

# Teaching Higher Level Thinking Skills via Collaboration

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What are some of the pros and cons of having students collaborate?

# Today's Session

- Introduction
- Why have students collaborate?
- What skills should be taught via collaboration?
- How should collaboration occur?
- Final thoughts, questions, etc.

# Why have students collaborate?

- Two main thoughts about student collaboration:
  - It is a skill that needs to be learned.
  - It is a tool for teaching other skills.
- Collaboration as a skill:
  - 21<sup>st</sup> century workforce (and world!) requires working within diverse populations
  - Social development required ability to communicate and collaborate
- Collaboration as a tool:
  - Vygotsky: interpsychological to intrapsychological
  - Flexible thinking (e.g., argumentation) boosted via collaborative cognition

# What skills should be taught via collaboration

- What works:
  - “Messy” problems (e.g., real-world, ill-structured problems)
  - Higher-level thinking skills (e.g., argumentation, critical thinking)
- What doesn't:
  - Rote learning (e.g., memorization)
    - One of two problems occur:
      - Lower level students do little work/leave all the work to higher level students
      - Higher level students help lower level students grow, but do not grow themselves

# Think-Pair-Share

- Brainstorm key skills in your subject area that would be appropriate for collaboration.
- With partner, choose the one(s) that are most conducive to collaborative learning.

# How should collaboration occur?

- **Problem: social loafing**
  - Solution: smaller groups (2-4 max)
  - Solution: individual accountability (e.g., project write-up)
- **Problem: students not on same level**
  - Solution: give students time to come up with ideas before collaboration
  - Solution: choose activities that allow for input from people with different skill levels (e.g., discussion before writing)
- **Problem: students don't agree**
  - Solution: teach how to argue constructively
  - Studies show that discord of ideas can help grow thinking (e.g., Kuhn, Järvelä)

# Group Work

- Choose a skill from your list(s).
- Plan out a collaborative classroom activity to help teach that skill.

# Final Thoughts

- Collaboration can be a powerful tool if used correctly.
- How did we address the pros and cons from the beginning of class?
- Questions?