# Case 2: Drive Higher-Order Thinking with RSA Animation

RSA animation is essentially whiteboard animation. The artist draws pictures on a whiteboard to depict concepts using a combination of words and pictures. If you've never seen an RSA animation, I'd suggest watching "Changing Educational Paradigms" which took a section of Ken Robinson's TED Talk and animated it using this technique.

I love the idea of representing complex concepts with images and words. To do this effectively, you have to really understand the information you are attempting to communicate visually.

While teaching Ray Bradbury's futuristic novel *Fahrenheit 451*, I wanted my students to examine **why** society shifted from reading books and valuing literature to burning books. There is a conversation in the book between two characters in which this shift is explained; however, there are many factors at play and students struggle to understand all of the reasons why society shifted.

In an interview about why he wrote *Fahrenheit 451*, Ray Bradbury said, "I've tried not to predict, but to protect and to prevent." If his mission was to protect books and the ideas in them and prevent people from burning books and devaluing literature, then it's crucial that students understand why book burning (in the novel) became the norm.

I decided to have my students create RSA animation films to portray this shift. I knew creating a film would force them to analyze the text, evaluate the factors at play, and create!

**Step 1:** I asked students to do a close reading of the pages in the text where Captain Beatty explains why society changed. In small groups, they took their annotations and created flowcharts on paper illustrating the different factors that led society from reading books to burning them. I also asked them to include direct quotes from the book to link each image to the text.
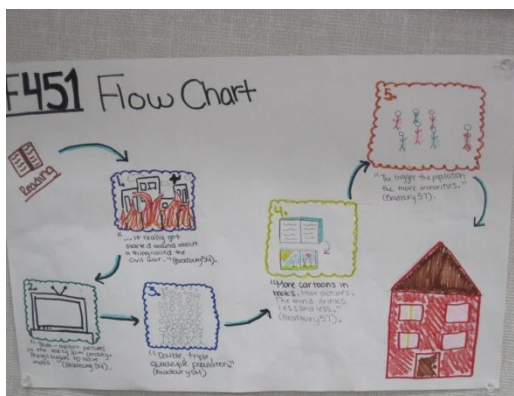


**Step 2:** After creating a flowchart, each group started a shared Google document and wrote a rough draft of a script detailing the transition from reading to burning books. Then one member of the group became the official writer for the group. It was the writer's job to edit, refine and improve the script.

**Step 3:** In class while the writer was working on the script, the other members of the group began the actual RSA animation. One student was the artist and another student filmed the artist as he or she drew. The videos were captured using cell phones then saved in Google Drive.
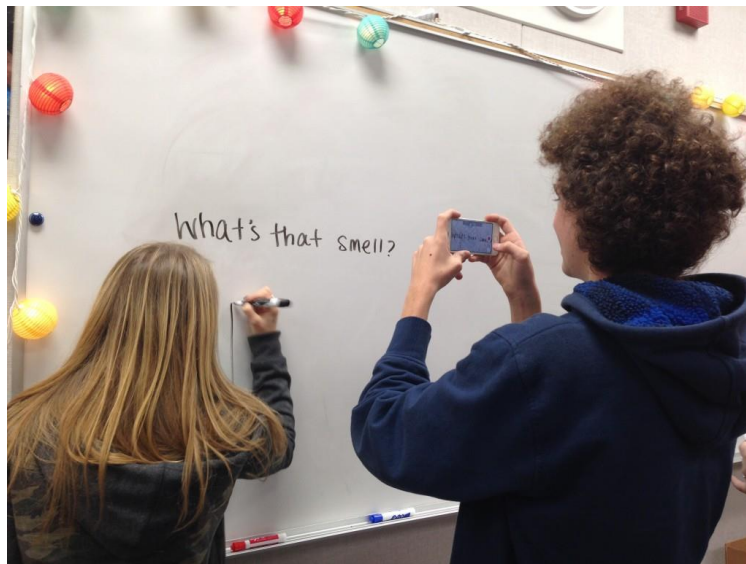


**Step 4:** Once the script was complete, students uploaded the video into iMovie and selected "Modify" > "Fast Forward." This allowed them to take a 10-15 minute video of the artist drawing and condense it into 2-3 minutes.

**Step 5:** Here's the tricky part! Once the group knew how long the video would be, one group member had to record a reading of the script and attempt to match the events in the script with the scenes being depicted in the video. This took some practice. Then students then uploaded their audio and layered it on top of their video in iMovie.

**Step 6:** Each group published their RSA Animation video to one of their group member's YouTube channel. Note: You can ask students to make the video "Public" so anyone online can view it (my preference) or they can post it as "Unlisted" which means only people with the link can find it.

**Step 7:** I used a Google Form to collect and organize the videos. Each group had to submit the Google Form below with their group's information and the URL to their video. So all I had to do was open the spreadsheet where the information was stored and click on their URLs to quickly view the videos!

I love how creative yet challenging this assignment was for my students. They had to employ higher-order thinking to successfully accomplish each task required to create the video. It was fun watching them troubleshoot and bounce ideas around. While observing them, I found myself smiling. They are so incredibly creative and resourceful when they want to be! I know my students this year have a much better understanding of why Bradbury's dystopian society destroyed books.