

NOTE: These ideas are the product of ideating around California's grade level science and social studies content standards. This list is not comprehensive. Rather is it a representative sampling of what will be offered in my book: Classroom for the Conceptual Age: A Developmental Approach to Design Thinking coming spring 2013.

Pre- Kindergarten and Kindergarten

How might we be reminded to wash our hands before snack/lunch?

How might we have more fun during our clean-up process?

How might we organize materials (in room, in desk, at table) so we can find things faster?

How might we learn to share playground equipment more fairly?

How might we find ways to take turns?

How might we provide more comfortable seating for ourselves during assemblies in the gymnasium?

How might we guarantee the safety of our pets?

How might we be reminded to take things home every day? Bring things back in the morning?

How might we make friends with new students?

First Grade

How might we organize materials (in room, in desk, at table) so we can find things faster?

How might we learn to share playground equipment more fairly?

How might we provide more comfortable seating for ourselves during assemblies in the gymnasium?

How might we keep our pets safe at home? In the park? In the car?

How might we create a pet hotel to keep our pets when we are away?

How might we find a way to ask a question when the teacher (teacher aide) is busy?

How might we speed up the learning of our addition and subtraction facts?

How might we design a new kind of timepiece so we can tell the time more easily?

Second Grade

How might we improve our understanding of our friend's mood?

How might we improve the learning our times tables experience?

How might we help to conserve water at our school? soil?

How might we help with a litter problem at our school?

How might we honor and thank American soldiers?

How might we assist younger readers at our school?

How might we improve getting school supplies, books, homework and lunch to and from school every day?

How might we improve the soil at home or at our school?

How might we improve the backpacking, hiking, or orienteering experience?

Third Grade

How might we improve the traveling to another planet experience?

How might we improve the space suit worn by astronauts?

How might we better remember new vocabulary words?

How might we remember to add details to our writing?

How might we make traveling in a car with our younger siblings more enjoyable?

How might we improve the going out to a restaurant with my parents experience?

I am a school principal, *how might I* construct a map of our school area for the local city council meeting?

I am a scientist, *how might I* turn potential energy into kinetic energy?

How might we determine how much pet food we need to purchase for our classroom pets?

How might we keep our classroom aquarium cleaner?

How might we improve the "being a zoo animal" experience?

How might we find a better way to keep our lunch money safe?

Fourth Grade

How might we better remember our friend's birthdays?

How might we redesign the California flag or State Seal to better reflect new industries or recent history?

How might we create a tour of California that visits important physical areas of the state?

How might we create a tour of California that visits important industrial areas of the state?

How might we create a tour of California that visits important recreational areas of the state?

How might we create a tour of California that visits important historical areas of the state?

How might we use electric circuitry to light our model dream house?

How might we begin to control eColi bacteria found in our creeks and streams?

We are the state government, *how might we determine what new laws are needed and pass a bill through the legislature?*

Fifth Grade

I am a Pre-Columbian tribal member, *how might I create (models of) tools for daily living?*

I am a 15th/16th century ship builder, *how might I design (a model of) an ocean going cargo vessel using only materials available to me?*

I am a 21st Century scientist and inventor, *how might I create a model of a product that will help the population of the planet?*

How might we eradicate our national obesity epidemic?

How might we stop predators from raiding our chicken coop?

How might we keep our pets safe when they are outside?

How might we design a wallet, pocketbook, or backpack that meets our needs?

How might we help people in storm-ravaged areas generate electricity?

How might we improve the 'school day' experience?

Sixth Grade

How might we improve human survival during the Paleolithic Era?

How might we improve modern agricultural processes so that it feeds more people?

How might we improve food storage and food transport systems so there is not so much waste? (Or) How might we avoid wasting food?

How might we prevent loss of life in an earthquake?

How might we improve homes to maximize energy use?

How might we lessen the effects of erosion?

How might we cultivate symbiotic relationships?

How might we hasten the regeneration of renewable resources?

How might we mitigate the number of 'lost and found' items at our school?

How might we improve the progress report/report card instrument used at our school?

Seventh Grade

How might we gauge our community's response to composting? (or community gardening? or shopping locally?)

How might we gauge our community's energy use as compared to a neighboring community?

How might we improve our own understanding of ourselves through our ancestors by tracing our own genetic structure?

How might we simulate the interactions between cells and cellular systems?

How might we empathize with the religious teachings and political practices of Islam in the Middle Ages?

We are modern physicians transported back to Europe in the Middle Ages, how might we eradicate the causes of plague (Black Death)?

How might we empathize with the radical thinkers of the Reformation?

How might we improve the school lunch program?

How might we mitigate the occurrence of bullying on campus?

How might we improve the 'drop off and pick up' at school transportation experience?

Eighth Grade

How might we (as a country) amend the constitution to be more in step with modern America?

How might we (as a country) build a fail-safe voting system?

How might we (as a country) become a nation of 'haves,' instead of 'haves' and 'have-nots?'

How might we (as a country) remain neutral during global wars?

How might we empathize with run away slaves and owners of the underground railway and simulate their symbiotic relationship?

How might we empathize with Northern Generals and Southern Generals as we reenact important battles of the Civil War?

How might we reconstruct the Reconstruction Period?

How might we mitigate the destruction and pollution caused by the Industrial Revolution?

How might we understand the Battle of the Monitor and the Merrimack in terms of density and buoyancy?