

Co-creating learning experience with students in group data science projects

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“To become self-directed learners, students must learn to assess the demands of the task, evaluate their own knowledge and skills, plan their approach, monitor their progress, and adjust their strategies as needed”.¹

Instructors in data science projects can help students become self-directed learners by co-creating the learning environment and modeling the learning process. For example, you can use the following steps to facilitate student learning:

1. Guide students to identify what they need to learn.
2. Provide handouts/tutorials/resources for individual learning.
3. Provide deliberate practice.
4. Facilitate students to connect what they learned to project work and brainstorm new ideas.
5. Observe how students apply the new knowledge and provide timely feedback.
6. Facilitate the team to discuss their work and come to a consensus as a team.

Read more about project-based learning: *Pedagogies of engagement: Classroom-based practices*, Smith et al. *JEE* (2005)

How can you apply this idea to your courses?



Read an example handout



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¹ *How learning works: Eight research-based principles for smart teaching* (Chapter 8) By Lovett et al.