

# From the Digital Products Group UX Blog: Feedback in the field from K-12 teachers at NCTM

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Posted by [Andrea Chin](#) Apr 10, 2017

At this year's NCTM (the National Council of Teachers in Mathematics) conference, REDACTED DESIGNER and I ran a user research study with 10 K-12 math teachers on how they sequence and schedule lessons, as well as what visual layout would help them find and organize available resources for a lesson. This work helps inform some of the key interaction flows for the K-12 teacher experience in REDACTED PRODUCT, in preparation for upcoming REDACTED PRODUCT'S releases.

One of the joys of qualitative feedback is that it's easier to discover unexpected insights that you would've never thought to ask in the first place. Some of those insights have to do with why a particular feature might be especially important to a teacher, or how the same teacher might approach the same workflow differently depending on the context.

I've heard consistent feedback on the growing importance of using videos to help illustrate a concept, but not about how teachers envision video content to appear on their course websites. External links to videos hosted on other websites are much more problematic for K-12 teachers, even more so compared to higher education instructors. Some of the teachers in this study, without prompting, explained why they would hope that any external video links that they'd add to their course website would open within an embedded video player app in REDACTED PRODUCT, instead of opening another window. For classrooms borrowing space in a computer lab or with a 1:1 tech setup where every student has a tablet or Chromebook, there's a high risk that students will be distracted if they can go to another website, especially if it's Youtube. Restricting them to materials and activities hosted on just one website prevents younger students from rabbit holing away from the current lesson.

Another interesting finding (at least to me) - some subjects such as math, which require more frequent reteaching, have daily homework, while homework may only be assigned weekly other subjects such as reading or social studies. Depending on what subject they teach, or if a cohort of students need a lot of reteaching, it may be preferable to write upcoming assignment and test dates on the classroom whiteboard instead of using a digital calendar to assign due dates in advance. Using the REDACTED PRODUCT calendar for lesson planning and sequencing, however, seemed more realistic as a planning tool regardless of subject taught.

We're still synthesizing all of the findings, but here are some of the more noteworthy comments from our participants:

## Context of use

## How standards and testing influence lesson pacing - and why changing the courseware module sequence is important

Participant 3:

"Our district has a pay for perform - as long as you score above the district average - it's a 51% passing rate with the curve..I literally have to plan by seeing what (standards) are being tested at what time. Sometimes the subject order in a book isn't how I would naturally teach things. Things don't flow as nicely. Our spring exam covered only 2 major subjects - **you don't want to teach to a test, but your salary depends on it.** (Therefore) one thing I'd wonder is if I could move around the modules on this list of available resources."

## How to determine how to schedule individual lessons and figure out appropriate pacing for module

Participant 10:

"I'm on a 90 minute block schedule, so many times with pre-AP (geometry sections) I can cover 2 lessons. They're pre-AP and should do the homework. I'll look at my 2 lessons. It is based on my children every year - this class can handle 2 lessons together and do their homework. There's a higher probability that I'll do multiple lessons based on the kids' ability. For the lower performing kids, I might do lesson 1 and edit a few things that are too complex for them, or I'll leave them for bonus if they want to try them."

It depends on the makeup of my kids. In my grade level sections, we put the higher performing grade levels together and lower performing grade levels together. Some might rise up, but they might fall between the cracks in a class that moves too fast for them. So the editing is fairly sparse for me - I always want to give them enough opportunity, but there's the realization that you don't want to overwhelm them if (the material) is too abstract. That's what I mean about the editing - we don't want to show them a problem where they don't have the skills."

## Feature Requests

### Why teachers would want a feature that blocs off non-school days when scheduling lessons on the calendar

Participant 9:

"It'd be so cool if I could block off holidays by default, and Saturday and Sunday. Don't let me accidentally put anything on that day. Maybe there could be a button where I could input what the holidays and noninstructional days are."

## **Why teachers would want a feature that warns them if a lesson is taking too long on the calendar**

Participant 6:

"What I'd like to see is that the (metadata on the module) saying that it's scheduled 15 days becomes red, warning you. And then when you hover over it, it says your (remaining) scheduled lessons are over the length of your scheduled module.

What I'd like - if I've scheduled the module for 15 days and I'm at 13 days by lesson 4, but I still need 2 more days to cover lesson 5 - the lesson could say that you're 2 days over (on lesson 5) and then let me go back so that I could shorten the upcoming lessons/modules and make it fit."

## **Why being able to share a calendar event with students with just one click would be a huge win for teachers**

Participant 4:

"I love the 'Show on Student Calendar' (option when creating a calendar event) - with one click, it'll go to both of us, which is easier than my current view in Edmodo."

## **Why it's important to be able to print assignments and practice quizzes from a course, even when students are used to accessing these online**

Participant 3:

"I'd like to print individual resources and assignments - many of our kids have a phone but not a computer. They'll say it's too small and it's hard to complete some of the homework online on a small screen."

REDACTED COLLEAGUES - I'd love to hear your observations from the conference as well!

73 Views on the intranet

Tags: nctm, usability testing, user testing, user experience research, field research, k-12 user research

