Comprehensive Program Review Report

Program Review - Research, Planning & Institutional Effectiveness

Program Summary

2023-2024

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What are the strengths of your area?: Overview/Mission

Data analysis is central to the College of the Sequoias Model for Integrated Planning and serves as an important tool in each of the District's planning processes. The mission of the Office of Research, Planning & Institutional Effectiveness is to provide research, planning, and assessment services to all segments of the District community. To fulfill this mission, the Research Office provides leadership, guidance, and representation for generating sustainable, data-informed solutions/decisions to improve equity, student learning, and quality services throughout the District.

Strengths

The Research Office's strengths are evidenced by its team knowledge, abilities, skills, education/training, and experience. In addition, the Research Office team's strengths are exemplified, and demonstrated by the following:

- Highlighting equity as the forefront of analysis
- Boasting institutional history and knowledge dating back as far as 15 years
- Possessing advanced knowledge of statistical measures and their application
- Commending knowledge and understanding of, and access to student and management information systems, and data warehouse databases
- Serving on many participatory governance committees, senate and workgroups
- Disseminating data through reports, dashboards and presentations
- Developing solutions from multiple perspectives and approaches
- Maintaining capacity for continued improvement/development of team members

The Research Office helps meet the District's data and assessment needs by providing data management and visualization tools, and responding to ad-hoc data/research or consultation requests each year. In 2022-23, 115 requests were received. The top two most common requests were for data (72) and consultation/data coaching (32). With the regular maintenance of District's Giant Dashboards, program review units continue to have access to substantially more aggregate and disaggregate data than in previous years. The Program Review and Planning Dashboard functions as a one-stop-shop for the District's academic program planning needs. This dashboard contains metrics assessing faculty growth, success rates, unduplicated headcounts, census enrollments, excused withdrawal rates, program majors, awards, full-time equivalent students (FTES), full-time equivalent faculty (FTEF) and FTES/FTEF ratio. Users may disaggregate course success rates (including and excluding EWs), unduplicated headcounts, census enrollments, withdrawal rates, and excused withdrawal rates by more than 25 characteristics. Disaggregated data allows for better insight into equity gaps at the District, department, or course level.

The Research Office team participates in professional development activities to support continuous improvement. Over the 2022/23 year, the research team had 43 attendances across 30+ training events ranging from data analysis to mandated reporting. Some of the completed trainings include dashboard metrics, student equity planning, data management (warehouse & lake house), active shooter, college access and success, generative artificial intelligence in higher education, and AB1705 topics.

What improvements are needed?: The Office of Research, Planning & Institutional Effectiveness identified areas for improvement based on its Overall SAO Achievement and an internal needs assessment (evidence: see SAO assessments). The

Research Office may

- •   Transition to Invoke Learning Data LakeHouse & Snowflake environment
- •   Engage faculty, staff and administrators in best practices for accessing and requesting relevant data, and using the subsequent information for continuous improvement.

Describe any external opportunities or challenges.: The Office of Research, Planning & Institutional Effectiveness faces a major challenge:

Dependency to Others

- •   In order to accomplish its mission, the Research Office relies and depends on several District offices/groups and partners. In particular, the Research Office relies and depends on various departments across the District to update and maintain their departments' data fields to ensure consistent and accurate data collection across the District. This limitation can prevent the Research Office from accessing and utilizing accurate data if the data fields have not been properly maintained and updated by their respective departments. In addition, time and amount of work required for the development of the 2025-35 Master Plan, Accreditation/ISER preparation, and Transition to Invoke Learning Data LakeHouse & Snowflake environment pose a challenge to the Research Office's continuous improvement efforts.

Overall SAO Achievement: Overall, the Office of Research, Planning and Institutional Effectiveness demonstrated its research capacity by responding to all data/research requests, maintaining/updating data dashboards, and disseminating transparent reports to respective stakeholders and publishing on the public website. The Research Office participated in and evaluated professional development trainings and workshops, which support the District's continuous improvement efforts. The Research Office developed and distributed 10 Curious Giant correspondences, which promoted awareness and usage of data across the District. The Research Office team served on many committees, councils, workgroups, and task forces ranging from participatory governance to solutions workgroup to systems review taskforce. Equity data has been promoted in all efforts made by the Research Office. There are now over 25 student groups in the Success and Enrollments tab for program review. The Research Office developed metrics for the 2021-25 Strategic Plan. All data metrics were updated for the 2023 Annual Report on the Master Plan. This work assists the District in institutional planning activities (evidence: see SAO assessments).

Changes Based on SAO Achievement: •   Participation in training/professional development opportunities

- •   Increasing awareness of data warehouse solutions (Invoke Learning Data LakeHouse & Snowflake environment)

Outcome cycle evaluation: The Office of Research, Planning & Institutional Effectiveness regularly and continuously assesses its outcomes, actions and activities that are aligned with the District's Strategic Plan Objectives, and its Research Agenda. The outcome cycle is evaluated annually during the program review process. The outcome cycle was revised in September 2021 to articulate the standard Service Area Outcomes produced by the Research Office and how these outcomes are assessed. For the second year, the Research Office team found the assessments to accurately capture the accomplishments of the office and the challenges to address that will drive improvements.

Action: Stakeholder engagement for data use and continuous improvement (2022-23)

The Office of Research, Planning & Institutional Effectiveness will engage faculty, staff and administrators in best practices for accessing and requesting relevant data, and using the subsequent information for continuous improvement.

Leave Blank:

Implementation Timeline: 2022 - 2023

Leave Blank:

Leave Blank:

Identify related course/program outcomes:

- •   District Objective 3.1 - Reduce equity gaps in course success rates across all departments by 40% from 2021-2025.
- •   District Objective 3.2 - Increase the course success rate by 10% for each disproportionately impacted student group in their transfer level Quantitative Reasoning and English courses by the end of their first year from 2021-2025.
- •   District Objective 4.1 - Increase the effective use of data and transparency in decision making at all institutional levels from 2021-2025.

Person(s) Responsible (Name and Position): Dali Ozturk, Ryan Barry-Souza and Tyler Virden

Rationale (With supporting data):

Data analysis is central to the College of the Sequoias Model for Integrated Planning and serves as an important tool in each of the District's planning processes. The mission of the Office of Research, Planning & Institutional Effectiveness is to provide research, planning, and assessment services to all segments of the District community. To fulfill this mission, the Research Office provides leadership, guidance, and representation for generating sustainable, data-informed solutions/decisions to improve equity, student learning, and quality services throughout the District.

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Based on its Overall SAO Achievement and an internal needs assessment, the Research Office needs to further engage faculty, staff and administrators in best practices for accessing and requesting relevant data, and using the subsequent information for continuous improvement.

Priority: High
Safety Issue: No
External Mandate: No
Safety/Mandate Explanation:

Update on Action

Updates

Update Year: 2022 - 2023   10/13/2023
Status: Action Completed

In an effort to engage faculty, staff and administrators in best practices for accessing and requesting relevant data, and using the subsequent information for continuous improvement, the Research Office:

• Continued Curious Giant series with topics specifically focusing on accessing data from internal and external dashboards.
• Updated the Guidelines for Requesting and Conducting Surveys and published the guidelines to the research request webpage.
• Fully implemented a new research/data request form to promote a more user-friendly and streamlined process for requesting data.
• Continued to publish reports on the Research Office website including reports on external surveys conducted in conjunction with the Chancellor's Office and RP Group.

Impact on District Objectives/Unit Outcomes (Not Required):

Link Actions to District Objectives

District Objectives: 2021-2025
District Objective 3.1 - Reduce equity gaps in course success rates across all departments by 40% from 2021-2025.
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Action: Support for Invoke Learning Data LakeHouse (2022-23)

The Office of Research, Planning & Institutional Effectiveness will support the District's transition into and implementation of the Invoke Learning Data LakeHouse

Leave Blank:
Implementation Timeline: 2022 - 2023
Leave Blank:
Leave Blank:
Identify related course/program outcomes:
• District Objective 1.1 - The District will increase FTES 2% from 2021 to 2025.
• District Objective 4.1 - Increase the effective use of data and transparency in decision making at all institutional levels from 2021-2025.
Person(s) Responsible (Name and Position): Dali Ozturk, Ryan Barry-Souza and Tyler Virden
Rationale (With supporting data):

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In order to accomplish its mission, the Research Office relies and depends on several District offices/groups and partners including the Technology Services Department. In particular, the Research Office relies and depends on the Technology Services to create and maintain data elements in the data warehouse. However, the data warehouse has limitations and does not cache daily data. For example, this limitation does not allow the Research Office better respond to the enrollment surveys that come from the Chancellor's Office. The addition of more data elements to the data warehouse further complicates the situation. The Research Office needs to

- Switch to a database or platform that can cache data daily.
- Explore the possibility of creating its own data variables when the Tech Services cannot create what is needed.

The District's transition into and implementation of the Invoke Learning Data LakeHouse will address these issues.

Priority: High
Safety Issue: No
External Mandate: No
Safety/Mandate Explanation:

Update on Action
Updates

Update Year: 2022 - 2023   10/13/2023
Status: Action Completed
The Research Office, in conjunction with Technology Services provided support for the District's transition into and implementation of the Invoke Learning Data LakeHouse and Snowflake environment. Support included the following:
- Attending Invoke training meetings with the vendor and the COS Tech Services team
- Review of data fields and the coding to ensure accuracy of data as fields are being moved into Snowflake.

Impact on District Objectives/Unit Outcomes (Not Required):

Link Actions to District Objectives

District Objectives: 2021-2025
District Objective 1.1 - The District will increase FTES 2% from 2021 to 2025.
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Action: Transition into Invoke Learning Data LakeHouse & Snowflake Environment (2023-24)

The Office of Research, Planning & Institutional Effectiveness will transition into the Invoke Learning Data LakeHouse & Snowflake Environment.

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