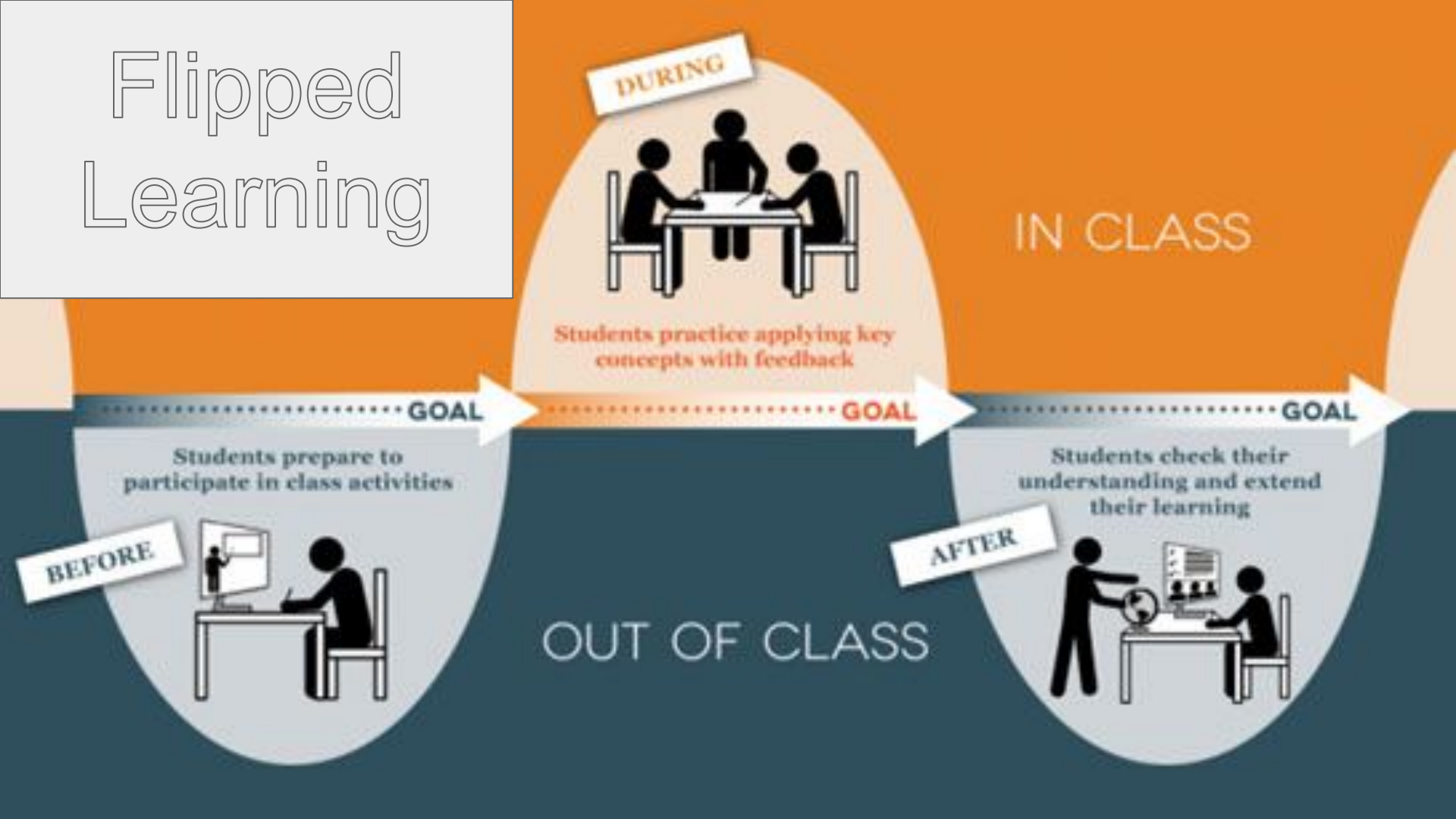
Interactive Classroom

What, Why, How

The Do’s and Do Not’s

Flipped Learning



What is the Flipped Classroom

- Students view “lecture” in the form of short videos or readings prior to class.

- Class time is used to erase misconceptions, practice problems, hands on activities, group work.

Typical lesson presentation is FLIPPED upside down.

Why Flip

- Increase Student Contact (One on One)
- Increase Student Motivation
- Increase Student Time on Task
- “Pause”, “Rewind” and “Rewatch” Option for Students
- Review Capabilities
- Student Self-Pacing
- Educational Responsibility
- Reduce or Eliminate Homework Frustration

How do we flip?

- Videos (embedded quizzes, google form after video, checking for understanding the following day).
  - Embedded links (to prerequisite material/videos).
  - Embedded quizzes,(Ensure students complete the video).
  - Check for understanding the next day (through quiz/practice). **NSPIRE NAVIGATOR!**
- Platforms
  - Quiz (Edpuzzle, Quizizz, Kahoot, Delta Math)
  - Recordings (Smart Recorder, Camtasia, Screencastify)
  - Practice (Delta Math, Quizizz, **MathNspired**)

Not all flipped classrooms are the same! Celebrate your differences!

The ups and downs

- What has gone oh… so… wrong…
  - Notes
  - Administrative/Community Resistance
  - Video “Grading”
- What has gone right!
  - Informal Assessment
  - Students Love not Having “Homework” / Not Bored in Class
  - One-on-One Attention
  - Student Knowledge Retention
  - Review
- Tips and Tricks (remember every group of kids is different)

Common Misconceptions

- The students are expected to teach themselves.
- It only works for some subjects.
  - Math
  - Science
  - English
  - Physical Education
- It’s New.
- You have to record your lectures.

Common Misconceptions

- Teachers have to create their own content.
- It’s exclusive of pedagogical strategies, other than lecture.
- The flipped classroom is uniform.
- There is no evidence that it works.
- The flipped classroom replaces the teacher.

Do

- Make the “videos” relevant and engaging
- Use class time for collaboration, inquiry, discovery,... learning
- Let students “screw around”
- Encourage students to talk (communication is key)
- Allow students to struggle (growth mindset)
- Form an accountability system for watching videos

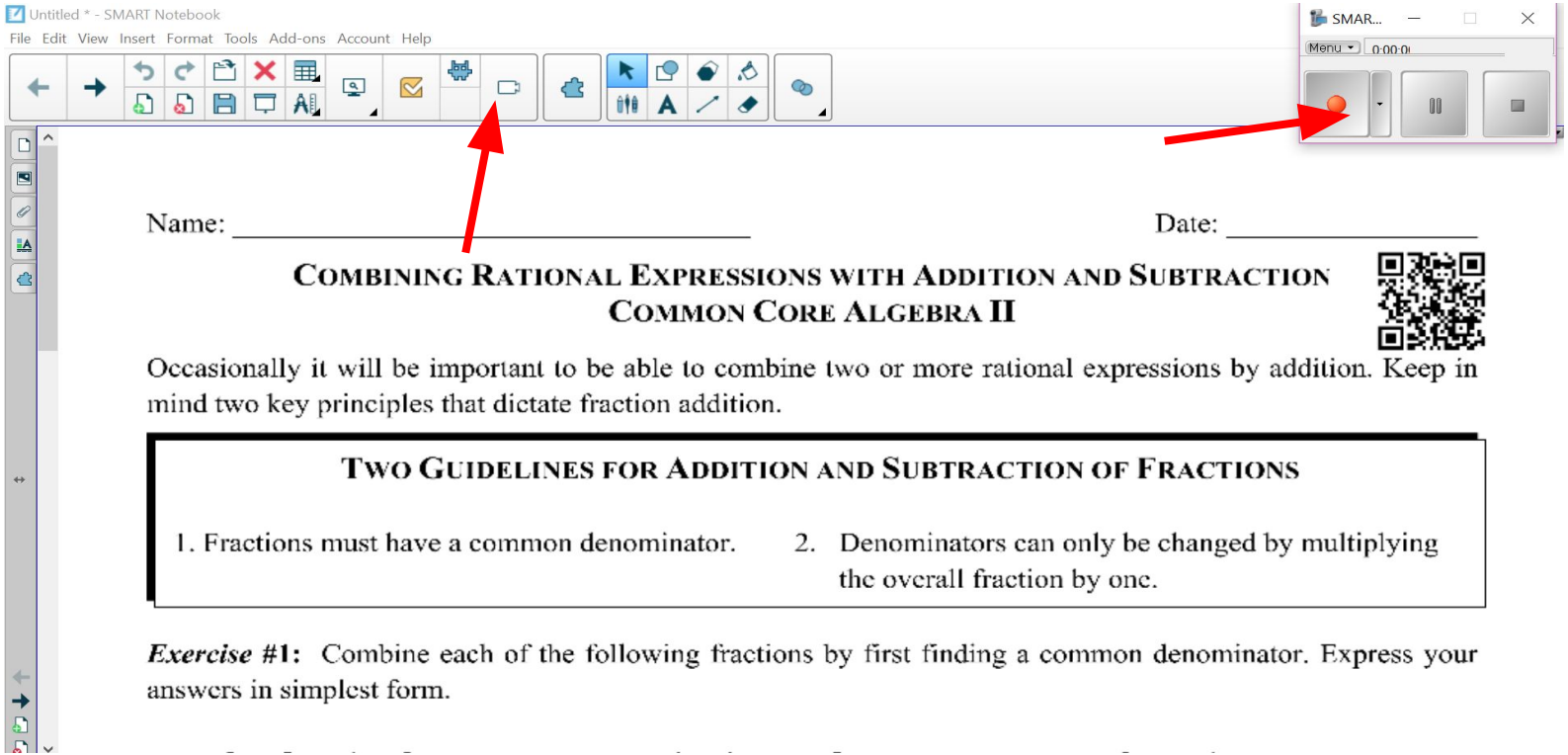
Don't

- Use the classroom time for busy work
- Use class time to grade papers
- Expect students to learn everything from the videos
- Allow students to think it's a novelty
- Make long videos (should be based on class level)
- Give up (give it some time)
- Go "ALL - IN"

How???

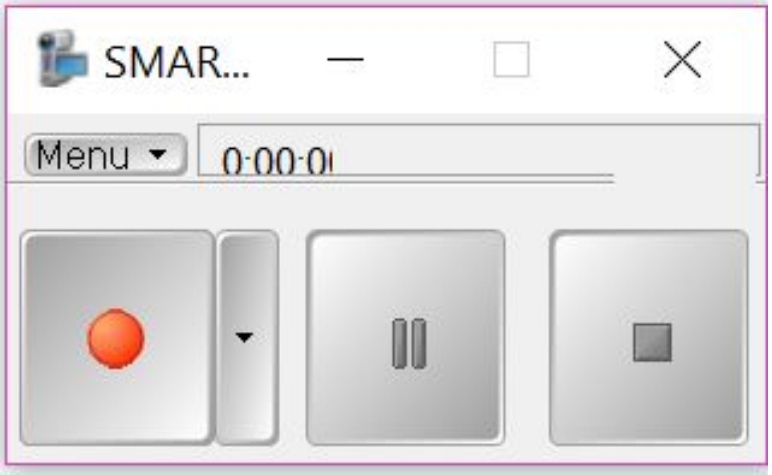
- Technology (Laptop; ipad; phone; SmartBoard; Wireless Mic)
- Platforms (EdPuzzle, Delta Math, Google Classroom)
- Software (Camtasia; Smart Notebook; **Nspire Navigator**)
- It takes TIME! (you will mess up your first video)
- Start Small!

Smart Notebook



Smart Notebook Recorder

FREE if you have Smart Notebook!



Platforms

- You Tube
- **EdPuzzle (let’s take a look)**
- Google Classroom
- **Deltamath.com (let’s take a look)**

Edpuzzle and DeltaMath

Edpuzzle

- Track students video completion
- Insert questions throughout the video
- Search for and import free videos
- Free for up to 20 videos

DeltaMath

- Students can use as review on their own.
- Self Paced
- Explanations and example problems to help students along
- Free!!! ($50 for DeltaMath Plus)

In Class: Check for understanding - Navigator

- Send quick check (Quick Poll) at the beginning of class to check student understanding of content from the video. **(IMPORTANT!!!)**
- Look at student data, and use this as a learning moment to diminish student misconceptions.
- **Allow the data to guide where the in class work will lead.**
- Save your data to your portfolio so that you can track student progress on specific standards.

Live presenter (let the kids lead)

- Let the students be in charge of the classroom discussion (you are simply the guide).
- Peer instruction at its finest.
- Kids get to show off their knowledge
- If they can teach it, you know they have got it!

Data Collection and resources

Data Collection

- Temperature Probes; CBR’s; Pressure Probes
- TI-Nspire
- Real World Data, Hands on Experiments

Resources

- Education.ti.com
- Math and Science Nspired