Institutional Research

Office of Institutional Effectiveness and Human Resources

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Northwestern Mission. Northwestern State University is a responsive, student-oriented institution committed to acquiring, creating, and disseminating knowledge through innovative teaching, research, and service. With its certificate, undergraduate, and graduate programs, Northwestern State University prepares its increasingly diverse student population to contribute to an inclusive global community with a steadfast dedication to improving our region, state, and nation.

The **Office of Institutional Effectiveness and Human Resources** is a responsive administrative service and support unit that provides University leaders with information to be used in strategic planning and evidence-based decision-making and human resource programs and services. The Office assesses, collects, analyzes, reports, and disseminates data on behalf of the University and supports all University units in assessment-based improvement efforts. Reporting of information is in accordance with Southern Association of Colleges and Schools (SACS) and federal and state regulations. The Office develops and delivers innovative human resource programs and services designed to support the mission of the University, including its core services and competencies such as staffing, employee relations, organizational and employee development, risk management, compensation and benefits, human resource information management, and regulatory compliance.

Within the Office of Institutional Effectiveness and Human Resources, the Office of Institutional Research (OIR) focuses on the analysis and provision of data to both internal and external constituents for the purposes of decision-making, accreditation, academic research, strategic planning, grant proposal and post-award reporting, as well as mandated governmental reporting. Strong ties with NSU's Office of Information Technology ensure that OIR continues to exploit the latest tools, data structures and methods to provide leadership and customer service in NSU's data analysis function. Strong ties with NSU's Internal Auditor allow OIR to:

- process data that is properly processed through University-approved methods
- work with the auditor and functional departments to address deficiencies in those methods to promote data integrity
- assist in designing enhanced methods to allow the most accurate and effective data sources for analysis and decision-making.

Assessment Cycle 2021 – 2022

Methodology: The assessment process includes:

(1) Data from assessment tools (direct & indirect and quantitative & qualitative) are collected and returned to the executive director.

(2) The executive director will analyze the data to determine whether the applicable outcomes are met:

(3) Results from the assessment will be discussed with the appropriate staff.

(4) Individual meetings will be held with staff as required (show cause).

(5) The executive director, in consultation with the staff and senior leadership, will determine proposed changes to measurable outcomes, assessment tools for the next assessment period and, where needed, service changes.

Institutional Research (OIR)

Service Outcomes:

SO 1. Provide expertise and support for strategic planning, assessment, program design, and continuous improvement.

<u>Measure 1.1.</u> Complete 100% of data requests for unit and program assessments. The OIR regularly interprets, validates, and manages student and program assessment data at predetermined intervals to facilitate organizational planning and program design. (Revised June 2021)

Finding. Target Met.

Analysis. In 2020-2021, the target was met under the prior version of Measure 1.1 and, recognizing the improvements in interdepartmental processes, that Measure was revised as above.

Based on the analysis of the 2020-2021 results and the revised measure, OIR determined that essential definitions and methods for collecting, and reporting data are highly inconsistent across University functions. Some examples include:

- Identification of military students
- Identification of first-generation students
- Identification of on-campus students
- Identification of International students.

As a result, in 2021-2022, OIR proposed a modification to the DESC (Data Entry Standards Committee) procedures to the head of the committee. This proposal was aimed at gaining support for implementation of initial governance processes. Several committee members expressed support, but the proposal was not discussed by the committee whose work occurs solely by email.

In 2020-21, Information Technology (IT) and OIR were partnering on this initiative. Since the summer of 2021 IT priorities have precluded their involvement in this project.

Also, based on the analysis of the 2020-2021 results, OIR recognized that the hyperextract data structures (a feature of Tableau) alone do not address the breadth of data relationships or the enterprise-level oversight needed to support the desired analytics.

As a result, in 2021-2022, OIR and IT had planned to use these constructs to design the next phase of data mart content and relationships to support NSU's Analytics Strategy. This focus was shifted as it became clear that the level of effort for implementing Banner CRM (Constituent Relationship Management) Recruit would continue beyond the original schedule, delaying the data mart work.

Knowing that all things happen for a reason, OIR acknowledges that some of the very data structures we were seeking to model for analytics are "baked in" to the analytics capabilities of CRM Recruit through the Advanced Find feature. So, the efforts expended in the implementation of CRM Recruit have helped to progress on this goal after all.

Additionally, a "Combined Enrolled" Tableau workbook has been created, mimicking some characteristics of a data mart for OIR's internal purposes.

Also, based on the analysis of the 2020-2021 results and the revised measure, OIR began inventorying unit and program assessment data requests that require OIR data preparation.

As a result, in 2021-2022, OIR finalized the listing and began specifically identifying these requests in the tracking system. A Unit Assessment folder has been created under "Recurring" in OIR data storage structures and the work dialed into yearly planning and scheduling.

Decision. Based on the analysis of the 2021-22 results, OIR will work with DIE (Director, Institutional Effectiveness) to develop specifications for an IE Assessment KPI (Key Performance Indicator) dashboard for units and/or Strategic Focus Areas (SFAs).

<u>Measure 1.2.</u> – One hundred percent (100%) completion of federal and state reports. The University consistently utilizes historical enrollment, retention, and completion data to analyze performance trends and develop forecasts to assist leadership with strategic and operational planning decisions. The OIR contributes data for the University Strategic Plan and University Operating Plan on an annual basis utilizing enrollment, retention, and graduation rate data. The University submits enrollment, finance, facilities, human resource, financial aid, library, graduate, and completer data reports each semester and annually to the Louisiana Board of Regents (BOR) and the Integrated Post-Secondary Education Data System. The information submitted is reviewed at the system level to ensure data accuracy and to monitor compliance with and the attainment of state and system level goals and objectives. Additional reports of significance include the Statewide Student Profile System, the Facilities and Space Utilization Report, Louisiana

Assessment Cycle 2021 – 2022

Performance Accountability reports, and the BOR Strategic and Operational Plans.

Finding. Target met.

Analysis. In 2020-2021, the target was met.

Based on the analysis of the 2020-2021 results, OIR decided to present data governance plans to NSU leadership, requesting authorization to review policies and procedures at the departmental level for the purpose of incorporating data governance checkpoints. Upon approval and adoption of this plan, tools for data governance would be required for consistent administration.

As a result, in 2021-2022, the framework was presented, and estimates for tools were obtained. Requirements for IT involvement were outlined to VP of Technology, Innovation and Economic Development in August 2021 for incorporation into Chief Information Officer's (CIO) scope of work. Throughout the assessment year, other priorities have precluded IT's involvement in this initiative. No request for data governance tools will be prepared for the coming year.

Also based on the analysis of the 2020-2021 results, OIR planned to work with Human Resources (HR) to record faculty credentials in Banner and with IT and Controller to record faculty assignments by CRN in Banner. These projects did not hold priority within HR, IT, or the Controllers' office during this assessment cycle.

As a result, in 2021-2022, OIR created a Tableau Prep flow that combines various sources of information about faculty credentials. While this tool does not fully meet the need for up-to-date data to be used in decision-making, it does support limited OIR response to surveys that request this data.

Decision: Based on the analysis of the 2021-22 results, OIR has determined that departmental resources would be better used to expand the understanding and use of dashboards and other resources available on the OIR website. Having reviewed Google Analytics traffic to various OIR dashboard pages, OIR believes that increased utilization can be achieved with additional visibility and training. Therefore, OIR will create and publish at least three 3-minute training videos for Fact Book and OIR dashboards. Availability of these videos will be publicized in the Messenger. Content will focus on not only the mechanics of operating the dashboards, but also on the definitions and how to interpret data on the dashboards.

SO 2. Develop, provide, and maintain timely and accurate institutional data to internal and external audiences.

<u>Measure 2.1.</u> – One hundred percent (100%) of data source files will be documented for federal and state reports to enable responsiveness to all inquiries, requests, and audits. Complete any audits with no substantial findings. The OIR ensures accuracy, consistency, and timeliness among federal, state, and internal reports (IPEDS, Louisiana Board of Regents, Louisiana Performance and Accountability System, and internal assessment reports) through data validation protocols and audit and balancing of state and federal standardized reports. The Louisiana Legislative Auditors, (the independent audit body for the state of Louisiana), has the authority to audit as they deem appropriate to verify data accuracy.

Finding. Target met.

Analysis. In 2020-2021 the target was met.

Based on the analysis of the 2020-2021 results, OIR planned to begin a regular extract and consolidation of course-level high school student data for each entering NSU Fall and Spring cohort. These entering cohorts are referred to as Entering Freshmen (EFRs). Three times per year, all students, including EFRs, are reported to the BOR. EFRs, however, must be reported at a greater level of detail than other students. These details include their math and English high school GPAs which are available through the BOR internal Student Transcript System (STS).

As a result, in 2021-2022, work order #57177 was created, requesting IT assistance with developing an extraction, archive and refresh routine. The resulting database would be used to prepare the BOR Student Profile reports and as a springboard for integration to Banner student data on the high school screen, SOAHSCH. This request is still outstanding. OIR has locally archived the May 2021 and November 2021 STS extract files.

Decision. Based on the analysis of the 2021-2022 results, OIR will locally consolidate STS extracts as a data source for analysis of high school coursework from NSU's EFRs. These extracts will also act as an archive (for audit purposes) of data used in preparation of BOR Student Profile reports.

<u>Measure 2.2.</u> – One hundred percent (100%) compliance with Board of Regents' modifications to report specifications. The OIR consistently reviews data collection and reporting processes to identify relationships among reports and across departments to synchronize data reporting and to validate accuracy employing different data extraction and reporting methods in compliance with reporting standards as established by the Louisiana Board of Regents. Report procedures exist for all major state reports that are compiled by the OIR, however, the Board of Regents often issues modifications to specifications for the required reports. The Office of Institutional Research will implement continuous improvement processes to continuously revise reporting methods to comply with Board of Regents reporting specification revisions.

Findings. Target met.

Analysis. In 2020-2021 the target was met.

Based on the analysis of the 2020-2021 results, OIR established periodic archival rules for electronic folders. The primary reasons for accessing historical folders are:

- To guide or cross-check current processes
- To respond to audit requests
- To help assemble trend data.

As a result, in 2021-2022 OIR reviewed the folders and determined that, in general, folders older than 5 years can be archived. These archival efforts commenced in Spring 2022.

Decision. Based on the analysis of the 2021-2022 results, OIR will document anticipated changes to IPEDS and other reporting, and, where foreseeable, alert appropriate NSU departments of potential changes to data or process requirements.

SO 3. Conduct project-based research and analyses.

<u>Measure 3.1</u> – Eighty percent (80%) overall completion of requests for ad hoc data reports and surveys. One hundred percent (100%) completion of all requests for ad hoc and recurring data requests related to **accreditation**, **planning and compliance**. The OIR compiles, analyzes, and reports student and program data in a timely and accurate manner to assist departments with new program initiatives, grant applications, compliance/accreditation, recruiting, and other strategic and planning initiatives as appropriate.

Finding. Target met.

Analysis. In 2020-2021 the target was met.

Based on the analysis of the 2020-2021 results, OIR planned to work with the implementation team to deploy Banner CRM Recruit prior to the end of 2021.

As a result, in 2020-2021, OIR was part of the core implementation team, with project initiation slightly delayed. Rollout of the new NSU Admissions Application occurred in November 2021. Now that it is in place, this system natively provides reporting and analytics to Recruiting and Admissions users based on roles and security profiles within the system.

Banner CRM Recruit's self-service query and reporting has enhanced data accessibility since recruiters are often out of the office and seeking data outside of business hours. Now staff may serve students even from their phones or laptops - prior to implementation, off-campus access to Banner data was not available.

Also based on the analysis of the 2020-2021 results, OIR planned to improve selfservice to the University at large by deploying an electronic Fact Book.

As a result, in 2021-2022, OIR has implemented a selection of dashboards which reflect the primary sections of the Fact Book. This selection is available at: https://www.nsula.edu/oir/dashboards/



Decision. Based on the analysis of the 2021-22 results, OIR will publish Retention dashboard on OIR website.

Comprehensive Summary of Key Evidence of Improvements Based on Analysis of Results. The following reflects all the changes implemented in AC 2021-2022 to drive the continuous process of seeking improvement. These changes are based on the knowledge gained through the analysis of the AC 2020-2021 results.

SO	Measure	Key Evidence
1	1.1	Proposed initial Data Governance step to DESC to standardize table values. Designed "Request for Action by DESC" form to gather key info before creating, changing, or changing the meaning of values. Standardized some Recruiting/Admissions fields during Banner CRM Recruit implementation.
1	1.1	Tabled Data mart initiative due to lack of resources and lack of meaningful progress on prerequisite data governance. Created working Tableau workbook called "Combined Enrolled" which mimics some characteristics of data mart.
1	1.1	Tracked completion of unit/program assessment data requests in OIR Work Orders tracking sheets. Category "Accreditation" and "Unit Assessment" in Notes.
1	1.2	Data governance/data dictionary tools not acquired or implemented.
1	1.2	Developed Tableau Prep flow to combine all available electronic sources for faculty credential data from Board reports and historical spreadsheets.
2	2.1	Created IT request #57177 requesting assistance to store STS student summary and course-level data into a database every Fall and Spring. Request still open as a project.
2	2.2	Reviewed electronic folders, standardized naming as needed, and organized by Year within subject.
3	3.1	Worked with team to implement Banner CRM Recruit starting June 2021 with go-live in November 2021.
3	3.1	Published electronic Fact Book information on OIR website in Summer 2021 as a series of dashboards.

Plan of Action Moving Forward.

SO	Measure	Plan
1	1.1	Work with DIE (Director, Institutional Effectiveness) to develop specifications for an IE Assessment KPI dashboard for units and/or Strategic Focus Areas (SFAs).
1	1.2	Upload submitted IPEDS reports to OIR website.
1	1.2	Create and publish three 3-minute training videos for Fact Book and OIR dashboards.
2	2.1	Consolidate STS extracts to promote analysis of high school coursework from NSU's EFRs and to archive (for audit purposes) data used in preparation of Student Profile reports.
2	2.2	Document anticipated changes to IPEDS and other reporting, and, where foreseeable, alert appropriate NSU departments of potential changes to data or process requirements.
3	3.1	Publish Retention dashboard on OIR website.