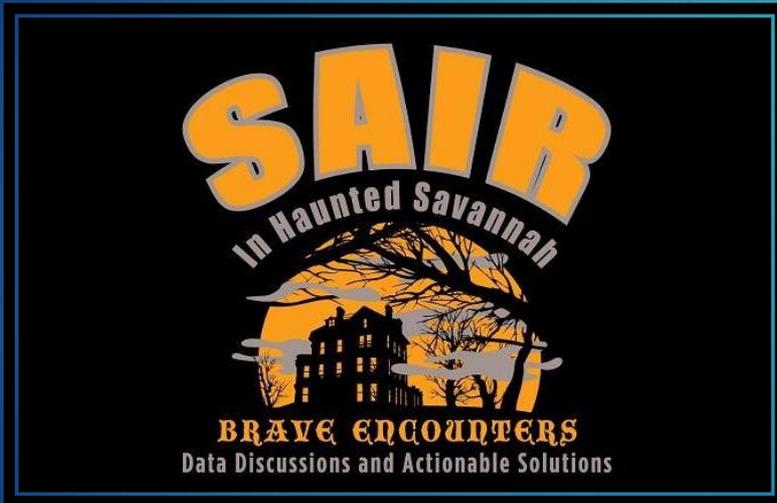


Avoiding Dreadful Data Displays & Pointless Publications



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SOUTHERN ASSOCIATION FOR INSTITUTIONAL RESEARCH

SAVANNAH, GEORGIA

OCTOBER 2015

Importance of Design

Why is design important?

- ▶ Campus community uses data to understand and respond to a variety of issues.
- ▶ Senior administrators use data to make important decisions.

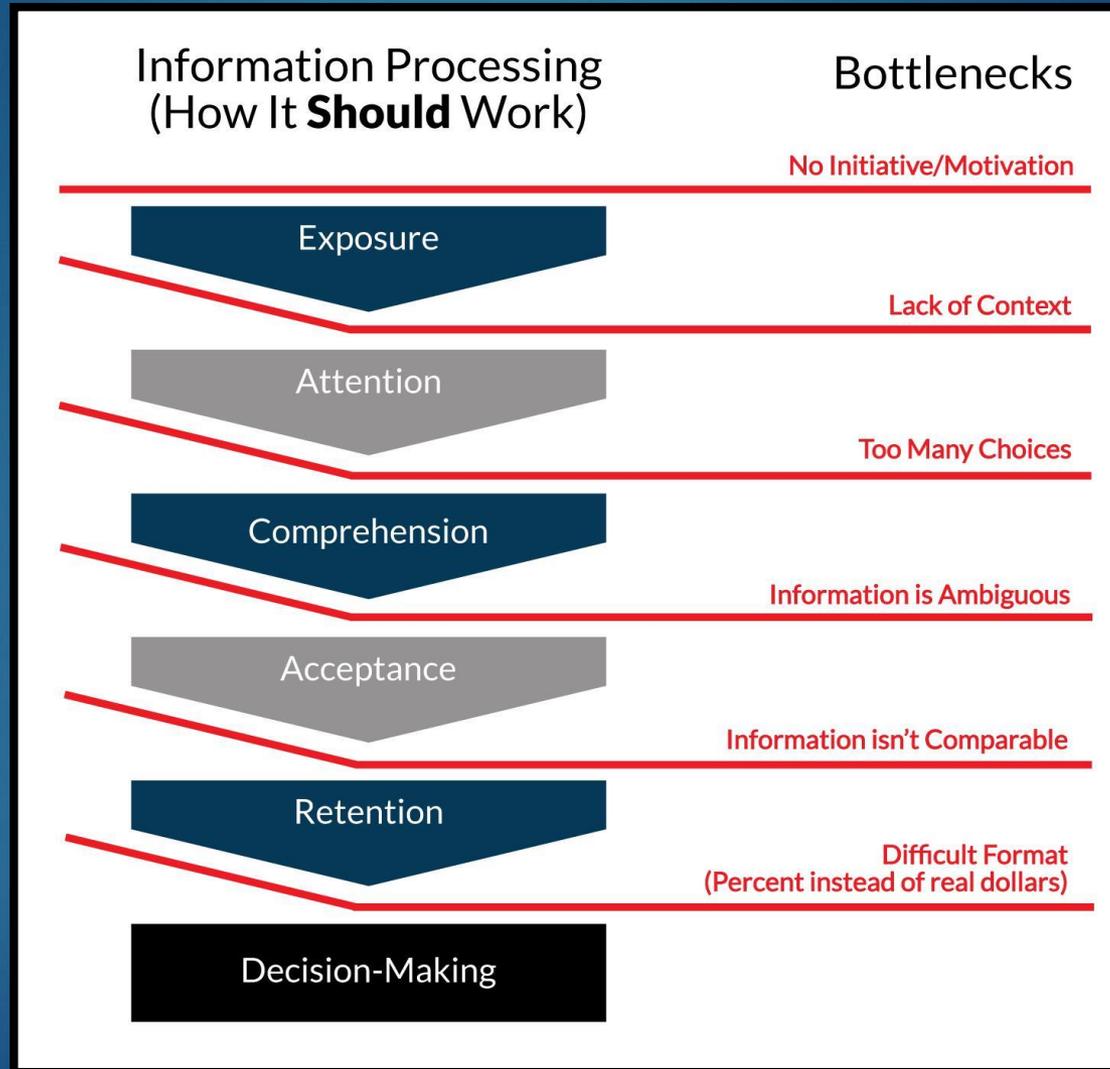


Importance of Design

If information is misunderstood due to lack of clarity and consistency, the data are of no value.



Information Processing



Allison, T. (2015). Designing a Federal Ratings Tool. Inside HigherEd. 7/2/15.

<https://www.insidehighered.com/views/2015/07/02/how-department-education-should-design-its-ratings-tools-essay>



How can we ensure that
our analyses and
information are used to
inform decisions?



Administrators want...

- ▶ concise and accurate analyses – a 30 second view
- ▶ clear data definitions and parameters
- ▶ conclusions and recommendations for action based on sound analysis and institutional priorities
- ▶ clear framework for decision making
- ▶ timely analyses



Make the data tell a story

- ▶ Data should show what is happening compared to a benchmark or to historical trends.
- ▶ Presenting data in isolation is generally a waste of time. Appropriate context is required to make data meaningful, but avoid giving irrelevant information.
- ▶ Use a visually appealing layout, suited for your audience.

Align data to big priorities

- ▶ Consider ways to link data to institutional planning and priorities
 - ▶ For example, include which strategic and master planning goals are supported by the data
- ▶ Consider high level initiatives on campus which might be related to data and information awareness
 - ▶ Business intelligence, data visualization, and data warehousing



Think critically

- ▶ Consider what questions are likely to be asked about the data.
- ▶ Address expected questions.
- ▶ Get input from other individuals and use multiple data sources.
- ▶ Revise data and generate new information based on changing needs of institutional leadership.



Create timely analyses

- ▶ Precision must be relative to time pressures and the magnitude of the decision.
- ▶ In many cases, a decision will be made with or without input from IR.
- ▶ To ensure data informed decision making, IR must provide reasonably accurate data that is contextually appropriate within the designated timeframe.





Putting it all together...



University of North Georgia

Example

Provide data in a concise, easy to understand format

The screenshot shows the University of North Georgia website. The header includes the UNG logo and navigation links: About, Admissions, Academics, and Corps of Cadets. A search bar and dropdown menus for 'DIRECTORIES' and 'RESOURCES FOR...' are also present. The main content area is titled 'INSTITUTIONAL EFFECTIVENESS' and includes a sidebar with links to Accreditation, Assessment, Institutional Research, Planning, Quality Enhancement Plan, Student Achievement Data, Student Consumer Information, and Resources. The main content area displays 'Graduation Rates' for the 'Fall 2008 cohort' and 'UNG Associate Graduation Rates' for the 'Fall 2010 cohort' and 'Fall 2011 cohort'.

Fall 2008 cohort	
4 year	26.5%
5 year	-
6 year	52.4%

	Fall 2010 cohort	Fall 2011 cohort
3 year	9.4%	7.5%

Official Census Data

Fall 2014

Full-Time 10,904 68%

Part-Time 5,160 32%

Total 16,064

FTE 14,143

Undergraduates 15,507

Graduates 557

Commuter 13,853 86%

Resident 2,211 14%

Cadets 796 5%

Female 8,923 56%

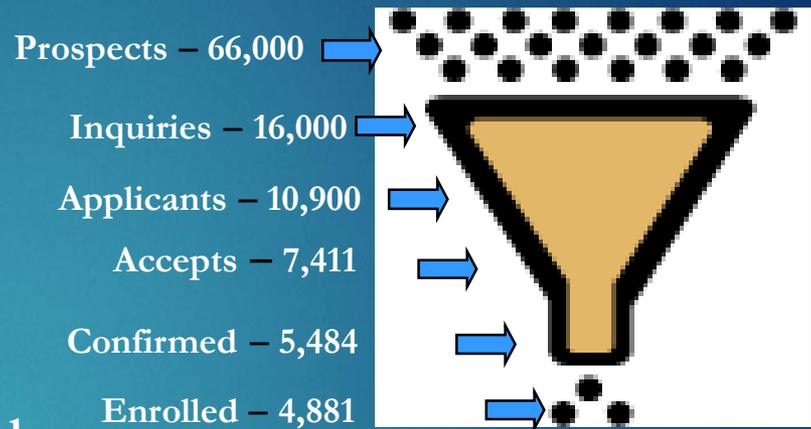
Male 7,141 44%



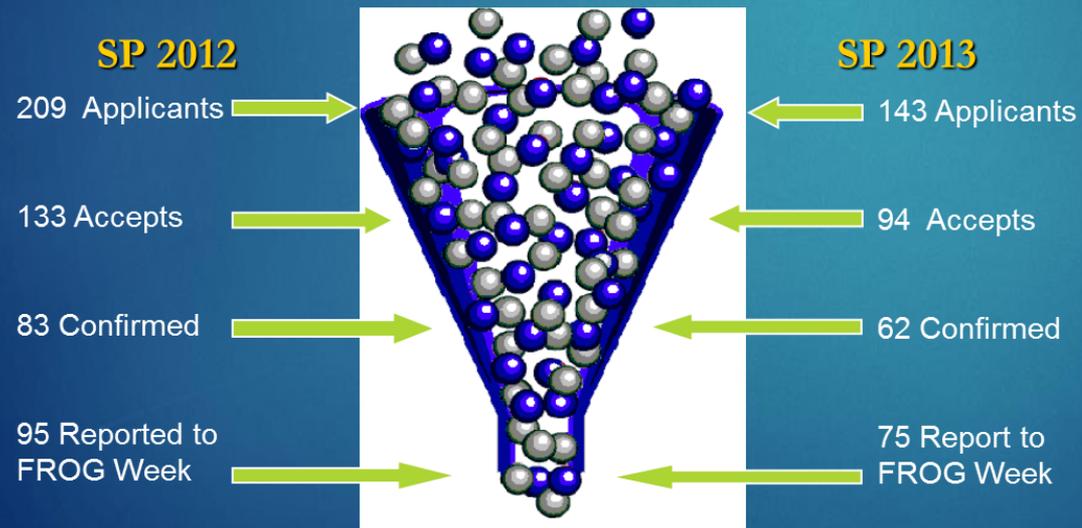
Example

Use graphics to enhance relevant information

UNG Admissions Funnel for Fall 2015



Cadet Admissions Funnel



Source: UNG Admissions

Example

Use layout to summarize data to be useful to many audiences



Quick Facts

Students (Fall 2014)

- Enrollment: 16,064
- Gender: 56% Female, 44% Male
- Full-Time: 68%
- Race/Ethnicity:
 - American Indian or Alaskan Native: 0.2%
 - Asian: 3.1%
 - Black or African American: 4.3%
 - Hispanic: 9.4%
 - Multiracial: 2.6%
 - Native Hawaiian or Pacific Islander: 0.1%
 - White: 78.7%
 - Unknown: 1.6%
- Undergraduate: 15,507 (97%)
 - Associate: 6,709 (43%)
 - Baccalaureate: 8,798 (57%)
- Graduate: 557 (3%)
- Countries Represented: 98
 - International Students: 607
- States Represented: 46
- Georgia Counties Represented: 132

UNG Enrollment



Academics

- Academic Colleges: 5
 - Biology
 - Business Administration
 - Psychology
 - Criminal Justice
 - Early Childhood Education
- 6 Year Baccalaureate Graduation Rate (Fall 2008 cohort): 52.4%
- 3 Year Associate Graduation Rate (Fall 2011 cohort): 7.5%
- 1 Year Baccalaureate Retention (Fall 2013 cohort): 82.6%
- 1 Year Associate Retention (Fall 2013 cohort): 71.0%

Admissions

- Baccalaureate:
 - Number of Applicants: 6,676
 - Acceptance Rate: 67%
 - Percent Admitted Who Enrolled: 54%
 - Average SAT of First-Time Freshmen: 1101
 - Average HS GPA of First-Time Freshmen: 3.54
- Associate:
 - Number of Applicants: 2,996
 - Acceptance Rate: 78%
 - Percent Admitted Who Enrolled: 78%
 - Average SAT of First-Time Freshmen: 952
 - Average HS GPA of First-Time Freshmen: 2.99

[Apply Here](#)

Athletics

- Mascot: Nigel the Nighthawk
- Number of Teams: 12
- NCAA Division II
- Member of the Peachbelt Conference
- Modern Athletic Facilities

[More Athletics](#)



Corps of Cadets

- One of only 6 Senior Military Colleges in the United States
- Enrollment (Fall 2014): 796
- Gender: 13% Female, 87% Male
- Race/Ethnicity:
 - American Indian or Alaskan Native: 0.4%
 - Asian: 4.0%
 - Black or African American: 5.9%
 - Hispanic: 4.9%
 - Multiracial: 4.0%
 - Native Hawaiian or Pacific Islander: 0.1%
 - White: 80.3%
 - Unknown: 0.4%
- Acceptance Rate: 59%

[Learn More](#)

Campuses

- Cumming Campus:
 - 300 Aquatic Circle, Cumming, GA. 30040
 - Phone: (470)239-3102
- Dahlonega Campus:
 - 82 College Circle, Dahlonega, GA. 30597
 - Phone: (706)864-1400
- Gainesville Campus:
 - 3820 Mundy Mill Rd., Oakwood, GA. 30566
 - Phone: (678)717-3639
- Oconee Campus:
 - 1201 Bishop Farms Pkwy, Watkinsville, GA. 30677
 - Phone: (706)310-6201

Traditions

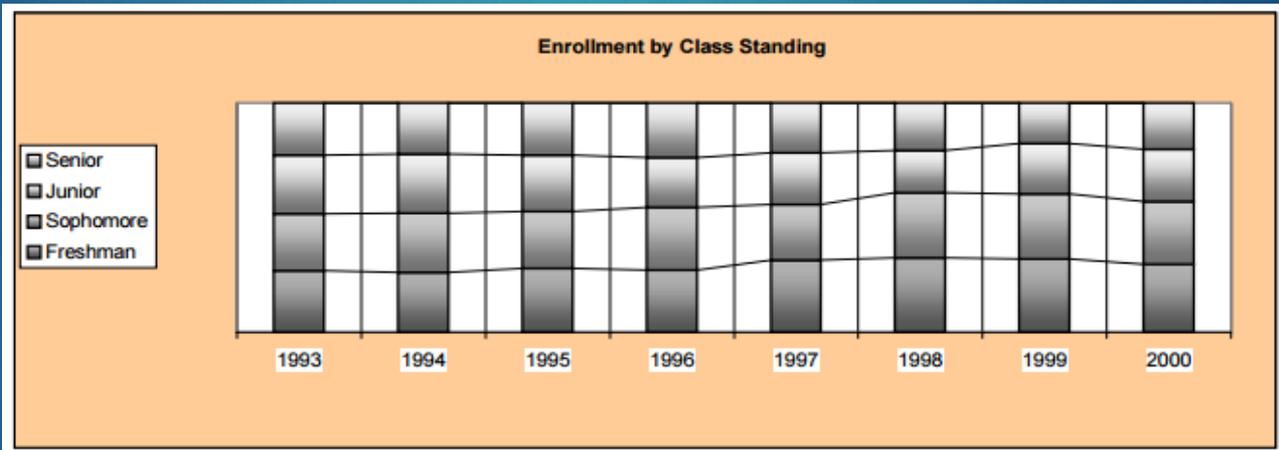
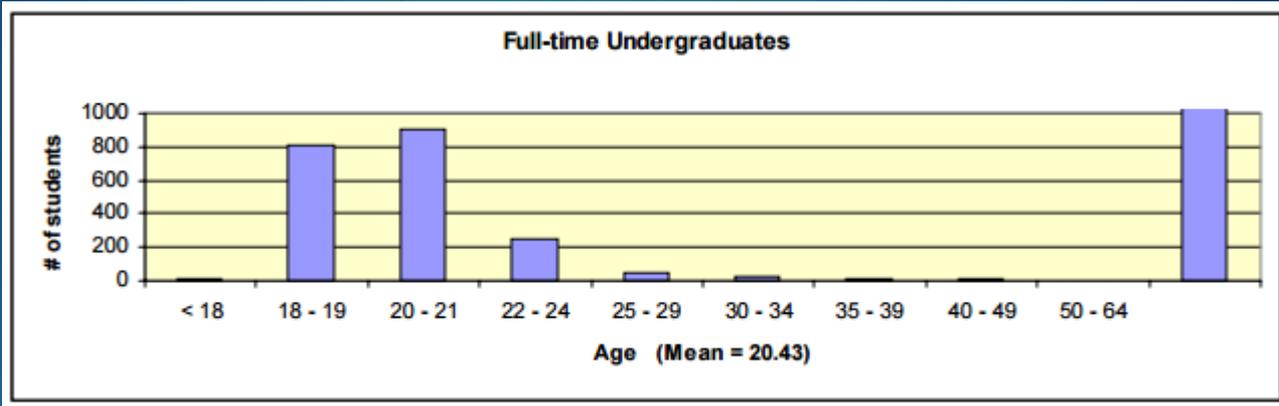
- Colors: **Blue & Gold**
- Bugle Calls:
 - Reveille; played every morning at 7:00am
 - Retreat/To the Colors; played every afternoon at 5:00pm
 - Taps; Played at midnight (2am on Fridays and Saturdays) to signal end of day
- Drill Field
 - Located at the heart of the Dahlonega campus, the drill field plays a central role in student life.

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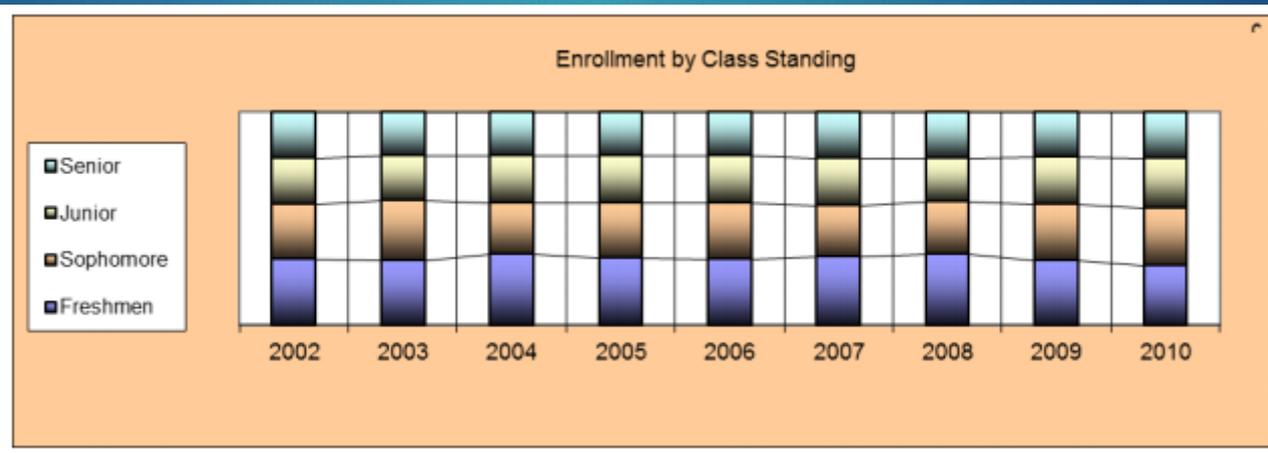
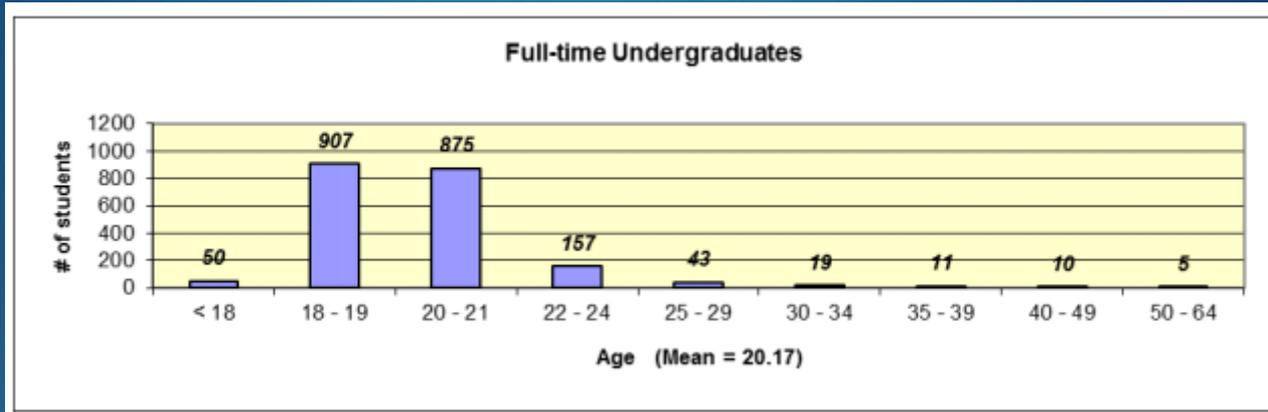


Stetson University

2000-01 Fact Book



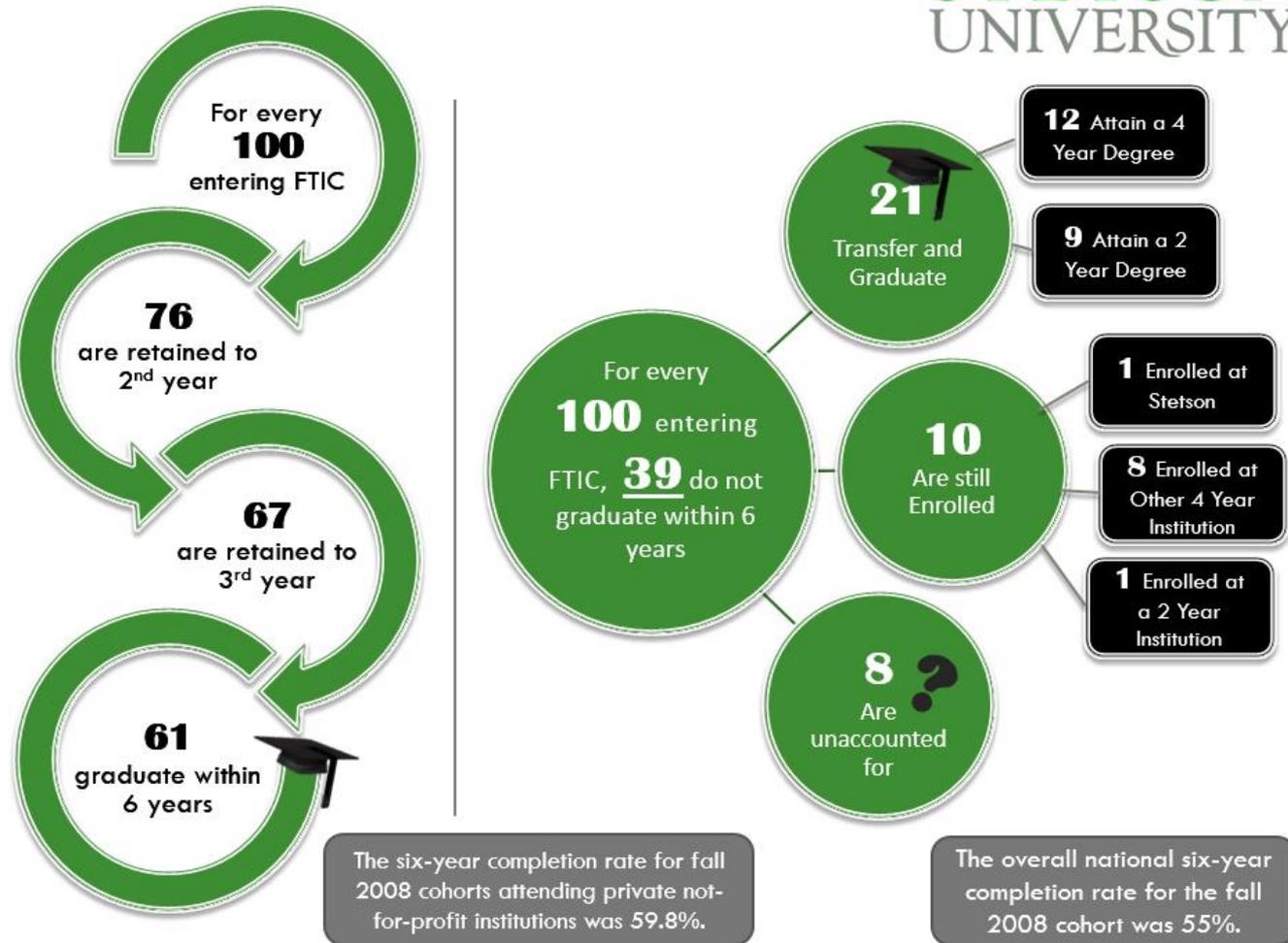
2010-11 Fact Book



Combine
visuals and
context to
create
concise data
displays

Pathway to Success - Fall 2008 FTIC Cohort

STETSON
UNIVERSITY



2015



Natural Science Undergraduate Program Report Data																											
Program	Average Majors (Last 3 Yr)			New FTIC			Minor Enrollment			Major Enrollment			Average SCH (Last 3 Yrs)			Average % of Total SCH			Average Completers			Average Time to Degree			Fall to Fall Retention		
	F12	F13	F14	F12	F13	F14	F12	F13	F14	F12	F13	F14	F12	F13	F14	F12	F13	F14	F12	F13	F14	F12	F13	F14	F12	F13	F14
Aquatic & Marine Biology	34.7	40.3	45.7	19	14	15				45	43	49	969.3	1177.0	1309.0	1.36%	1.52%	1.58%	3	3	3	3.8	3.8	3.8	68.4%	63.2%	71.4%
Biochemistry	30.0	28.0	29.7	13	9	17				33	26	30	924.7	838.7	829.0	1.29%	1.08%	1.00%	4	5	5	3.7	3.7	3.7	66.7%	69.2%	100.0%
Biology	129.3	145.7	157.7	66	55	64	9	16	12	147	158	168	3779.7	4330.0	4719.0	5.28%	5.58%	5.70%	19	14	15	3.8	3.8	3.8	75.8%	74.2%	74.1%
Chemistry	31.3	32.7	33.3	12	10	14	16	12	17	33	33	34	951.3	970.0	983.0	1.33%	1.25%	1.19%	5	8	8	3.6	3.5	3.7	70.0%	90.0%	55.6%
Environmental Science & Geography	43.3	35.3	41.3	3	7	11	13	11	13	56	22	42	1343.0	1247.7	1230.0	1.88%	1.61%	1.49%	14	16	12	4.0	3.9	3.9	85.7%	66.7%	60.0%
Integrative Health Science	127.3	149.0	172.3	59	48	41	12	14	23	166	163	188	3996.7	4580.7	5226.7	5.59%	5.90%	6.31%	24	26	26	3.8	3.8	3.6	81.3%	71.2%	70.8%
Physics	18.0	19.7	25.3	10	5	14	4	2	2	21	24	31	612.0	652.7	797.7	0.86%	0.84%	0.96%	3	4	3	3.9	3.8	3.7	50.0%	80.0%	80.0%
Total	2301.3	2477.3	2646.3	695	696	646	570	643	736	2505	2661	2769	71533	77580	82827	100%	100%	100%	557	537	527	3.9	3.9	3.8	78%	78%	79%

Before

After

Use design to make data easier to use and understand

UNDERGRADUATE PROGRAM REPORT

Click to select year. 2014

Biology
Click to select program.

KEY METRICS Click to change report Key Metrics

ENROLLMENT

168

↑ 6%

NEW FTIC ENROLLMENT

64

↑ 16%

MINORS

12

↓ -25%

STUDENT CREDIT HOURS

5005

↑ 4%

DEGREES AWARDED

34

↑ 89%

ALL METRICS Do not modify the information below.

METRIC	THIS YEAR (2014)	LAST YEAR (2013)	% CHANGE	MULTI YEAR TREND
ENROLLMENT	168	158	↑ 6%	
% OF UG ENROLLMENT	6.1%	5.9%	↑ 3%	
NEW FTIC ENROLLMENT	64	55	↑ 16%	
MINORS	12	16	↓ -25%	
STUDENT CREDIT HOURS	5005	4826	↑ 4%	
% OF UG CREDIT HOURS	5.7%	5.8%	↓ 0%	
DEGREES AWARDED	34	18	↑ 89%	
% OF DEGREES	3.3%	2.6%	↑ 29%	
3 YR AVG ENROLLMENT	158	146	↑ 8%	
3 YR AVG CREDIT HOURS	4719	4330	↑ 9%	
3 YR AVG DEGREES	22	15	↑ 41%	
AVG YRS TO DEGREE	3.8	3.8	↓ 0%	
RETENTION RATE	74.1%	74.2%	↓ 0%	

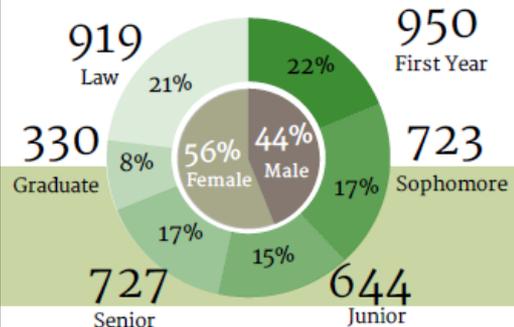
2015

Use infographics to relay data

Use brand colors for consistency

STETSON UNIVERSITY FALL 2015 Census Snapshot

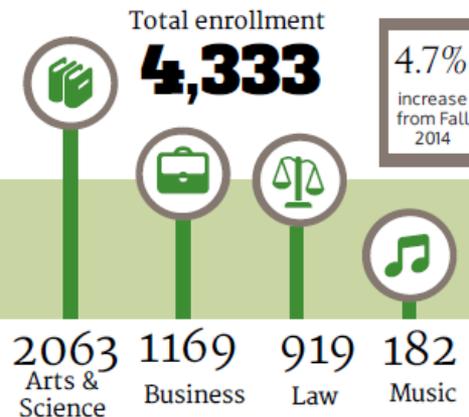
Student Class Level*



*Based on credits earned

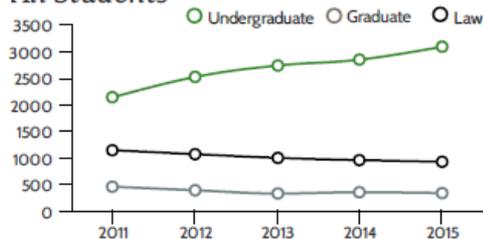
77% Retention of First Year to Second Year FTIC Students

College/School

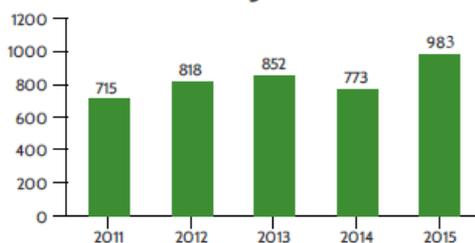


Student Type

All Students



First Time in College



Residency & Demographics*



Residency

51 FL counties
44 States
3 Territories
52 Countries

Demographics

6% International
28% Out-of-State
66% In-State
29% Students of color

*Undergraduate Enrollment - 3,084

Office of Institutional Research & Effectiveness

421 N. Woodland Blvd, Unit 8282 386.822.7255 www.stetson.edu

What not to do:

- ▶ Long wordy reports
- ▶ Undefined data parameters
- ▶ Output without headings, labels, or context
- ▶ Lack of context/benchmark
- ▶ Requires substantial interpretation
- ▶ Out-of-date data
- ▶ Vague
- ▶ Unformatted or inconsistent formatting

GradeLevel

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	2573	97.1	97.1	97.1
2	25	.9	.9	98.0
3	7	.3	.3	98.3
4	5	.2	.2	98.5
5	1	.0	.0	98.5
6	4	.2	.2	98.6
7	36	1.4	1.4	100.0
Total	2651	100.0	100.0	

AgeBracket

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Under 18	7	.3	.3	98.9
18-19	220	8.3	8.3	8.3
20-21	353	13.3	13.3	21.6
22-24	406	15.3	15.3	36.9
25-29	586	22.1	22.1	59.0
30-34	398	15.0	15.0	74.0
35-39	247	9.3	9.3	83.4
40-49	318	12.0	12.0	95.4
50-64	84	3.2	3.2	98.5
Over 64	3	.1	.1	98.6
Unknown	29	1.1	1.1	100.0
Total	2651	100.0	100.0	

Final Thoughts

- ▶ Don't write a lengthy narrative when a simple graph and a few bullets will suffice.
- ▶ If you had to interpret the data in one minute or less, what would be the best way?
- ▶ There is always room for improvement.
 - ▶ Perhaps document this continuous improvement for assessment and accreditation purposes. (i.e., SACS 3.3.1)





Questions and Comments