LEARNING ECONOMICS 3-14-21

My apologies to those of you who learned all of this stuff in middle/high school but I have found in the past that my students are not always well prepared to learn even after they have been at WWU for a while.

The most important thing to understand about learning is that **you need to know what you don't know** and especially what you don't know although you think that you know it.

The way that you determine if you know something is by testing your knowledge by asking yourself questions.

Reading is a very passive form of "learning" and has the severe problem of lulling you into believing that you are well prepared for the exam because you understood what you read – psychologists call this "familiarity bias". Since what you read was written in English you almost certainly did understand what you read when you read it. But that does not mean that you remember what you read, that you understood it, and that you can answer questions about it. Online materials are even more treacherous.

Cognitive scientists do not believe in multi-tasking. What your brain does when you multi-task is to switch between tasks so that at any instant of time you are thinking only about one thing. So, while you think that you can study while you listen to music, your brain is either listening to the music or studying, it cannot do both things at once.

Cognitive scientists also emphasize the importance of getting a good night's sleep, especially before exams. Do not attempt "all nighters".

Your best study strategy is to work on the Commentaries making flash cards as you go. Use 5x3 index cards – put a question on one side and the answer on the other. (Your answer side can include a page reference to a Commentary.) In these "interesting times" you may have to make your own cards. Use card if you can but otherwise use opaque paper. I would suggest that you should have a card for everything that you would usually make a note on – in the lecture (if only you had one!) and when reading the Commentaries. Most students take too few notes and their notes are too long. Keep them down to a single sentence if possible. If you take notes then take your notes on your 5x3 cards. Question on one side, answer on the other

Use the questions at the head of the Commentaries to guide you in making your flash cards. For example:

Q: How do we – you and me – experience scarcity? A: We do not have as many goods and services as we would like to have because we have only limited ability to buy goods and services (limited incomes).

Q: How do economists think about scarcity? A: Economists emphasize that goods and services are scarce because the means to produce them – land (natural resources), labor, capital (physical capital), and entrepreneurial ability – are in limited supply.

Using my questions, you should be able to *expand your set of cards*. Some questions should lead you to ask additional questions. For example:

Q: Give an example of land.

A: A forest, a coal mine, a salmon run.

Then you can ask yourself to come up with examples of labor, capital, entrepreneurship.

When you have a pack of cards, shuffle them, choose one and look at the question, formulate your answer – preferably in writing – and then turn over the card and check your answer against what is on the "answer" side. Beware of cheating yourself, cheating other people is immoral, cheating yourself is stupid. In a subject like economics getting the answer "almost" right, or claiming "that is what I really meant" is not acceptable. If you get the answer wrong then ask yourself why was your answer wrong. (You may eventually want to keep two packs of cards – one on material you are pretty certain that you have mastered, and a second set of cards on new material. Go back to the old material from time to time to make certain that you still remember it.)

Repeat! Repeat! Repeat until you get the answers right 95% of the time!

Keep your cards on you and test yourself when you have a spare five minutes. But set aside at least an hour a day, every day, for testing yourself and expanding your set of cards. Test, test, and test again!

This process will not always work in economics but with a multiple-choice exam it is very effective. It is a very efficient way to learn definitions and basic concepts. But you also need to understand economics, at least if you are planning to take more economics courses.

The 5x3 system is like preparing for a short answer exam, but works even better for multiple-choice exams. In the exam you should look at the opening line(s) of the question and try to formulate your answer without looking at the "foils". Then look at the "foils" and choose the best one. Some times when you look at the "foils" you will see that I am asking something other than what you initially thought but most of the time you will have guessed what I wanted. Your exams are multiple-choice and so if you can get 95% or more of your 3x5 questions right – unprompted – then you will be in an excellent position to do well on the exams where one of the "foils" will be the correct answer.

Learning is hard work and a subject like economics is highly indigestible if force fed – do not leave studying until a cram session just before the exam. This is particularly important when learning online. The biggest problem with distance learning is our lack of self-discipline. When you are on campus it is easy to put off studying until tomorrow, or the weekend, or next week – disaster! When studying at home the problem is many times worse because you have so many things to distract you. You need to establish a routine setting aside the same time every day to study for each of your courses.

I encourage you to work in groups. Obviously, you should not meet physically but most of you can devise a way of doing this online – turn the process into a game! For those of you who will be in study pairs – two is an ideal number but I could add people to your group if you wanted – you can swap ideas for your cards and the answers. And taking turns to ask one another questions is a good idea. Make certain that the other person does answer the question correctly. Be polite and helpful but be firm and do not accept "well that is what I meant to say" as an acceptable answer.

Here is a way to make testing more appealing.

Persuade someone in your household to play with you.

Give them your stack of flash cards.

They select one and place it question side up on the table. You have ten seconds to provide an answer while they read what you wrote down as the answer.

If you answer correctly, they pay you one penny (or one jelly bean or M and M or peanut).

If you answer incorrectly you pay them a nickel/dime/quarter (etc.) depending on how well you think you know the material.

As you get better you can play for higher stakes.

Initially you may want to keep the cards in their proper order, later you may want to randomize.

If you want to bail out of your group let me know and I will assign you somewhere else if you wish me to. But some people do not like groups and that is fine with me.

Always remember the Golden Rule – she who has the gold rules – *in my ECON 206 section it is what I write in the Commentaries that is the appropriate answer to the exam question.* (1,300)