

ITA Transcripts

Title:	Economics Recitation with a focus on Interactive Lecture
Focus:	Students can focus on the characteristics of her speech that maintain a sense of connection with the audience in a monologue format. The use of rising intonation and the punctuation of <i>right?</i> and <i>okay?</i> contribute to this feeling of conversation in what is essentially a lecture. Her use of pronouns also adds to the personal quality of the communication. Other issues that stand out in this transcript are the signposting or verbal outline, and the use of paraphrasing and examples to make her explanations clear and lively.
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Context:	Ana, an Economics TA from Thailand, is teaching a section of Economics 402, an upper division intermediate macroeconomic theory course. Her class is quite large, about 45 students, and meets in a long, narrow classroom with a fairly deep raised platform and lectern at the front separating the board from the students. This is the last day of class and the topic is the solo growth model.
Trainer Tips	This transcript works very well as a contrast to the hydraulics lab transcript, in which the TA interacts with a class of about 12 students in a much more intimate way. Having looked at that one, it is possible to see in this one how the TA keeps elements of interaction or an interactive style in what is predominantly a lecture format.

Transcript

- 1 T: first I just do a . okay so this is our . last section . you glad or are you sad .
2 [laughs] okay the review session ? [writing on board] let's write it down . in this
3 room . your very own room . u:m . seven to nine PM ? Friday ? the twenty-third .
4 I e-mailed you guys already . okay ? and today's lecture gonna be . the hardest one
5 . I can say because it hard for me this morning . for my morning section so bear
6 with me . and if you have any question ? just raise your hand . it's okay . all right .
7 because I have to sign a consent form too . okay ? hm I'm gonna talk about solo
8 growth model ? and u:h . if I have time I'm gonna go over . question three and
9 eight . from the problem sets ? and then I'll talk about discussion sets . discussion
10 problems . okay ? for hm solo growth model . I listed down the components for
11 you guys so you can just pick it up whenever you want to use it . right ? because
12 we gonna a lot of manipulation in the . in this model . we're not gonna have as
13 many graphs . as I'd like . before . so we're gonna have to use all these equations
14 to explain . the movement of the model right now . [voice gets markedly louder]

15 **the first one . is the labor supply . okay ?** we assume that everyone in the
16 country . the whole population . are in the labor force is in the labor force . okay ?
17 L-T . and the growth rate of this L . is N . which is the population growth . right ?
18 **so now I have to kind of . refresh your memory a little bit about the growth**
19 **rate ?** because what is a growth rate . suppose you want to find a growth rate for
20 L . $\frac{D-L}{D-T}$. growth rate is how . the labor . the number of labor change
21 over time . right ? Ricardo will call this L-dot-T . okay ? and . I'll call it . change-
22 in-L over L-T . they're the same thing . okay ? hm in the review notes that you get
23 you're gonna see something very complicated . that's why . I was . carefully .
24 writing these notes last night . [*shows the notes to the class*] for you guys . if you
25 don't understand those . fine . understand my notes and you're gonna be able to do
26 the final . okay ? because he . hm he assume L equals to something . and then he
27 derive L-dot . but I already derived it for you . you have to go through the revision
28 . so this is N . the growth rate of the labor force is N . **second (2) the**
29 **effectiveness of the labor augmenting technology . and we call that E [writing**
30 **on the board] okay ?** and the growth rate of E . which shifts the change-in-E over
31 E-T . is G . these are given . right ? population growth . technological growth .
32 they are given . and constant too . **okay ? the third one is production function**
33 **we talked bout production function last time** . they have constant returns to
34 scale . the first derivative of production function . which is the slope . is gonna be
35 positive . with both respect to labor and capital . right ? increase capital . increase
36 output . increase labor: increase output . this is Y equals to $F \cdot K^{\alpha} \cdot L^{1-\alpha}$. **okay ?**
37 **what is the fourth one ? the saving function . just regular saving** . these are all
38 in the big letters . saving function is the small-S . which is the saving rates . times
39 Y-T how much you save out of the income (6) [*moves the lectern to make it*
40 *easier to see the board*] okay ?

41
42 S2: fine but why don't you put . on the if it eh if it didn't pass on the sss E . on the
43 production function you don't have E .

44
45 T: [*writing on board*] yeah . sorry . that's good . I forgot to put E in because we just
46 add this E into the model . right we usually have L . but I just wanted the full
47 model . so good question . thanks . **for: . number five . we have saving equals to**
48 **investment in closed economy remember ?** in closed economy with no
49 government . savings gonna incr equal to investment . so . hm (2) investment is
50 gonna also equal to little-s times big-Y-T . **okay ? the last component of solo**
51 **growth model . is capital accumulation . remember the bar chart last time ?**
52 the change in the total number of capital in the economy equal to . investment .
53 which is the inflow of the water . minus . ΔK which is the outflow of the
54 water . what's left in the tank . is the change in capital . or is the level of capital .
55 **okay ? now . if you want to study the growth model . we have to define some**
56 **parameters** . because it's gonna be very easy for us . if you specifying some
57 parameters . **well let's define little-k** . so now distinguish my both Ks . big-K and
58 little-k . let's define it as big-K over the effective unit of labor . this is not only
59 labor this is the effective unit of labor . if you have ten labors . it doesn't mean
60 that everyone works the same way . right ? someone can be more effective than

61 the others . so you care for the effective unit of labor when you produce . the
62 pr the goods . so . we have to divide it by $E-T L-T$. okay ? **and also . we need to**
63 **define . output per effective unit of labor . same way . okay ? now to study**
64 **growth . we wanna find . we wanna look at the behavior of the capital**
65 **accumulation** . so we wanna see: . how this little-k change . over time . okay ? so
66 . we gonna do . $K\text{-dot-T}$. for Ricardo . or for me . change-in-little-k-t over k-t .
67 okay ? when we ha . **when we wanna derive this . the ri deri derivative of K-T**
68 **. you have to do the portion rule again . remember ?** botto:m multiplied by top
69 minus top multiplied by the bottom . **so let's do that again . [writing on board]**
70 **just gonna do the first . derivation** . $E-T$. $L-T$. change in big-K . minus top .
71 change the bottom . over . the botto:m squared . okay ? and you plot . the change
72 in capital . using the last equation here . put it here . and do some manipulation .
73 you gonna get the change in $K-T$. I did it in my notes so . go through it . okay ?
74 I'm just gonna skip that pa:rt . it's gonna be equal to S . $F-K-T$. minus delta-plus-
75 $N\text{-plus-G}$. little- $K-T$. [*draws a box around the equation*] you have to understand
76 the derivation of this . but you don't have to get it down like a hundred percent
77 like you have to rewrite it . but you have to memorize this one . this is important .
78 okay ?=
79

80 S3: =what exactly does that mean again ? th=

81
82 T: =this is . the growth rate of the capital per effective unit of labor . you wanna see .
83 how the change in effective unit of labor . contribute to growth . okay ? so that's
84 why you need this equation . **this is the whole solo model . this equation . tells**
85 **you the whole thing . okay ?**

approximately 9 minutes

Some Possible Questions for Materials:

1. Take a look at lines 1-14, in which Ana begins her class, making some announcements and introducing the day's work. What kind of relationship would you guess she has with the class? What is it about the way she addresses them in these opening remarks that gives you this impression?
2. Look at the language in boldface in the transcript. What is the function of these passages? What do they provide in Ana's talk? Next, look at how she expresses them--what sentence types and pronouns does she use? What is the function of *okay*? The periods in the transcript represent pauses. How does she use pausing in these sentences?

3. Look at Ana's explanation of the production function, lines 32-26. What strategies does she use in her explanation to make this idea clear?

4. In lines 57-62, Ana defines little- k and effective units of labor. What strategies does she use to make the idea clear? What is the effect of her use of the pronoun **you** in this explanation?

5. In lines 21-28, and in line 66, it is clear that Ana and the professor, Ricardo, use different notation systems in their equations. What do you think of this? How does she handle it? How do you imagine the students react to this difference? What about her use of Ricardo's first name?

Expressions

6. What does Ana mean when she says, "so bear with me" in lines 5-6?

7. In line 74, she says, "I'm just gonna skip that part". What does this expression mean?

8. In line 76, she advises students, "you don't have to get it down like a hundred percent". What does *get it down* mean in this sentence and what is her overall point?

Materials Using This Transcript and Fatih's (Transcript 2), Winter 2000

Whereas Fatih teaches a small class in an intimate style, Ana's class is large and more formal. She still manages to connect with her students, but she does it in a different way. These two teaching performances therefore make a nice contrast and demonstrate a key point about teaching, that a variety of personal styles can be successful. In this video viewing and analysis activity, I use the same approach I took with the Seto tape, setting up small groups in class to focus during their viewing on different aspects of the ITA's performance. For these two tapes, the group topics I selected were as follows:

Group 1: Non-Verbal Communication

As you watch the video, pay attention to the IGSI's use of body language. Consider eye contact, facial expressions, tone and pace of speaking, body posture and movement, and use of gestures. Make notes here on specific examples of what the IGSI does. What do you think this behavior communicates to the students? Is there anything you would like the IGSI to do differently?

Hydraulics Lab IGSI:

Economics IGSI:

Group #2: Asking and Responding to Questions

What kinds of questions does this IGSI use? What does he/she do to encourage responses from students? How do these questions contribute to the atmosphere and the interaction? How does the IGSI respond to student questions? What does this behavior communicate to the students? Is there anything you would like the IGSI to do differently with respect to asking and handling questions?

Hydraulics IGSI:

Economics IGSI:

Group #3: Emphasis

What does the IGSI say and do to create emphasis, stressing key points. Consider introductions, repetition, reminders, examples, phrasing, and summaries. Consider both language and style of delivery.

Hydraulics IGSI:

Economics IGSI:

Group #4: Organization

What does the IGSI do to make the structure of an explanation clear to the students? Note transitions and linking, and use of contrasts, similarity and reminders. Checking questions may also be relevant here.

Hydraulics IGSI:

Economics IGSI:

In class, we work on one tape at a time, first Fatih's, then Ana's, viewing, discussing, and adding topics by means of a selection of discussion questions. I include the entire hydraulics lab transcript in the handout, followed by all the questions except 8, 9, and 10, referring to stress, rhythm and intonation. These issues may arise in the general discussion of non-verbal communication and emphasis and are also not so much the focus of this course. I have included other questions in the handout which clearly so overlap with the discussion topics, because they provide an easy line reference to details that students might want to consider in their group discussion, such as the references in questions 1-6. Topics of course don't have to be discussed as separate questions if they have already arisen in the discussion. For the econ tape, I include the entire transcript and all the questions in the handout. Again, they create a handy reference for particulars in the transcript that can feed group discussion. Finally I ask students to reflect on their own style and to list a couple of strategies they have seen in these two tapes that they could use in their next practice teaching session in class.

Strategies of Ana or Fatih that You Might Adopt in Your Next Practice Teaching:

- 1.
- 2.

Please let me know what experiences you have using these transcripts.

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