Investigating FLAN - Questions to consider

1) How would you describe the flan you have just tasted? Was it different from what you expected?

dense, surprisingly heavy, burn smell, delicious, eggy, taste like a smore, attractive contrast in color, drippy, vanilly, smooth, syrup, custardy, smell and taste differ

2) How could you relate flan to your major discipline?
Do you see any connections between flan and your discipline?
Broad/narrow terms?

3) How would you engage students within your discipline to learn about flan?

Field	**Content Delivery (How would you provide direct instruction behind the idea of flan?)**	**Activities (What could students then do to reinforce their understanding?)**
Math	calories	calculate calories of portions
Physics	fluid dynamics	different consistency present, extrude through tubes
Chemistry	coagulation	different heats, sugars . . . different recipes
History		
Language	national origin, vocab	read recipe, learn about commands in a recipe

	Content Delivery	Activities
Chemistry	1) Scientific Experiment 2) Chemical properties 3) Scientific method	1) follow recipe and bake flan! 2) analyze/observe flan 3) make predictions/suggestions on how to improve recipe (aka how to improve experiment to get desired results)
Math	1)Using the recipe of flan, create a word problem calculating the ingredients 2)Create a word problem 3) Word problem using fractions 4) Word Problem 5)Manipulating Fractions	1) 2)Given two different rates of production, see which creates more flan in a given amount of time 3)Practicing manipulating ratios within the recipe 4) Find the ratio between two ingredients 5)Doubling/ halving the recipe
Physics	1)Using word problems 2)Using concepts of heat transfer 3)Discuss concepts of volume and density	1)discuss how flan is made 2)shows importance of accurate measurements 3)can discuss sources of error
English	1)Give students a reading on Flan 2) Have students read a recipe of flan, then compare with the real thing 3)	1) Have them do a crossword puzzle on the ingredients 2) Discuss differences and reaction, in writing or orally 3) Students will have an added recipe to their knowledge. They can cook it at home.
History	1)Show that with one difference in ingredients can cause a different outcome 2)Research the origin of Flan 3):Give students a memoir from Latin American history (somehow including flan)	1) I would have the students study the relevance of Flan in Latin American culture and how it is celebrated in everyday life. 2) Make 2 Flan's with a slight difference in ingredients to show the significance of " historical action. 3)Read and talk about a Latin American family's experiences, including cultural customs such as food; make flan
Spanish	1) Following directions in Spanish, cooking vocabulary	1)Go on a field trip to the Home Ec room and have students follow a recipe in

	2) 3) bringing in food (like flan) to share as a way of sharing culture 4)	Spanish to make flan. Then eat a cultural desert together! 2) 3)

Using a nonconventional item as your focus

Benefits	Possible Critiques	How would lesson be different?
- Gain/peak interest in something that might otherwise be boring - Provide the unexpected - Do something different to increase attention - Shock value - students already trying to make connections - Stimulate curiosity	- Allergies (depending on what you bring in) - Distractions from original goal - Too much excitement - Build in unattainable expectations - Troublemakers	

Team Practice

Dragon Kite	The Day Gogo Went to Vote	Tapicero Tap Tap	The Cazuela That Farm Maiden Stirred
2 Math 1 Physics 1 History 1 English	2 Math 2 History	1 Math 1 History 1 Spanish 1 English	1 English 1 Spanish 1 Chemistry 2 History

Dragon Kite	
Activities based upon book	Math - making graphs based on flight patterns/height Physics - discussing how air resistance and forces act on the kite History - English -
Types of sources	Primary Source

	Image **Youtube video** **Documentary**
Activities based upon primary source	Math - think about how different shaped kites will fly and then test to see if predictions were correct Physics - how to build a tetrahedron and why they are efficient History - Read about Bell or his actual works English - discuss differences between Bell's view on kites and the main character's
Activities based upon image	Math - find slope of the strings; given some dimensions on the kite, find the rest. Physics - no matter the size or weight of the kite, it still has the same gravity acting on them History - English -
Activities based upon YouTube Video	Math - make a kite and guess flight trajectory Physics - why certain shapes are more efficient for flying kites as compared to others History - discuss how this relates to student's experience with kites- how it is culturally similar or different English - discuss views from kite maker's and that of the main character's
Activities based upon Documentary	Math - Physics -discuss how different formations of a kite are more efficient and why History - write about their experience with kites, how the invention influenced their own lives English -

The Day Gogo Went to Vote	
Activities based upon book	Math - Statistical inferring, plots and graphing based on percentages History - Teach students about the apartheid with this book as the intro

Types of sources	**News Source** **Data** **Image** **Primary Source**
Activities based upon news source	Math - pie charts/ graphs of political demographics as well as voter and population demographics History -current event activity relating it back to the original election of Nelson Mandela (Black South African vs. South American Women oppression)
Activities based upon data	Math - Graphing, percentage changes, generalizing trends History -have students research the political party and their general interests for the election
Activities based upon image	Math - population density in image, demographics History -KWL chart based on the images (answers can be gained from the reading of the book)
Activities based upon primary source	Math - percentage of promises made in speech that were kept, History - compare the speech by Nelson Mandela to the "I Have a Dream Speech" by MLK

Tapicero Tap Tap	
Activities based upon book	Math - The character builds a chair, so I could create math problem in which you have find the amount of wood needed to build the chair History - Spanish - learn about the history of the Spanish civil war, learn some new Spanish vocabulary, learn about traditions like the siesta and the fiesta. English - Incorporate this into lessons involving spanish countries.
Types of sources	**Video/Lyrics -"Last Train to Clarksville"** **Diary - Porte Crayon's Mexico** **Image-picture of a park in Spain**
Activities based upon video/lyrics	Math - Calculate the rate at which the train travels to Clarksville History - Compare and contrast present day music video's to the past. We can debate different inspirations for past and modern genre's Spanish - use the lyrics to discuss travel during the travel unit. English - Identifying the descriptive words that signify visual imagery since as the lyrics are about traveling. We want to find out how the

	singer brings us into his world. For the video, listen to how the singer expresses his feelings through his tone and point to instances of that expression. How does his tone maintains the flow of the music and keeps the listener's interest.
Activities based upon diary	Math - Calculate the number of miles the man traveled throughout his life through Mexico History - Show that this is a historical primary source. I could use the diary of Anne Frank as an example. Spanish - Read an excerpt from the chapter "A New Mexican President, learn about Porfidio Dias English - Writing a journal of own interest and using some of the identified elements of the author in their own writing to demonstrate their understanding of those elements.
Activities based upon image	Math - Calculate the area of the circular benches the people in the park are sitting on History- Show's the class visuals of spanish architecture because the book is more artwork than reality. Spanish - learn about Gaudi's artistic style and other works of art he designed- discuss the colorful style emphasizing curves. Describe the picture in Spanish. English - Discuss how the artist or painter cathes the audience's attention with mood. What did the artist do to invoke feelings of excitement, the weather, people doing their own thing.

The Cazuela That Farm Maiden Stirred	
Activities based upon book	Spanish - Giving background knowledge of vocabulary words from the book Chemistry - making rice pudding;talk about chemical processes occurring in the food; why heat is needed; etc History -a case study on the culture referenced in the book
Types of sources	**Nonfiction - What Einstein Told His Cook** **Fable - Little Red Hen** **Case study - Soya, Culture and International Food Aid** **Web resource**
Activities based upon nonfiction	Spanish - exploration of common Spanish foods Chemistry - page 10- crystallization process in refining sugar History - importing taxes, American diplomacy with other countries,

	which countries commonly import which foods
Activities based upon fable	Spanish - minor historical introduction to wherever the Hispanic setting takes place Chemistry - chemistry of transformation of seed to final product (baking-why yeast is used) History - connect it to the populist movement
Activities based upon case study	Spanish - Research of Nicaraguan homes and family life, largely including cooking/food. Chemistry - protein/chemical composition in meat vs soya (pg 98) History - research the history of Nicaragua and the prevalence of hunger throughout the years
Activities based upon web resource	Spanish - some form of low-scale research project; looking into small-scale Spanish farms Chemistry - environmental protection/science; chemistry of food production History - vocabulary lesson