A RECIPE FOR REPORTING SUCCESS USING DATA COOKBOOK

MARCH 7<sup>TH</sup>, 2017





#### Introductions

- Brief History of Data Governance and the Data Cookbook
- Data Cookbook Stewardship Group

#### Demo

- Using the Cookbook
- Incorporating Data Cookbook into Reporting
  - SIRI
  - Tableau

#### **Additional Information**

· Review, Website, Questions, and Drawing

- Data Governance (Brief History)
  - Provost Initiative
    - February 2014 (Winter Senior Leadership Retreat)
    - March 2014 (Data Governance Executive Oversight Group Formed)
    - June 2014 (Data Governance Principals Agreed upon)
    - July 2014 (Data Stewardship Committee was Formed)
      - April 2015 Created Working Teams to focus on Definitions
    - <u>http://www.buffalo.edu/provost/oia/data-governance.html</u>

How to Define Regular vs Externally Funded Enrollment



What are AAU and Other Universities Utilizing for their Data Governance Efforts?

- Data Cookbook (Brief History)
  - December 2015 (Data Cookbook software was Purchased From IDATA)
    - Provided UB with the Following:
      - Store Definitions
      - · Incorporate Definitions into SIRI and Tableau Reports
      - A Common Lexicon to Assist with the Communication Across Campus
    - March 2016 Data Cookbook Training Completed
    - April 2016 over 600 Definitions imported or Entered into the System
    - February 2017 formed a Data Cookbook Stewardship Committee

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# **Recipe for Reporting Success Data Cookbook**

Data Cookbook Stewardship Committee



# Data Cookbook Post-Implementation

#### **Centralized Data Cookbook Oversight Team**

- Responsibilities Include:
  - Working alongside Enterprise Application Services (EAS)
  - Serve as Administrators for the Data Cookbook
  - Coordinate and Run the Data Cookbook Stewardship Meetings

# Data Cookbook Post-Implementation

#### **Data Cookbook Moderators**

#### Responsibilities Include:

- Creating Definitions for Their Own Functional Area in Response to Reporting Needs of the Campus.
- Entering Definitions into the Data Cookbook, Utilizing Best Practices
- Working with the Data Cookbook Oversight Group
- Approving Definitions Within Their Functional Area
- Attend the Data Cookbook Stewardship Meetings (Representing Their Individual Functional Area)

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#### Using the Cookbook



# Using the Cookbook

- Three ways to search:
  - From Home screen (Find Data)
  - Browse definitions
  - Quick Lookup box
- "Watch" definitions
- Community: shared definitions
- Specifications
- User profile and preferences



- In your browser, open the Data Cookbook site: <u>https://buffalo.datacookbook.com</u>
- Log in using your UBIT name and password

Uni The	versity at Buffalo Lynne DePasquale (Log out) Help State University of New York	Recent Updates	Quick defin	Cookbook		F	
Ног	ne Definitions Specifica	tions	Organization	Community			
	What information are	you looking fo	vr?				
	Search the Data Cookbook		GO				
<b>Tasks</b> You have no Tas	k items.	1	🛎 Create	a Definition		=	
My Feed	V	iew All Activity	Definitions Recen	tly Added (all)			
			<ul> <li><u>Academic Group</u></li> <li><u>Cohort Program</u></li> <li>Cohort Term</li> </ul>				
			<ul> <li>External funding</li> <li>mstest</li> <li>See All &gt;</li> </ul>				

• The first time you log in, you should be prompted to accept the license agreement



• Enter the term you are looking for in the "Search the Data Cookbook" box and click "GO"



The search results will highlight words that match your search •



-

+

# **Demonstration:** Look Up a Definition

Hover over a term in the search results to see the definition in a pop-up •



Click on the term to bring up the full definition page



Click the "Start Watching" button to receive an e-mail when an update is made to the definition



• You can return to the search by hovering over the "Home" tab and selecting "Find Data"



• You can also view all definitions by hovering over the "Definitions" tab and selecting "Browse definitions"



The "browse" view allows you to sort and filter by several dimensions •



You can search within the "browse" view using the search box 



You can also search from any page using the "Quick definition lookup" box at the top of the • screen



# **Demonstration:** Shared Definitions

• You can view definitions shared by other institutions under the "Community" tab



### **Demonstration:** Specifications

• You can also view specifications for reports that have been linked to Data Cookbook



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# **Demonstration:** User Profile

View and edit your preferences, including definitions that you are watching, by clicking on your name at the top of the screen



### Live Demonstration

Data Cookbook site:

https://buffalo.datacookbook.com





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#### Incorporating Data Cookbook into Reporting



Simple Research Question:

What were our Credit Hours and Headcount in Summer 2012?

As usual, there are many places we can go for answers. Everybody has their favorite source:

~UB Info Source~

~SIRI Student Reports~

~Office of Institutional Analysis Dashboards~



# How many different ways to calculate headcount can there be, anyway?

Calculator							
????							
MR	MS	M+	M-				
CE	С	±	$\checkmark$				
8	9	1	%				
5	6	*	1/x				
2	3	-					
0 . +							
	ulator dit Hel MR CE 8 5 2 0	ulator dit Help MR MS CE C 8 9 5 6 2 3 0 .	ulator dit Help MR MS M+ CE C ± 8 9 / 5 6 * 2 3 - 0 . +				



B University at Buffalo State University of New York Strated	JIC Information	Reportir	ng Initia	tive (SIF	रा)		
udent							
Headcount and Credit Hours	by School or College ar	nd Career					
Note: Students may have more t	han one School or College	?					
		_	-				
	- C	Summer 20:	12			Headcount	Credit Hour
		Extornally E	alet	State Funde	d	]	
Primary Academic Group	Primary (Billing) Career	Headcount	Credit Hours	Headcount	Credit Hours		
Architecture & Planning	Graduate			14	119.0	14	119
	Undergraduate			107	738.0	107	738
Architecture & Planning Total				121	857.0	121	857
College of Arts & Sciences	Graduate			119	445.0	119	445
	Undergraduate	1059	9,888.0	2097	13,513.5	3156	23,401
College of Arts & Sciences T	otal	1059	9,888.0	2216	13,958.5	3275	23,846
Dental Medicine	Graduate			1	1.0	1	1
Dental Medicine Total				1	1.0	1	1
Engineering & Applied Sciences	Graduate			217	466.0	217	466
	Undergraduate			869	5,131.0	869	5,131
Engineering & Applied Scier	ces Total			1086	5,597.0	1086	5,597
Graduate School of Education	Graduate			508	2,511.0	508	2,511
Graduate School of Education	on Total			508	2,511.0	508	2,511
.aw	Graduate			3	15.0	3	15
	Law School			53	240.0	53	240
law Total				56	255.0	56	255
Management	Graduate	118	369.0	70	159.0	188	528
	Undergraduate	261	2,598.0	592	3,471.5	853	6,069
Management Total	1	379	2,967.0	662	3,630.5	1041	6,597
Medicine & Biomedical Sciences	Graduate			2	5.0	2	5
	Undergraduate			204	1,413.5	204	1,413
Medicine & Biomedical Scie	nces Total			206	1,418.5	206	1,418
Nursing	Graduate			139	907.0	139	907
	Undergraduate			167	1,921.0	167	1,921
Nursing Total				306	2,828.0	306	2,828
Office of the Provost	Graduate			2	7.0	2	7
	Undergraduate			83	317.0	83	317
Office of the Provost Total				85	324.0	85	324
Public Health	Graduate			33	127.0	33	127
	Undergraduate			386	2,325.0	386	2,325
Public Health Total				419	2,452.0	419	2,452
Roswell Park	Graduate			1	3.0	1	3
Roswell Park Total				1	3.0	1	3
School of Pharmacy	Graduate			3	3.0	3	3
	School of Pharmacy			3	10.0	3	10
	Undergraduate			203	1,343.5	203	1,343
School of Pharmacy Total				209	1,356.5	209	1,356
Social Work	Graduate			233	1,338.0	233	1,338
	Undergraduate			1	1.0	1	1
Social Work Total				234	1,339.0	234	1,339
Undergraduate Education	Graduate			26	117.5	26	117
	Undergraduate	105	160.0	825	4,395.0	930	4,555
Undergraduate Education To	otal	105	160.0	851	4,512.5	956	4,672
Grand Total		1543	13,015.0	6961	41,043.5	8504	54,058

#### Report 1: Summer or Winter Students (All Reports) - SIRI

#### Head Count

Externally Funded- 1543 State Funded- 6961 Total- 8504

#### Report 2: Headcount Enrollment by Unit- OIA Dashboards

<u>Head</u>	Headcount Enrollment by Unit Intended Majors Attributed to Unit of Interest See Notes below							
<u>Count</u>	F 11			Summer 2012	T - 1			
	Funding Regular State	Current Major	Undergraduate	Graduate	10tal			
	Regular State	Conlege of Arts and Sciences	2,040	121	2,107			
Externally		Comment Degree Programs	5	14	22			
Funded- 1441		General Oniversity space	1	505	1			
		Izoobs School of Madicina and Biomadical Sciances	205	305	209			
		Law School	200	52	52			
		Office of Academic Affairs	807	14	821			
		Provost Enrollment	80		80			
Chata		Roswell Park Institute		1	1			
State		School of Architecture	109	14	123			
Funded_		School of Dental Medicine		1	1			
		School of Engineering and Applied Sciences	863	215	1,078			
6887		School of Management	590	61	651			
		School of Nursing	166	139	305			
		School of Pharmacy and Pharmaceutical Sciences	203	5	208			
Total		School of Public Health and Health Professions	399	32	431			
IUlai-		School of Social Work		232	232			
8328		Total	5,478	1,409	6,887			
00-0	Externally Funded	College of Arts and Sciences	1,060		1,060			
	I tabled	School of Management	262	119	381			
		Total	1,322	119	1,441			
	Grand Total		6,800	1,528	8,328			

#### Report 1 and 2: Reconciliation

SIRI Report Headcount

- 1543 Externally Funded (+102)
- 6961 State Funded (+74)
- 8504 Total (+176)

#### OIA Dashboard Headcount

- 1441 Externally Funded
- 6887 State Funded
- 8328 Total

The externally funded category has a high percentage difference. One subcategory doesn't appear to even exist on the OIA Dashboard:

	$\sim$	Summer 20 Extornally 5	12 Geodea					
Primary Academic Group	Primary (Billing) Career	Headcount	Credit Hours	Externally	College of Arts and Sciences	1,060		
Undergraduate Education	Graduate			Funded	Salaal of Management	262	110	
	Undergraduate	105	160.0		School of Management	202	119	
Undergraduate Education T	otal	105	160.0		Total	1,322	119	

The source data for the SIRI Report reveals that the externally funded students attributed to Undergraduate Education were Gifted Math students— not countable for official enrollment at the time.

#### Report 1 and 2: Reconciliation Continued

SIRI Report Headcount

- 1543 Externally Funded (+102)
- 6961 State Funded (+74)
- 8504 Total (+176)

#### **OIA Dashboard Headcount**

- 1441 Externally Funded
- 6887 State Funded
- 8328 Total

We still have 71 more students on the SIRI Report.

Further reconciliation reveals multiple causes. For example, one student who appears as registered in the data underlying the SIRI report does not appear in the data underlying the OIA Dashboard.

#### A quick peek at the HUB reveals why:

The Info Source view underlying the SIRI report counts students as enrolled even if they eventually resign all their classes. The SUNYIR process is sensitive to the timing of the drop. As a rule, data sources underlying SIRI student reports are dynamic, unlike official data sets, which are snapshots.

<sup>7</sup> Classes					
Enrolled	⊗Dropped	4	Wait Listed		
Class	Description	Units	Grading	Grade	Status
<u>ITA 101LEC-J</u> (10516)	Elem Italian 1st Semester (Lecture)	5.00	Letter Grading	R	8

#### Our Results Thus Far...

Calculator							
888							
M	5	MR	MS	M+	M-		
+	-	CE	С	±	√		
7		8	9	1	%		
4		5	6	*	1/x		
1		2	3	-			
0				+			

How can anybody know why the headcount totals differ on these reports without extensive research?



Fortunately, Data Cookbook has some nifty functionality that allows you to link from a report on a BI platform like OBIEE or Tableau to a Report Specification. The "spec" will pop up without requiring authentication.

The specification can have definitions from the Cookbook embedded within it. These are clickable, although you will have to log on to view the full definitions.

Both reports we viewed earlier have had links to Data Cookbook specifications added to them.

Let's go try them out.

#### Summer/Winter Registration Report (by Student)

Note: These summaries are not to be used for official enrollment reporting Time run: 2/21/2017 4:49:30 PM

View Report Definition

Headcount and Credit Hours by Estimated Funding Source and Career

		Summer 20	12
Funding Source (Estimated)	Primary (Billing) Career	Headcount	Credit Hours
Externally Funded	Graduate	118	369.0
	Undergraduate	1425	12,646.0
Externally Funded Total	^	1543 13,015	
State Funded	Graduate	1371	6,223.5
	Law School	53	240.0
	School of Pharmacy	3	10.0
	Undergraduate	5534	34,570.0
State Funded Total	State Funded Total		41,043.5
Grand Total		8504	54,058.5

Headcount and Credit Hours by Matriculation Status and Career

		Summer 20	12			Headcount	Credit Hours
		Externally F	Funded	State Fund	ed		
Matriculation Status	Primary (Billing) Career	Headcount	Credit Hours	Headcount	Credit Hours		
Matriculated	Graduate	117	366.0	1239	5,747.0	1356	6,113.0
	Law School			53	240.0	53	240.0
	School of Pharmacy			3	10.0	3	10.0
	Undergraduate	1320	12,486.0	4809	30,971.0	6129	43,457.0
Non-matriculated	Graduate	1	3.0	132	476.5	133	479.5
	Undergraduate	105	160.0	725	3,599.0	830	3,759.0
Grand Total		1543	13,015.0	6961	41,043.5	8504	54,058.5



#### Summer/Winter Registration Report (by Student)

Note: These summaries are not to be used for official enrollment reporting
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Headcount and Credit Hours by Estimated F



Headcount and Credit Hours by Matriculatio

		Si Ei
Matriculation Status	Primary (Billing) Career	н
Matriculated	Graduate	
	Law School	
	School of Pharmacy	
	Undergraduate	
Non-matriculated	Graduate	
	Undergraduate	
Grand Total		



Specification

#### Purpose

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Summarizes Summer and Winter Enrollment by student characteristics for enrollment management purposes. Helps administrators see what types of students enroll in Summer and Winter Sessions.

#### Description

For the Summer or Winter Term entered, student headcount and credit hours are totaled by Funding Source (State vs. Externally Funded), Matriculation Status (Regular or Non-matriculated), International or Domestic Status, Graduation Application Activity, and School or College (Academic Group) of primary major. The data is dynamic and all dimensions are operational in origin. Therefore, this report is not to be used for official enrollment reporting.



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#### Additional Information



#### Additional Information:

- Link to Our Data Cookbook Page
  - www.buffalo.edu/provost/oia/data-governance/data-cookbook.html
- Please submit questions about the Data Cookbook to the following e-mail address
  - Data-cookbook@buffalo.edu

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# **Recipe for Reporting Success Data Cookbook**

#### **Questions?**



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#### Drum Roll Please....



#### and the Winner is....