

Urban Planning - Class Period 05

Class Goal: Understanding efficient city design

Engineering: Most cities use Urban Planners for city design. A degree in urban planning may begin with or include studies in civil engineering, environmental engineering, and other engineering concentrations.

1. There are three types of zones: residential, commercial, industrial
 - a. The formula that has stood the test of time is 2:1:1. In other words, there should be twice as much residential zone as commercial and twice as much as industrial - or the same amount of residential as commercial and industrial combined.
2. These zones have to be in close proximity so as to reduce commute time.
 - a. In SimCity, Sims who have too much commute time will leave your city.
 - b. More commute means pollution as well as traffic gridlock, etc.
 - c. people want to be able to shop close to home, as well.
3. However, there are reasons to keep some buildings away from others
 - a. Sims don't want to live next to dirty power and factories
 - b. In the game, tenements will develop next to industries that pollute
 - c. Commercial makes a nice buffer between residential and industrial.

I have taught these concepts several ways. I have found that using the "inquiry method", where students discover through their own experimentation, makes the lesson more meaningful and more likely to be remembered.

On the other hand, there is something to be said for teaching the concept of "transfer." This means that students should be able to take a concept I have taught them (like the 2:1:1 formula) and transfer that concept into the reality of their city.

There are lots of articles on city design. Here's an example:

<http://www.standard.co.uk/news/transport/first-images-of-heathrow-city-airport-site-development-released-9608593.html> And you can ask your students to bring in their own articles.

One easy exercise is to ask each student to plan out his/her city on a regular piece of 8 ½ x 11 inch paper. Then have each student pass his/her paper to another student for critique.

1. Is there enough residential area?
2. Is shopping convenient?
3. Is the commute to work going to be too long?

After students have learned something about transportation design, you can have them do this exercise again.

You might want to have your students [read this article about SimCity5](#) and what kinds of cities urban planners designed with it.