	Math 032B	B+	
	Math 031B	D-	EngComp 003	C+
		Chem 020A	F	

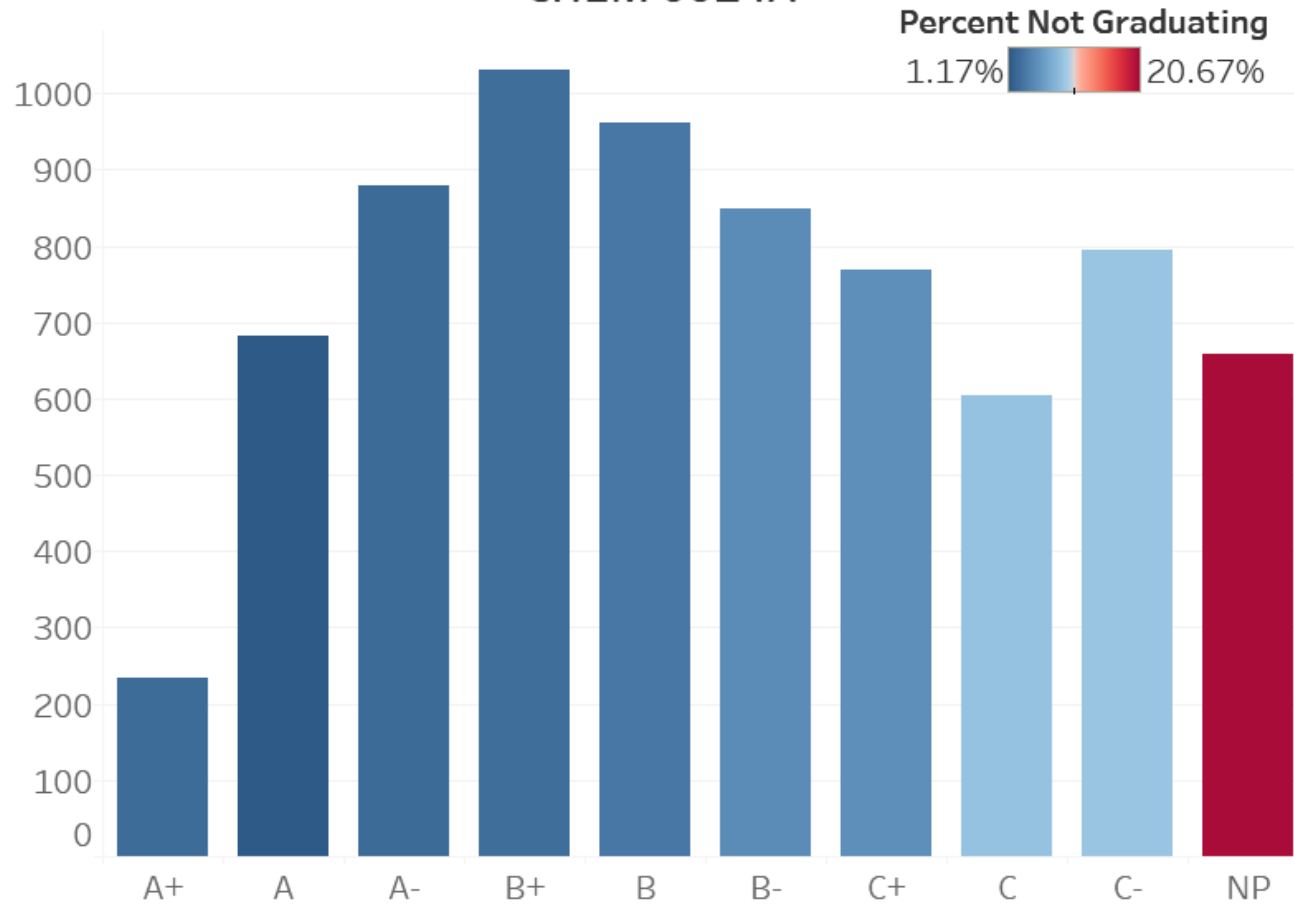
### Unredeemed Student Credit Hours (SCH) in Red



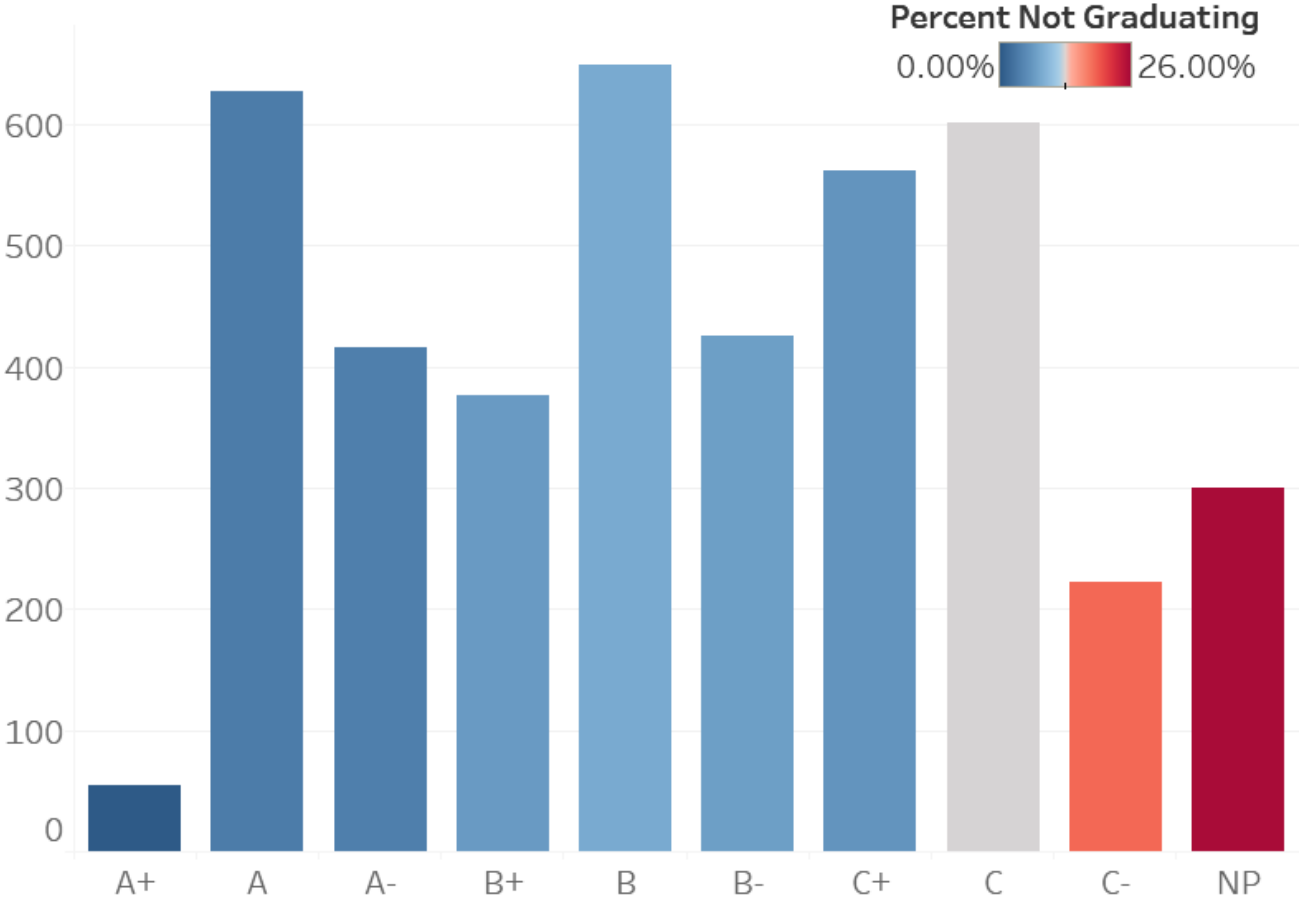
# LIFESCI 0001



# CHEM 0014A



# MATH 0031A

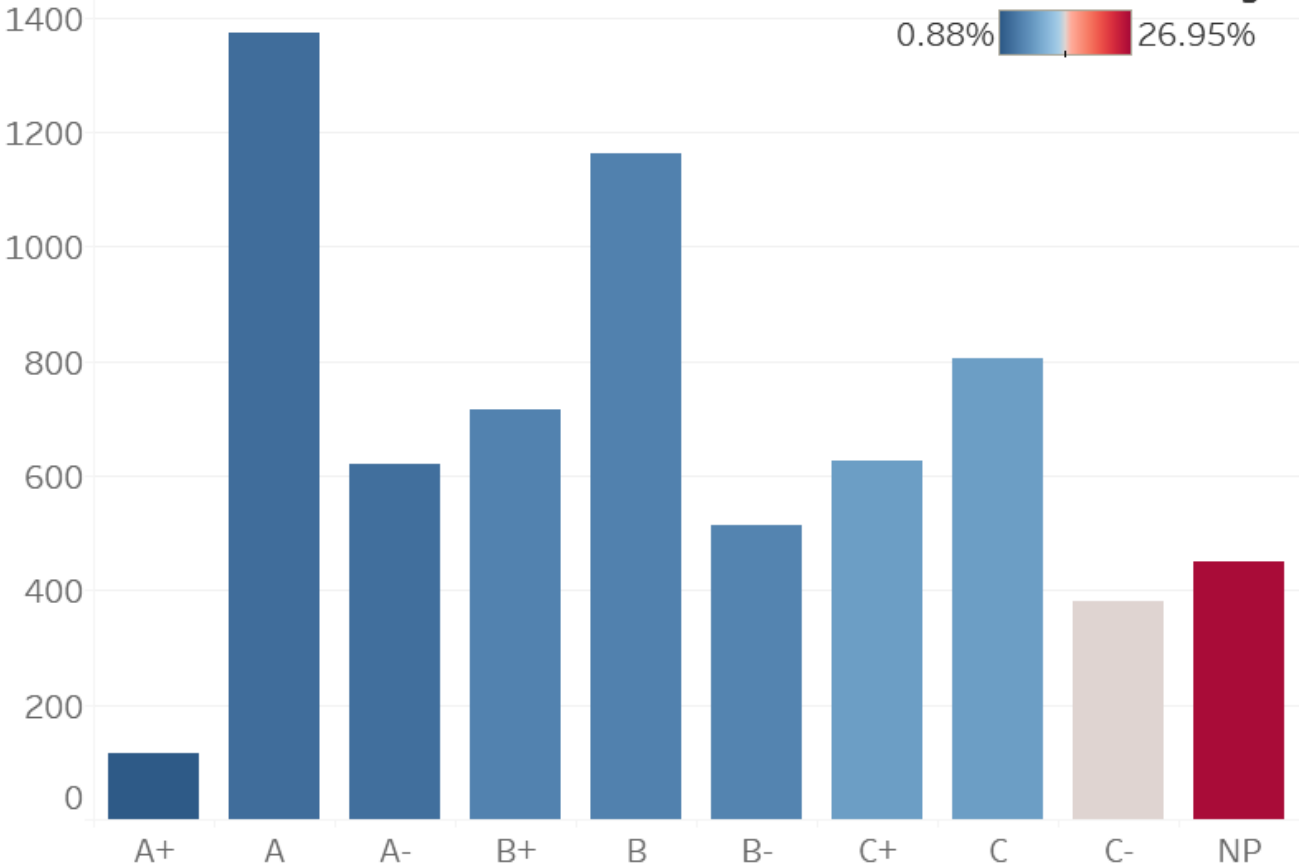




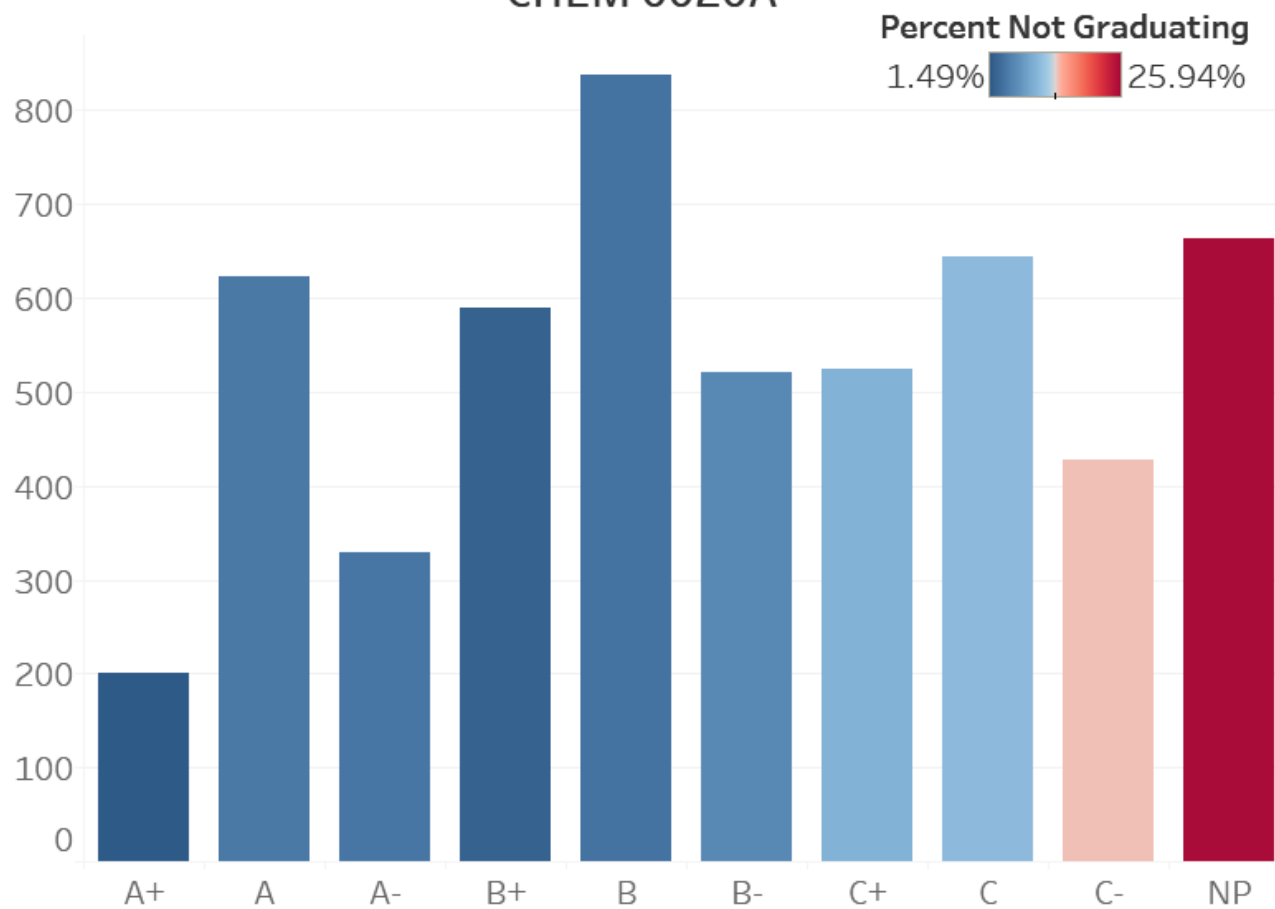
# MATH 0032A

Percent Not Graduating

0.88% 26.95%



# CHEM 0020A





# Mining for Course Performance Patterns

## Principal Components Analysis

	Component			
	1	2	3	4
math32B_min	.795			
math32A_min	.752			
chem20A_min	.656			
lifesci1_min		.803		
chem14A_min		.802		
astr3_min			.684	
stats10_min			.613	
engcomp3_min			.565	
psych10_min		.330	.442	
math31A_min				.863
math31B_min	.330			.680

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.  
a. Rotation converged in 5 iterations.

Identified

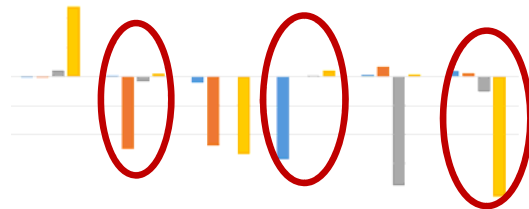
Course Performance Patterns:

Trouble in Life Sciences  
Pre-Requisites

Trouble in Calculus

Trouble in Physical  
Sciences Pre-Requisites

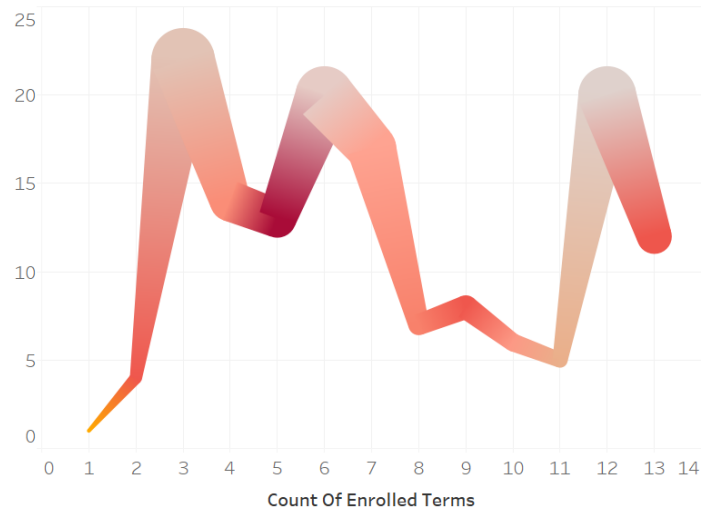
## K-Means Cluster Analysis



Identified

Groups of Students Experiencing  
Course Performance Issues

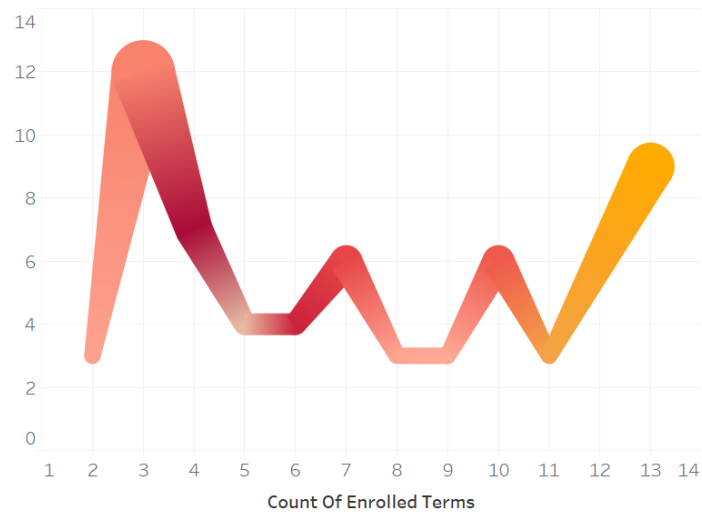
Lowest Performance: Life Sci 1 and Chem 14A



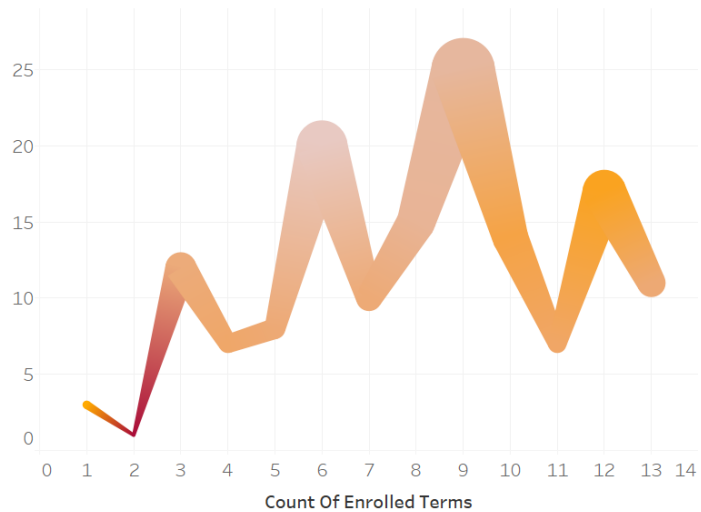
**Students Not Graduating, in the Course Performance Cluster Groups...**

**For example, these three clusters of students tell three distinct **stories**.**

Lowest Performance: Math 31A and 31B



Lowest Performance: Math 32A & 32B and Chem 20A



# Application of Findings

- Confirmation for Academic Advisors and Student Affairs Officers
  - Retention and Completion of Students per Program
- Feedback to Academic Departments and Programs
  - Patterns of Persistence and Course Performance
- Perspective for Academic Planning and Budget
  - Issues Regarding “Unredeemed” SCH

## Continuous Analysis and Dialogue

# Institutional Example Using the GRD

Dmitri Rogulkin,  
California State University, Fresno

## WSCUC Graduation Rate Dashboard (Excel Version)

	2007	2008	2009	2010	2011	2012	2013	2014	8 Year Total
<b>Degree Seeking Undergraduate Students</b>									
Unduplicated Headcount	19703	19677	18260	18989	20081	19806	20793	21538	158847
Total Annual Institutional Units Completed	409854	418080	407307	415118	442227	450882	462225	471874	3477567
Average Institutional Units Completed Per Student	21	21	22	22	22	23	22	22	22
<b>Undergraduate Degree Recipients</b>									
Unduplicated Headcount	3565	3542	3456	3551	3441	3699	4265	3878	29397
Total Institutional Graduation Units Completed	257803	330371	335311	343785	342288	363353	416214	376273	2765398
Average Institutional Graduation Units Per Student	72	93	97	97	99	98	98	97	94
Y/Y Enrollment Change		-0.13%	-7.20%	3.99%	5.75%	-1.37%	4.98%	3.58%	
Y/Y Graduation Headcount Change		-0.65%	-2.43%	2.75%	-3.10%	7.50%	15.30%	-9.07%	
Ratio - Grad Headcount/Annual Units	0.1809	0.18	0.1893	0.187	0.1714	0.1868	0.2051	0.1801	
<b>Unit Redemption Rates (URR)</b>									
	63%	79%	82%	83%	77%	81%	90%	80%	80%
URR 2-year average		80%	81%	84%	80%	81%	91%	81%	
URR 3-year average			81%	83%	81%	83%	92%	82%	
URR 4-year average				83%	81%	85%	94%	82%	
<b>Calculation for numerator of 'd'</b>									
Total institutional units completed by non-continuing students =	108220	111664	91313	88901	97780	89698	93783	88484	
Headcount of non-continuing students =	2777	2964	2119	1977	2240	2079	2219	2269	
Average institutional units for non-continuing students =	39	38	43	45	44	43	42	39	42
d (ratio of dropout units to graduating units)	0.541	0.405	0.444	0.464	0.441	0.440	0.431	0.402	0.446
<b>Absolute Graduation Rates (AGR)</b>									
	48%	60%	67%	69%	60%	65%	80%	61%	64%
AGR 2-year average		62%	66%	70%	64%	66%	82%	62%	
AGR 3-year average			66%	70%	66%	69%	83%	64%	
AGR 4-year average				70%	66%	71%	87%	65%	
AGR 5-year average					66%	72%	90%	68%	

## WSCUC Graduation Rate Dashboard (Tableau Version)

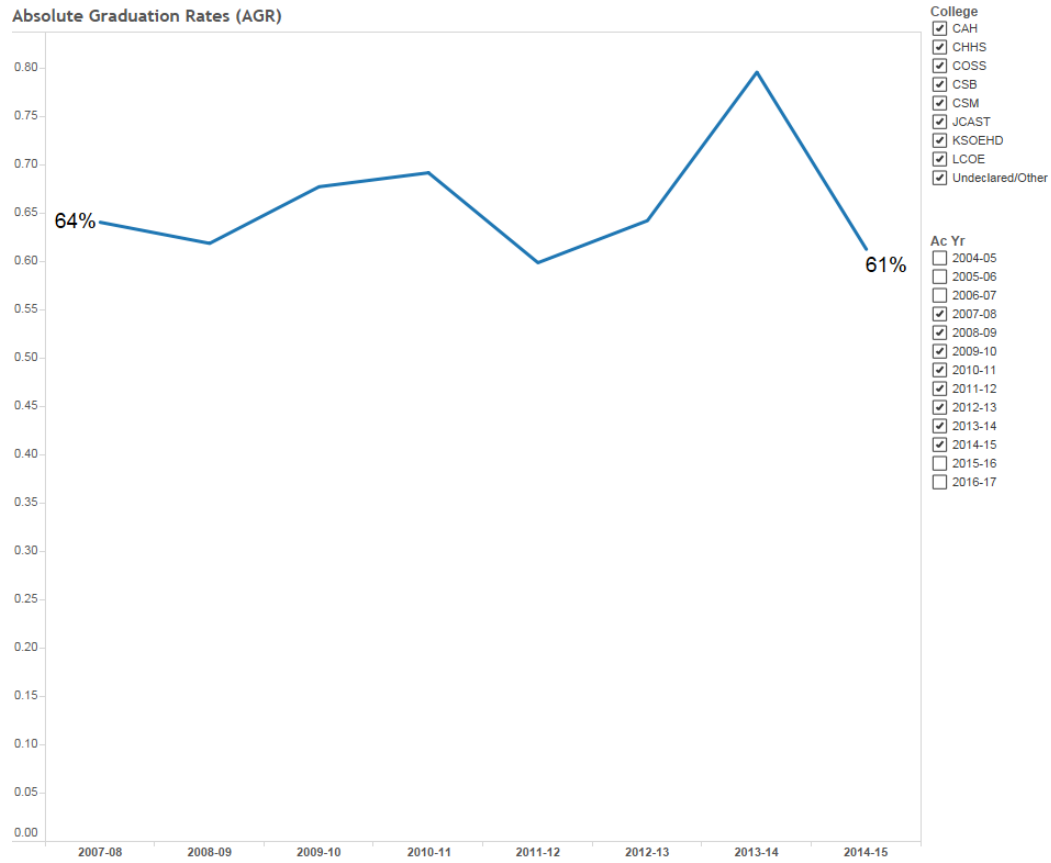
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	Grand Total
Unduplicated Headcount	19,718	19,682	18,254	18,989	20,081	19,806	20,792	21,536	158,858
Total Annual Institutional Units Completed	410,178	418,198	407,235	415,113	442,227	450,870	462,220	471,875	3,477,916
Average Institutional Units Completed Per Student	21	21	22	22	22	23	22	22	22
Undergraduate Degree Recipients	3,509	3,541	3,456	3,551	3,434	3,684	4,263	3,878	29,316
Total Institutional Graduation Units Completed	331,647	334,299	335,311	343,785	341,855	362,408	416,080	376,273	2,841,657
Average Institutional Graduation Units Per Student	95	94	97	97	100	98	98	97	97
Y/Y Enrollment Change		-0.2%	-7.3%	4.0%	5.8%	-1.4%	5.0%	3.6%	
Y/Y Graduation Headcount Change		0.9%	-2.4%	2.7%	-3.3%	7.3%	15.7%	-9.0%	
Ratio - Grad Headcount/Annual Units	18%	18%	19%	19%	17%	19%	21%	18%	18%
Unit Redemption Rates (URR)	81%	80%	82%	83%	77%	80%	90%	80%	82%
URR 2-year average		81%	81%	84%	80%	81%	91%	81%	
URR 3-year average			81%	83%	81%	83%	92%	82%	
Total institutional units completed by non-continuing students	108,553	111,507	91,751	89,902	97,985	89,403	93,635	88,388	
Headcount of non-continuing students	2,718	2,896	2,097	1,991	2,244	2,071	2,214	2,264	
Average institutional units for non-continuing students	40	39	44	45	44	43	42	39	43
d (ratio of dropout units to graduating units)	0.423	0.408	0.451	0.466	0.439	0.439	0.433	0.402	0.446
Absolute Graduation Rates (AGR)	64%	62%	68%	69%	60%	64%	80%	61%	67%
AGR 2-year average		63%	66%	70%	63%	65%	82%	63%	
AGR 3-year average			66%	70%	65%	68%	83%	64%	
AGR 4-year average				70%	66%	71%	87%	65%	
AGR 5-year average					66%	71%	90%	68%	



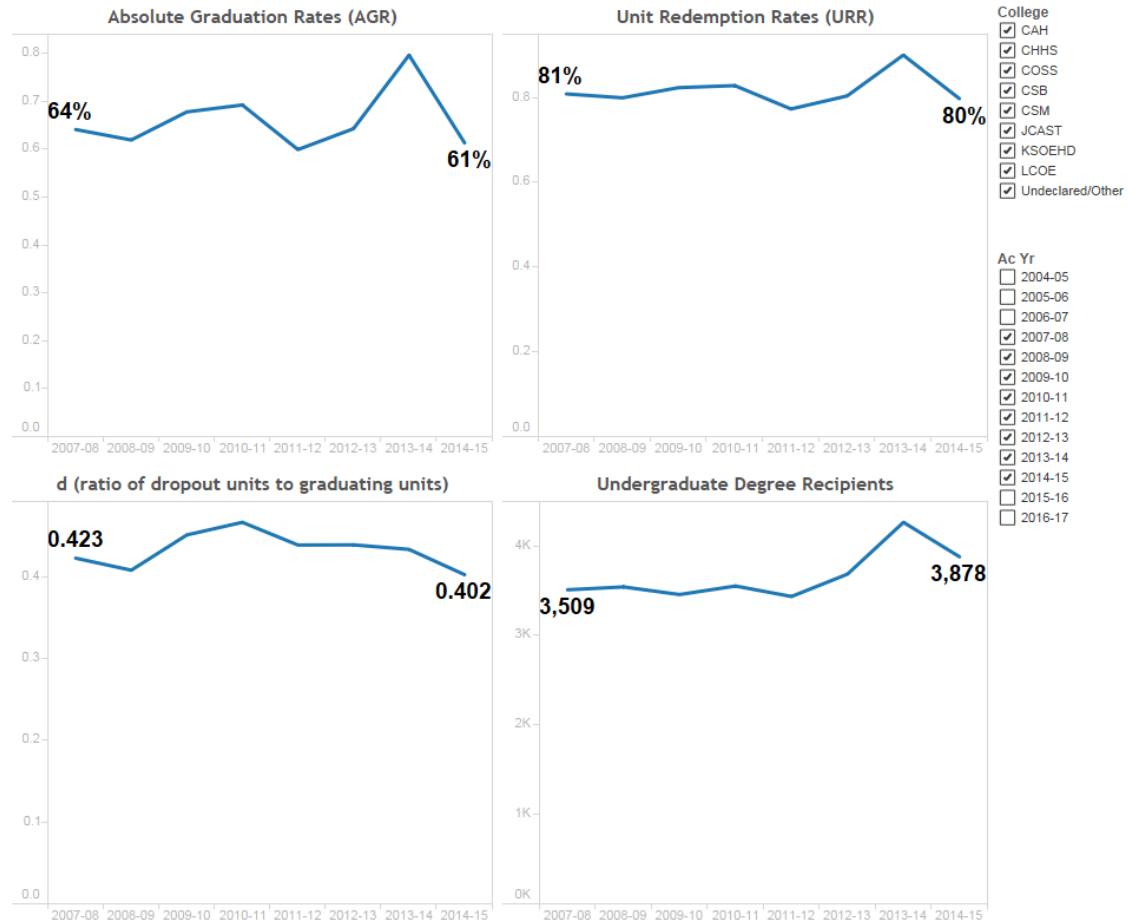
# Advantages

- **Visual**
- **Drilldown** (College, Department, Demographics)
- **Automated** (updates on a refresh button)
- **Timing**

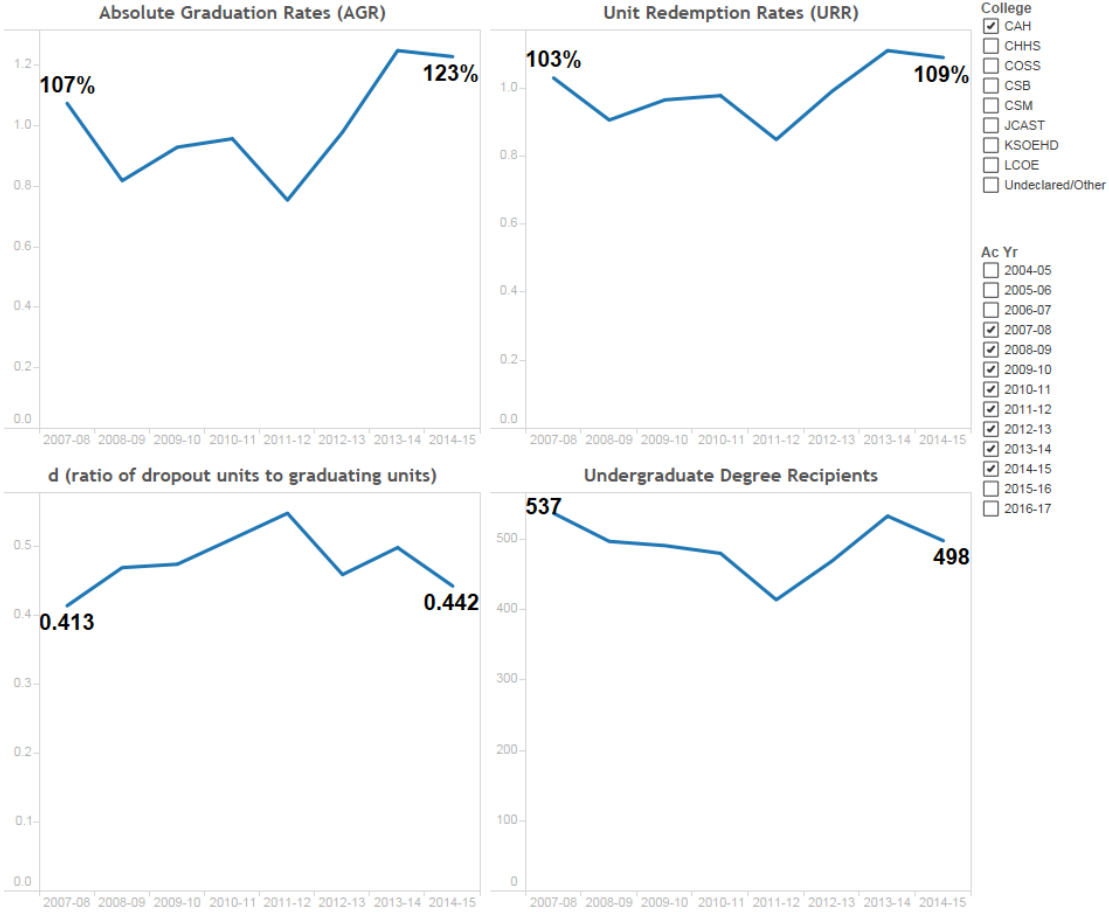
# Visual



# Visual

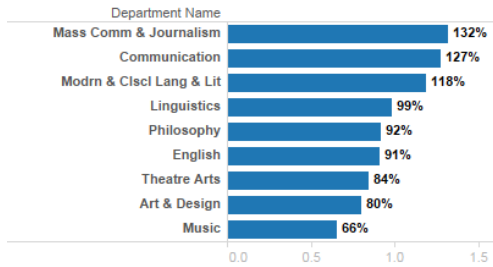


# Drill Down (College of Arts and Humanities)

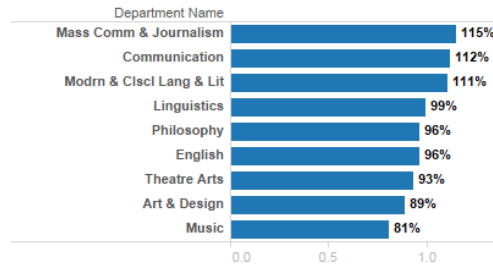


# Drill Down (Department level)

Absolute Graduation Rates (AGR)



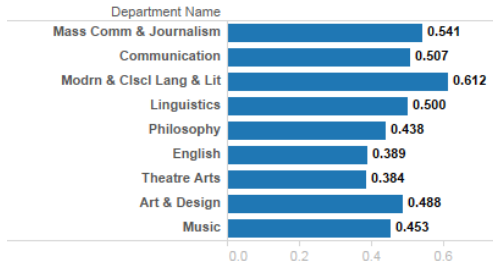
Unit Redemption Rates (URR)



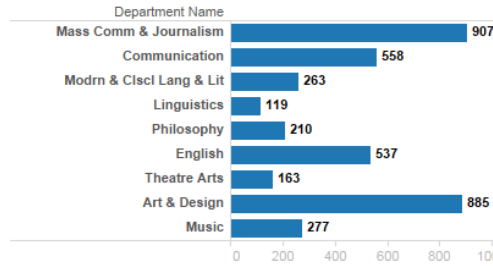
- College
- CAH
  - CHHS
  - COSS
  - CSB
  - CSM
  - JCAST
  - KSOEHD
  - LCOE
  - Undeclared/Other

- Ac Yr
- 2004-05
  - 2005-06
  - 2006-07
  - 2007-08
  - 2008-09
  - 2009-10
  - 2010-11
  - 2011-12
  - 2012-13
  - 2013-14
  - 2014-15
  - 2015-16
  - 2016-17

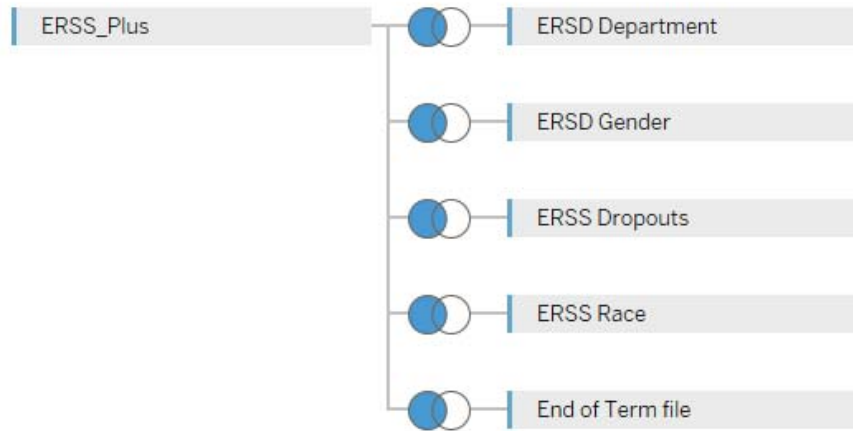
d (ratio of dropout units to graduating units)



Undergraduate Degree Recipients



# Mechanics



# Application

(Fall 2008 Cohort Outcome Measures)

	6yr Graduation FTFTF	Count FTFTF	6-yr Graduation Transfer	Count Transfer	Absolute Graduation Rates (AGR)
Jordan College of Agricultural Sciences and Technology	60%	189	76%	111	54%
Kremen School of Education & Human Development	58%	137	78%	111	108%
Craig School of Business	56%	338	66%	297	69%
College of Science and Mathematics	56%	410	68%	205	44%
College of Arts and Humanities	55%	288	73%	177	123%
College of Social Sciences	53%	257	82%	192	77%
Undeclared / Other	49%	403	72%	25	1%
College of Health and Human Services	47%	475	74%	323	61%
Lyles College of Engineering	44%	235	64%	113	30%

# Fresno State: WSCUC Graduation Rate Dashboard

Agenda	Fresno State	WSCUC Grad Rate Dashboard Excel Version	Tableau Version	Confucius	Visual, Interactive, Personalized	Comparison
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- Grad Rate dashboard in Tableau: data sources and automation
- Disaggregation by college, department, and demographics
- Advantages and potential usage

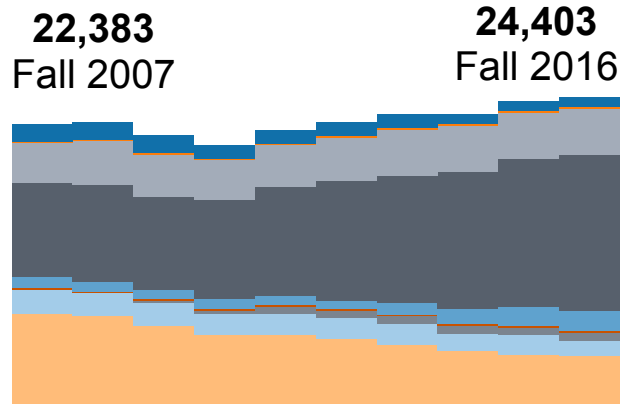
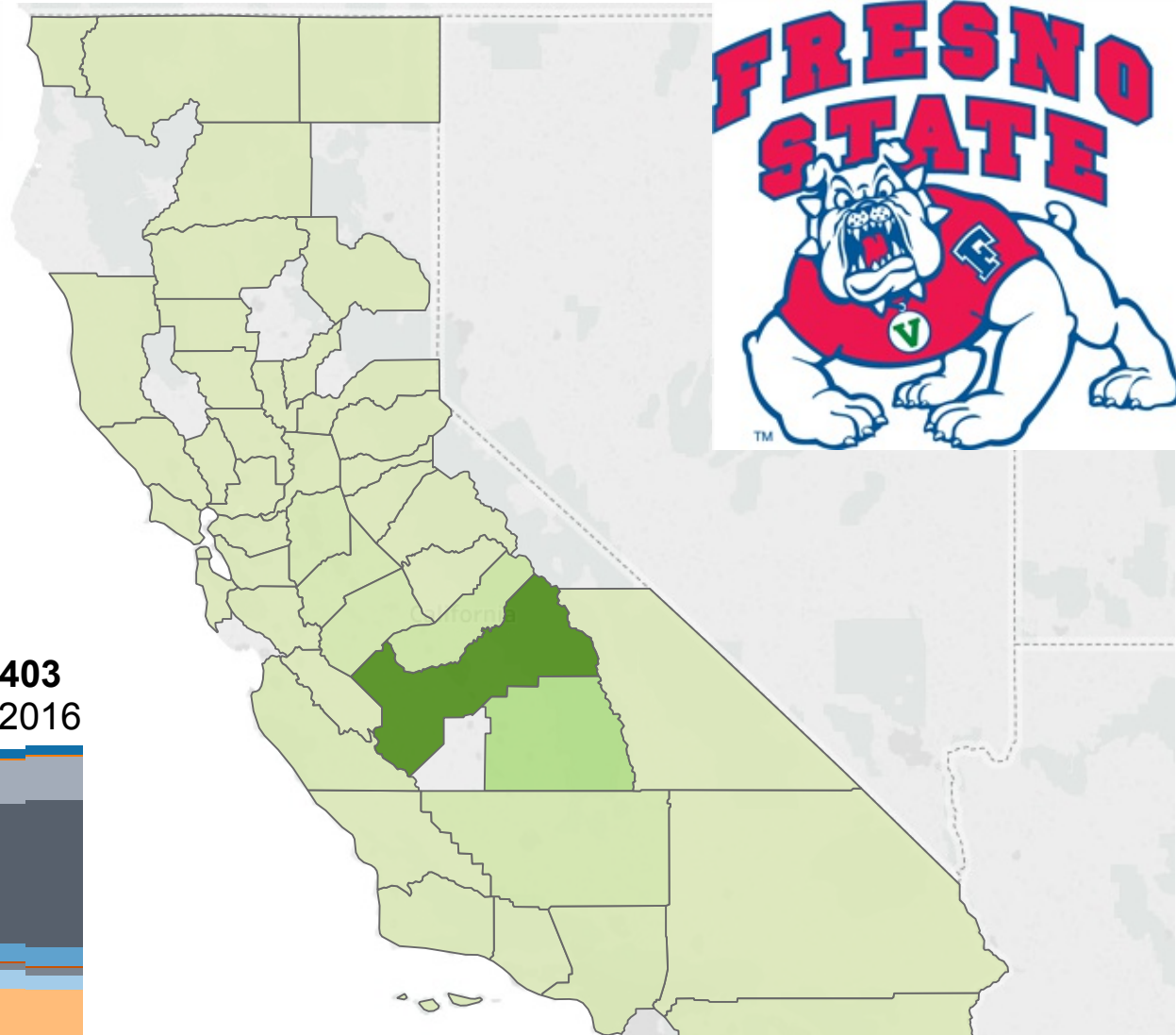
**Dmitri Rogulkin**  
Associate Director of Institutional Effectiveness  
Fresno State



# Fresno State: WSCUC Graduation Rate Dashboard

Agenda	Fresno State	WSCUC Grad Rate Dashboard Excel Version	Tableau Version	Confucius	Visual, Interactive, Personalized	Comparison
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**FRESNO STATE**  
Discovery. Diversity. Distinction.



# Fresno State: WSCUC Graduation Rate Dashboard

Agenda	Fresno State	WSCUC Grad Rate Dashboard Excel Version	Tableau Version	Confucius	Visual, Interactive, Personalized	Comparison
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	2007	2008	2009	2010	2011	2012	2013	2014	8 Year Total
<b>Degree Seeking Undergraduate Students</b>									
Unduplicated Headcount	19703	19677	18260	18989	20081	19806	20793	21538	158847
Total Annual Institutional Units Completed	409854	418080	407307	415118	442227	450882	462225	471874	3477567
Average Institutional Units Completed Per Student	21	21	22	22	22	23	22	22	22
<b>Undergraduate Degree Recipients</b>									
Unduplicated Headcount	3565	3542	3456	3551	3441	3699	4265	3878	29397
Total Institutional Graduation Units Completed	257803	330371	335311	343785	342288	363353	416214	376273	2765398
Average Institutional Graduation Units Per Student	72	93	97	97	99	98	98	97	94
Y/Y Enrollment Change		-0.13%	-7.20%	3.99%	5.75%	-1.37%	4.98%	3.58%	
Y/Y Graduation Headcount Change		-0.65%	-2.43%	2.75%	-3.10%	7.50%	15.30%	-9.07%	
Ratio - Grad Headcount/Annual Units	0.1809	0.18	0.1893	0.187	0.1714	0.1868	0.2051	0.1801	
<b>Unit Redemption Rates (URR)</b>	63%	79%	82%	83%	77%	81%	90%	80%	80%
URR 2-year average		80%	81%	84%	80%	81%	91%	81%	
URR 3-year average			81%	83%	81%	83%	92%	82%	
URR 4-year average				83%	81%	85%	94%	82%	
<b>Calculation for numerator of 'd'</b>									
Total institutional units completed by non-continuing students =	108220	111664	91313	88901	97780	89698	93783	88484	
Headcount of non-continuing students =	2777	2964	2119	1977	2240	2079	2219	2269	
Average institutional units for non-continuing students =	39	38	43	45	44	43	42	39	42
<b>d (ratio of dropout units to graduating units)</b>	0.541	0.405	0.444	0.464	0.441	0.440	0.431	0.402	0.446
<b>Absolute Graduation Rates (AGR)</b>	48%	60%	67%	69%	60%	65%	80%	61%	64%
AGR 2-year average		62%	66%	70%	64%	66%	82%	62%	
AGR 3-year average			66%	70%	66%	69%	83%	64%	
AGR 4-year average				70%	66%	71%	87%	65%	
AGR 5-year average					66%	72%	90%	68%	
Available IPEDS 6-year graduation rates	48%	48%	48%	51%	49%	48%	49%	52%	49%

# Fresno State: WSCUC Graduation Rate Dashboard

Agenda	Fresno State	WSCUC Grad Rate Dashboard Excel Version	Tableau Version	Confucius	Visual, Interactive, Personalized	Comparison
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## Select Academic Years

Multiple values

	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	Grand Total
<b>Unduplicated Headcount</b>	19,718	19,682	18,254	18,989	20,081	19,806	20,792	21,536	158,858
<b>Total Annual Institutional Units Completed</b>	410,178	418,198	407,235	415,113	442,227	450,870	462,220	471,875	3,477,916
<b>Average Institutional Units Completed Per Student</b>	21	21	22	22	22	23	22	22	22
<b>Undergraduate Degree Recipients</b>	3,509	3,541	3,456	3,551	3,434	3,684	4,263	3,878	29,316
<b>Total Institutional Graduation Units Completed</b>	331,647	334,299	335,311	343,785	341,855	362,408	416,080	376,273	2,841,657
<b>Average Institutional Graduation Units Per Student</b>	95	94	97	97	100	98	98	97	97
<b>Y/Y Enrollment Change</b>		-0.2%	-7.3%	4.0%	5.8%	-1.4%	5.0%	3.6%	
<b>Y/Y Graduation Headcount Change</b>		0.9%	-2.4%	2.7%	-3.3%	7.3%	15.7%	-9.0%	
<b>Ratio - Grad Headcount/Annual Units</b>	18%	18%	19%	19%	17%	19%	21%	18%	18%
<b>Unit Redemption Rates (URR)</b>	81%	80%	82%	83%	77%	80%	90%	80%	82%
<b>URR 2-year average</b>		81%	81%	84%	80%	81%	91%	81%	
<b>URR 3-year average</b>			81%	83%	81%	83%	92%	82%	
<b>Total institutional units completed by non-continuing students</b>	108,553	111,507	91,751	89,902	97,985	89,403	93,635	88,388	
<b>Headcount of non-continuing students</b>	2,718	2,896	2,097	1,991	2,244	2,071	2,214	2,264	
<b>Average institutional units for non-continuing students</b>	40	39	44	45	44	43	42	39	43
<b>d (ratio of dropout units to graduating units)</b>	0.423	0.408	0.451	0.466	0.439	0.439	0.433	0.402	0.446
<b>Absolute Graduation Rates (AGR)</b>	64%	62%	68%	69%	60%	64%	80%	61%	67%
<b>AGR 2-year average</b>		63%	66%	70%	63%	65%	82%	63%	
<b>AGR 3-year average</b>			66%	70%	65%	68%	83%	64%	
<b>AGR 4-year average</b>				70%	66%	71%	87%	65%	
<b>AGR 5-year average</b>					66%	71%	90%	68%	
<b>6yr Graduation FTFTF</b>							48.6%	52.4%	

## Fresno State: WSCUC Graduation Rate Dashboard

Fresno State	WSCUC Grad Rate Dashboard Excel Version	Tableau Version	Confucius	Visual, Interactive, Personalized	Comparison	Actionable
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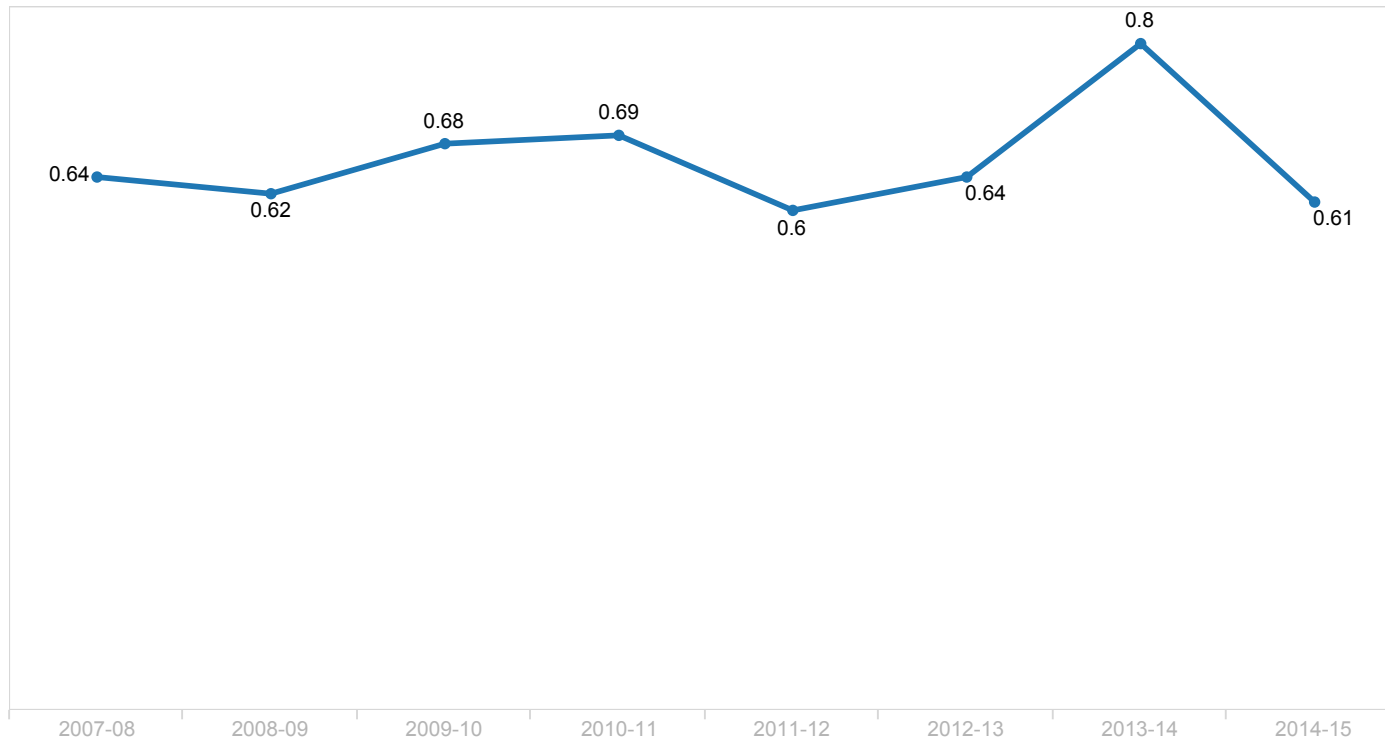


I hear and I forget.  
I see and I remember.  
I do and I understand.  
(Confucius)

# Fresno State: WSCUC Graduation Rate Dashboard

WSCUC Grad Rate Dashboard Excel Version	Tableau Version	Confucius	Visual, Interactive, Personalized	Comparison	Actionable	Data Sources
--	-----------------	-----------	--------------------------------------	------------	------------	--------------

## Absolute Graduation Rates (AGR)



**Academic Years**  
Multiple values

**College**  
All

**Measure**  
Absolute Graduation Rates (..

### Definition

The Absolute Graduation Rate is the proportion of students entering an institution that eventually graduate from that institution.

### Formula

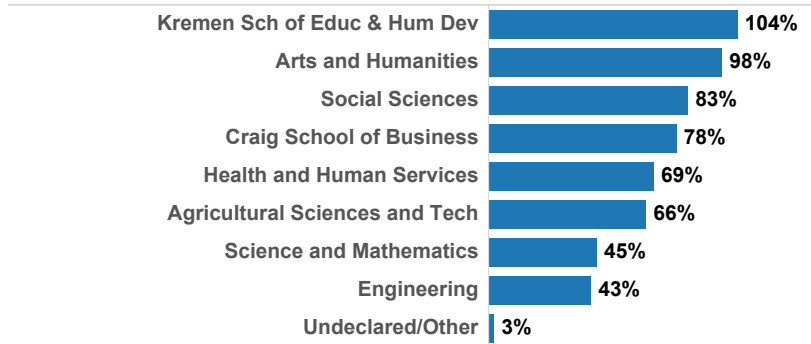
$$\frac{\text{sum}([\text{Total Institutional Graduation Units Completed}])}{(\text{sum}([\text{Total Institutional Graduation Units Completed}]) + ((\text{sum}([\text{Total Annual Institutional Units Completed}]) - \text{sum}([\text{Total Institutional Graduation Units Completed}])) / d(\text{ratio of dropout units to graduating units}))}$$

# Fresno State: WSCUC Graduation Rate Dashboard

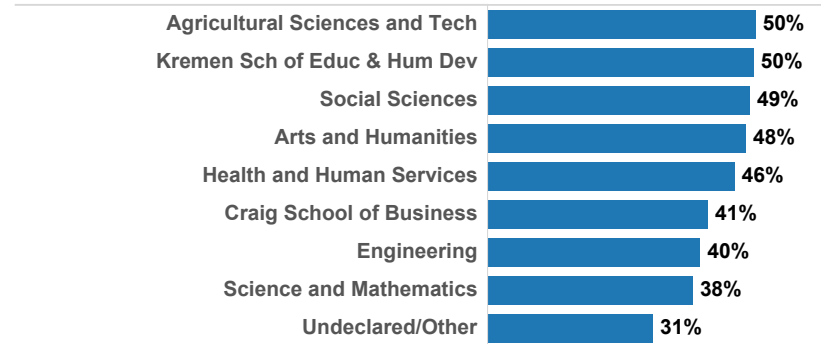
WSCUC Grad Rate Dashboard..	Tableau Version	Confucius	Visual, Interactive, Personalized	Comparison	Actionable	Data Sources
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Comparison by: College  
College: All

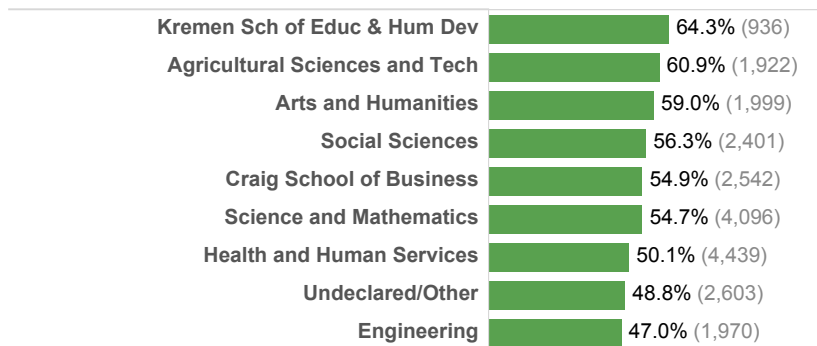
## Absolute Graduation Rates (AGR)



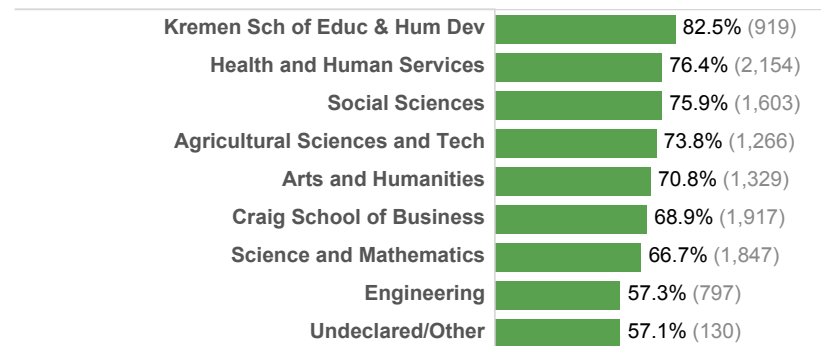
## d (ratio of dropout units to graduating units)



## 6-year Graduation FTFTF



## 4-year Graduation Transfer Students



Note: Data aggregated for the last 8 years. In parenthesis, aggregated cohort sizes.

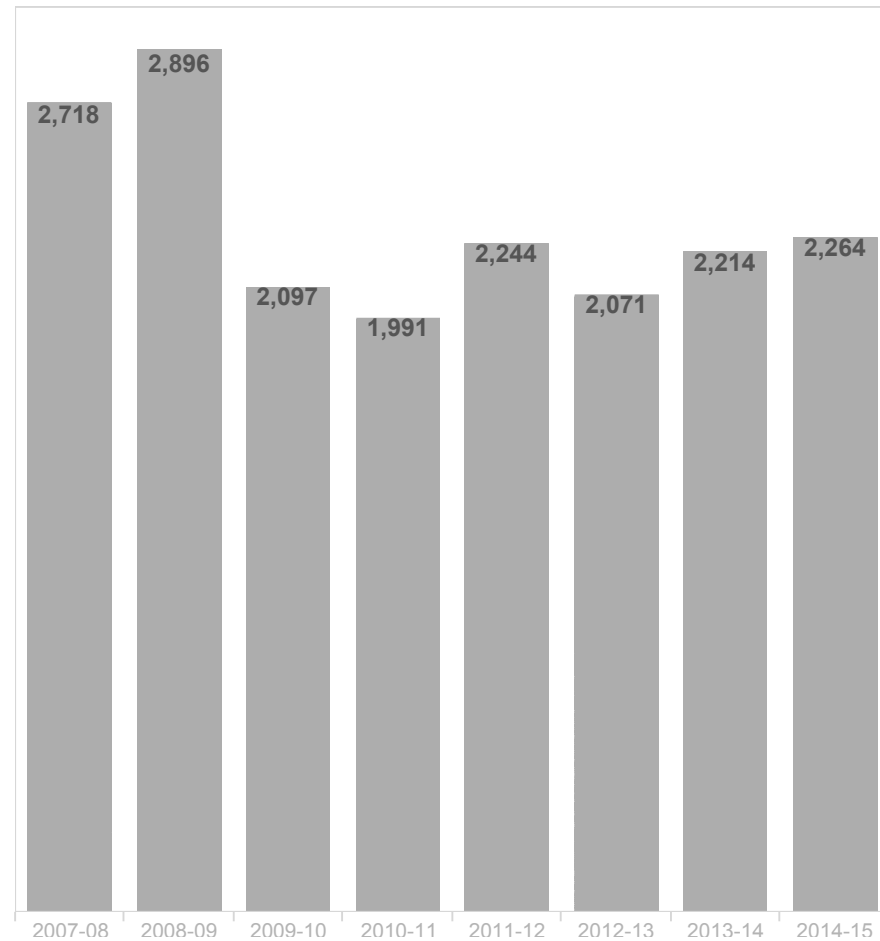
# Fresno State: WSCUC Graduation Rate Dashboard

WSCUC Grad Rate Dashboard..	Tableau Version	Confucius	Visual, Interactive, Personalized	Comparison	Actionable	Data Sources
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College  
All

Department Name  
All

### Headcount of non-continuing students

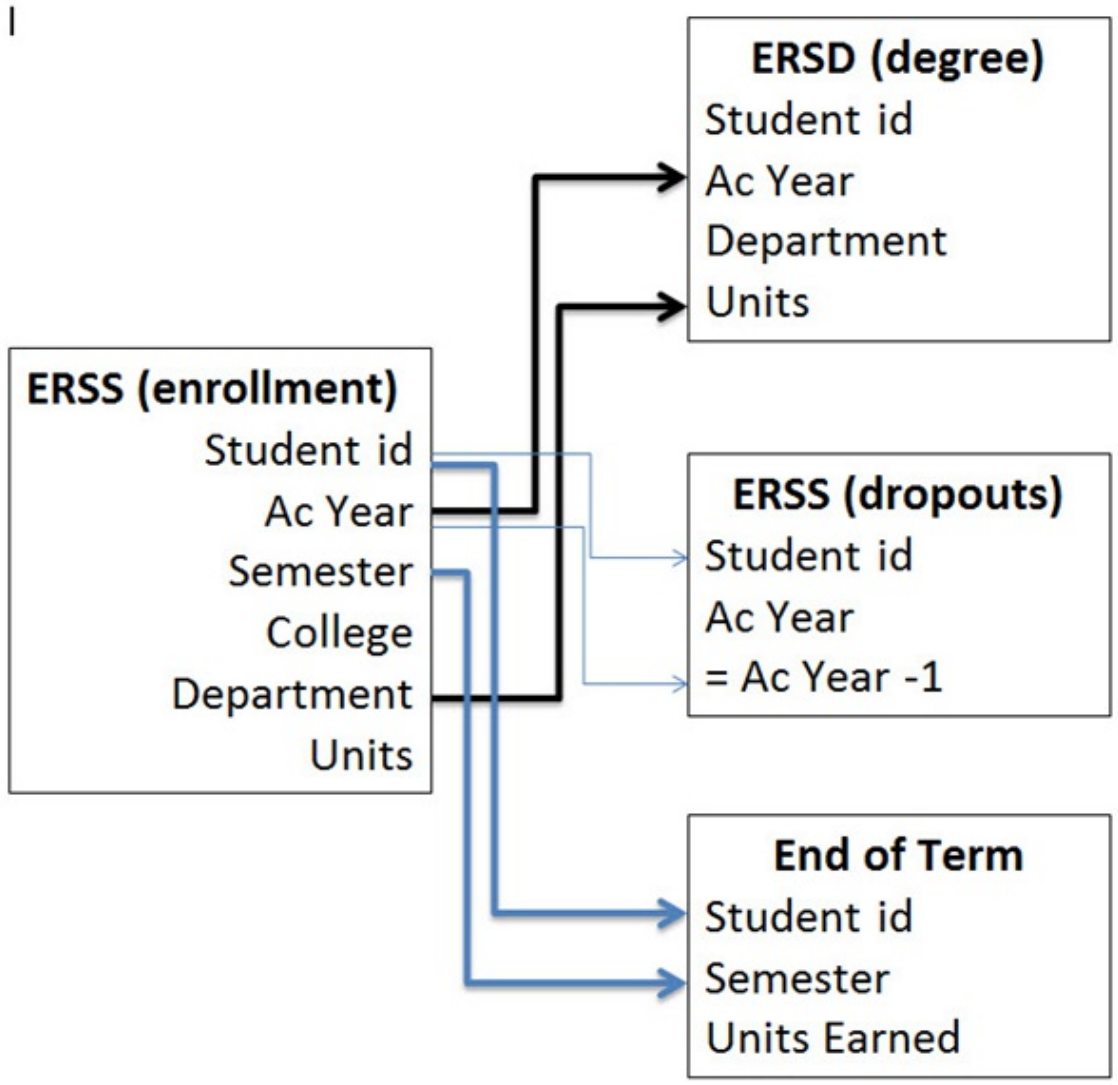


### List of non-continuing students (total units)



# Fresno State: WSCUC Graduation Rate Dashboard

WSCUC Grad Rate Dashboard..	Tableau Version	Confucius	Visual, Interactive, Personalized	Comparison	Actionable	Data Sources
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# Institutional Example Using the GRD

W. Ken Nelson, MD  
Loma Linda University

# Loma Linda University



**MANY STRENGTHS. ONE MISSION.**

*A Seventh-day Adventist Organization*



**LOMA LINDA  
UNIVERSITY  
HEALTH**

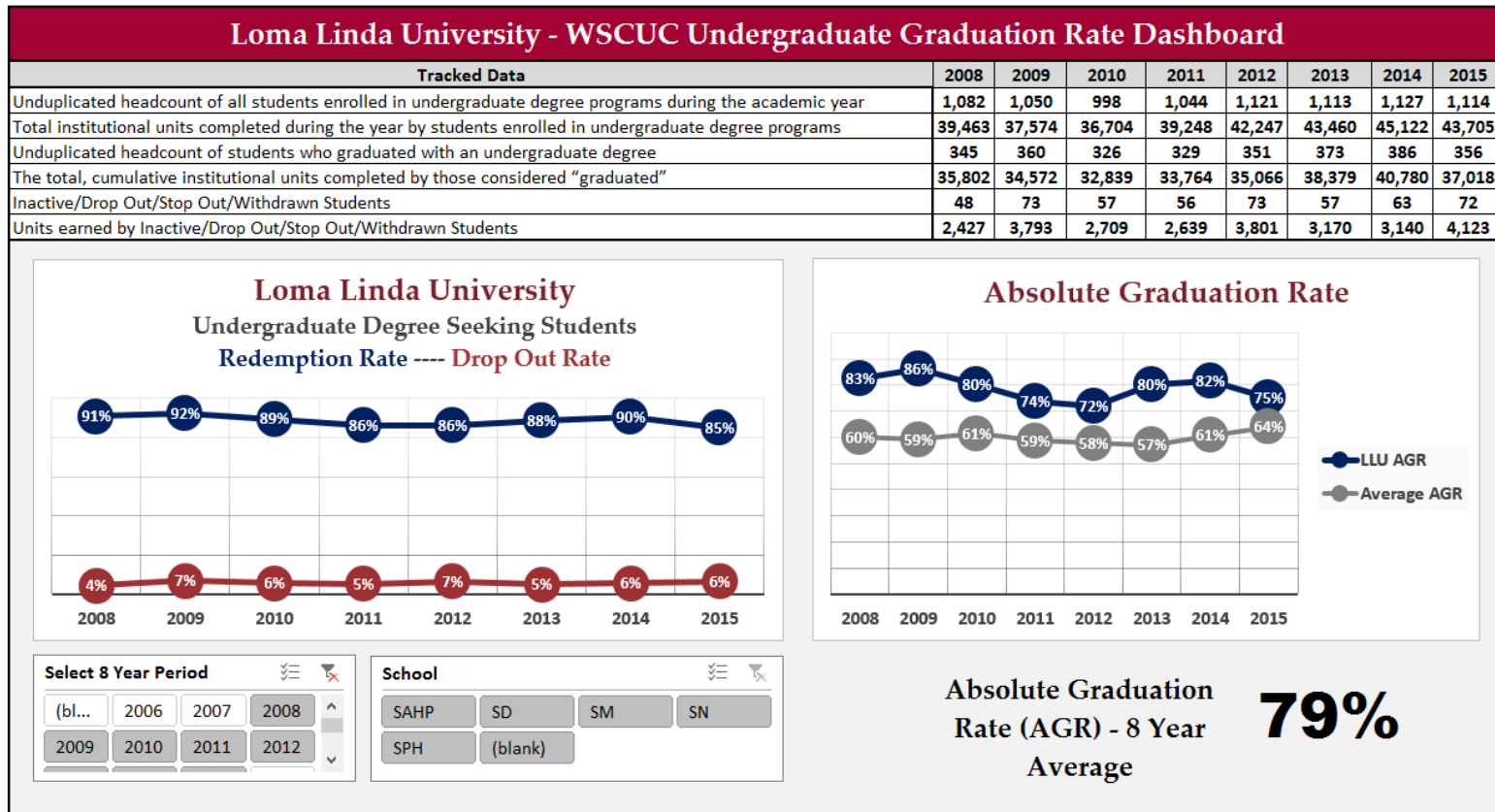
Diverse Campus  
Private, non-profit, faith-based,  
health sciences, transfer in only

- 1,157 Undergraduate Students
- 1,648 Graduate Students
- 1,639 Doctoral or Professional Students
- 4,157 FTE
- 100+ Programs
- 400 International Students
- 75 Countries
- 22 Professional Accreditors (8 undergraduate)
- 26 Undergraduate programs

Fall 2016



# Loma Linda University – WSCUC AGR



# Loma Linda University – WSCUC AGR

Loma Linda University - WSCUC Undergraduate Graduation Rate Dashboard								
Tracked Data	2008	2009	2010	2011	2012	2013	2014	2015
Unduplicated headcount of all students enrolled in undergraduate degree programs during the academic year	1,082	1,050	998	1,044	1,121	1,113	1,127	1,114
Total institutional units completed during the year by students enrolled in undergraduate degree programs	39,463	37,574	36,704	39,248	42,247	43,460	45,122	43,705
Unduplicated headcount of students who graduated with an undergraduate degree	345	360	326	329	351	373	386	356
The total, cumulative institutional units completed by those considered "graduated"	35,802	34,572	32,839	33,764	35,066	38,379	40,780	37,018
Inactive/Drop Out/Stop Out/Withdrawn Students	48	73	57	56	73	57	63	72
Units earned by Inactive/Drop Out/Stop Out/Withdrawn Students	2,427	3,793	2,709	2,639	3,801	3,170	3,140	4,123

Year	2008	2009	2010	2011	2012	2013	2014	2015
Headcount	1,082	1,050	998	1,044	1,121	1,113	1,127	1,114
HC Units	39,463	37,574	36,704	39,248	42,247	43,460	45,122	43,705
Graduates	345	360	326	329	351	373	386	356
Grad Units	35,802	34,572	32,839	33,764	35,066	38,379	40,780	37,018
Lost Count	▶ 48	73	57	56	73	57	63	72
Lost Units	2,427	3,793	2,709	2,639	3,801	3,170	3,140	4,123



## Case Study

### *BS RN 2015*

- » WSCUC GRD identified **72** inactive/drop out/stop out/withdrawn students in 2015
- » Undergraduate program with largest “N” in this category was the BS RN program with **26** discontinuing students
- » **11** failed out
- » **15** discontinued
- » Incoming years – **2013, 2014, 2015**





# LLU - WSCUC GRD – BS Nursing

Loma Linda University - WSCUC Undergraduate Graduation Rate Dashboard									
Tracked Data		2008	2009	2010	2011	2012	2013	2014	2015
Unduplicated headcount of all students enrolled in undergraduate degree programs during the academic year		578	588	544	553	563	568	581	568
Total institutional units completed during the year by students enrolled in undergraduate degree programs		17,913	17,951	16,896	17,304	18,016	19,023	19,820	18,994
Unduplicated headcount of students who graduated with an undergraduate degree		130	159	137	146	119	146	158	134
The total, cumulative institutional units completed by those considered "graduated"		15,622	15,530	15,206	16,005	12,690	17,004	18,612	15,945
Inactive/Drop Out/Stop Out/Withdrawn Students		29	46	33	32	41	26	30	26
Units earned by Inactive/Drop Out/Stop Out/Withdrawn Students		1,737	2,666	1,803	1,535	2,710	1,551	1,589	1,716

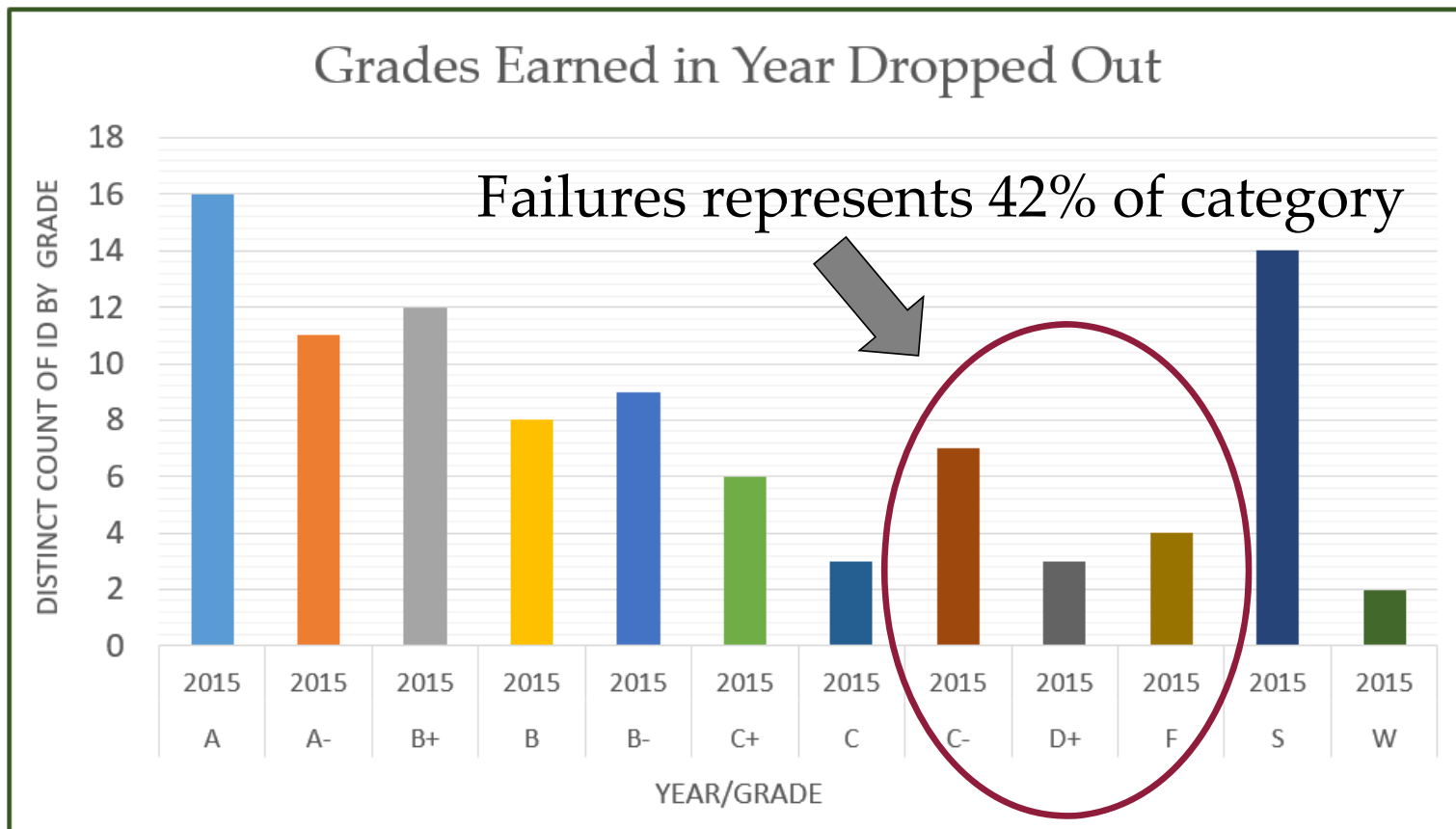
  

Loma Linda University Undergraduate Degree Seeking Students Redemption Rate --- Drop Out Rate		Absolute Graduation Rate						
Year	2008	2009	2010	2011	2012	2013	2014	2015
Headcount	578	588	544	553	563	568	581	568
HC Units	17,913	17,951	16,896	17,304	18,016	19,023	19,820	18,994
Graduates								
Grad Units	Inactive/Drop Out/Stop Out/Withdrawn Students							
Lost Count	29	46	33	32	41	26	30	26
Lost Units	1,737	2,666	1,803	1,535	2,710	1,551	1,589	1,716

BS,  
Nursing



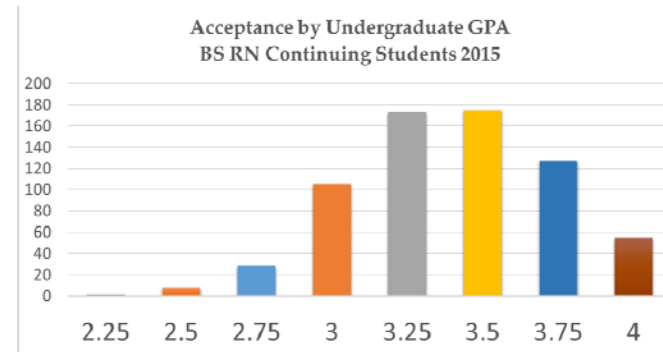
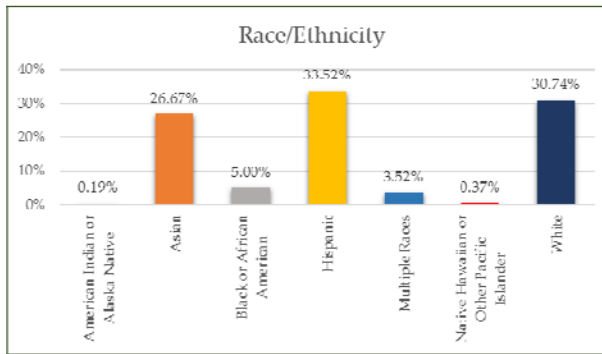
# Students Who Discontinued - BS RN 2015



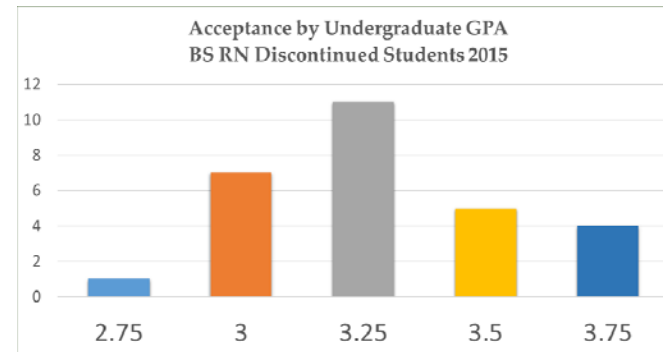
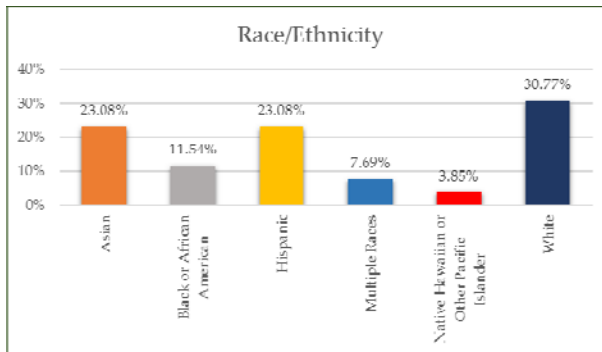


# Continuing vs Discontinuing Students BS RN 2015

## Continuing Students by Race/Ethnicity and Incoming GPA



## Discontinuing Students by Race/Ethnicity and Incoming GPA



WSCUC AGR – LLU aware of trends

»Professional accreditation reporting

Characteristics of a Discontinuing Student

»“Life Happens” – characteristics unknown



<http://edtechtimes.com>



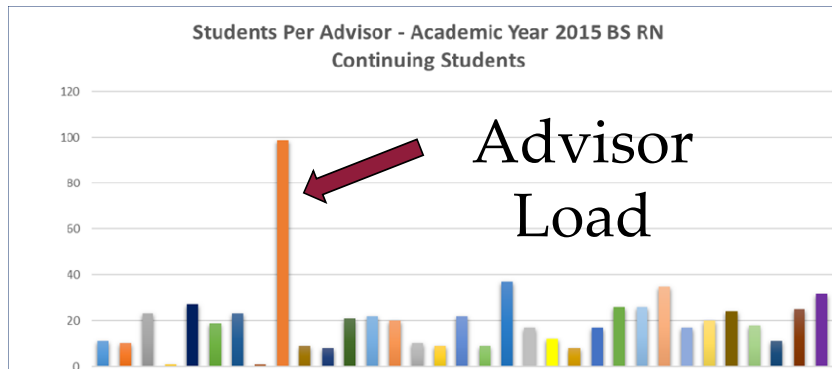
LOMA LINDA UNIVERSITY  
HEALTH

# Started a Conversation

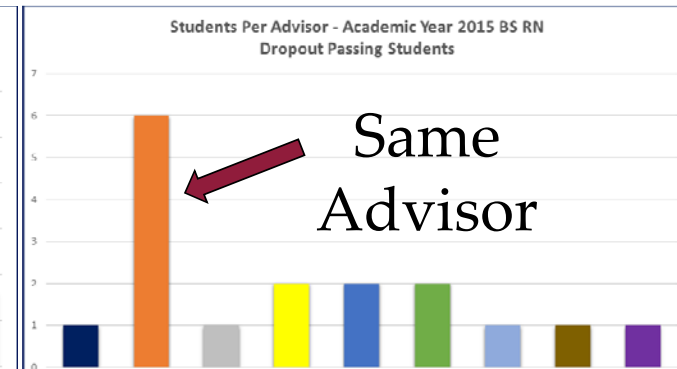
## What is in place to address attrition?

### » Advisors

#### Continuing Students



#### Dropout Passing Students



Advisor load – is there a chance this affects the opportunity to intervene?



# Program Review Action Plans



## Loma Linda University - Program Action Plan Review

Programs Reporting

Action Plans

1

9

**Issue Category**

Accomplishments Assessment

Collaboration Curricula

Faculty Inst. Alignment

Other Prof. Alignment

Resources Satisfaction

Societal Alignment Students

**Issues by School and Program**

Search

SN

- 12 PhD, Nursing
- 11 MS, Nursing
- ✓ 9 BS, Nursing
- 8 DNP, Nursing

Other (1) [More](#)

SD

- 10 DDS, Dentistry

SPH

- 8 MPH, Global Health
- 7 DrPH, Health Policy and Leadership
- 7 MPH, Biostatistics
- 6 DrPH, Preventive Care

Other (20) [More](#)

SBH

- 7 MS, Counseling
- 6 PhD, Social Policy/Social Research
- 3 MS, Child Life Specialist
- 1 MS, Marital and Family Therapy

SAHP

- 6 BS, Clinical Laboratory Science
- 6 MOT, Occupational Therapy (Entry-Lev...

**Issues, Goals, and Action Plans**

**In Progress, Issue ID #202** B

Esther Mattheson • Nov. 11, 2015

The Undergraduate Faculty and Curriculum Committee are in the process of reviewing the use of care plans across the curriculum. Efforts are being made to establish consistency. This action is in response to: This issue was identified by - - The issue goal is: Recommendation to establish consistency among faculty in review and grading of case

**In Progress, Issue ID #201** B

Esther Mattheson • Nov. 11, 2015

Various revisions have been implemented to the Med/Surg courses to facilitate student progression and enhance the learning environment for optimal success. The course progressions will continue to be monitored. This action is in response to: This issue was identified by - BRN Site Visit Recommendation - The issue goal is: Recommendation to

**Completed, Issue ID #200** B

Esther Mattheson • Nov. 11, 2015

Options have been provided for skills and assessment practice using simulators within the school. This action is in response to: This issue was identified by - BRN Site Visit Recommendations - The issue goal is: Students have expressed concerns regarding losing competency in their nursing skills, especially when a quarter of nursing without in

**Not Started, Issue ID #209** B

Esther Mattheson • Nov. 12, 2015

None. This action is in response to: This issue was identified by - CCNE Continuous Improvement Report - The issue goal is: RN to BS completion track has been reviewed and strengthened in content and process.

**In Progress, Issue ID #210** B

Esther Mattheson • Nov. 12, 2015

Monitor for effectiveness. This action is in response to: This issue was identified by - CCNE Continuous Improvement Report - The issue goal is: Curricular revisions and new courses developed have been implemented.

**In Progress, Issue ID #232** B

Esther Mattheson • Oct. 13, 2016

Curriculum review and changes will be undertaken over the next few years to align the program with the current healthcare environment, and regional and national nursing education practices. This action is in response to: Various revisions have been implemented to the Med/Surg courses to facilitate student progression and enhance the

LOMA LINDA UNIVERSITY  
HEALTH

# Findings Validation



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A University Renewed Organization

## Loma Linda University - Program Action Plan Review

Programs Reporting

1

Action Plans

9

**Issue Category**

- Accomplishments
- Assessment
- Collaboration
- Curricula
- Faculty
- Inst. Alignment
- Other
- Prof. Alignment
- Resources
- Satisfaction
- Societal Alignment
- Students

**Issues by School and Program**

Search

SN

- 12 PhD, Nursing
- 11 MS, Nursing
- 9 BS, Nursing
- 8 DNP, Nursing

**Issues, Goals, and Action Plans**

- In Progress, Issue ID #202  
Esther Mattheson • Nov. 11, 2015  
The Undergraduate Faculty and Curriculum Committee are in the process of reviewing the use of care plans across the curriculum. Efforts are being
- In Progress, Issue ID #201  
Esther Mattheson • Nov. 11, 2015  
Various revisions have been implemented to the Med/Surg courses to facilitate student progression and enhance the learning environment for
- Completed, Issue ID #200  
Esther Mattheson • Nov. 11, 2015  
Options have been provided for skills and assessment practice using simulators within the school. This action is in response to: This issue was

**BS, Nursing**

**In Progress**

Esther Mattheson • Oct. 13, 2016

Assistance through the newly restructured Academic Center for Excellence (ACE) is being offered students after their final grades for beginning nursing courses reveal possible success issues. Results of the program's efforts will be tracked over the next few years to monitor the need for further changes and improvements to the ACE program. This action is in response to: To identify academic challenges students experience early in the program and offer various means for promoting student mentoring and success. This is

was identified by - - The issue goal is: Student retention continues to be a cited concern in the senior student exit interview process. Their suggestions include offering more assistance early in the program to optimize student success.





Ken Nelson, MD, MS  
*Associate Director, Office of Educational Effectiveness*  
*Institutional Researcher*  
LOMA LINDA UNIVERSITY



# Institutional Example Using the GRD

John Stanley

University of Hawaii – West Oahu

## Triangulation and Context

- “Institutions’ definitions of success will differ, given their unique missions, traditions, programs, and the characteristics of the student they serve.”

- WSCUC, *About the Graduation Rate Dashboard*

- Triangulating multiple measures (i.e., IPEDS, WSCUC GRD, campus reports) is an inclusive approach to understanding your institution’s success “story.”
- Providing information relative to other institutions can help gauge key performance indicators.



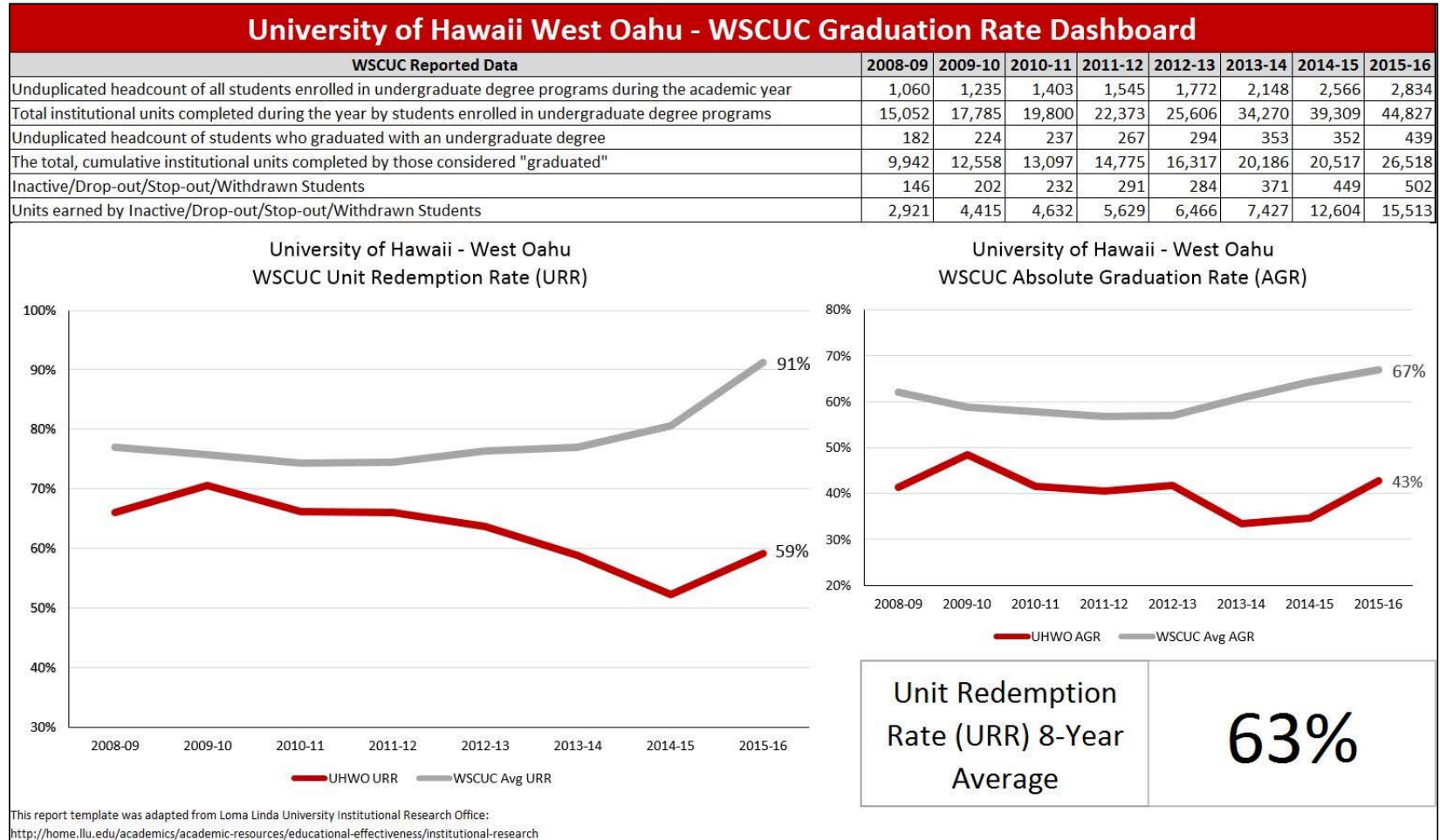
# University of Hawaii – West Oahu



- Baccalaureate university established in 1976; new physical campus opened in 2012.
- Part of ten-campus UH System.
- ~3,000 undergraduate students.
- Rapid enrollment growth last four years.
- Many students enroll with intent of transferring after two years, typically to UH flagship campus.



# First Step: GRD data readily accessible on IR website





# Next Step: 'Homegrown' Data Feedback Report (DFR)

University of Hawai'i - West Oahu

Office of Institutional Effectiveness

## UHWO OIE Data Feedback Report

**2016**

What is the Purpose of This Report? The UHWO OIE Data Feedback Report is intended to provide context for examining institutional-level data submitted to IPEDS and WSCUC GRD. The purpose of this report is to provide a convenient tool for analyzing and comparing student success rates relative to peer institutions and the institution's larger region of baccalaureate colleges.


What is This Report? This report includes retention, graduation, and transfer-out rates, as reported to IPEDS and WSCUC.

What is IPEDS? The Integrated Postsecondary Education Data System (IPEDS) is a system of survey components that collects data from about 7,500 institutions that provide postsecondary education across the United States. IPEDS collects institution-level data on student enrollment, graduation rates, student charges, program completions, faculty, staff, and finances.

What is WSCUC GRD? The WASC Senior College and University Commission (WSCUC) Graduation Rate Dashboard (GRD) was developed as an inclusive method to identify the retention and graduation patterns of all undergraduate students. The primary benefit of this methodology is that it accounts for all graduates regardless of how they matriculate (first-time or transfer, lower or upper division) or enroll (part-time, full-time, swirling), or what programs they pursue.

These data are used at the federal, regional, and state levels for policy analysis and development; at the institutional level for benchmarking and peer analysis; and by the general public visiting the UHWO OIE website. For more information about IPEDS, see <http://nces.ed.gov/ipeds>. For more information on the WSCUC GRD, see: <https://www.wascenior.org/resources/about-the-graduation-rate-dashboard>

<http://www.uhwo.hawaii.edu/academics/oie/>



1

OIE Data Feedback Report

Table 1: WSCUC GRD Reported Data

University of Hawaii West Oahu - WSCUC Graduation Rate Dashboard

WSCUC Reported Data	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
1) Unduplicated headcount of all students enrolled in undergraduate degree programs during the academic year	1,060	1,235	1,403	1,545	1,772	2,148	2,566	2,834
2) Total institutional units completed during the year by students enrolled in undergraduate degree programs	15,052	17,785	19,800	22,373	25,606	34,270	39,309	44,827
3) Unduplicated headcount of students who graduated with an undergraduate degree	182	224	237	267	294	353	352	439
4) The total, cumulative institutional units completed by those considered "graduated"	9,942	12,558	13,097	14,775	16,317	20,186	20,517	26,518
5) Inactive/Drop-out/Stop-out/Withdrawn Students	146	202	232	291	284	371	449	502
6) Units earned by Inactive/Drop-out/Stop-out/Withdrawn Students	2,921	4,415	4,632	5,629	6,466	7,427	12,604	15,513

The Unit Redemption Rate (URR) is the proportion of units granted by an institution that are eventually 'redeemed' for a degree from that institution. The URR is a completion measure that can be applied to institutions serving any population of students (full-time or part-time; first-time, transfer or swirling), as well as institutions offering different degree programs or mixes of degree programs.

Figure 1: Unit Redemption Rate (URR)

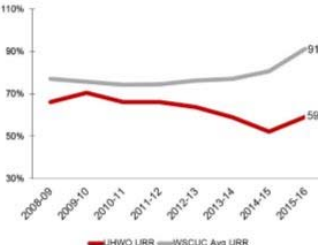
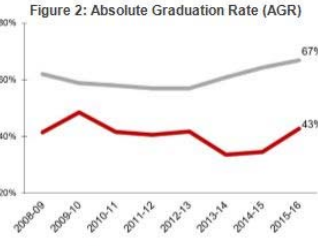


Figure 2: Absolute Graduation Rate (AGR)



Absolute Graduation (AGR) 8-Year Average 41%

Unit Redemption (URR) 8-Year Average 63%

The Absolute Graduation Rate is the proportion of students entering an institution that eventually graduate from that institution. Unlike IPEDS which only tracks cohort based, first-time, full-time students, the Absolute Graduation Rate is inclusive of all students at the institution. Like the URR it includes all students regardless of their enrollment pattern- first-time or transfer, full-time or part-time students but also accounts for students who have a gap in their enrollment before completion.

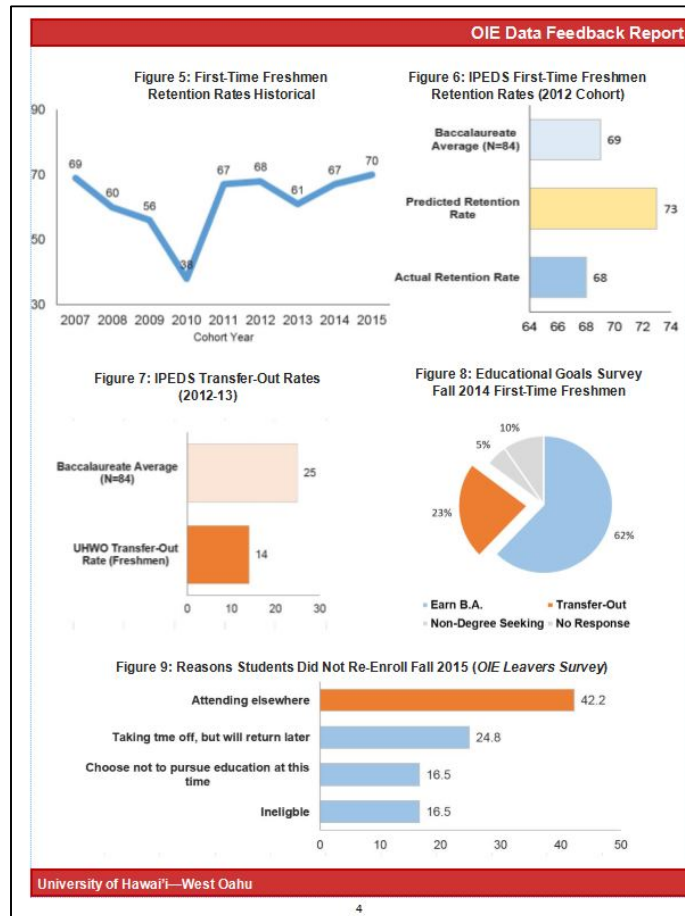
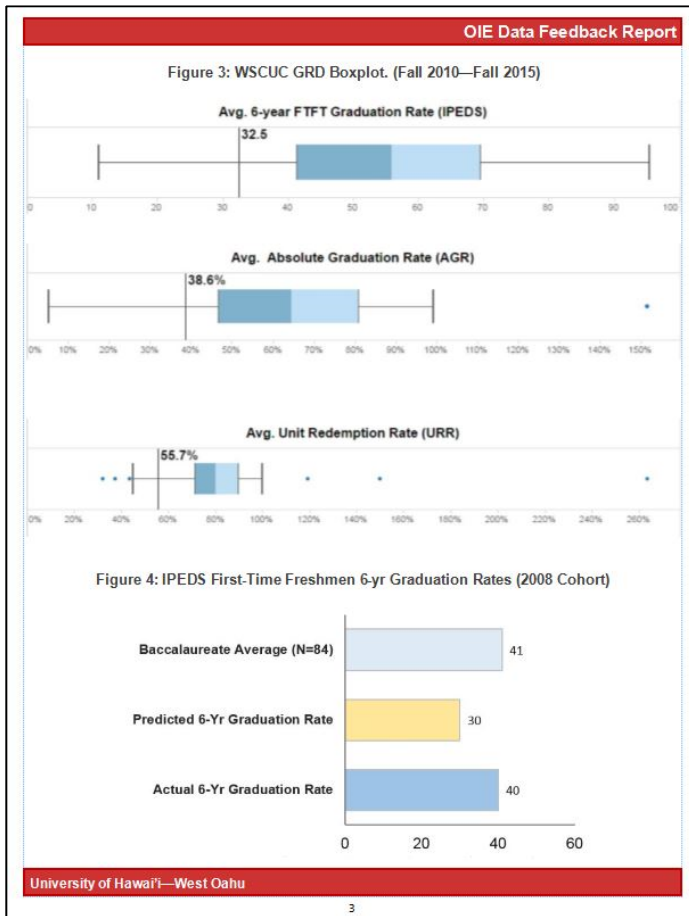
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- One report with comparative data on student success based on IPEDS and WSCUC GRD data.
- Regional and national averages used in analyses.
- Compares actual performance to predicted performance.
- Particular attention towards unit redemption rates and 'swirling.'



# Comparison groups, predicted performance



- Retention rate close to baccalaureate group average, lower than predicted rate.
- Unit redemption rate at 50<sup>th</sup> percentile.
- Results from Ed Goals survey, and Leaver's survey corroborate transfer-out rates and low third-year retention rates.

## UHWO's DFR story

- Retention rate performance good comparatively.
- URR above average, AGR below.
- One-third of first-time freshmen indicate desire to transfer-out/ not earn a bachelors.
- Desire to attend elsewhere was the top reason reported in the 2015 *Leaver's Survey*.
- Institution second-to-third year persistence rates low.
- Triangulating data points indicates a sizable % of entering students intend to transfer after two to three years.
- AGR measure is volatile due to enrollment size; URR better reflects the amount of units taught/earned towards degrees.

## DFR Next Steps

- Enhance OIE Data Feedback Report with narrative.
- Distribute DFR annually to administration; present at campus IR workshops and trainings.
- Create an user-friendly, dashboard version.

# Attendee Discussion

Kristina Powers, Ph.D.,  
WSCUC Fellow

# **Audience Questions for Presenters**



# Workgroup Discussion

- Form small groups with individuals around you.
- In your groups:
  - Introduce yourself (name, title, and connection to the GRD)
  - How has the GRD been used at your institution?
  - What ideas do you have for GRD analyses at your institution?
  - What challenges exist for completing your GRD analyses?
- Report-out from groups – Goal is to create a list of ideas and gather more institutional examples to share.

# Workgroup Report-Out

- How has the GRD been used at your institution?
- What ideas do you have for GRD analyses at your institution?
- What challenges exist for completing your GRD analyses?

# Resource Documents

- This session will be on the CAIR and WSCUC websites.
- <https://www.wascsenior.org/resources/about-the-graduation-rate-dashboard>

The screenshot shows the WASC Senior College and University Commission website. The header includes the WASC logo, social media icons for Twitter, Facebook, YouTube, LinkedIn, RSS, and Email, and a search bar. A navigation menu contains links for About, Accrediting Commission, Resources, Directory, Documents, and Educational Programs. The main content area is titled "About the Graduation Rate Dashboard" and contains several paragraphs of text explaining the dashboard's purpose and methodology. To the right, there are sections for "Documents" and "Videos". The "Documents" section lists several files, including a 2016 ARC Workshop Materials, a Graduation Rate Dashboard Instructions and Data Definitions (.docx), a Graduation Rate Dashboard Template (.xlsx), an Explanation of the Unit Redemption Rate and Absolute Graduation Rate (PDF), and Data Validation Questions (PDF). The "Videos" section features a video player with a play button and a title: "An Explanation of the Undergraduate Student Success and Graduation Rate Dashboard An overview by John Etchemendy, WSCUC Commissioner". Below the main text, there is a section for "Frequently Asked Questions - Graduation Rate Dashboard" with a "[expand all]" link and a list of questions.

**WASC**  
WASC Senior College and University Commission

Search site

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### About the Graduation Rate Dashboard

With 50% of U.S. citizens having no more than a high school diploma, college degree completion has become a focus of national debate. The WASC Senior College and University Commission (WSCUC) is also emphasizing the need to measure student success including student retention, progress towards a degree, and graduation rates.

For WSCUC, student success includes not only strong retention and graduation rates, but also high-quality learning. It means that students are prepared for success in their personal, civic, and professional lives, and that they embody the values and behaviors that make their institution distinctive. Institutions' definitions of success will differ, given their unique missions, traditions, programs, and the characteristics of the student they serve.

Traditionally, the Integrated Postsecondary Education Data System (IPEDS) has been the primary source of data on graduation rates for institutions. However, it is restricted to first-time, full-time cohorts and fails to account for the success of a growing number of students in its measures of graduation rates.

The Graduation Rate Dashboard was developed by WSCUC as a more inclusive method to identify the enrollment, retention and graduation patterns of all undergraduate students. The primary benefit of this methodology is that it accounts for all graduates regardless of how they matriculate (first-time or transfer, lower or upper division) or enroll (part-time, full-time, swirling), or what programs they pursue.

WSCUC encourages the use of multiple measures to understand and improve graduation rates as a component of student success.

### Documents

- 2016 ARC Workshop Materials
- Graduation Rate Dashboard Instructions and Data Definitions (.docx)
- Graduation Rate Dashboard Template (.xlsx)
- An Explanation of the Unit Redemption Rate and Absolute Graduation Rate (PDF)
- Data Validation Questions (PDF)

### Videos

An Explanation of the Undergraduate Student Success and Graduation Rate Dashboard  
An overview by John Etchemendy, WSCUC Commissioner

### Frequently Asked Questions - Graduation Rate Dashboard

[expand all]

- What is the Undergraduate Student Success and Graduation Rate Dashboard? (GRD)
- Why was the Undergraduate Student Success and Graduation Rate Dashboard developed?
- Is this just for undergraduate programs or will graduate programs also be included?
- What data will institutions provide GRD data for in the Annual Report?
- What data points does the institution need to provide?

# If you want to know more...



WSCUC will be working bring more information about the dashboard and training to the region.

- WSCUC ARC 2017 – San Diego, CA
- Association for Institutional Research 2017 – Washington, DC

**Thank You for Attending**