Generative Learning Strategies

organizing new knowledge

reflective knowledge building

which involves

which leads to

more coherent mental representations

which leads to

applying knowledge to new situations

and

supporting students in

knowledge telling & repeating

as opposed to

helps students to

does not support

integrated new knowledge

Spatializing

Visualizing

Drawing

Mapping

such as

Description: Words, ideas, terms, or concepts are arranged and connected by their relationship to each other.

This is an example of a CONCEPT MAP. See back for more information and examples of spatializing activities from UGA courses!

Enacting Movement

Manipulating Objects

Gesturing

such as

Description: Moving objects or your own body in service of demonstrating, representing, or acting out relevant course content

Tips for Instructors: Be specific about what aspects of the learning material you want students to focus on. Useful to enact processes; helpful when abstract concepts can be connected to concrete materials or actions. Debrief afterwards to help students reach deeper understanding of material, not just fun.

Explaining

Self Explaining

Explaining to Others

such as

Description: Students explain the material to themselves or to others by actively generating inferences that connect the material to their existing knowledge. Explaining can help students monitor their level of understanding and regulate their thinking accordingly.

Tips for Instructors: Be specific about what inferences you want students to make. Show and discuss examples of knowledge telling versus knowledge building. Constructive feedback from peers can help build better quality explanations.

Created with the assistance of Logan Fiorella, Ph.D.
Spatializing Activities

**Drawing**

By hand or with computer tools, students draw diagrams or pictures of material to be learned.

**Tips:** De-emphasize mechanics of drawing. Support students by providing partially drawn illustrations or listing elements to include. Have students compare self-drawings with yours or that of the textbook.

**Mapping**

A concept map, shown on the reverse side of this handout, is just one type of map students can create to help them learn more effectively. Concept maps contain linking words between the boxes to explain the relationship between terms. Other examples of maps that don’t need the linking terms are mind maps, flow charts, categorizing grids, Venn Diagrams, or treemaps.

**Tips:** It is a good idea to make a map before asking students to do so. You might consider if it is appropriate to withhold feedback on students’ maps and allow them to reorganize them as they learn more. For concept maps, you might try providing students with the terms that they need to map.

**Visualizing**

Students create mental images that depict the material to be learned. This may be used as a precursor to drawing, mapping, writing, or discussion.

**Tips:** Best used when students have sufficient knowledge of domain. Practice how to engage in productive imagining, give specific prompts for visualizing.