Kanban
calms the
chaos™

Managing the Chaos with Confidence

A Proto-Kanban Story Beyond IT:
a Knowledge Work Case Study

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#KanbanCalmsChaos

A STORY

of Unexpected Success

- A newly minted 7 year old
- Some string
- And chaos ensues

START with a Great Idea!

First comes a service or product

Wow! That thing is great! Maybe we could offer more types and styles!

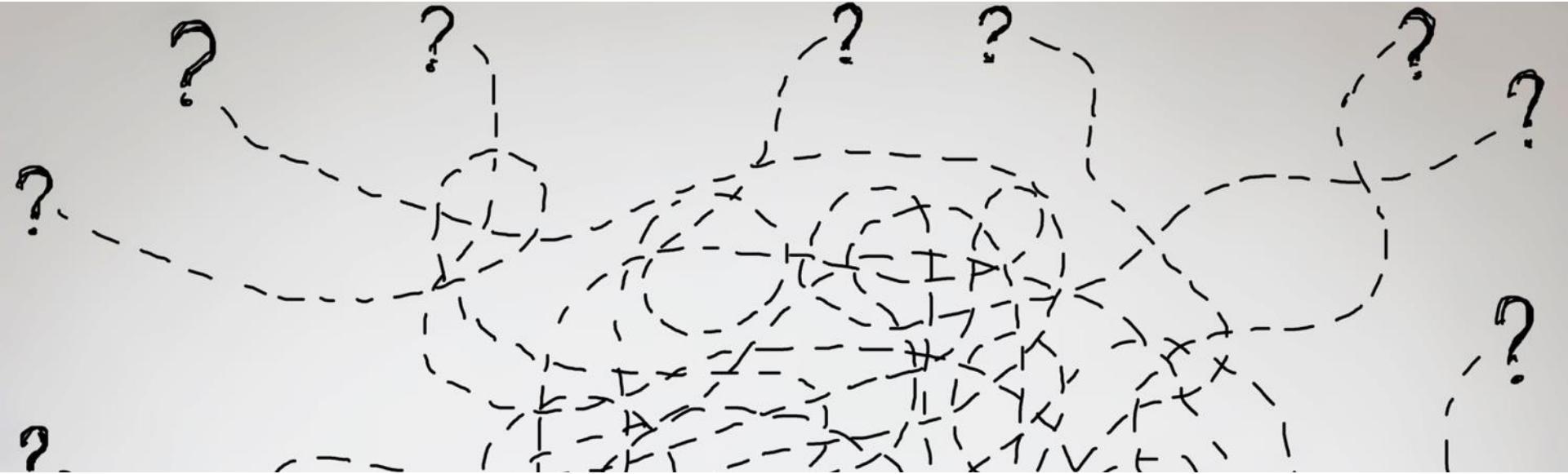
THEN… the Service or Product Takes Off!

Demand goes haywire. Requests come in.

Demand Creates **MORE** Demand!

On top of the original product, now everyone wants to talk to YOU about this great new THING!

You Can No Longer **KEEP TRACK!**



Obligations, demands, promises are stacking up. You know you're forgetting things, but you can't remember what! NOW WHAT?

Using agility to serve the American people.

OUR STORY

A Federal Agile Training Program

Work Small,
Prove It,
Get Done

Our Agile Philosphy

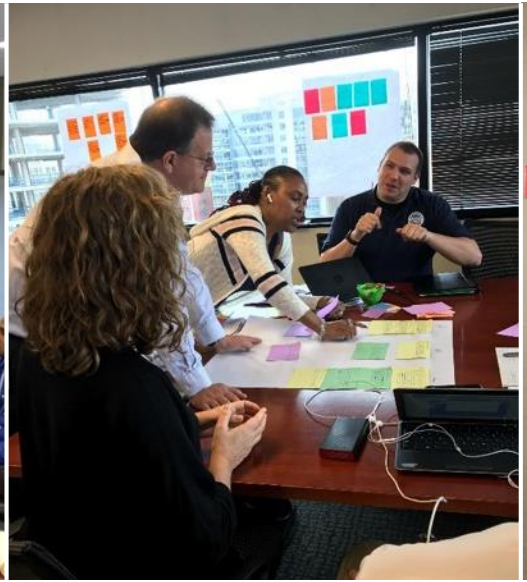
Where Did We **START?**

- In 2012, we began changing the way they developed software.
- The Delivery Assurance Branch led the way by tailoring the SELC and offering training to management.
  - Waterfall -> Agile
  - IT Executive Training
  - Full-day agility classes, as needed
  - One SME and one training professional

Surveys Influenced Content

- Every student received an evaluation form.
- Survey results have direct influence on evolution of content.
- People loved our interactive classes with practical exercises.
- Two new courses emerged.

Uniquely **Robust** Training



- Our courses were not required for anybody. They were completely optional.
- We expected within 2 years we would have exhausted the potential audience.

Expanding Audience

- Within a few months of our new classes, a few other agencies began sending students to any open seats we have.

Increasing Requests & Commitments!

- More agencies were asking to attend, outside agencies wanted us to explain our successful path to agile, and more course content was requested.

Making Sense of the **Chaos?**

- Visualize!
- We got all the commitments, ideas, requests, work-in-progress up on a wall.
- What is all this stuff?
- What is important and what isn't?

Sources of Work

SOURCES

- Federal Client
- Student Evals
- Agency Outreach
- Contractor Management

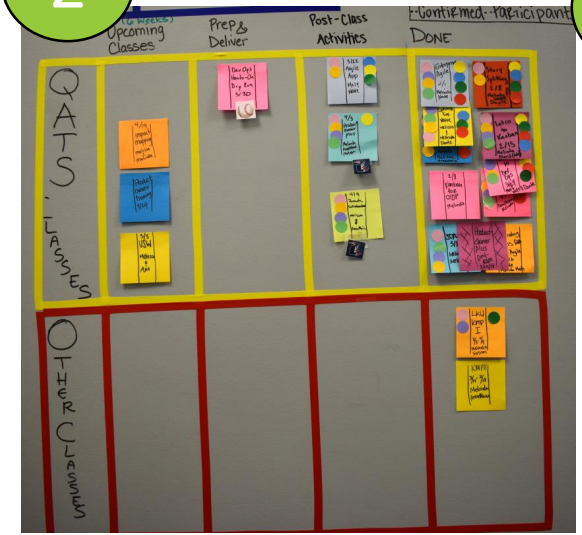
6 MAJOR TYPES

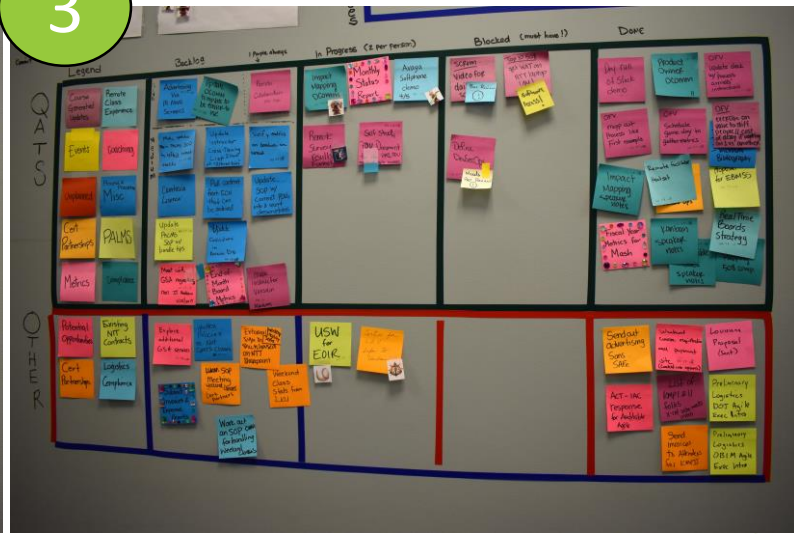
- New courses to be developed
- Regularly-scheduled class offerings
- Agency briefings
- Course content updates
- Regulatory/remote enhancements
- Unplanned work

Visualize Work

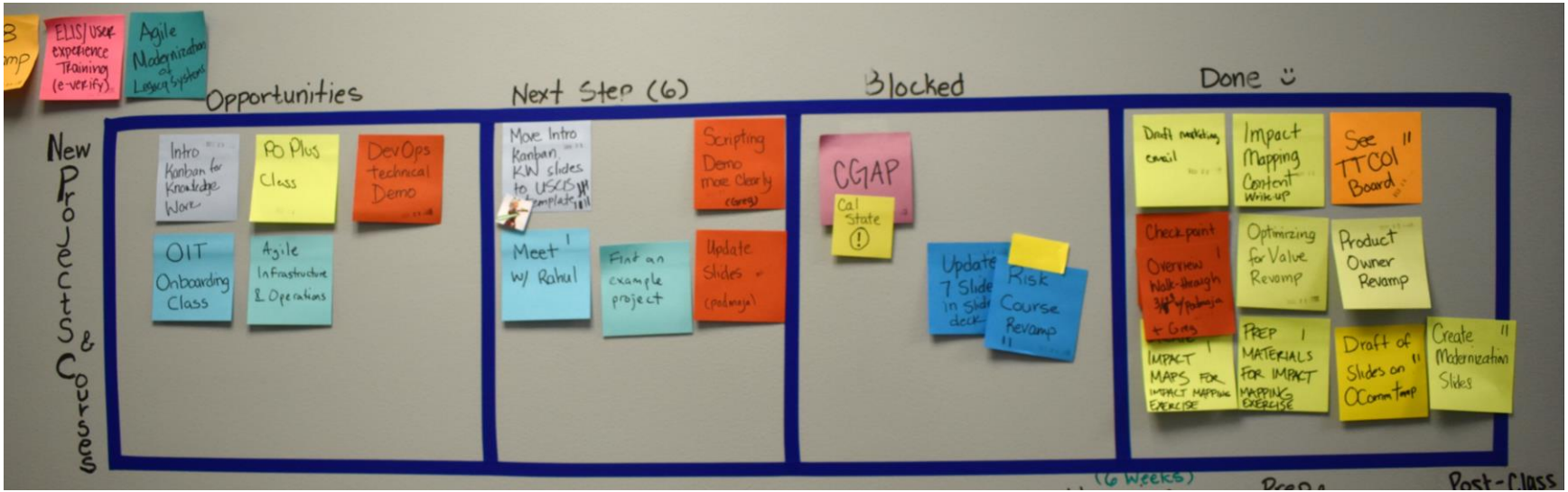
Three Boards

1. New Opportunities
2. Upcoming Classes
   a. QATS
   b. Non-QATS
3. Other Work
   a. QATS
   b. Non-QATS



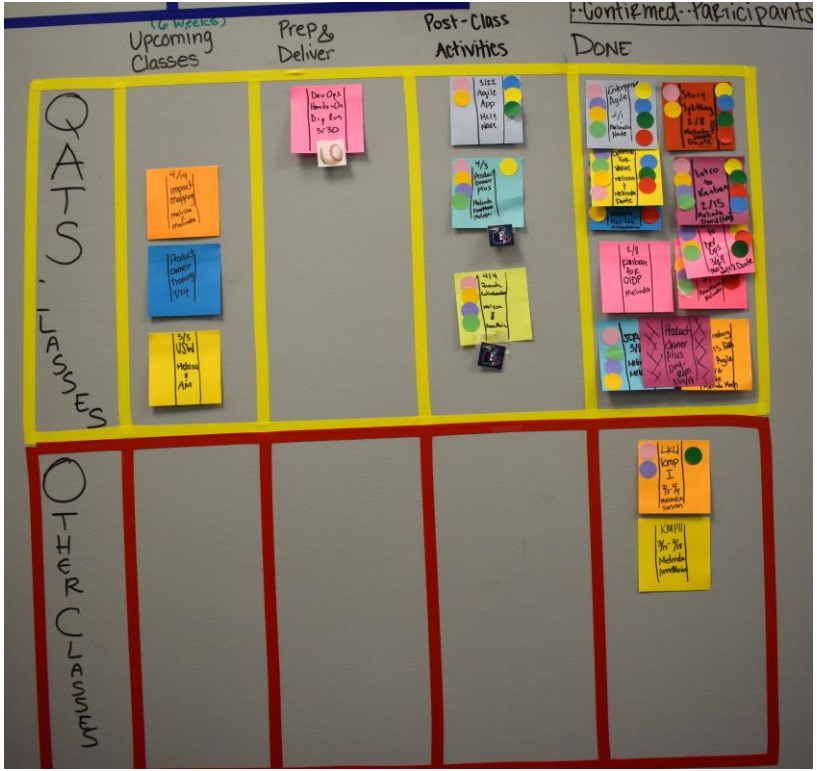


New Opportunities Board



- We identify large items, like new courses. We give each item a color stickie. Each item is then broken into smaller pieces. The “Next Step” column items should take approximately a week to accomplish.

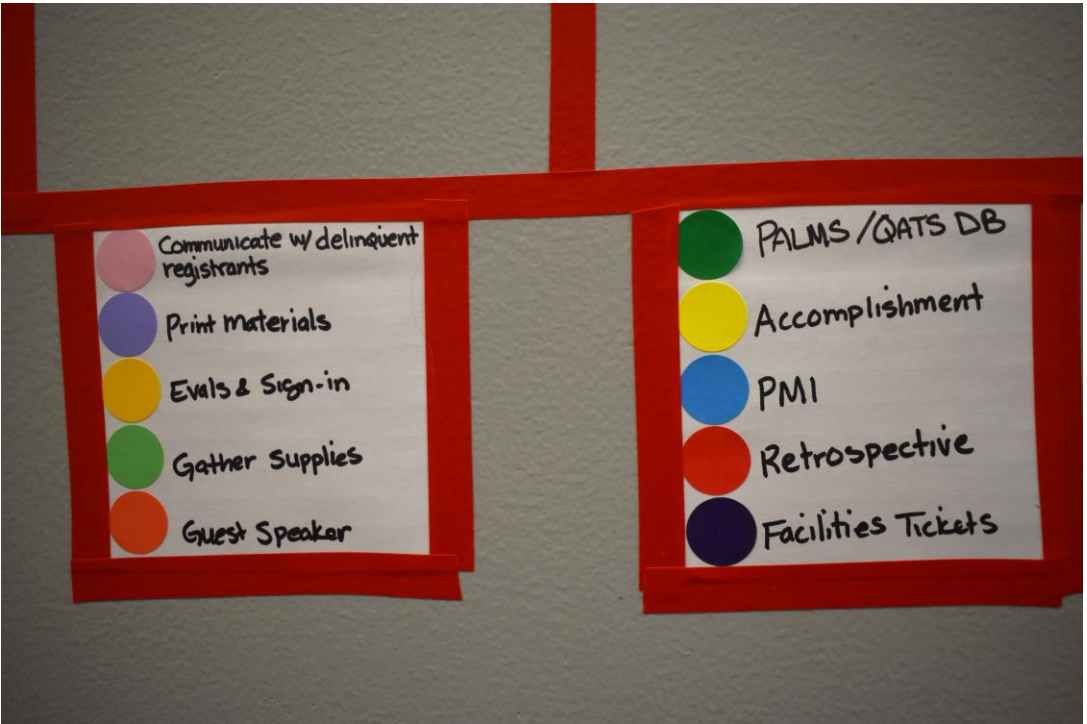
Upcoming Classes Board

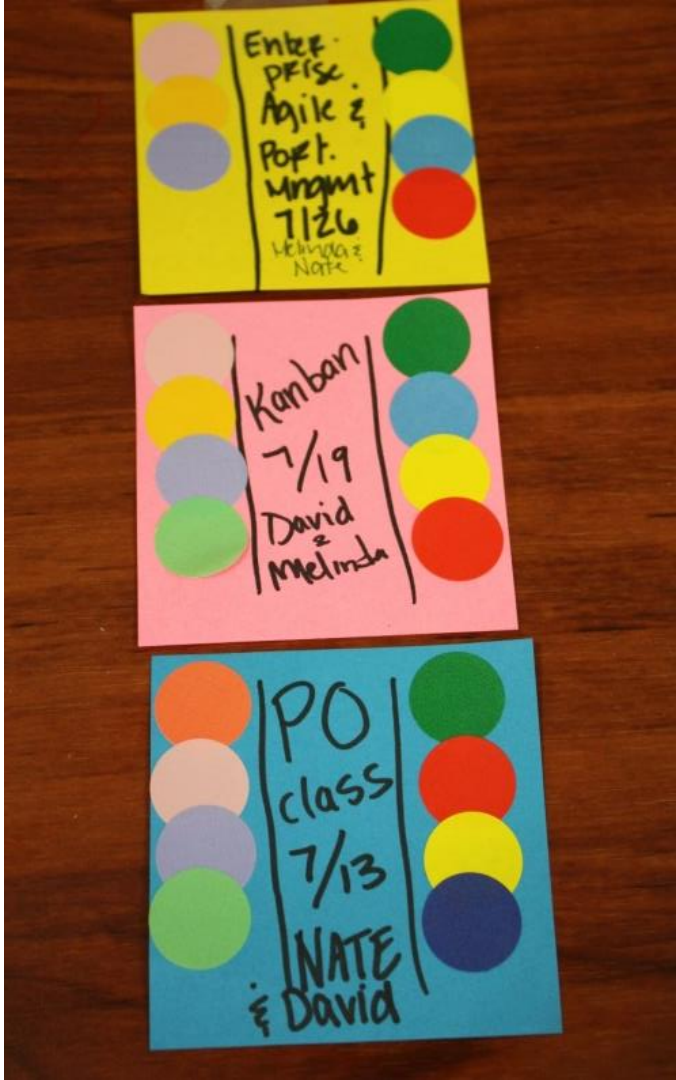


- Classes are all fixed-date delivery items.
- We track classes 6 weeks out from the current date
- 4 columns:
  - Upcoming (backlog)
  - Prep & Deliver
  - Post-Class Activities
  - Done (cleared at the end of the month)
- Two types of classes – QATS & Other

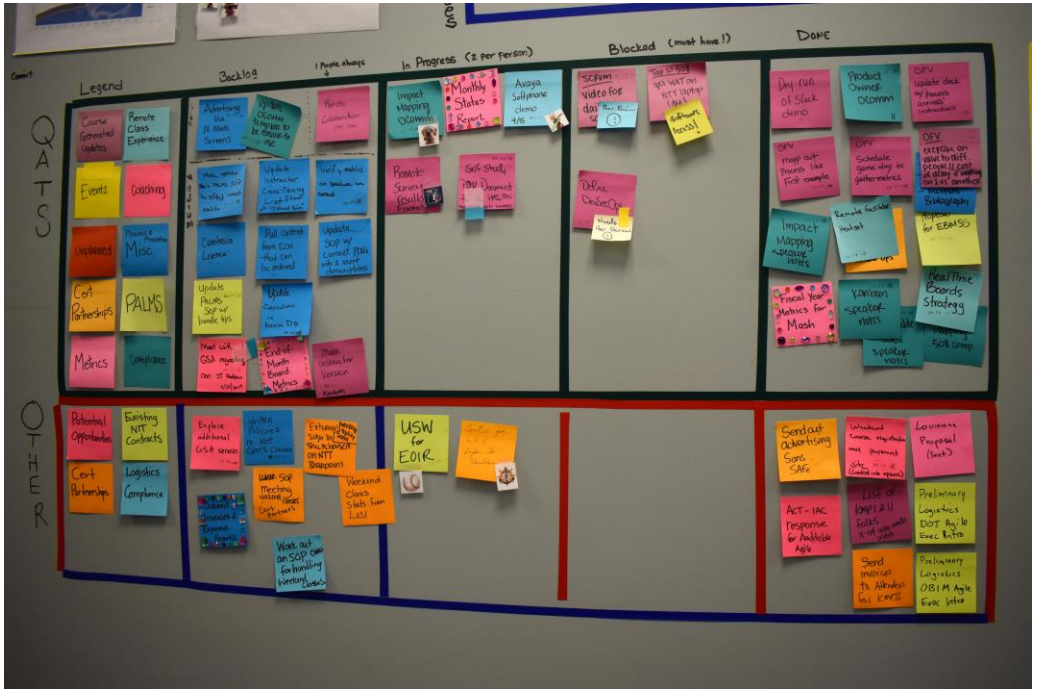
Non-Sequential Tasks

Ticket Design





“Other Work” Board

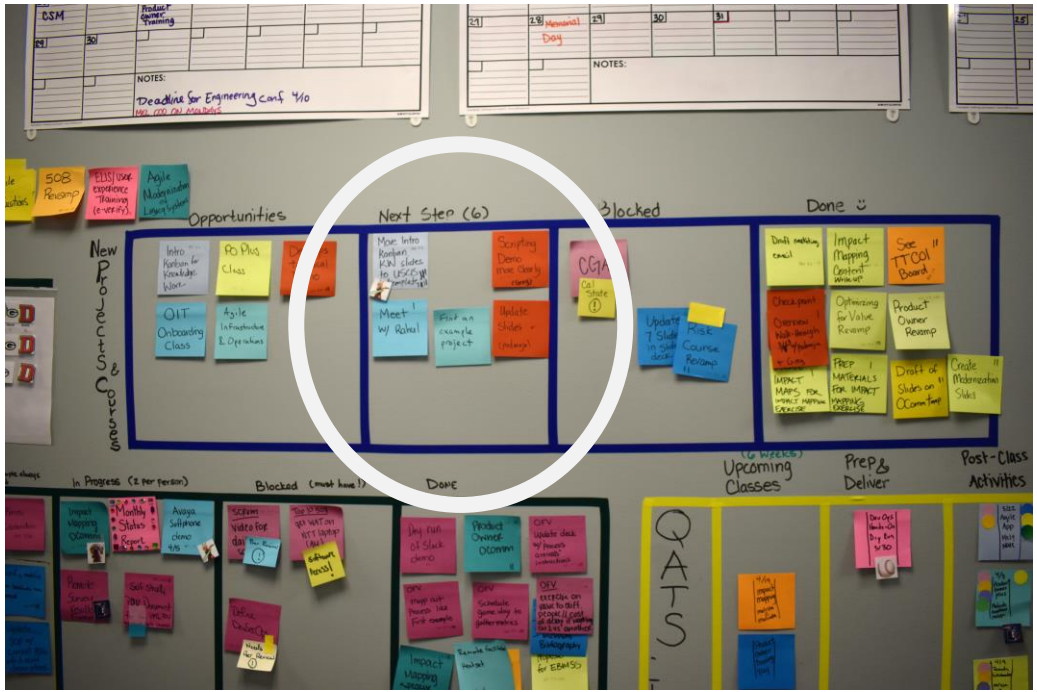


- We’ve got a whole bunch of other stuff that needs doing
- 4 process columns
  - Backlog
  - In Progress
  - Blocked
  - Done
- 10 Categories of work items
  - Each category has it’s own stickie color - Legend

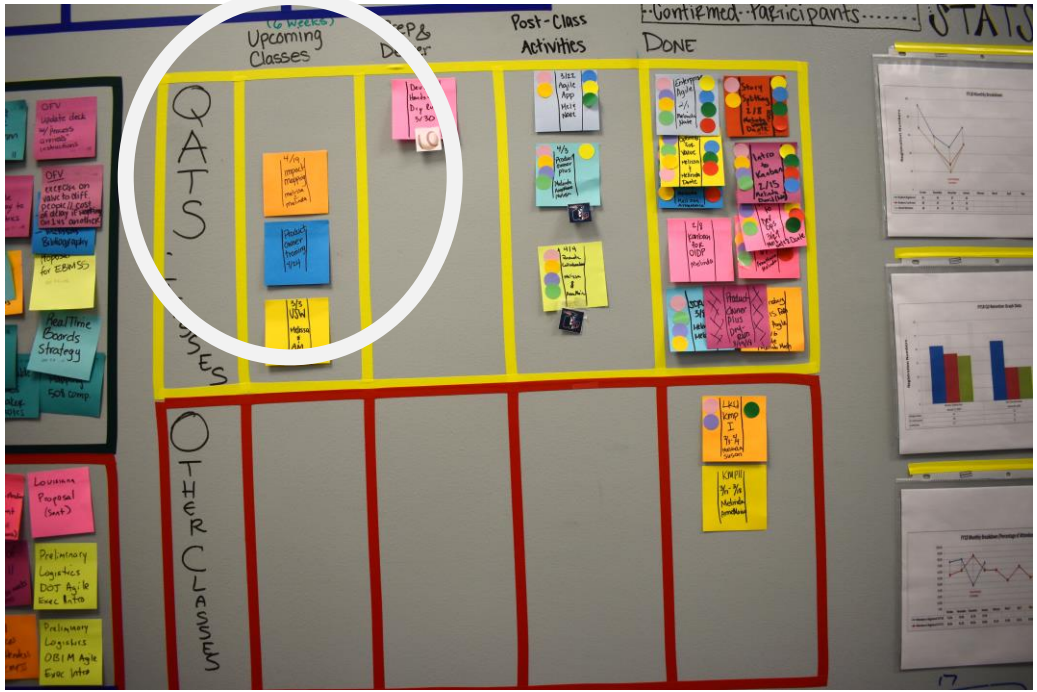
Limiting WIP

Limit **Work-in-Progress** with avatars!

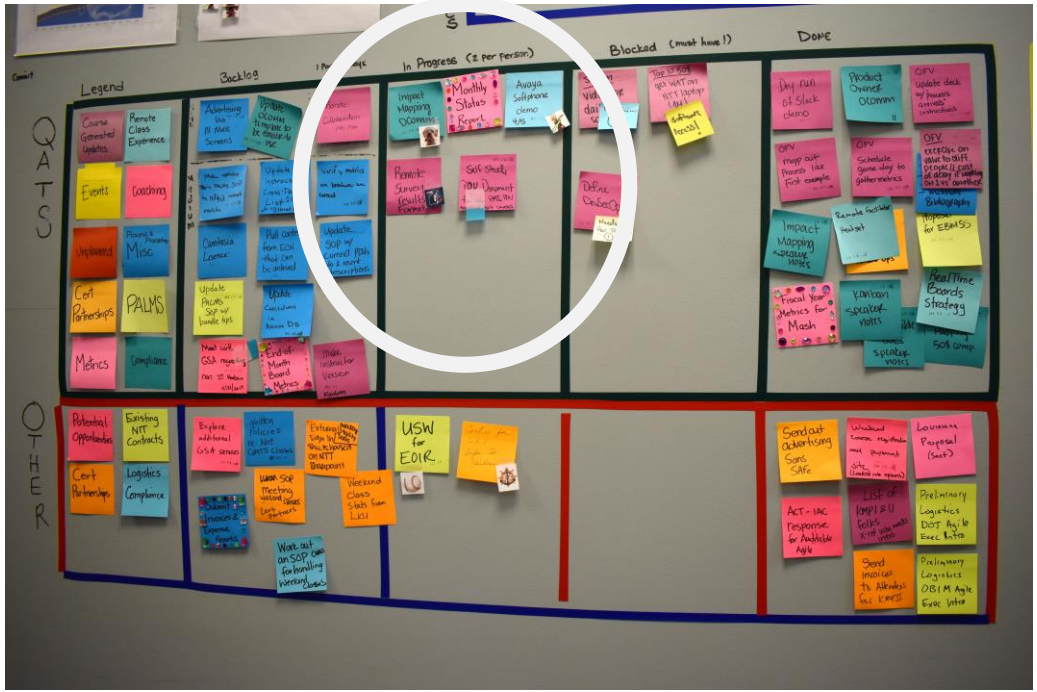
Board 1: Limiting by column



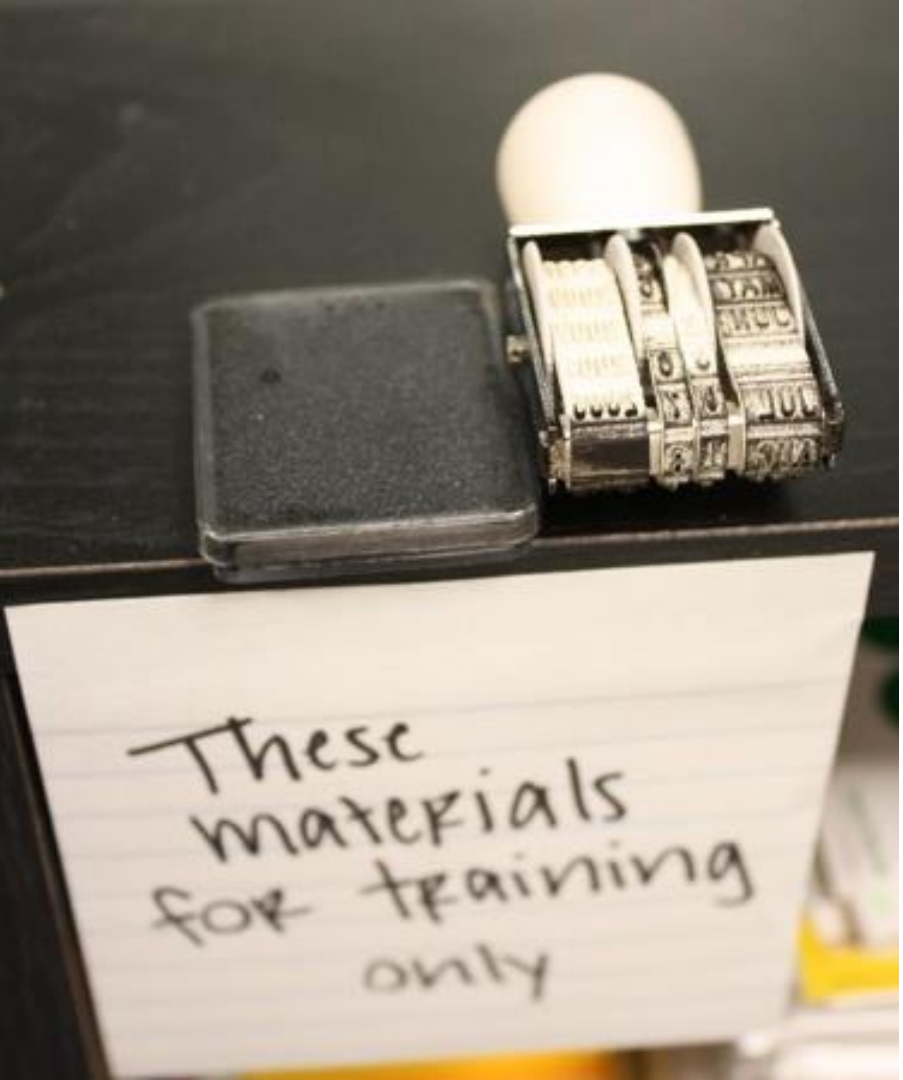
Board 2: Limiting by time



Board 3: Limiting by avatar

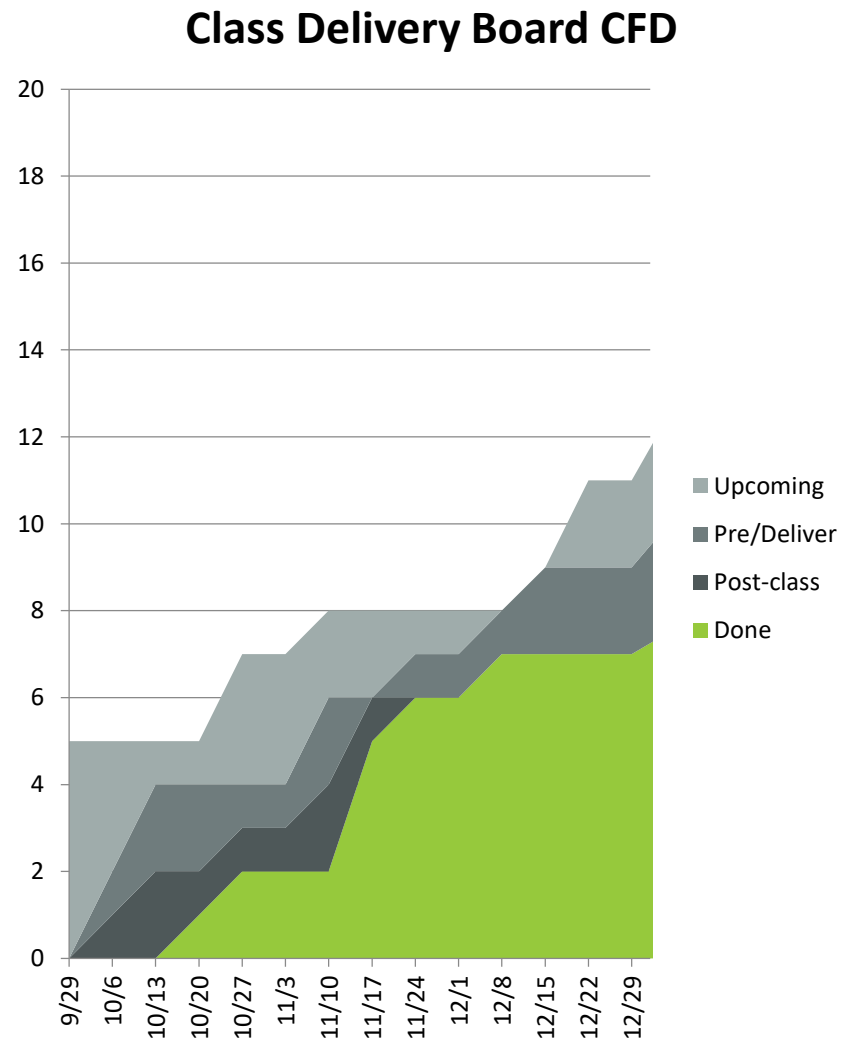


Collect Measurements



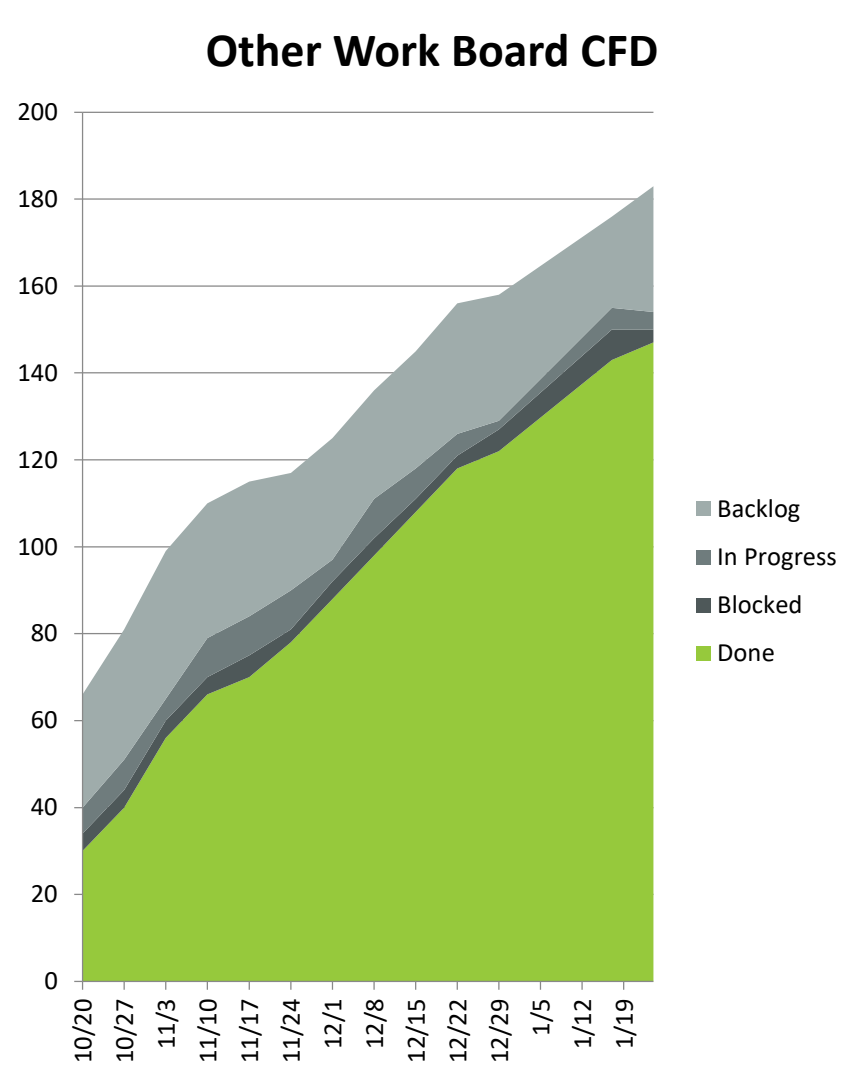
Every stickie gets a date

- All items get stamped when the request is identified
- All “Done” stickies are removed at the month’s end
- Monthly metrics are published on the group Slack channel
- They are used in the retrospective



Cumulative Flow

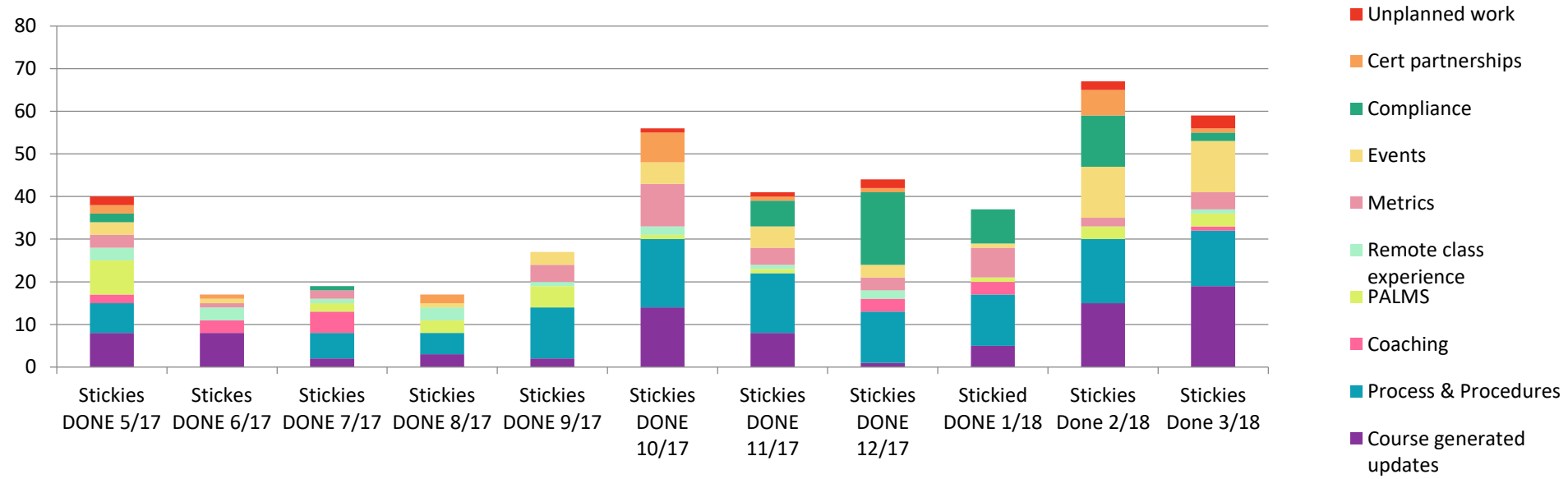
- Made policy about 6 weeks of commitments on board
- Post class activities happening so fast



Cumulative Flow

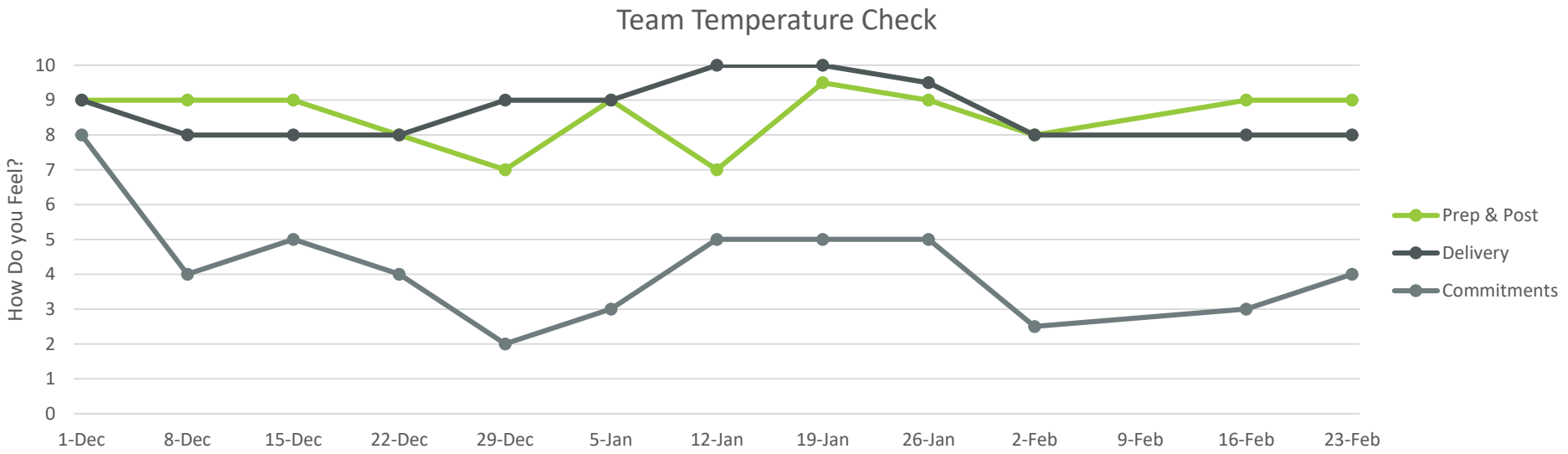
- We verify that the backlog isn't exceeding our rate of completion
- If it is, we start discarding items based on the backlog date
- We verify blocked items are not too overwhelming

How much of our effort is spent on what?



- Are we doing the right stuff?

Department **Evaluation**



- How are we doing? Can we support the work coming in?
- Can we have successful fixed-date delivery?

The Data Influences Decisions!

- Blockers… What do we do?
  - This problem is above my pay grade.
  - Where is your leverage?

- Staffing… We need more people!
  - Is the value left on the table worth the sunk cost of more people?

Managing Capacity

Constant Surprises… Unexpected Requests

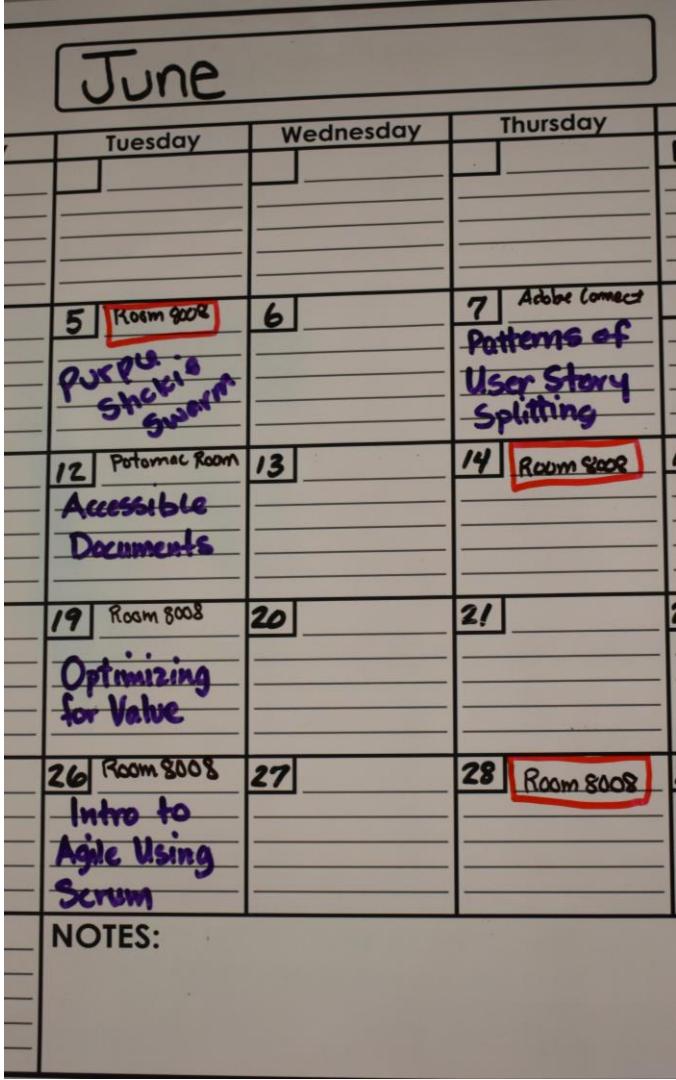
Planned unplanned work!

Reserve capacity.

Influence a swarm

Planned Unplanned Work & Swarms

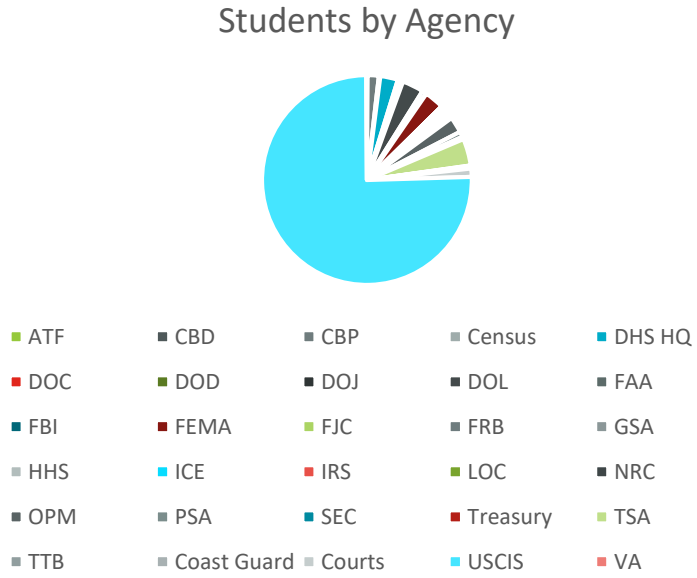
- We reserve capacity for unplanned work
- We reserve extra rooms to support future requests
- We schedule a monthly swarm
- Purple stickies represent feedback from our students

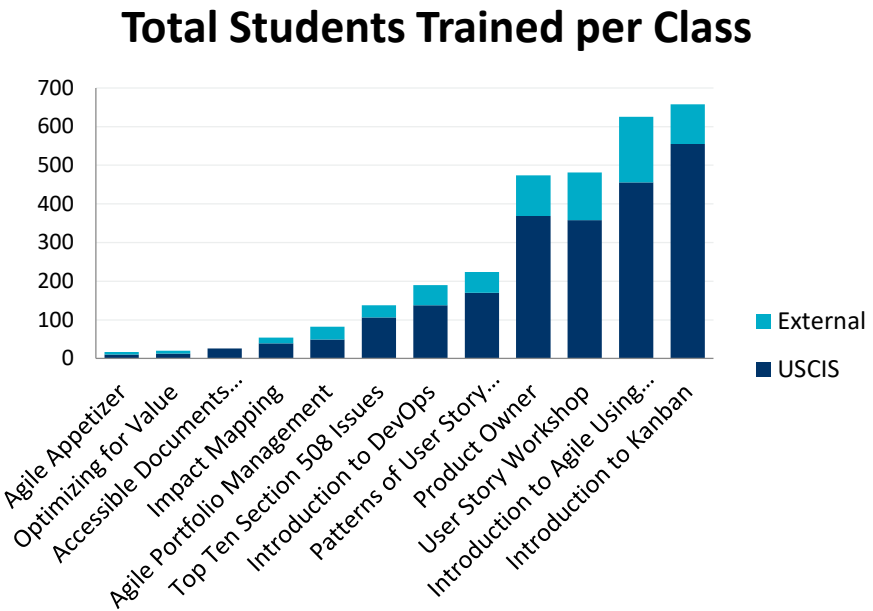


Student Retention & Satisfaction Metrics

- Some students register and don’t come
- Most students are highly satisfied
- So why don’t they come?

Where are we **now?**





- We now have 15 courses
- 9 staff members
- 3,618 students

- ~30 agencies participating
- Coaching other non-IT depts.
- Good authentic prioritization

Takeaways

Visualize work

- Get ALL the work visible
- Identify sources of that work
- Recognize different workflows

Limit work in progress

- Limit by column
- Limit by avatar
- Limit per time

Takeaways

Measure

- How many things are requested vs. how many things get done?
- How long does each item take to accomplish?
- What are the constraints? Personnel? Resources?

Policies

- We prioritize improvement activities
- We often suggest other groups to support other training items
- We don’t start things unless we feel confident we can finish

Parting Thoughts

- For more information about the Agile Training Program:

  Melinda@middlegrass.com

- Courses are open to:
- Federal employees from all agencies.
- Government contractors with COR approval

- We welcome your attendance.

Questions?

@Middlegrass

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