



## Message from the Associate Provost for Institutional Research and Analysis & Chief Data Officer

Thank you once again for taking time to read the latest edition of the Office of Institutional Research (OIRA) newsletter. In this edition, we feature an interview with James Yu, another long-standing staff member! In our Data Literacy brief, we discuss the term “metrics” and briefly describe several metrics specific to North Carolina Central University (NCCU).

We also examine the most recent spring semester enrollment trends, and spend some time on the use of analytics to help OIRA identify the needs and interests of our webpage users.

We have a rich and diverse set of features in this edition, including links to several informative podcasts. I encourage you to take your time to read and listen to our offerings this month.

*Sarah Carrigan*

## Featured OIRA Staff Member



**Name:** Jianping (James) Yu

**Occupation:** Business and Technology Application Technician, OIRA

**Specialty Areas:** Student Ratings of Instruction (SRI), Fact Book, CoursEval, Tableau Dashboards, Programming (SAS Data Warehouse)

**Alma Mater(s):** North Carolina State University, (B.S.) and North Carolina Central University (MBA/MIS)

**Number of Years at NCCU:** 21 years

**Hometown:** Ningbo, China (Outside of Shanghai); currently resides in Morrisville, N.C.

## Before your time at NCCU, what was your previous professional role?

Before coming to the U.S., I worked for an international travel agency that had a contract with Disney World at the Epcot Center in Orlando, Florida, where I worked in hospitality and tourism. I then moved to North Carolina and worked for an information technology company as a database specialist assistant, which had a research contract with the Triangle Environmental Protection Agency (EPA). I was responsible for assisting EPA scientists with their chemical and biological research. The job consisted of retrieving research articles from Duke and the University of North Carolina at Chapel Hill doing data entry. After I left the company, I began working at NCCU as a business and technology application technician in OIRA.

## What does a day in the OIRA office look like for you?

Most days, I work on different tasks that include building data charts and graphs for the NCCU Fact Book, using SAS to run data request reports (e.g., credit hour and student reports), and overseeing the administration of the course evaluation system (CoursEval) for the Student Ratings of Instruction (SRI). I also work on building dashboards in Tableau (i.e., admissions, financial aid and human resources). I attend weekly OIRA Tableau Group, Data Team and staff meetings. I use these meetings to continue learning and improving my data collection, data visualization and reporting skills.

## Have you always had a passion for data collection? Reporting? Visualization?

Yes, I have always had a strong passion for this kind of work. Since I started my career at NCCU, I have been working with student data, which is challenging but rewarding. I enjoy contributing to decisions that affect NCCU. Data matters, especially impacting the success of our students, faculty and staff. I am happy to play a small role in this process.

## What are some hobbies that you enjoy outside of work?

I spend my free time traveling and doing yard work on the weekends. I enjoy fishing with my son at Jordan

Lake. When I find time to travel, I enjoy visiting every state on the east coast from Maine to Florida, especially Key West. Every summer, I enjoy visiting Canada. And, I look forward to traveling to Europe once the spread of COVID-19 has passed.

- Financial: Instructional costs, tuition cost, budgets, student aid).
- Faculty and Staff: Faculty workload and productivity, student-to-faculty-ratio.

## OIRA Data Literacy Brief

### What are metrics?

According to EDUCAUSE, “metrics are tools designed to facilitate decision-making and improve performance and accountability through collection, analysis and reporting of relevant performance-related data. Institutional leaders can use metrics to document current circumstances and evaluate organizational health (2022, para. 1).”

Source:

*Metrics*. (n.d.). Retrieved February 2, 2022, from <https://library.educause.edu/topics/it-professional-services/metrics>

### How does OIRA collect and report on NCCU metrics?

Each year, OIRA prepares several metric reports. Some of these reports include UNC System Metrics-NCCU Report, NCCU Fact Book, Common Data Sets (CDS), Integrated Postsecondary Education Data System (IPEDS), US News College Report (rankings), Delaware Study of Instructional Costs and Productivity, National Clearinghouse, NCCU-Peer list, SACS-COC Student Achievement, Tableau data dashboards, NCCU Strategic Plan, and Academic Affairs Strategic Plan. Several of the metric reports are used for information and decision-making.

### What are common examples of institutional metrics that examine performance, progress and/or impact?

- Student success: Retention rates, graduation rates, persistence rates, time to completion, academic performance, student engagement, student outcomes, passing rates for licensure exams.
- Grants and funding: Alumni donations, endowments, research grants, fundraising efforts.

## UNC System Metrics

The Board of Governors approved [Higher Expectations: The Strategic Plan for the University of North Carolina, 2017-2022](#) and this Plan set ambitious goals centered around five areas of focus: access, student success, affordability and efficiency, economic impact and community engagement, and excellent and diverse institutions for all the system schools.



Each UNC System institution worked with UNC System to develop a five-year performance agreement signed by the chancellor and UNC System president. Campuses could align the metrics with their own strategic plans by categorizing each one as: Prioritize, Improve, or Sustain.

Based on analysis of historical data, current capacity, and future projections, campuses proposed targets that they negotiated with UNC System. To explore UNC System and NCCU metrics visit the following links:

### Prioritize Metrics

- [Low-income Completions](#)
- [Rural Completions](#)
- [Five-year Graduation Rates](#)
- [Undergraduate Degree Efficiency](#)
- [Achievement Gaps in Undergraduate Degree Efficiency](#)

### Improve Metrics

- [Low-income Enrollments](#)
- [Critical Workforces](#)
- [Research Productivity](#)

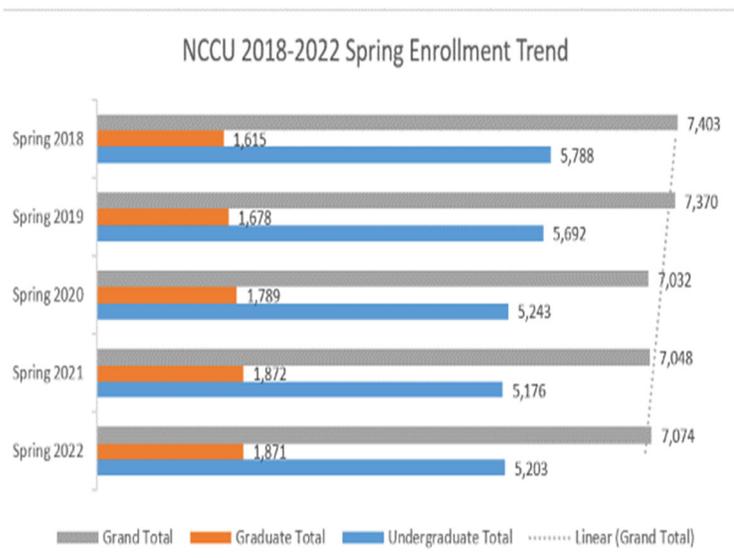
**Sustain Metrics**

Rural Enrollments

North Carolina Central University Five-year goals and associated benchmarks. UNC System. (2021, August 20). Retrieved January 31, 2022, from <https://www.northcarolina.edu/institutions-and-affiliates/north-carolina-central-university-five-year-goals-and-associated-benchmarks/>

Check out OIRA’s Data Literacy Corner for more data definitions, resources, videos, and materials to better understand and use institutional data.

**OIRA Data Highlights: Spring Enrollment**



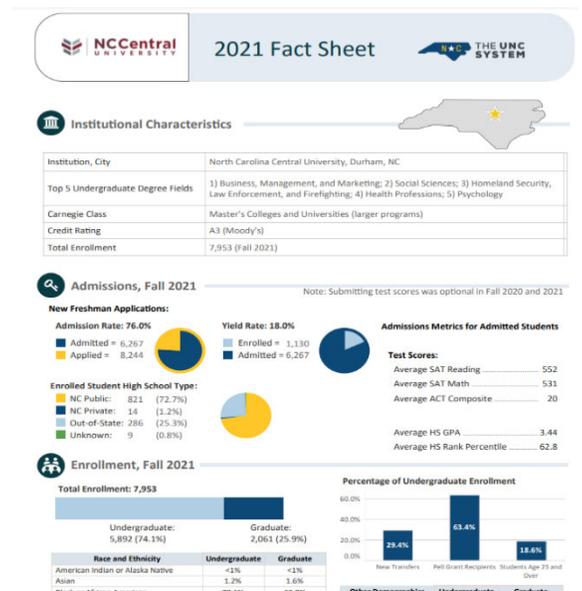
**What does this 5-year spring enrollment trend reveal?**

- As a whole, Spring enrollment has declined 4.4% since Spring 2018.
- Undergraduate enrollment has decreased by 10.1%.

- Graduate enrollment has increased by 15.9%.
- NCCU's 5-year enrollment decline is being driven by the yearly drop of undergraduate student enrollments.

**UNC System Fact Sheets**

The university fact sheets are available for export to PDF at <https://www.northcarolina.edu/unc-system-fact-sheets/>.



**OIRA Analytics Highlight**

**What are analytics?**

The systematic analysis of data or statistics.

**How does OIRA use analytics?**

OIRA uses both Google and Tableau Analytics to gain a better understanding of the data needs of the community by identifying which dashboards and webpages are viewed more often and on which webpages users are spending more time. We can then use this data to set dashboard and webpage development priorities and steer resources towards higher priority areas.

**What results do we get using analytics?**

The type of analytics data OIRA can view varies widely and can be as specific showing which mobile device, operating system, browser and screen resolution a user from Durham county was using to view the Admissions workbook. Despite the enormous amount of information available, OIRA primarily uses three indicators: which page was viewed, how many times that page was viewed, and how long users were on that page. This data is viewed over various date ranges to identify user viewing trends. The table below shows the top five OIRA webpages descending order of viewing popularity for the year 2021. While the main OIRA webpage was the most viewed, the dashboard page was viewed almost as often. Also, users spent more time on subpages such as the Institutional Studies, Surveys and Evaluation, and Enrollment Dashboard webpages. This gives OIRA an idea of the data and information needs of our users.

Website Page	Pageviews	Unique Pageviews	Avg. Time on Page
1. OIRA	2,754(24.64%)	1,808(24.96%)	00:01:16
2. Dashboards	2,734(24.46%)	1,562(21.56%)	00:01:27
3. Institutional Studies	1,019(9.12%)	445(6.14%)	00:02:25
4. Enrollment	672(6.01%)	504(6.96%)	00:04:55
5. Surveys and Evaluations	568(5.08%)	466(6.43%)	00:03:11

Analytics information can also be filtered for a more detailed analysis. For example, we can filter the OIRA Google Analytics site content data to compare our dashboard webpages. The next table displays the top five dashboard webpages viewed in 2021. These results show that almost one quarter of all dashboard users viewed enrollment data. We can also see that users spent an average of almost five minutes on the enrollment dashboard page, a minute more than the next closest dashboard and over twice the viewing time of any other dashboard. This gives OIRA a glimpse into the data needs of the community.

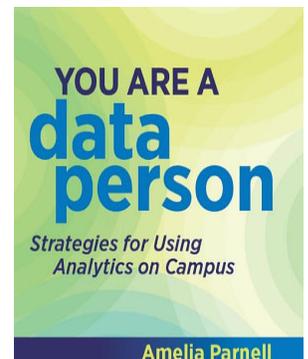
Dashboards	Dashboard Views	Unique Dashboard Views	Avg. Time on Dashboard
1. Enrollment	672(23.16%)	504(23.77%)	00:04:55
2. Retention	430(14.82%)	292(13.77%)	00:04:09
3. Admissions	321(11.06%)	228(10.75%)	00:02:27
4. Degrees Awarded	278(9.58%)	211(9.95%)	00:03:34
5. Grades	240(8.27%)	159(7.50%)	00:03:32

While viewing analytics data can be helpful, identifying trends over time can be more useful when developing plans for future development. This requires an on-going analysis of the analytics data. Another useful function of most analytics software is the ability to receive regular email updates of dashboard pages. These updates are a snapshot of the dashboard worksheet at a given point in time. Tableau Server does this using the Subscription option while Google Analytics uses the Share option. Both options allow users to receive regular email attachments in various formats such as PDF, CSV, and XLSX. OIRA receives both weekly and monthly updates of various dashboards.

The information above is only a very small subset of the features available in most analytics software. Please contact Dax Prather at [dprathe1@ncsu.edu](mailto:dprathe1@ncsu.edu) if you'd like to get more information on analytics and how analytics are used in OIRA.

**Data and Research: In the News**

The book "You are a Data Person," by Dr. Amelia Parnell, NASPA, vice president for research and policy, explains why nearly everyone in higher education can contribute to important conversations about data and analysis to help students and improve institutions.



### OIRA Upcoming Event



### Tap Into The Data Person In You

Do you have data in your office and are not sure what to do with it? Have you longed to develop your analytical skills? Do you struggle with analyzing large and small data sets? Tap Into the Data Person In You is a workshop series that will give you the opportunity to develop the skills you need to analyze data.

Who should attend? Anyone who needs the basic tools to quantitatively and accurately analyze the mountains of data that come across your desk each minute of every day to help make data-driven decisions.

### OIRA Upcoming Survey: NSSE



### Data Request

OIRA operates primarily as the central unit for the collection, processing, analysis, interpretation, reporting and maintenance of official historical, institutional data.

You can request university historical data by clicking on: [Data Request Form](#).

### OIRA Contact Information

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