



Kanban  
calms the  
chaos™

# Managing the Chaos with Confidence

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



# Melinda Solomon

Federal Agile Training Program Director with NTT Data

Certified Scrum Master

Accredited Kanban Trainer

Agile Coach

@Middlegrass

#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!

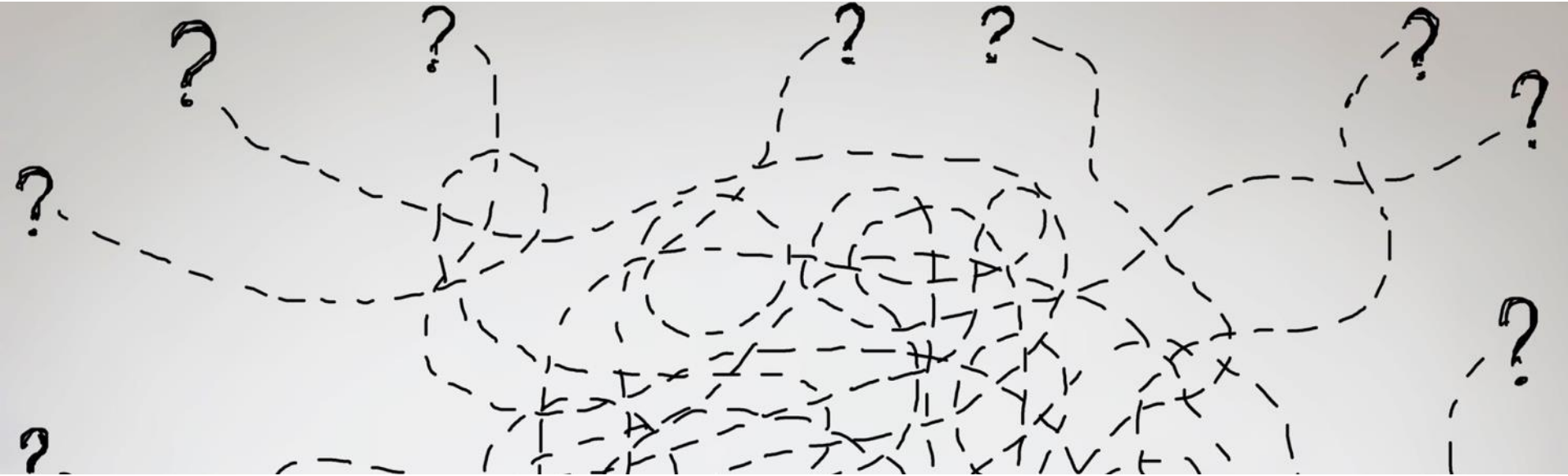


Now we need to make more product!  
And manage more meetings, discussions,  
interviews, suggestions of new capabilities,  
people who want to use our services!!

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 Philosophy




# 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.



How can we  
help your  
success?

# 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.





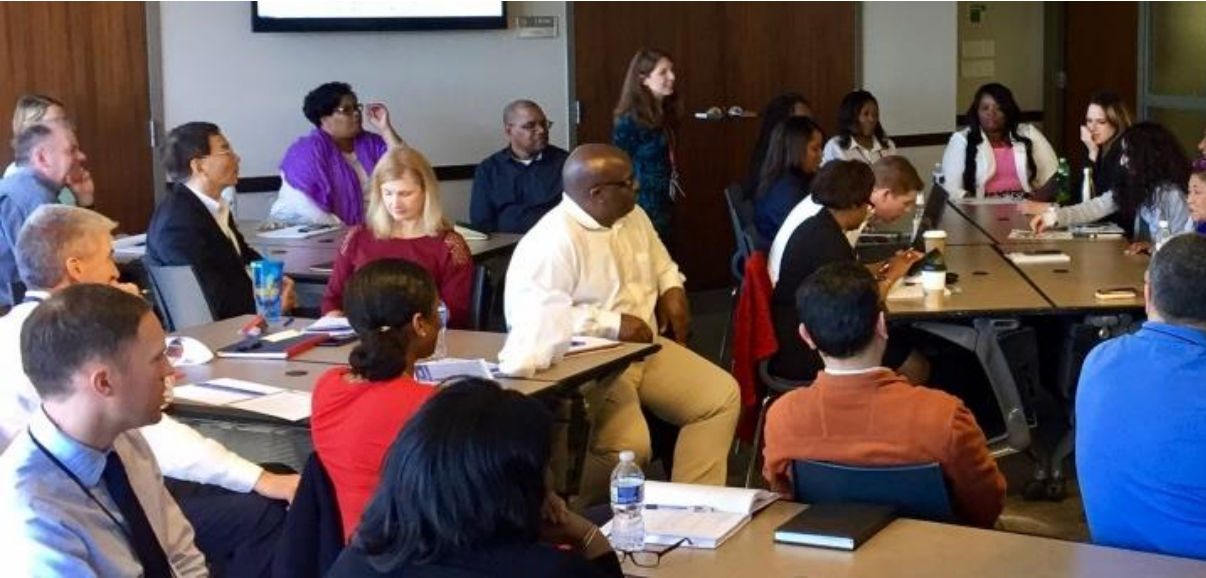
# Expanding Audience



- 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

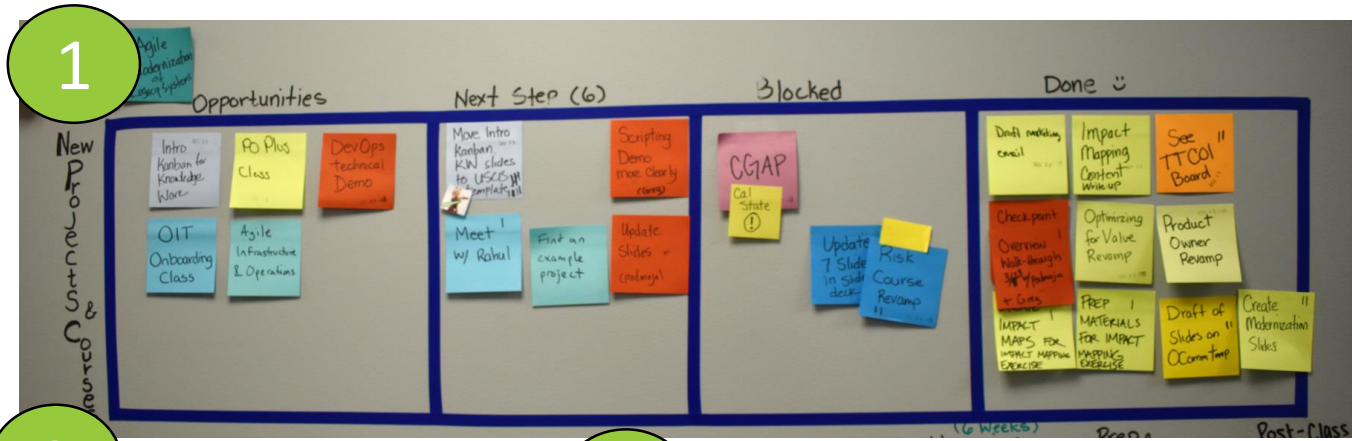


# Visualize Work



# 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



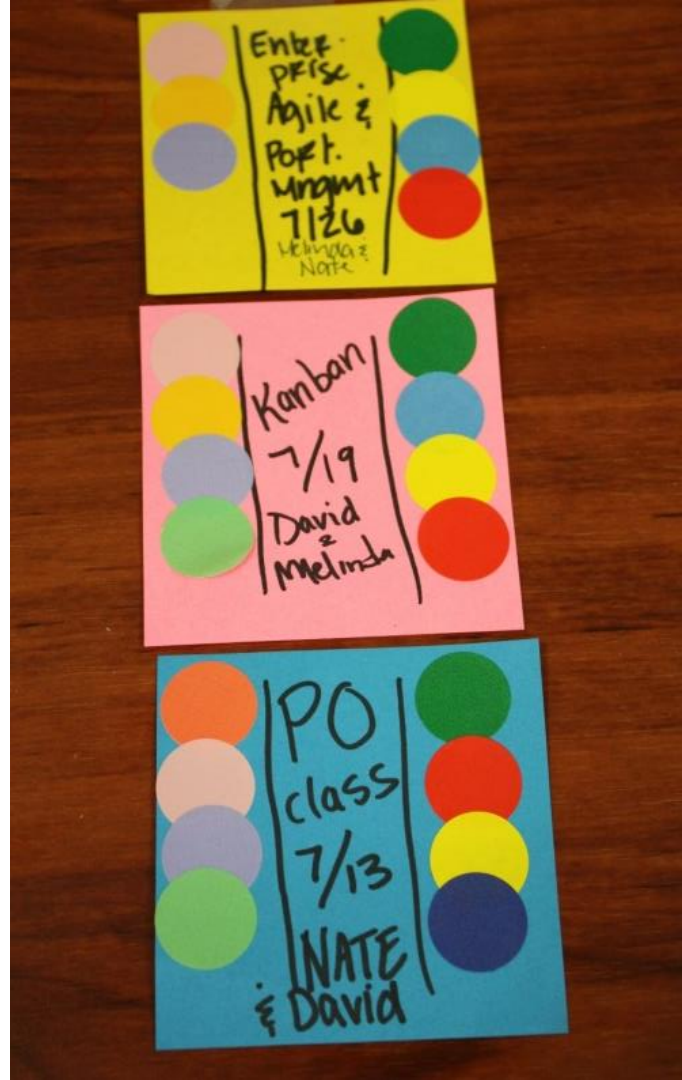
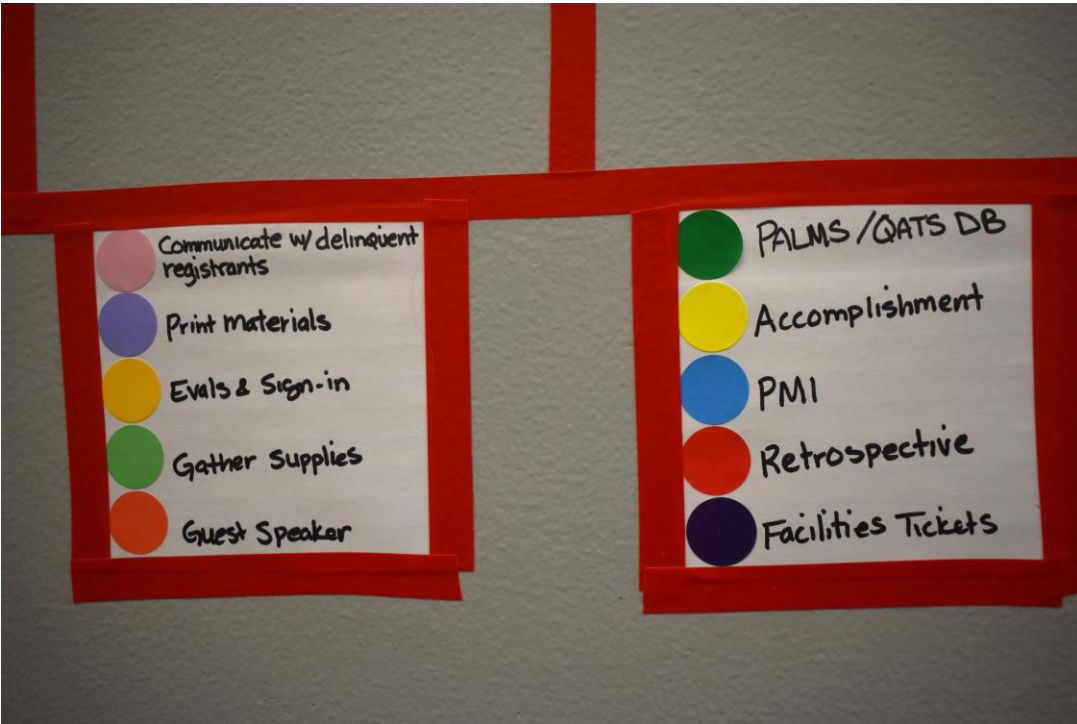
- Classes are all fixed-date delivery items.
- We track classes 6 weeks out from the current date
- 4 columns:
  - Upcoming (backlog)
  - Prep & Deliver
  - Post-Class Activities
  - Done (cleared at the end of the month)
- Two types of classes – QATS & Other





# Non-Sequential Tasks

## Ticket Design





# Limiting WIP

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





# Board 1: Limiting by column

The image shows a Kanban board with several columns. The top row has columns labeled 'Opportunities', 'Next Step (6)', 'Blocked', and 'Done'. The 'Next Step (6)' column is circled in white. Below this row, there are more columns labeled 'In Progress (2 per person)', 'Blocked (most have 1)', 'DONE', 'Upcoming Classes', 'Prep & Deliver', and 'Post-Class Activities'. The board is filled with various sticky notes, some with images of a dog and a baseball. A white circle highlights the 'Next Step (6)' column.

## Next Step (6)

Move Intro  
Kanban.  
KW slides  
to USCIS  
template



Meet  
w/ Rahul



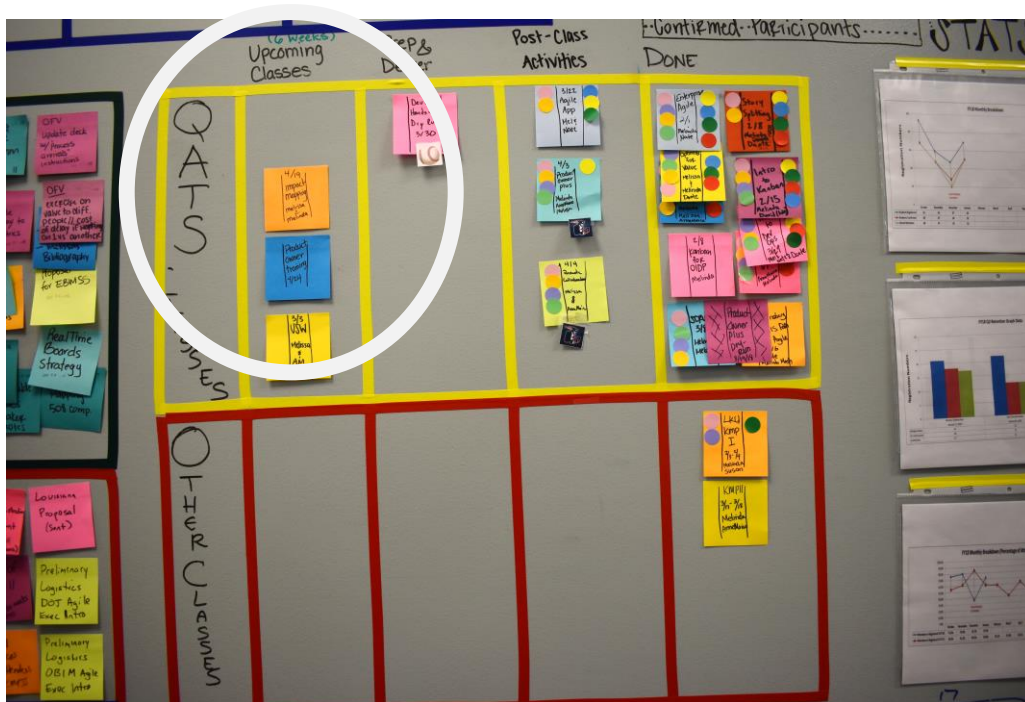
Find an  
example  
project

Scripting  
Demo  
more clearly  
(Greg)



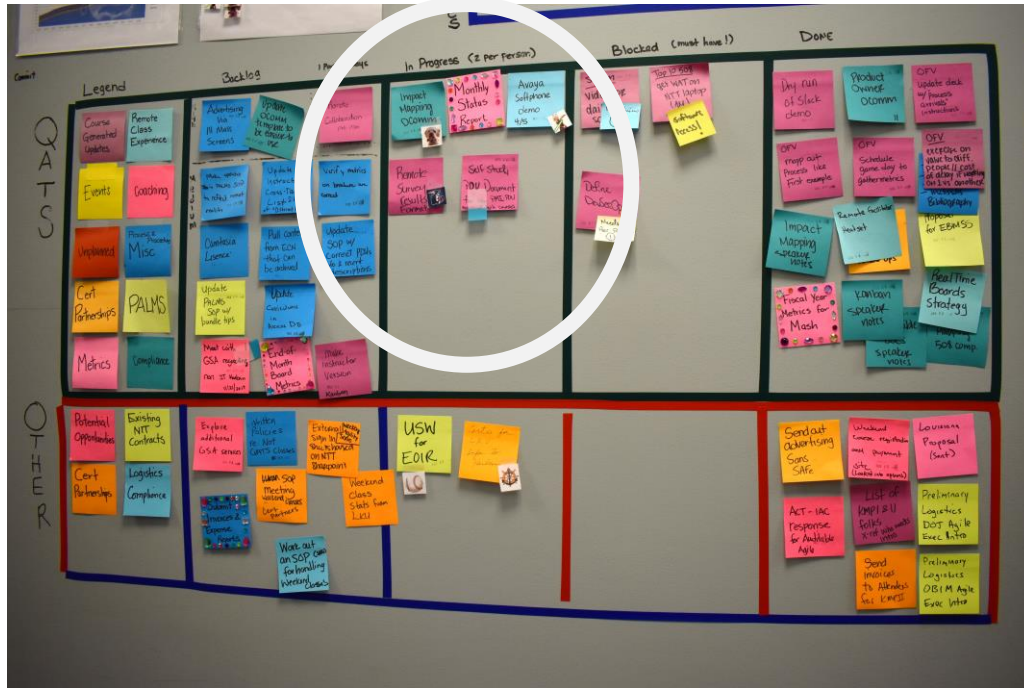
Update  
Slides  
(padmaja)

# Board 2: Limiting by time





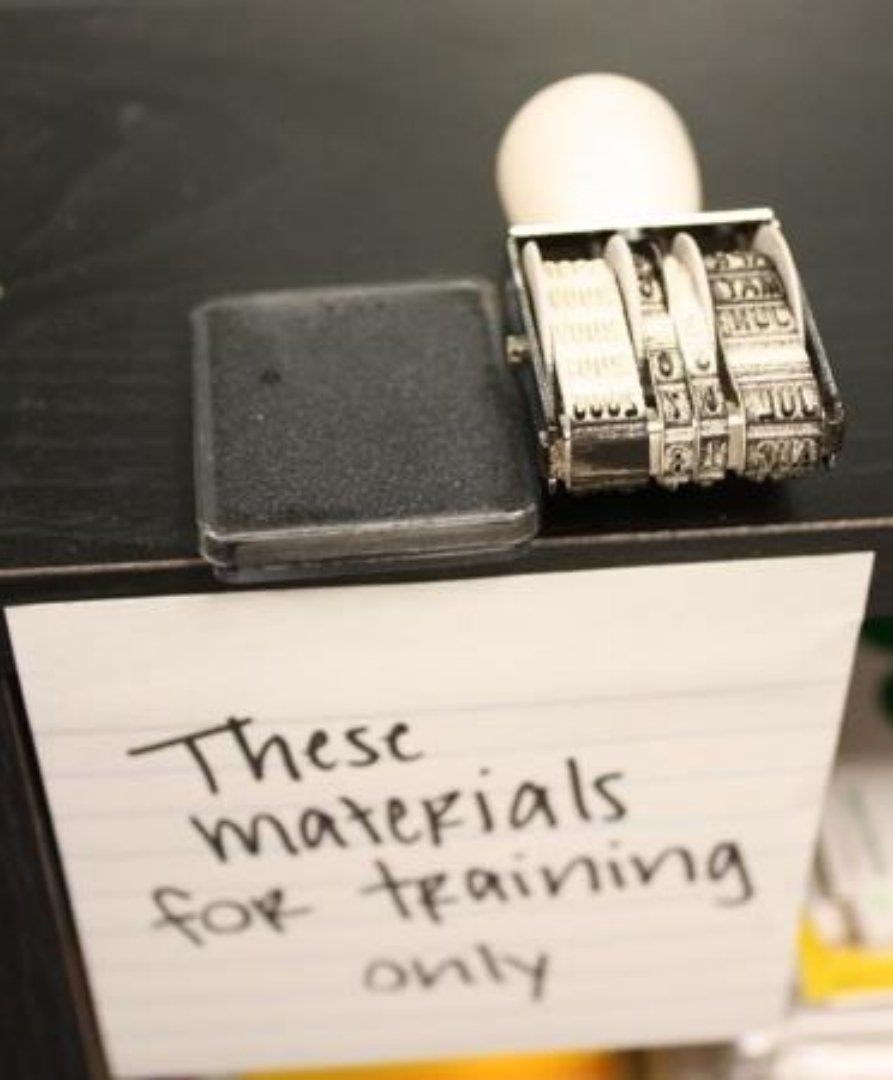
# Board 3: Limiting by avatar



# Collect Measurements

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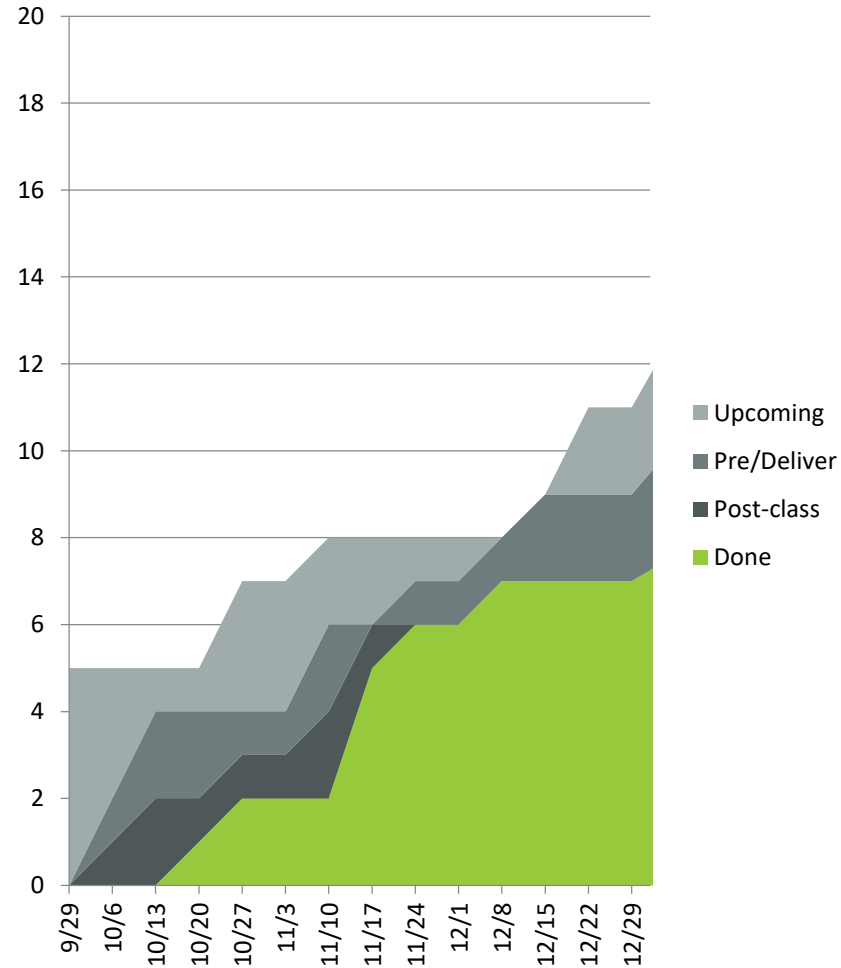
These  
materials  
for training  
only

# 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



# Class Delivery Board CFD

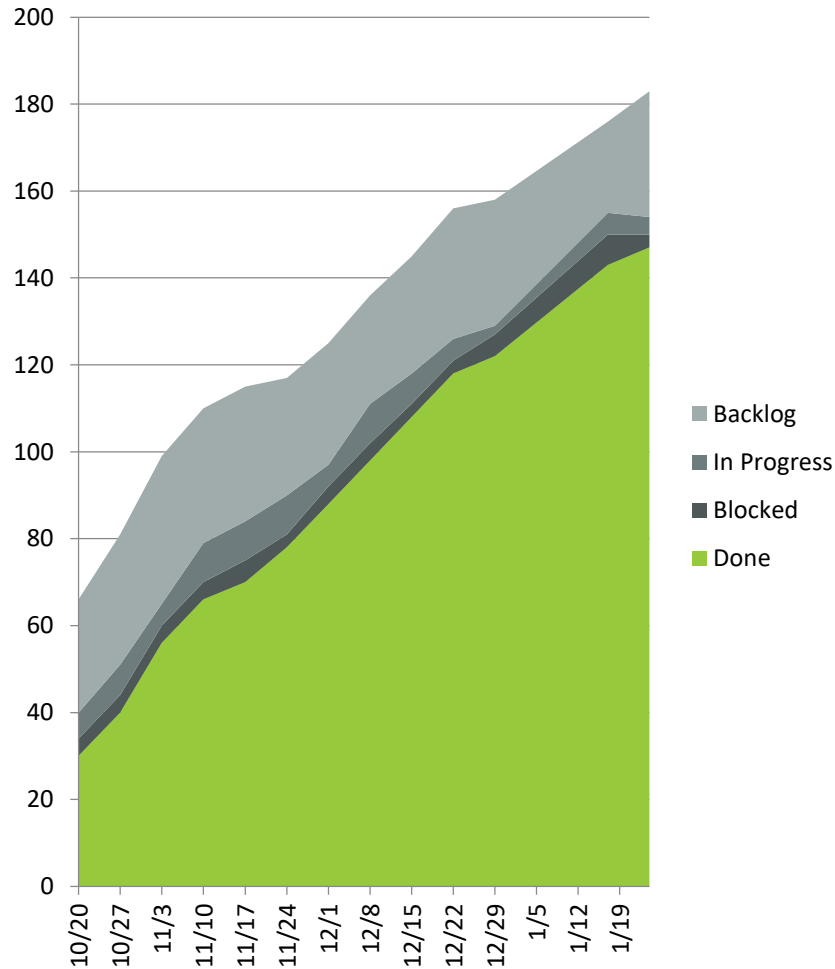


## Cumulative Flow

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



## Other Work Board CFD

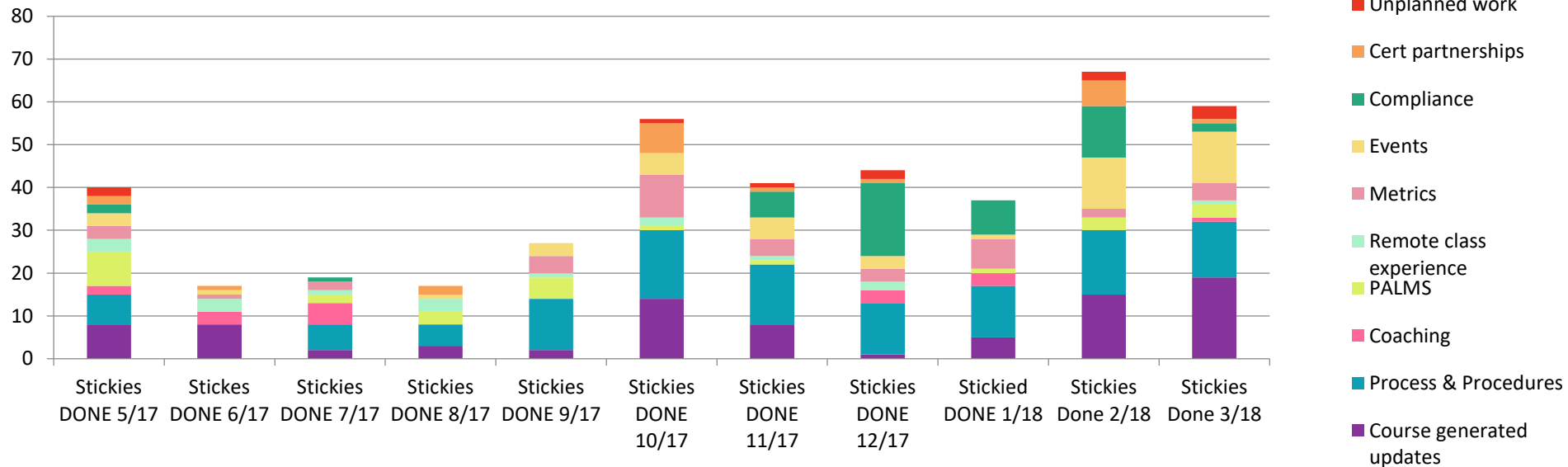


## Cumulative Flow

- 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?

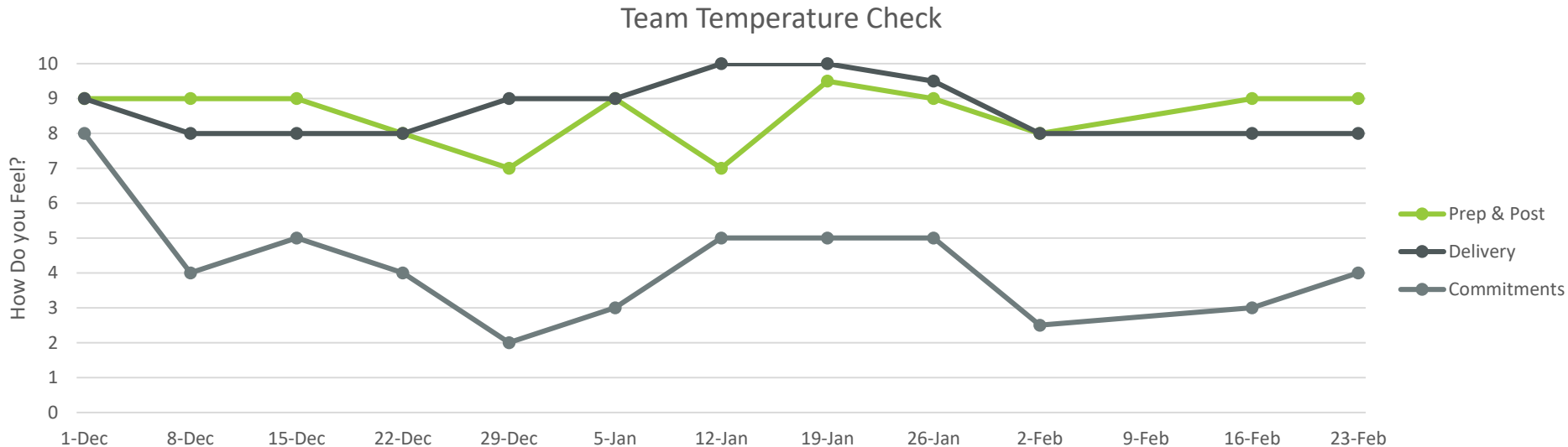


- Are we doing the right stuff?





# 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

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# Constant Surprises... Unexpected Requests

MONTHLY PLANNER

APRIL

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		3	4	5	6	7
		PROJECT DAVEY PLUS	Remote Collaboration		AM OUT →	
	10	11	12	13	14	
	PEOPLE STICKY SWARM			AM OUT →		
	17	18	19	20	21	
			Leadership Retreat		CSM	
	24	25	26	27	28	
	Product Owner Training					
	30					

NOTES:  
Deadline for Engineering conf. 4/10  
140,000 ON MINDS

MONTHLY PLANNER

May

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
		Purple Sticky Swarm		User Story Workshop		
	7	8	9	10	11	12
		Room 8008 Enterprise Agile & Portfolio Mgmt				Intro to Kanban
	14	15	16	17	18	19
				Room 8008 Intro to Kanban		
	21	22	23	24	25	26
		Room 8008		Room 8008		
	28	29	30	31		
	Memorial Day			Room 8008		

NOTES:

MONTHLY PLANNER

June

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	
3	4	5	6	7	8	9
		Room 8008 Purple Sticky Swarm		Adobe Connect Patterns of User Story Splitting		LKA KMP1
10	11	12	13	14	15	16
LKA KMP1		Potomac Room Accessible Documents		Room 8008		
17	18	19	20	21	22	23
		Room 8008 Optimizing for Value				
24	25	26	27	28	29	30
		Room 8008 Intro to Agile Using Scrum		Room 8008		

NOTES:

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

June		
Tuesday	Wednesday	Thursday
5 Room 8008 Purple Stickies Swarm	6	7 Adobe Connect Patterns of User Story Splitting
12 Potomac Room Accessible Documents	13	14 Room 8008
19 Room 8008 Optimizing for Value	20	21
26 Room 8008 Intro to Agile Using Scrum	27	28 Room 8008
NOTES:		

# Student Retention & Satisfaction Metrics

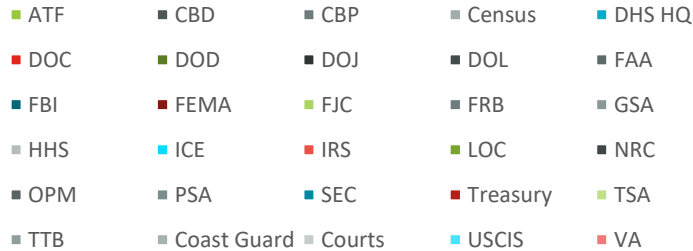
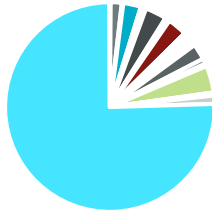
- Some students register and don't come
- Most students are highly satisfied
- So why don't they come?





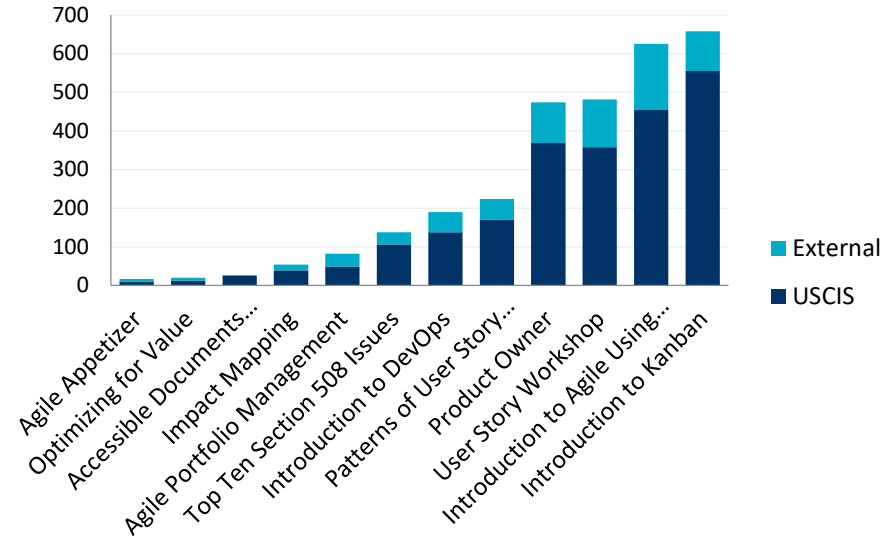
# Where are we **now**?

Students by Agency



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

Total Students Trained per Class



- ~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?



# Kanban calms the chaos™

