Linear vs. Layered Learning
Dr. Roblyer – POLS (F2017)

If you are having trouble making sense of a body of material, or of getting that "sense" to stick, you probably want to try something other than the same learning approaches you have used regularly in the past.

- "Attack that hill!" may seem to be the right learning response when you encounter the very first thing you don't understand.
- However, it may be a much better strategic battle plan to first know the lay of the land beyond that first hill, how the hill fits into that larger landscape, and whether attacking that hill should be done later instead of now in order to win the day. You can then use your reading, listening, reviewing, and quizzing tactics much more effectively because you have the big picture in mind.

1. **Linear Learning** – The is the "attack the hill" approach that is probably resulting in your frustration. Trying to learn new material in this way can also be likened to how most of us eat a sub sandwich: start at one end and take repetitive bites until you reach the other end—job done!

- This approach probably works best for material with which we are somewhat familiar or that is effectively a "recipe" of sequential steps.
- However, it can be very laborious and disconcerting if the material is quite new to us. Each "bite" tastes strange, is hard to "swallow" (remember), and doesn't help make the next bite look appetizing at all! Result is frustration, not understanding!
- What is quite likely missing from this approach is a <u>sense of context, or connection</u> to the other related material.   You won't be able to understand and remember your target material without that context and those connections.

2. **Layered Learning -** This approach works through the material more like a pilot in a helicopter on a search & recover mission.   If you are a techie, you can also liken this to 3D printing: laying down understanding one micro layer at a time to build a robust, intricate, and useful object. This is done deliberately, and with each new layer locked into the previous ones. How do you do this when studying? See the bullets below….

- **First**, you want to get a good view of the large-scale structure of the material. For Chapter 9, this might begin with "Legislative Culture," "Representation," and "Legislative Operations," although this is too general to be of much help. So "fly over" each of those two pieces again, and you may notice the following structure within "Legislative Culture:" *legislatures and taxes*, *legislative functions*, *legislatures and democracy*, *legislatures as unique cultures*. Within "Representation," you will see *geographic approach, redistricting purpose and rules, gerrymandering, gerrymandering defenses, gerrymandering outcomes in Texas,* and *redistricting reform*

approaches. Inside of "Legislative Operations," you'll find a different set of structural divisions, and I'll leave that to you to discover.

- o If you unfamiliar with this chapter, but hope to master it, then finding and identifying this general level of organization of the material is fundamentally important. So quiz on it initially at this higher level! Can you explain in your own words, on paper/screen or to your partner, what is the structure of each of these sections, and why it makes sense that I picked those subsections? In answering that query, you will likely begin to realize that you already understand some material <u>within</u> some of those subsections, but don't follow that rabbit down the hole just yet.... Once you've gotten down how I've structured things, and it makes sense to you, you're ready to proceed to a lower altitude and proceed with the search for understanding.

- The **second step** is to now break down each of those subsections, wherever possible. In very simple subsections, this will be almost item-level lists, such as in "legislatures and taxes." Here, your observations might notice the following: *no tax increase pledge, game theory and chicken,* and *upside and downside to tying hands*. Now, does this level of the structure make sense to you? Can you explain in your own words what the layout is, and why it fits together? In larger subsections, this breakdown may result in smaller categories, but not yet the same level of detail that we found in this tax-related subsection.

- Successive steps should continue layer by layer until we arrive at the lowest level of detail within each part of the chapter. By checking our understanding at each step by explaining in our own words what we have found, we intentionally and systematically build a network of pieces of information and concepts without omitting the relationships that help them make sense, and that help us learn them!

- o For those of you who may have **already outlined the material**, you have a <u>head start in the layering process</u>. Just stop looking at your outlines in a linear fashion (reading from top to bottom), and instead read all of the Roman numeral entries first, then the capital-letter entries next, then the ordinal number entries, etc. Doing it in this way will help you see the layers in the material.

- **The end result** will be a solid understanding of the material you have learned. You will be better able to remember and explain this material, including the specific concepts, items, events, and people involved, as well as the relationships between these various pieces. You will be better able to capably answer "how" and "why" questions, along with the simpler "who," "what," "when," and "where" queries.

- o This approach **will also give you the most benefit for each hour of effort**, even permitting you to halt the "search" prematurely because of time constraints, yet leaving you with a sense of how what you DO know all fits together.