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

Colleagues and friends! I am pleased you are reading the Fall 2023 issue of the OIRA newsletter. In this issue we introduce our newest staff members, Mr. Robert Patrikios and Dr. Becky Mussat-Whitlow, who both joined the team in August.

We share several new data and information sources, and several longer articles on data and instructional practices. We also have a briefing on the various analytical tools used by the OIRA staff, and a link to the recording of our third annual Data Literacy Virtual Speaker, Dr. Christian Collins.

Sarah Carrigan

New Members to OIRA

Mr. Robert Patrikios
Student Data Mart Business Analyst

Mr. Robert Patrikios is a native to Apex, North Carolina where he lives with his wife, daughter, and three dogs. Mr. Patrikios received his BFA from the University of North Carolina at Greensboro in 2003. After time within the retail and gaming industries, Mr. Patrikios began his career in education with The Art Institute of Raleigh-Durham in 2013 as their associate director of admissions. In 2019 Mr. Patrikios joined FedEx as a store manager of a local office location before returning to higher education admissionsonce more with Keiser University-Orlando in 2021. He then returned to North Carolina, joining NCCU and the School of Graduate Studies in 2022 as an admissions specialist, gaining extensive knowledge of the university’s data systems that would serve him well within his new role here at OIRA. While enjoying a range of hobbies in his spare time, Mr. Patrikios' current passion is 3D printing and modeling. He also enjoys building computers and tinkering with Linux.

Dr. Becky Mussat-Whitlow
Director of Institutional Reporting and Data Analytics

Dr. Becky J. Mussat-Whitlow has joined our team in the role of Director of Institutional Reporting and Data Analytics, reporting directly to Associate Provost Dr. Sarah Carrigan. Dr. Mussat-Whitlow comes to us after a 23-year career at Winston-Salem State University, where she served as the director of institutional assessment and research. In her prior role, she served as the student data mart lead, IPEDS keyholder and was instrumental in helping the university with the past three successful SACSCOC reaffirmation visits. In addition to leading the university assessment and research activities, she conducted numerous research studies in the areas of retention and student success and presented at a variety of regional and national conferences.

In her previous role, she implemented processes to streamline data reporting and encourage data utilization. In fact, Dr. Mussat-Whitlow was a major contributor to the implementation of major campus initiatives such as Education Advisory Board (EAB) Navigate and EAB Academic Performance Solutions (APS) that resulted in cost saving measures due to increased student retention and increased student performance and Digital Measures/Watermark Activity Insight that assisted with faculty credential reporting for compliance mandates.

In her NCCU role, Dr. Mussat-Whitlow will manage the data reporting and data analytic activities for the Office of Institutional Research and Analysis. Additionally, she will provide oversight and leadership for the Student Data Mart process and working collaboratively with institutional constituents to establish and implement a policy on data governing.

Dr. Mussat-Whitlow has a doctoral degree in Research, Measurement and Evaluation with a minor in Statistics and a Master’s degree in psychology with a minor in...
A set of new Core Metric Drivers dashboards has been created by the UNC System Office to focus on student outcomes and completion. The dashboards can be used as early indicators of progress and regression on the metrics. These dashboards illustrate information on the fall-to-fall retention rates, attempted credit hours, course success rates, credit benchmarks, graduation rates, and transfer graduation rates. Our OIRA office has created built-in filters to allow users to drill-down to the college and major level. These dashboards will be placed on our OIRA website by the end of the Fall semester under the dashboard tab.
Common Data Challenges that Impede the Use of Data and Data Analytics: OIRA Commitment to Address These Challenges

Three of the common challenges that stand in the way of data being used effectively or data analytics being conducted appropriately are 1) having disorganized data infrastructures 2) having inadequate data governance systems and 3) having insufficient data literacy.

As universities have evolved, the amount of data possessed has increased dramatically. Such data exists in multiple record levels; on students, faculty, staff and buildings. The types of data captured vary from information on applications, student enrollment and performance, housing information, faculty/staff information, athletic data, card swipe data, survey data, course evaluation information, as well as crime statistics. This data is housed in a variety of different systems. It is found in a variety of different formats and is classified in multiple ways.

To further complicate matters, data governance structures in higher education settings have tended to focus on a data ownership mindset in which data were thought to be owned by a particular functional area. In the past, data sharing has been very limited and a rather arduous task. As data warehouses have become more commonplace and mechanisms to share data have evolved, data sharing has become more common and silos have started breaking down. Nonetheless independently used platforms still provide barriers to data sharing and integration of data systems. Only recently have data systems started to be viewed as more of a data ecosystem and higher education is switching to more of a data stewardship mindset. This paradigm shift has allowed for the focus to be on eliminating the siloed data sources across functional units and departments and making data sharing more efficient and accessible.

As data sharing has become more common, it has become vitally important to ensure that all individuals with whom the data are being shared are equally versed in the data definitions. In the past, data were shared without properly educating the intended viewers of what the data actually meant. Sharing of data without sharing of definitions can lead to inaccurate conclusions and inappropriate decision-making. Therefore, any data governance system must have, at its core, an appropriate means to adequately account for data literacy to ensure that individuals are equipped to interpret the data to which they have access to view and use for data analysis. Only when data literacy is coupled with data usage can one truly reap the full benefits of data utilization. To ensure that a data analyst is using the proper data for analysis, an individual must understand the origin of the data elements. Without understanding how data elements were derived or collected, a data analyst is at risk of improperly using such data elements for data analysis.

Addressing the issue of disjointed and disorganized infrastructures is a challenge that many institutions of higher education face. At NCCU, we are fortunate to be part of the UNC System Office which helps to facilitate some of our disjointed systems by providing a standardized structure that is used by all UNC campuses to report all of our student and human resources data. It is collectively referred to as the Student Data Mart and the Human Resources Data Mart. In this newsletter, we will focus on the Student Data Mart. Although other systems exist at NCCU, the Student Data Mart helps combine much of the pertinent data fields related to our student data. Additionally, in order to ensure that appropriate mechanisms are in place to ensure that individuals are adequately educated and that appropriate measures are taken to ensure the integrity of the data, the Office of Institutional Research and Analysis has several efforts underway to address these issues. Three of the major efforts are detailed below:

**Student Data Mart Team.** The Student Data Mart team is comprised of representatives across the Registrar, Extended Studies, Student Accounting, Financial Aid, Enrollment, Graduate, Law, Admission, Human Resources, and Transfer Offices. This team is collectively focused on data quality and meets weekly to ensure that data are accurately being entered and reported to our system office of record. Ultimately, the data reported to our federal reporting bodies relies on the hard work of this team to ensure that NCCU is accurately collected, reported and represented. This team works arduously to identify any reporting anomalies and correct these errors in reporting processes. This team also works to identify efficiencies to help workflow for functional offices to run more effectively and smoothly. Any faculty or staff member who applies for a grant can thank this team for
ensuring that the data is available for use and has been vetted and verified.

Data Governance Committee. In Fall 2023, OIRA plans to have active representation on the Data Governance committee that is charged with establishing a data governance plan for NCCU. As part of this process, the Director of Institutional Reporting and Data Analytics will pursue leading the group through the EDUCAUSE Digital Transformation Institutional Self-Assessment to assess for data governance and data literacy.

Professional Development Opportunities. The OIRA office will host training sessions each Fall and Spring semester to increase data literacy for NCCU faculty, staff and/or students. A series of virtual brown bag lunches will be planned to allow faculty, staff, and students the opportunity to discuss available data that can be readily accessed via the OIRA website. These sessions will be designed to explain common uses of such data sets including the OIRA Fact Book, OIRA dashboards, and IPEDs data sources. Dates regarding sessions will be shared via email and the OIRA website.

Informing Instructional Practices through Student Feedback

Encouraging student feedback can increase response rates and bolster students’ confidence in the course evaluation process. End-of-semester student evaluations provide useful information about student perceptions of the course and the instructor. Student feedback can inform changes to make in your course to enhance student learning.

Demonstrate that You Care about Student Feedback

- Let students know you care about their academic progress and tell them what changes you made over the years because of student evaluations.
- Consider conducting a mid-semester evaluation or a student focus group to demonstrate you care about student feedback and to adjust some elements of the course before the end-of-semester evaluations.
  - Examples of mid-semester evaluations:
- Ask students to tell you what to stop, start, and continue doing in the class:

Administrator Evaluations

- Set aside class time to administer the evaluation. This is essential because evaluations are generally considered valid if 80% or more of students respond. At NCCU, students can complete their Student Rating of Instruction (SRI) via a desktop computer and/or cellular phone. Students and faculty can also access their SRIs via Canvas learning management system. It takes less than 20 minutes to administer a student evaluation.

Review Numeric Scores

- Look at the number of students who completed the evaluations. If less than ten students completed the evaluations, the results are not reliable enough to make any conclusions. Consider combining ratings across semesters and looking for trends year by year, rather than semester by semester.
- Identify the three highest and lowest scores. What do these scores tell you about what went well in the class? What needs improvement?
Review Written Comments

- Having identified crucial areas of interest by looking at the numeric scores, write down three questions you have about the course. Read through the students’ written comments and determine what they have to say about those questions. Use the numeric scores to identify the tenor of the class; use the written scores to identify the specifics of the situation.
- Pinpoint specific complaints and, using the syllabus, assignments, and assessments, determine whether the complaint is justified. If it is, then identify what steps you can take to address the weakness.
- If there are one or two hurtful statements, ignore them. Everyone gets one or two of these.
- Save lengthy and meaningful positive comments and incorporate them in your teaching statement. Tape your favorites next to your computer to keep you inspired!

Determine What Changes You Will Make

- Low scores on teacher-student rapport can often be addressed by learning student names, being clear about your grading criteria, using active learning, requiring students to visit your office hours, and chatting with students before and after class.
- Low scores on organization of the course can often be addressed by examining the syllabus and grading criteria, determining whether course assignments and class objectives are aligned, improving preparedness during class lectures or activities, and handing back graded assignments and assessments sooner.
- Low scores on instructor knowledge can often be addressed by making your content knowledge more visible to students (i.e. incorporating your research or content interests into the course) and improving your presentation of the material (i.e. practicing lectures beforehand, having materials and technology ready).

References

Gerald, C. (2023, September 27)., Stop, Start, Continue [PowerPoint slides]. North Carolina Central University. Office of Faculty Professional Development.
Weimer, M. (2018, May 30)., What to do about those negative comments on course evaluations. Faculty Focus.
Weimer, M. (2017, March 8)., What can we learn from end-of-course evaluations? Faculty Focus.

Access Your Student Rating of instruction (SRI) Via Canvas

Faculty and students can now access their Student Rating of Instruction (SRI) surveys and results in Canvas. Just click on “Course Evaluations” in your course shell and you will be taken to your individual course evaluation account.
List of Analytical Tools Used in OIRA

- Tableau Desktop and Tableau Prep – used to prep and manage data, create interactive and visually appealing charts, graphs, and dashboards.
- SAS (Base, Enterprise Guide, Studio) and SPSS – used for data analysis, data management and statistical modeling.
- Argos – used for real-time reporting and to generate custom reports using real-time Banner data and to gain insights.
- Student Data Mart – used to collect data to support internal and external reporting, institutional planning, analysis and assessment efforts at the campus and University of North Carolina System levels.
- College Navigator* – used to explore college options within the United States.
- National Student Clearinghouse* – used to verify student enrollment and degree information for educational institutions and employers.
- Excel* used for data management, analysis and reporting.
- Labor Market Report (Lightcast)* - used to provide data on student employment trends and workforce statistics, and inform program review, accreditation and program development at NCCU.
- Qualtrics* - used to conduct research, gather feedback, analyze data, and make data-driven decisions from survey results.
- CourEval* - used to gather student feedback on courses and instructors, which aid in course-level improvements.
- Rapid Insight – used for data analysis and predictive modeling.
- IPEDS* used to collect and report data for analysis and policymaking.

*Available to campus community

Office of Institutional Research and Analysis
Third Annual Data Literacy Virtual Speaker Event

To those that attended our Third Annual Virtual Data Literacy event, thank you for attending. If you missed this event, you can watch the presentation by Dr. Christian Collins, Vice Chancellor of Institutional Excellence at City Colleges of Chicago, titled “Inspiring a Culture of Continuous Improvement and Data-Informed Decision Making,” on OIRA’s YouTube channel at

https://youtu.be/jJYrX34Kd8?si=VhLJ_RTZPonX1GAk
Your feedback is important to OIRA in creating future data literacy programs.

The Office of Institutional Research and Analysis (OIRA)

The Office of Institutional Research and Analysis (OIRA) website provides access to North Carolina Central University data and information to support institutional decision-making and achievement of our Strategic Plan goals through institutional research, assessment, and data/visual analytics.

We encourage you to visit the OIRA Website.

Data Request

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

You can request university historical data by clicking on either link: OIRA Data Request Form or Service Catalog.