What Can Teachers Do to Support Effective Study Skills?

Three strategies for effective learning (supported by evidence from cognitive psychology)

- **Spaced practice** - space out studying over time
- **Interleaving** - switch between ideas while studying
- **Retrieval Practice** – Practice bringing information to mind - test yourself

1-What can teachers do to support Spaced practice

- Rewrite tests to make them cumulative all semester long, and warn students that will happen (in the syllabus).
- Re-test after a while, and unannounced, to reward long-term memory only (and tell students you will do this; in the syllabus).

2-What can teachers do to support interleaving

- Make sure the skills you interleave are somehow related (ex. read, write, vocab.).
- Mix in old material with new material (not in order).
- Use interleaving together with other learning strategies (ex. spaced practice, practice test, retrieval).
- Spread the important information over months and return to them periodically to build and reinforce.
- Conduct many reviews for the material in class.
- In homework, ask student to reflect back on previous materials.
- Make exams cumulative (current and past material).
- Let students know the priority knowledge and skills from previous materials.
- Unannounced testing on previous learning
- Retest (same test after a few weeks), unannounced.
- Don’t get discouraged if you don’t see immediate results (it takes time).

3-What can teachers do to support Retrieval

Help students retrieve information using some of the following strategies:

**Assessment strategies:**

At beginning of class:

**Check prior knowledge and connect to it:**

- Focused Listing
- Background Knowledge Probe
- K-W-L Chart-
- Recall, summarize, question, connect, and comment
- Categorizing Grid/Memory Matrix -
- Bridge in (i.e. connect) to previous class at start, and bridge out to next class at the end.

During class

- **Wait time** (3-5 sec.; do not provide the answer).
- **Free recall**
• **Teach-OK**

**At end of class:**
- Empty Outlines
- Human Flashcards.
- Single Jigsaw
- One-minute paper:
- Teach students how to reflect on their own learning
- Critical Incident Questionnaire (handout)
- Learning Audit

**Caveats for retrieval**
- Student should get feedback on their retrieval to assure accuracy and completeness.
- Make it formative – not for grade- or minimum grading to reduce anxiety.
- Emphasize value of struggle and difficulty (for LTM).

**General tips for supporting all study strategies:**
- Always start with backward design in mind
- Identify most important concepts you want students to walk out with- what is most important for their future?
- Prioritize; not everything is important.
- Revisit and emphasize the important concepts.
- Fold distributed practice into the assignments and assessments.