**Workshop: Mathalicious Curriculum**

**Note: In this session we provided teachers with one-year access to the lessons available on Mathalicious.com. As delivered, the session included a sample lesson that was publicly available on the Mathalicious site at the time, but Mathalicious periodically changes which lessons are available without a subscription. If you would like to walk through a sample Mathalicious lesson with teachers without a subscription, select an appropriate lesson from those that are publicly available:**

[**https://www.mathalicious.com/lessons/search?lesson[public]=1**](https://www.mathalicious.com/lessons/search?lesson%5bpublic%5d=1)

**and adapt the guide as needed.**

**In order for teachers to more fully experience the lesson as students during the session, you may want to avoid selecting a lesson that requires students to gather outside materials. Most, but not all, Mathalicious lessons include a lesson guide; selecting a lesson that includes a lesson guide may spur more discussion of lesson planning using Mathalicious.**

**If you have full access to Mathalicious and would like the original facilitator guide based on the *You’re So Fined* lesson, please email Martha Mac Iver (**[**mmaciver@jhu.edu**](mailto:mmaciver@jhu.edu)**) or Tristan Hann (**[**tristan.hann@jhu.edu**](mailto:tristan.hann@jhu.edu)**).**

**Objectives**

The goals of this session are to:

* Connect teachers to the Mathalicious curriculum
* Experience a Mathalicious lesson

**Guiding Questions**

* How can we increase students’ exposure to cognitively demanding real-world mathematical content with Mathalicious lessons?
* What does a Mathalicious lesson entail (planning, teaching, reflecting)?

**At a Glance**

* Activity: sample lesson
* Go through lesson guide and guiding questions provided by Mathalicious
* Browse Mathalicious lessons
* *Optional:* Provide Mathalicious.com login information for teachers

**Materials**

Student handout for selected sample lesson, downloaded from Mathalicious

Lesson guide for selected sample lesson, downloaded from Mathalicious

Video/audio capabilities for media portion of selected sample lesson

**Procedure**

**Set-up:** Navigate to the selected sample lesson page at Mathalicious.com. Click on the “Teach” tab. Ensure that sound is working and set at the appropriate volume.

**Introducing the Session’s Focus: Mathalicious (5 minutes)**

Facilitator asks teachers if any of them are familiar with the website Mathalicious.com, and if so, if any have utilized the curriculum before. If any teachers respond affirmatively, facilitator asks if they would like to share what their experiences have been with Mathalicious. If no one volunteers or if no teachers are familiar with the website, facilitator explains that Mathalicious.com provides educators with engaging, real-world lessons that are intended to challenge students to think critically. **(4 minutes)**

Facilitator distributes the printed student handout and lesson guide to teachers. Facilitator informs teachers that they are going to experience a Mathalicious lesson first hand, followed by an opportunity to look through the Mathalicious.com lesson database. **(1 minute)**

**Activity: Sample Mathalicious Lesson (35 minutes)**

Facilitator informs teachers that he/she is going to be jumping back and forth from the role of the “teacher” to the PD session facilitator, and that, likewise, teachers are completing the activity as “students” while also considering the tasks from the perspective of a teacher. **(1 minute)**

Facilitator plays the brief video clip on the lesson’s “*Teach*” tab, and informs teachers that with their students they could spend a couple minutes discussing questions prompted by the video clip. Facilitator prompts teachers to work through the questions in Act 1 of the lesson with a partner. **(7 minutes)**

In the lesson’s *“Teach”* tab, facilitator clicks on Q1 to show teachers the results for the first question. Facilitator informs teachers that this is a moment where one would elicit student thinking, by asking (for example) whether the results are what students would expect. **(2 minutes)**

Facilitator (as teacher) clicks to Q2 on the *“Teach”* tab and uses the guiding questions on the lesson guide to facilitate a conversation among the teachers (who are role playing students) about question 2. (**10 minutes)**

Facilitator has teachers read through questions 3 and 4 with a partner, prompting them to discuss the value of each question. Facilitator prompts teachers to think about “*what are the key insights to be gained from each question*?” **(7 minutes)**

Facilitator prompts teachers to read the remaining question(s) and discuss with a partner their thoughts on the final question(s) and the lesson as a whole. **(8 minutes)**

**Planning for a Mathalicious lesson (20 minutes)**

Facilitator prompts teachers to look through the lesson guide, paying close attention to the Guiding Questions and Deeper Understanding sections that many guide include below student questions. **(5 minutes)**

Facilitator invites teachers to discuss the ways in which they see this type of lesson being useful to students, and unpack any obstacles/problems they foresee. **(7 minutes)**

*Optional:* Facilitator informs teachers that they have a one year subscription to Mathalicious.com. Facilitator gives teachers the remaining time to browse the Mathalicious lesson database and identify a lesson they are willing to try in an upcoming unit. **(8 minutes)**