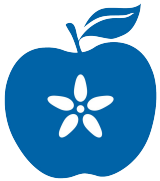


Dashboards

Optimizing Ops through Automation



ALGIERS CHARTER
SCHOOL ASSOCIATION

Jane Patton and Jeremy Cumbie
Algiers Charter School Association

Purpose of Today

- To present Algiers Charter's lessons learned and best practices around creating and using operational dashboards.
- Sharing what we've learned and where we are now

What are Dashboards for?

- Algiers Charter values dashboards that are actionable
 - And used solely to help people do their jobs.
- What are your dashboards for?
 - Your association or school should have its own operating principles driving your dashboard creation.

Algiers Charter's Dashboard Rule #1

- **Core Lesson:**
 - Dashboards like this don't work without true integration between teams
 - One dashboard can rely on inputs from several different folks in different buildings

Why Dashboards?

- Create a data-oriented culture
 - Provide insights into how individuals and groups can do their jobs better and with more real knowledge
- Provide a tool for discussion and driving conversations

What These Dashboards Aren't

- The kind of dashboards discussed here are not meant to be a 360 degree data warehousing system
 - That requires a huge investment of personnel, resources, and infrastructure
- Interim dashboards can pull info together without the investment that database systems require
 - Data warehousing could be a long-term goal

Dashboard Design: Goals

- What are you trying to accomplish with your dashboards?
- Who is your audience?
- What are your organizational values?

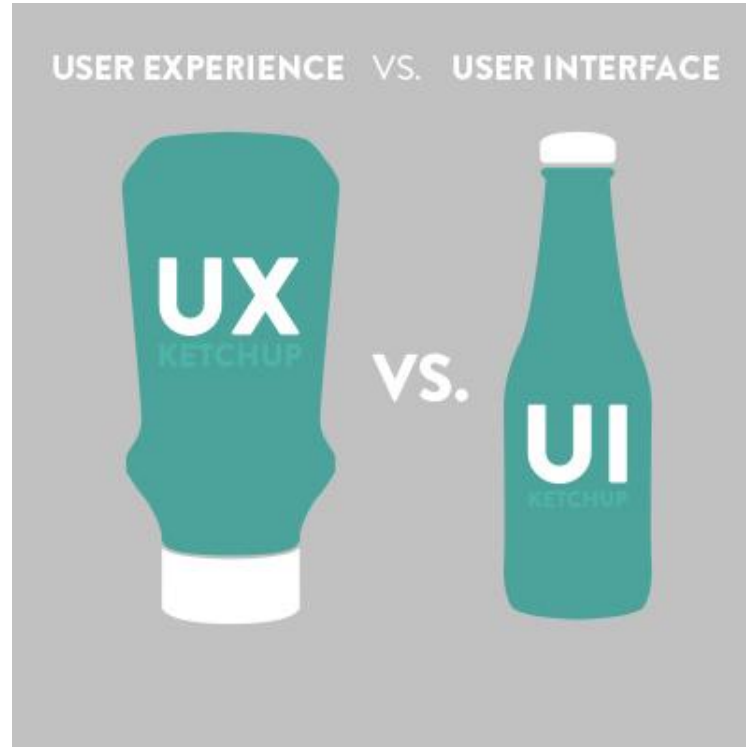
Dashboard Design: Goals

- **Selecting data to include:**
 - The idea is to most efficiently collect all the various possible data points into one single item to inform the real daily practice of staff and leaders.
- **Bonus points:**
 - If you can communicate it in a way that helps people digest the information for real practice.

Dashboard Design: Accessibility

- Your dashboards should be accessible to the folks who'll be using them
- The design should be user-centered, focused on their experience with the data

Dashboard Design: Accessibility



source: www.techtic.com

Dashboard Design: Accessibility

- Create an explanatory guide for those who'll be using the dashboard:
 - How the elements can be interpreted
 - Where they came from
 - How to dig into them independently of the dashboard

Algiers Charter's Dashboard Rule #2

“We believe that the purpose of dashboards is to help staff do their jobs, not to collect data.”

Algiers Charter COO, Tess Bradford

Algiers Charter's Dashboard Rule #2

- Our core principle means that we don't ask people to create tasks just for the sake of dashboarding.
- So we automate.

Why Automated Dashboards?

- We use a variety of systems org-wide to collect and manage data that change often:
 - PowerSchool
 - Google (multiple forms and elements)
 - LinkIt (interim assessments)
 - UltiPro (personnel)
 - Salesforce
 - RTI systems
 - Blackbaud (finance)
 - and more...

Why Automated Dashboards?

- A lot of different systems use native dashboarding
 - This is the data that sits in this system, here's a pretty picture of it
- Our dashboards are attempting to automate the pull of the right data from many of these systems into one place

Dashboard Design: Accessibility

- Across so many systems, it's important to meet people where they are
 - Moving out of native dashboards within each system into yet another 3rd or 4th or 10th system can be difficult for adoption and use
- Google makes the most sense for us to display current dashboards

Dashboard Design: Accessibility

- Automated emails are a good way to achieve user buy-in to the data
 - Could either contain elements of the dashboard directly or provide a link to it
 - Need to determine frequency of emailing
- Aim for a dashboard design that's mobile accessible, especially if it's being emailed

User Buy-in

- User buy-in is probably the most difficult part of organizing data for decision-making
 - not in use of the dashboard, but use of the systems which provide data for the dashboards

Data Integrity

- First step to good dashboards: good data
- Develop written expectations, protocols, and procedures for all systems feeding into your dashboards

Data Integrity

- **Garbage in, garbage out**
 - Your dashboard is only as operational as the data going into it are accurate
- **Controls for data quality on all systems:**
 - Training - ops managers, teachers, admin
 - Preparation and communications
 - Consistent crosschecks - trust but verify
 - Automated emails about missing/bad information
 - School Ops Managers run periodic checks

Organizational Structures

- Algiers Charter utilizes an organizational structure to support collaboration on good data:
 - Operations Manager at each school
 - Data & Strategy team at the School Support Center
- Each depend on communication with each other for accuracy and efficiency

Data Integrity

“It’s a completely useless strategy to be focused on the outputs at the end; you need to be focused on the inputs at the front.”

FirstLine Schools’ Director of Information Systems

Dashboard Design: Automation

- We're using our tools at hand to make ops dashboards automated:
 - Internal server executes a scheduled task, which runs a SQL script to pull data, and then upload that into a local Google Drive folder which pushes to the cloud via GoogleDriveSync.
 - A Google Sheets file aggregates that data, and a separate “clean” file presents it in a Dashboard
 - APIs can pull data from UltiPro and LinkIt to upload to our FTP for similar integration

Dashboard Design: Automation

- Caution on Google: it has real limits
 - Limited to 2 million cells in a Sheet
 - Functionality is limited: the larger the Sheet, the longer it takes to load and upload
- But the benefits of Google's automation outweighs the negatives - for now

Dashboard Design: Sustainability

- Making the dashboards work is important
- Lesson learned:
 - The first time it breaks is the first time you lose people.

Dashboard Design: Sustainability

- Sustainability is key
 - Lack of institutionalization → lack of effectiveness
- Document, document, document!
- Dashboards must be part of your regular meeting protocol

Caution: Drilling Down

- Be prepared to disaggregate!
 - School leaders will want to drill down to the individual level in each number you give them.
- That can be an entirely different issue for your automation systems.

Thinking Long Term

- What's your long term plan?
 - Operation dashboards as living documents - need to plan and adjust for this
 - Customize to an audience
 - Data warehousing system

Questions



- **Contact:**
 - jane.patton@theacsa.org
 - jeremy.cumbie@theacsa.org