Lecture 8: Modeling (V)
(11/04/2013)

1. Interactions and Discussions
We will comment on individuals’ new PLUMS segment first.
We should have 14 pages uploaded on the website.

2. Modeling
We will ask everybody to think and then give an example in each category.
2-1 Philosophy/Opinion Modeling (Zero-Governing-Equation)
2-2 Arithmetic/Algebra Modeling
2-3 Analogy/Metaphor Modeling
2-4 Law/Principle Modeling (not this time yet)

3. Benefits of Thinking
3-1 I think. Therefore I am (by Rene Descartes)
3-2 Discoveries or learning are made by us ourselves, leading to sheer joy.
When others ask us to clean up the bathroom, we will be quite reluctant and may become resentful. But if we take the initiative to do the chore, we feel neutral, sometimes even feel proud of ourselves.
3-3 Reduce the monotony of doing chores
When we do dishes, wash our hair, or do our laundry, we will feel that our chores become less monotonous if we can occupy our minds with our thoughts. (But do not think too deeply when driving!)
3-4 Tend to prevent our hair from falling
Thinking requires faster blood circulation, thus bringing more nutrition to our skull.
3-5 We become more attractive and charming
Our minds may appear sharper. We may become more humorous and witty. These are attractive traits in people's eyes.

3-6 Last, but not the least, Career advancements

4. Techniques for Cultivating Thinking Abilities

4-1 Think aloud

Thinking aloud makes some sounds, which reduce the chance of our being distracted or our minds wandering off (走神).

4-2 Whenever we are in the mind-idling phase (washing our hair, walking, waiting for our friends, waiting for our turns in the bank), we try to exercise our minds.

4-3 Think of extreme cases in order to receive the correct guidance.

Will give an example regarding the temperature distribution on a fin.

4-4 Try to start from simple, easy, and known cases as our bases.

Will also give an example in the classroom.