

Usability Testing and Tableau

An Opportunity for Improving DEM’s Utilization of the Software

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Tableau is utilized across DEM in a variety of ways, with dashboards commonly being created with a specific purpose in mind, but there has not been any testing performed to ensure the implementation and usage of these dashboards is efficient or successful. Implementing a form of usability testing can help DEM determine if the current dashboards are sufficient for our work, if the dashboards need to be adjusted to properly address the needs of the office, or if new dashboards need to be created to address gaps in Tableau’s usability.

What is Tableau?

Tableau is a data visualization tool that allows campus staff and faculty to generate and download ad hoc reports and visualizations. Offices that house campus data (such as the Division of Enrollment Management and Data, Academic Planning & Institutional Research) can use Tableau as a user-friendly format for campus partners to access data relevant to their role on campus.

Typically, campus partners can access predetermined reports or institutional data exporters (IDE). Most reports have a variety of parameters that can be used to parse the results to align closely with what information is needed. This format for generating reports allows campus partners access and explore campus data without needing to be an expert on navigating large data sets. This format also allows reports to be multifunctional– a staff member could use the same IDE to generate two distinct types of reports, or two staff members might use an IDE for the same type of report, but with results personalized to their department or student population.

What is Usability Testing?

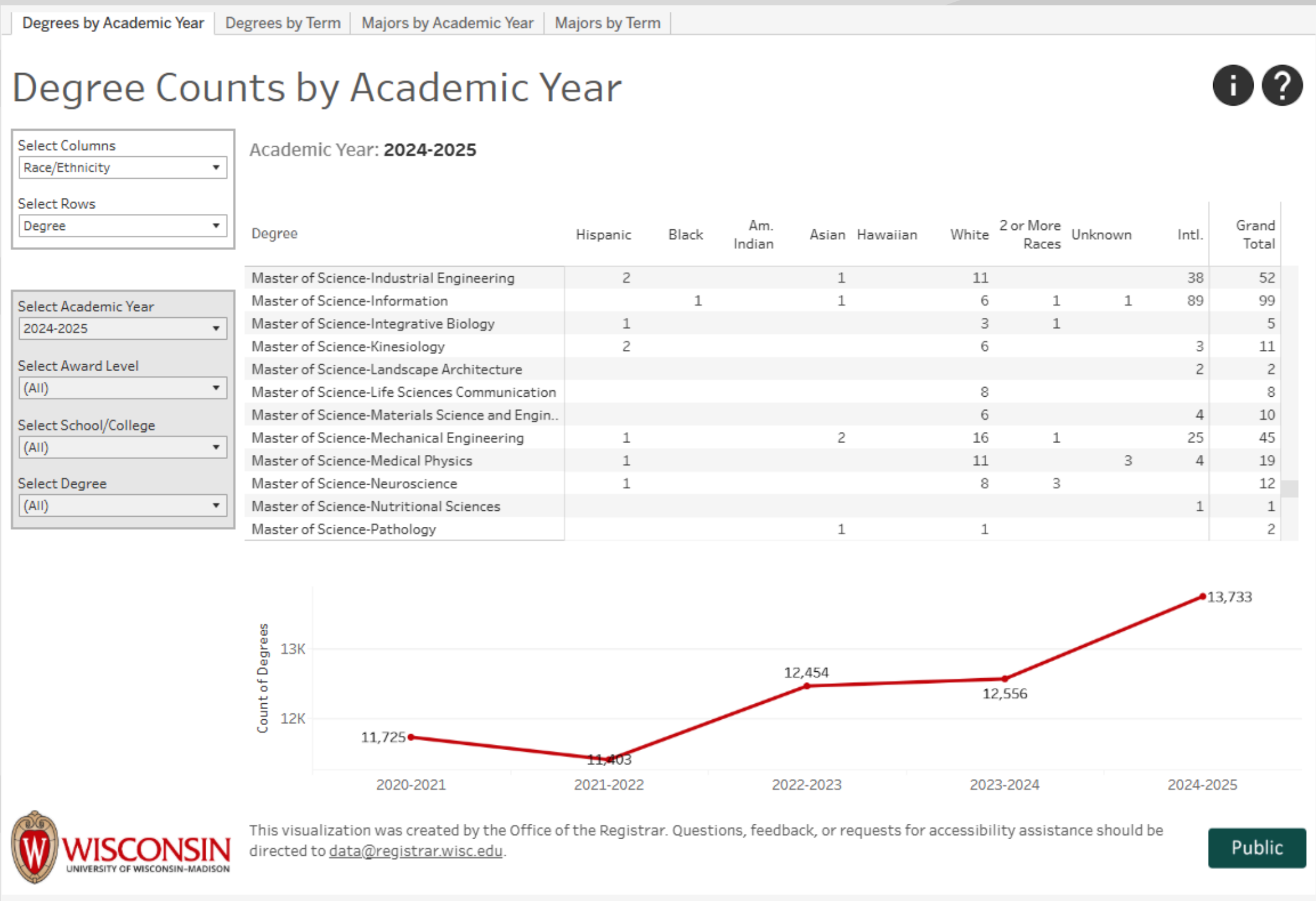
Usability testing is a research method aimed at evaluating products and the user experience. It allows designers, product teams, and researchers to determine how intuitive a product is and supplies data that can inform changes that may need to be made to improve ease-of-use.

Usability testing for Tableau is a process used to evaluate how easy and efficient it is for users to interact with Tableau dashboards, reports, or the Tableau platform itself. The goal is to identify usability issues, improve user experience, and ensure that end-users can effectively gain insights from the data.

Usability testing in Tableau is about ensuring that dashboards and visualizations are easy to use, effective in conveying insights, and tailored to the needs and skills of the intended audience. It helps bridge the gap between technical design and user expectations.

How does DEM use Tableau?

The Division of Enrollment Management, like many other units across the University, relies on Tableau to deliver actionable data through both operational reports and general insights. Many of these reports are available to UW–Madison employees for specific purposes. For instance, the Office of Admissions and Recruitment uses numerous dashboards during application season to manage the evaluation process for thousands of prospective students, while the Registrar’s Office provides campuswide data on enrollment trends and breakdowns. Similarly, the Office of Student Financial Aid and the SSTAR Lab maintain a variety of internal and external reports to support their operations and missions



An example of a public Tableau dashboard provided by the Office of the Registrar, demonstrating trends in degree counts.

Methodologies

Moderated vs Unmoderated
In-Person vs Remote
Qualitative vs Quantitative

Hallway Testing (Guerrilla Usability)

- Low-cost method where random people are asked to try a product.
- Good for identifying basic usability issues, especially early on.

Expert Review

- Usability experts evaluate a product.

A/B Testing

- Comparing two versions of a product.

Tree Testing

- Participants given specific tasks within an existing product/software to determine usability.

Important Considerations

- A major consideration with the current climate on campus is budget. Usability testing, regardless of method, is going to have costs associated with it (time, money, personnel).
- We work with a lot of sensitive & restricted data that we may not want accessible by an outside organization/platform providing usability testing.

Recommendations

Unmoderated, Remote, Tree Testing

Utilize a usability testing software program that tracks “clicks” and cursor movements to determine efficiency of completing a given task.

Would focus on quantitative data with a few qualitative questions at the end

Wiiisdom is a usability testing platform already formatted to work well with Tableau

Strengths

- Unmoderated and remote allow for more flexibility in scheduling, also makes the usability testing more accessible.
- Tree Testing would allow us to determine how well our dashboards are set up to accomplish specific tasks.
- Adding a few qualitative questions in the form of a survey after completion of the testing would allow for some additional data that the software cannot collect.

Limitations

- Software does cost \$\$\$
- Actions/tasks being evaluated are limited to the dashboards we already have created.