



ANNUAL MEETING

Columbus, Ohio
October 1-3, 2017

EXPLORE. EMPOWER. ENRICH.

SIMPLIFYING COMPLEX DATA USING TABLEAU: STORYTELLING WITH DATA VISUALIZATION

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University of Cincinnati

College of Education, Criminal Justice, and Human Services





AGENDA

- Our College Structure
- Budgeting System Overview
- Before Tableau – Data Examples
- Tableau Presentation
 - Enrollment
 - Recruitment
 - Instructional Revenue Breakdown
 - Teaching Loads
 - Functionality
- Benefits and Challenges
- Questions





OUR COLLEGE STRUCTURE

College

3,170 Undergrad
1,874 Grad
5,044 Total
91 Programs
\$53.8 million in Revenue

School of Criminal Justice

753 Undergrad
391 Grad
10 Programs
\$13.5 million

School of Education

1,155 Undergrad
621 Grad
48 Programs
\$16.4 million

School of Human Services

637 Undergrad
707 Grad
10 Programs
\$17.9 million

School of Information Technology

593 Undergrad
104 Grad
10 Programs
\$6.1 million





OUR DEAN'S OFFICE STRUCTURE

- Business Office
- Recruitment
- Student Services
- Enrollment Management Team – co-chairs





OUR BUDGETING SYSTEM

The University of Cincinnati uses a Performance Based Budgeting (PBB) Model

Key elements of PBB:

- Tuition revenue is assigned to the college of student primary major
- When students take courses outside of the college of their major, a portion of tuition revenue is transferred to the college that delivers the course
- Annual tuition revenue targets for each college are based on the prior year's final tuition results
- Colleges that exceed their revenue targets receive expense budget increase
- Colleges that do not meet their targets receive expense budget reduction





PRIOR TO TABLEAU: ENROLLMENT REPORTS

CECH Week-to-Week Enrollment Data
 Summer 2015 <---> Summer 2016
 May 26, 2015 <---> May 24, 2016

Undergraduate															
School	Headcount			Majors Credit Hours in CECH			Non-Majors Transfer In Credit Hours			Majors Credit Hours Transfer Out			FTE of CECH Credit Hours		
	15US	16US	% Change	15US	16US	% Change	15US	16US	% Change	15US	16US	% Change	15US	16US	% Change
Criminal Justice	221	231	5%	1,082	1,165	8%	354	334	-6%	706	670	-5%	96	100	4%
Education	396	388	-2%	1,299	1,200	-8%	813	603	-26%	717	813	13%	141	120	-15%
Human Services	218	231	6%	1,434	1,541	7%	1,246	1,085	-13%	372	429	15%	179	175	-2%
Information Technology	303	331	9%	1,075	1,252	16%	411	444	8%	516	630	22%	99	113	14%
Undergraduate Total	1,138	1,181	4%	4,890	5,158	5%	2,824	2,466	-13%	2,311	2,542	10%	514	508	-1%

Graduate															
School	Headcount			Majors Credit Hours in CECH			Non-Majors Transfer In Credit Hours			Majors Credit Hours Transfer Out			FTE of CECH Credit Hours		
	15US	16US	% Change	15US	16US	% Change	15US	16US	% Change	15US	16US	% Change	15US	16US	% Change
Criminal Justice	455	417	-8%	2,957	2,574	-13%	9	12	33%	3	0	-100%	198	172	-13%
Education	693	656	-5%	3,543	3,446	-3%	301	134	-55%	151	198	31%	256	239	-7%
Human Services	548	582	6%	3,511	3,695	5%	93	52	-44%	31	0	-100%	240	250	4%
Information Technology	1	22	2100%	12	150	1150%	78	18	-77%	0	0	---	6	11	87%
Graduate Total	1,697	1,677	-1%	10,023	9,865	-2%	481	216	-55%	185	198	7%	700	672	-4%

Total															
School	Headcount			Majors Credit Hours in CECH			Non-Majors Transfer In Credit Hours			Majors Credit Hours Transfer Out			FTE of CECH Credit Hours		
	15US	16US	% Change	15US	16US	% Change	15US	16US	% Change	15US	16US	% Change	15US	16US	% Change
Criminal Justice	676	648	-4%	4,039	3,739	-7%	363	346	-5%	709	670	-6%	293	272	-7%
Education	1,089	1,044	-4%	4,842	4,646	-4%	1,114	737	-34%	868	1,011	16%	397	359	-10%
Human Services	766	813	6%	4,945	5,236	6%	1,339	1,137	-15%	403	429	6%	419	425	1%
Information Technology	304	353	16%	1,087	1,402	29%	489	462	-6%	516	630	22%	105	124	18%
CECH Total	2,835	2,858	1%	14,913	15,023	1%	3,305	2,682	-19%	2,496	2,740	10%	1,215	1,180	-3%





PRIOR TO TABLEAU: PBB

Term	School	Program	Total Revenue FY16	ACE FY16	Transfer In FY16	Transfer Out FY16	Gross Revenue FY16	GIA/GAS FY16	Total Revenue FY17	ACE FY17	Transfer In FY17	Transfer Out FY17	GIA/GAS FY17	GIA/GAS FY17-FY16	Gross Revenue FY17	Online Modifications FY17	Variance	
Fiscal Year Total	Criminal Justice	Criminal Justice	\$14,911,012	\$32,187	\$844,271	(\$1,725,896)	\$14,061,573	(\$1,628,312)	\$13,483,785	\$10,358	\$856,190	(\$1,784,884)	(\$1,633,312)	\$5,000	\$12,560,449	\$350,474	(\$1,150,650)	
		Paralegal Studies	\$738,949	\$10,842	\$60,793	(\$94,486)	\$716,098		\$589,220	\$2,334	\$71,927	(\$91,850)	\$0	\$0	\$571,631		(\$144,467)	
		Open Registration							\$47,628	\$0	\$0	(\$4,299)	\$0	\$0	\$43,330		\$43,330	
		CJ Total	\$15,649,961	\$43,029	\$905,064	(\$1,820,382)	\$14,777,672	(\$1,628,312)	\$14,120,633	\$12,692	\$928,116	-\$1,881,032	-\$1,633,312	\$5,000	\$13,175,410	\$350,474	(\$1,251,788)	
	Education	Curriculum & Instruction	\$3,170,545	\$135,278	\$90,580	(\$38,820)	\$3,357,583	(\$645,140)	\$2,597,592	\$10,356	\$68,376	(\$38,145)	(\$190,557)	(\$454,583)	\$3,092,761	\$14,470	(\$250,352)	
		Early Childhood Education	\$5,382,733	\$18,108	\$150,152	(\$621,362)	\$4,929,631		\$4,991,946	\$1,167	\$149,108	(\$574,332)	\$0	\$0	\$4,567,890	-\$244,804	(\$606,545)	
		Educational Leadership	\$339,994	\$1,920	\$732	\$0	\$342,646	(\$9,742)	\$416,849	\$2,676	\$0	(\$505)	(\$17,644)	\$7,902	\$411,118	-\$18,991	\$49,481	
		Educational Studies	\$1,243,450	\$57,712	\$539,572	(\$11,475)	\$1,829,258	(\$919,575)	\$1,304,817	\$21,472	\$559,662	(\$9,590)	(\$918,641)	(\$934)	\$1,877,295		\$48,037	
		English as a Second Language	\$0	\$15,096	\$711,209	\$0	\$726,305		\$0	\$8,169	\$685,208	\$0	\$0	\$0	\$0	\$693,377		(\$32,927)
		Literacy	\$1,302,873	\$32,414	\$47,365	(\$732)	\$1,381,920	(\$177,717)	\$796,658	\$16,116	\$38,104	(\$6,055)	(\$53,023)	(\$124,694)	\$969,516		(\$412,404)	
		Middle Childhood Education	\$1,285,171	\$6,814	\$977	(\$311,780)	\$981,182		\$1,186,510	\$0	\$1,511	(\$304,825)	\$0	\$0	\$883,196		(\$97,986)	
		Professional Development	\$1,762,505	\$1,280	\$0	(\$3,662)	\$1,260,136	(\$32,570)	\$1,358,436	\$0	\$0	(\$2,274)	\$0	(\$32,570)	\$1,388,732	-\$486,583	(\$357,988)	
		Secondary Education	\$1,868,997	\$0	\$29,298	(\$719,754)	\$1,178,541		\$1,730,830	\$0	\$21,180	(\$697,710)	(\$2,304)	\$2,304	\$1,051,996		(\$126,545)	
		Signed Language Interpreting	\$199,058	\$8,169	\$796,173	(\$33,693)	\$969,707		\$62,481	\$756	\$928,677	(\$1,516)	\$0	\$0	\$990,397		\$20,690	
		Special Education	\$1,532,393	\$46,958	\$214,364	(\$249,277)	\$1,544,438	(\$72,792)	\$1,712,173	\$9,194	\$219,650	(\$282,851)	(\$43,360)	(\$29,432)	\$1,687,598	-\$35,000	\$108,160	
		Open Registration	\$106,959	\$0	\$0	(\$2,197)	\$104,762		\$312,563	\$0	\$0	(\$28,084)	(\$29,892)	\$29,892	\$254,587		\$149,826	
		SoE Total	\$18,194,677	\$323,749	\$2,580,421	(\$1,992,752)	\$18,606,109	(\$1,857,536)	\$16,470,855	\$69,903	\$2,671,477	(\$1,945,886)	(\$1,255,421)	(\$602,115)	\$17,868,464	-\$770,908	(\$1,508,553)	
	Human Services	Athletic Training													\$0			
		Counseling	\$2,384,252	\$36,535	\$328,870	(\$60,305)	\$2,689,352	(\$151,669)	\$2,185,005	\$18,450	\$164,301	(\$42,384)	(\$153,683)	\$2,014	\$2,323,358	-\$305,726	(\$671,720)	
		Health Education	\$3,770,848	\$78,442	\$1,346,487	(\$261,729)	\$4,934,048	(\$430,100)	\$3,378,015	\$14,956	\$1,603,009	(\$233,642)	(\$297,238)	(\$132,862)	\$4,895,200		(\$38,848)	
		Health, Fitness, and Leisure	\$0	\$37,244	\$718,533	\$0	\$755,777		\$0	\$20,043	\$707,827	\$0	\$0	\$0	\$727,869		(\$27,908)	
		School Psychology	\$6,300,178	\$21,120	\$7,325	(\$27,589)	\$6,201,034	(\$441,565)	\$6,595,362	\$11,525	\$4,546	(\$15,876)	(\$432,055)	(\$9,510)	\$6,605,067	-\$124,140	\$279,893	
		Sport Administration	\$3,712,096	\$13,176	\$393,082	(\$831,819)	\$3,286,534	(\$24,532)	\$3,871,883	\$9,266	\$435,409	(\$860,310)	(\$139,642)	\$115,110	\$3,341,138		\$54,604	
		Open Registration							\$252,065	\$0	\$0	(\$21,557)	\$0	\$0	\$230,508		\$230,508	
	HS Total	\$16,167,374	\$186,517	\$2,794,297	(\$1,181,442)	\$17,866,746	(\$1,047,866)	\$16,282,330	\$74,239	\$2,915,091	(\$1,173,768)	(\$1,022,618)	(\$25,248)	\$18,123,140	-\$429,866	(\$173,472)		
	Information Technology	Information Technology	\$4,672,505	\$107,153	\$737,089	(\$759,551)	\$4,757,196	(\$68,142)	\$6,068,674	\$26,704	\$802,918	(\$827,054)	(\$302,771)	\$234,629	\$5,836,613	-\$153,976	\$925,441	
		Open Registration							\$139,024	\$0	\$0	(\$13,225)	(\$37,776)	\$37,776	\$88,024		\$88,024	
	IT Total	\$4,672,505	\$107,153	\$737,089	(\$759,551)	\$4,757,196	(\$68,142)	\$6,207,698	\$26,704	\$802,918	-\$840,278	(\$340,547)	\$272,405	\$5,924,637	-\$153,976	\$1,013,465		
	Econ Center	Econ Center Total					\$72,292							\$0	\$0			
		CECH Total	\$54,684,517	\$660,448	\$7,016,871	(\$5,754,127)	\$56,007,723	(\$4,601,856)	\$53,081,517	\$183,538	\$7,317,603	(\$5,840,965)	(\$4,251,898)	(\$349,958)	\$55,091,651	(\$1,004,276)	(\$1,920,348)	





Tableau Demonstration





BENEFITS AND CHALLENGES

Benefits

- Data is easier to interpret
- Visual charts instead of excel spreadsheets
- Easily identify cross-college partnerships
- One stop shop for all information
- Reporting needs streamlined for data analyst

Challenges

- If you build it, they *may not* come
- People want to see everything in Tableau, I mean everything!
- Data cleaning and subject matter knowledge
- Switching to new student information system
- Not having direct connections so dashboards are only updated weekly
- It's not a predictive tool





Questions

