IWERC Dashboard - Learning Renewal
BADM 550 Business Practicum
February 23, 2025

What we have done:

- Set up Tableau Cloud accounts and created a dashboard that can be worked on simultaneously. Through Tableau cloud, we are each able to upload our visualizations to work towards combining them into one usable dashboard.
- An important step towards building a complete dashboard. We tried to create a dashboard (Dashboard 1) containing enrollment rate, low-income rate, and EBF Tier visualizations, with two filters (apply to all sheets in one dashboard) that can be operated by stakeholders. This is to see whether subsequent goals can be achieved.

The link to the IWERC Dashboard on Tableau Cloud, which contains all visualizations and dashboards we created:
https://us-east-1.online.tableau.com/#/site/crobl4-4e746da370/projects/919091?:origin=card_share_link

Plan in General:

1. Prioritizes Usability & Accessibility

- Implements district filter, year filter, and metric filters(range sliders for continuous variables) so that stakeholders can manually select the important education indicators they are interested in.
- Ensures WCAG 2.1 compliance (contrast toggles, screen-reader support).
- Embeds feedback loops.

2. Optimizes Performance

- Reduces load times by 20% via pre-aggregated datasets.
- Optimize visualizations by using different types of charts. For example, continuous variables like rates are suitable for line charts, while categorical variables like EBF Tier look better in bar charts.
- Add multiple dimensions and measures to the Tooltip in Marks card to show multiple metrics when stakeholders hover over a district.

3. Enables Data-Driven Insights

- Visualizes post-pandemic trends (enrollment drops, absenteeism spikes, etc.).
- Adds predictive tools: Use tools in the Analytics panel, like trend line or forecast, to predict metrics like enrollment rate, EBF Tier, etc.
- Highlights anomalies with missing data indicators.

4. Strengthens Stakeholder Engagement

- Includes interactive tutorials and guides in the dashboard. For example, we can write a tutorial and variable description in Google Docs, and add its Web Page to the dashboard.
- Allows benchmarking of comparable districts (±15% of population).
- Provides export/sharing capabilities for stakeholders.

5. Ensures Technical Robustness

- Standardizes color schemes and responsive layouts.
- Maintains data integrity through boundary validation.
- Annotates contextual factors (e.g., 2021 hybrid learning impacts).

What We Still Need From the Client:

1. Data from the client, e.g. ESSER, % modality school, survey data.
2. Whether we need to add 2024 data to the current dashboard.

Next Steps:

Our main focus at this stage is to integrate all created visualizations into a single dashboard. As a team, the basic integrated dashboard will be finished by Mar. 16th. It will entail:

- An overview map of Illinois, where users can choose areas by districts and schools.
- Within the districts or school views, users will be able to see information about their selected districts/schools.

Our objective is to have a working and user-friendly dashboard that will help users understand the learning efforts in Illinois.