

2015 NCTM Regional Conference –  
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AURASMA – Integrating Augmented Reality

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## **Aurasma – Part One – Aurasma On Your Mobile Device**

Before you begin using Aurasma, you need to know some simple vocabulary associated with this application. Here you go:

Aurasma – Name of the app you need to install on your iPhone or iPad

Aura – Presentation that you create

Trigger Image – Image file that you scan with your mobile device to start your Aura

Overlay – An image or video file that results from scanning your trigger image

Channel – Place where you store all of your Auras and what you should share with your students so that they can view all of your Auras. Create one for free on your device!

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Here is how you can create an Aura on your iPhone or iPad:

1. Open up the Aurasma app. The default setting for the app puts it in scan mode. Simply press the Aurasma icon (it looks like the letter A) and you will be directed to the main screen. On the bottom of the screen, you will see five icons. In order, they are EXPLORE, CREATE, SCAN, SEARCH, and FOLLOWING. Press the CREATE icon (+) to create an Aura!
2. Select DEVICE and the (+) sign to select/create an overlay for your Aura. Remember the overlay is what you want your audience to view once they scan the trigger image. It can be an image, video, PDF, etc. For example, you could begin class by writing a problem on the board. A group of students can take a video of themselves solving the problem to use as the overlay. Once you have created your overlay, give it a name.
3. Select your overlay. You will then be asked to take a trigger image to link to your overlay. Remember that the trigger image is what your audience will have to scan to view the Aura that contains the overlay.

Using your device's camera, take a picture! Not all pictures make effective trigger images. Images with more resolution and with more "character" usually work better. Images just need to be unique enough to be scanned. Practice makes perfect here. The slider on the screen serves as a rough guide as to how good your trigger image is.

4. Position your overlay how you would like it to appear and then name your Aura. If you have created a Channel, you can add your new Aura to it. Otherwise, this screen will also allow you to create a channel. If students create their own channel, they will have to share it with classmates so that they can view their Auras. I will usually create a class Channel for students prior to class to make things easier.

5. Go to the SCAN icon (looks like an “A”) and try it out!

### **Aurasma – Part Two – Creating Auras Using Aurasma Studio**

LINK: <https://studio.aurasma.com/login?msg=1>

The Aurasma Studio is an alternative way of creating Auras. This is a desktop application that is more time consuming but does provide some neat additions for your Auras. You use the same username and password to login to the Studio. Once there, you can create Auras in much the same way. One negative is that all trigger images, videos, or other files that you will be using in your Auras must be uploaded onto your PC.

To create an Aura on the studio, simply follow the steps below:

- Upload a trigger image.
  - This image must be a file on your computer. Just like the mobile version, not all images work. If your selected trigger image is not compatible, you will be asked to use another.
- Upload overlays
  - These again are files from your computer. A nice feature of the Aurasma Studio is the “Actions” feature. An example of an action is while an Aura is playing, you can double tap the screen to make the Aura full screen, link to a URL, or to a video you have uploaded.
  - We have found it helpful to create a YouTube channel when using video. If you use “ACTIONS” in your Auras, it is helpful to have a URL link. For example, you can create an Aura where scanning the trigger image displays a math problem. Double-tapping the screen sends you to the URL where students can watch a video that demonstrates the solution.
- Finalize your Aura
  - Here you can preview your Aura before it is saved. I always perform a trial run after I have saved the Aura. The Studio takes a while to get used to, and the process is more time consuming than the iPad app. However, if you are planning on using the Auras for multiple classes, teachers, or even school years, the Studio is worth the time.

## A Major Disadvantage:

A major disadvantage to Aurasma is that any Auras that you create on your iPad and store in the app are NOT available in the Studio even though they were added to your Channel. Therefore, if you create Auras in class, students will not be able to add any actions to them. So if you are looking to create some quick Auras, use the app. If you are looking for more detailed, long-term Auras, you may want to use the Studio. However, using Studio on your iPad (via a web application), helps alleviate this.

## **Aurasma Applications – Seven Ways To Use Aurasma With Your Students**

### 1. Personalized Learning – Test Review Session

Create an Aura for each learning target for your next test. When class begins, ask students to self-rate their understanding of each learning target. Students can select the order in which to review. Creating multiple Auras for targets that many students struggle with can help students get extra practice. If you save your trigger images, you can easily share your review with other teachers in your department!

### 2. Personalized Learning – Choose Your Own

Activating prior knowledge is a nice way to start a unit. Before class begins, ask students to view an Aura or two that helps to set the stage for the next unit of study. Prerequisite skills, formulas, definitions, or applications can be presented here. Increase student choice by allowing them to select with or without an explanation of what they will be seeing.

### 3. Problem of The Day – Hallway Problem

Studying for AP Calc on a block schedule? Create a problem of the day to post in your math department's bulletin board. Place your trigger image next to the topic or learning target and keep these review problems up for students to practice.

### 4. Student-Led Instruction – Gallery Walk

Instead of creating worksheets for solving equations, have students create their own Auras. Students could write their own problem, and use a picture or a video of their solution as their overlay. For the remainder of class, have your students take a gallery walk and solve away! Students will be have access to not-so-nice answers and opportunities to critique each other's work.

### 5. Math Club – Announcements

Create an augmented reality hub for your math club!

6. Math History – Create your own museum

Bring famous mathematicians alive! By using Aurasma Studio, you can link your Auras to YouTube or other videos. Not a bad project idea either.

7. Alternative Assessment – Portfolios that tell a story

Think of the possibilities when students can write a paper where the reader can scan pictures that link to video or other media samples of the students work.

### **Sample Auras and Sharing Information**

If you would like more information on how we use Aurasma, please email us at [kujawab@elmbrookschoools.org](mailto:kujawab@elmbrookschoools.org) or [tothj@elmbrookschoools.org](mailto:tothj@elmbrookschoools.org)