



Week 8

Reflection

DSC 95, Spring 2025 at UC San Diego

Agenda

- Learning theory.
- Mystery activity.
- Reflection.
- Final assignment.

Announcements:

- This is our last class meeting.
- Final assignment:
 - Due Monday, June 2 at 11:59PM.
 - Promote yourself!
 - Write an elevator pitch and a resume section about your tutoring experience.

Learning Theory

How people learn

- Engaging students' prior knowledge is critical to learning.
- Organizing knowledge into conceptual frameworks is essential in developing scientific understanding.
- Learning to monitor one's own thinking and understanding is essential in learning to think like a scientist.
- Culture fundamentally shapes all aspects of learning.
- An individual's motivation, goals, beliefs, values, interests, and identities play an integral role in learning.

From [Key Findings from *How People Learn*](#)

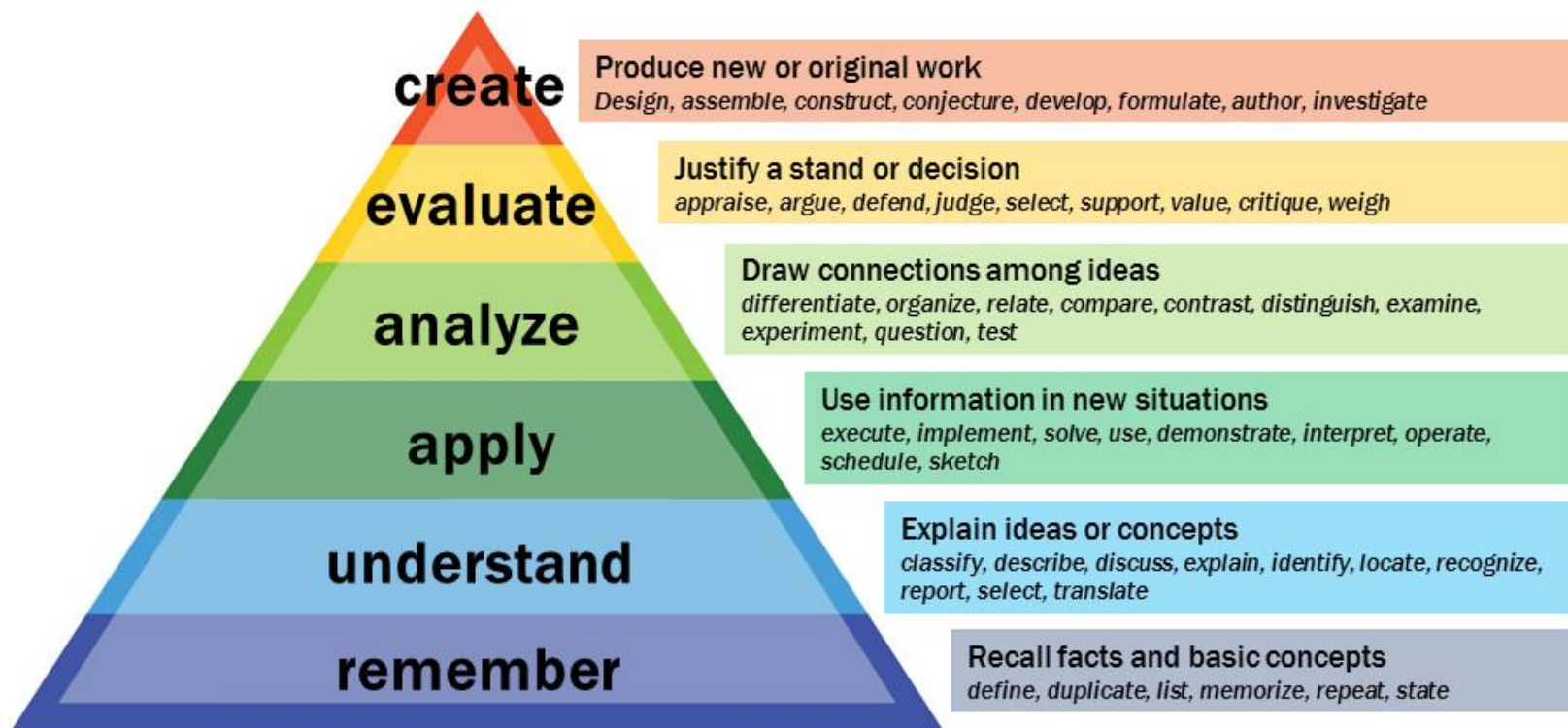
“One of the hallmarks of the new science of learning is its emphasis on learning with understanding. Students often have limited opportunities to understand or make sense of topics because many curricula have emphasized memory rather than understanding. The new science of learning does not deny that facts are important for thinking and problem solving. However, **the research shows that “usable knowledge” is not the same as a mere list of disconnected facts. Experts’ knowledge is connected and organized around important concepts, it is conditionalized to specify the contexts in which it is applicable, and it supports understanding and transfer to other contexts rather than only the ability to remember.**” –How People Learn

“People are willing to work harder to learn the content and skills they are emotional about, and they are emotionally interested when the content and skills they are learning seem **useful and connected to their motivations and future goals**. Conversely, emotions like anxiety can undermine learning by causing worry, which depletes cognitive resources and activates brain regions associated with fear and escape rather than with academic thinking.” –How People Learn II

“The capacity to understand and direct one’s own learning is important not only in school but also throughout life. When learners are self-regulated, they have more control over the strategies and behaviors they use to learn.

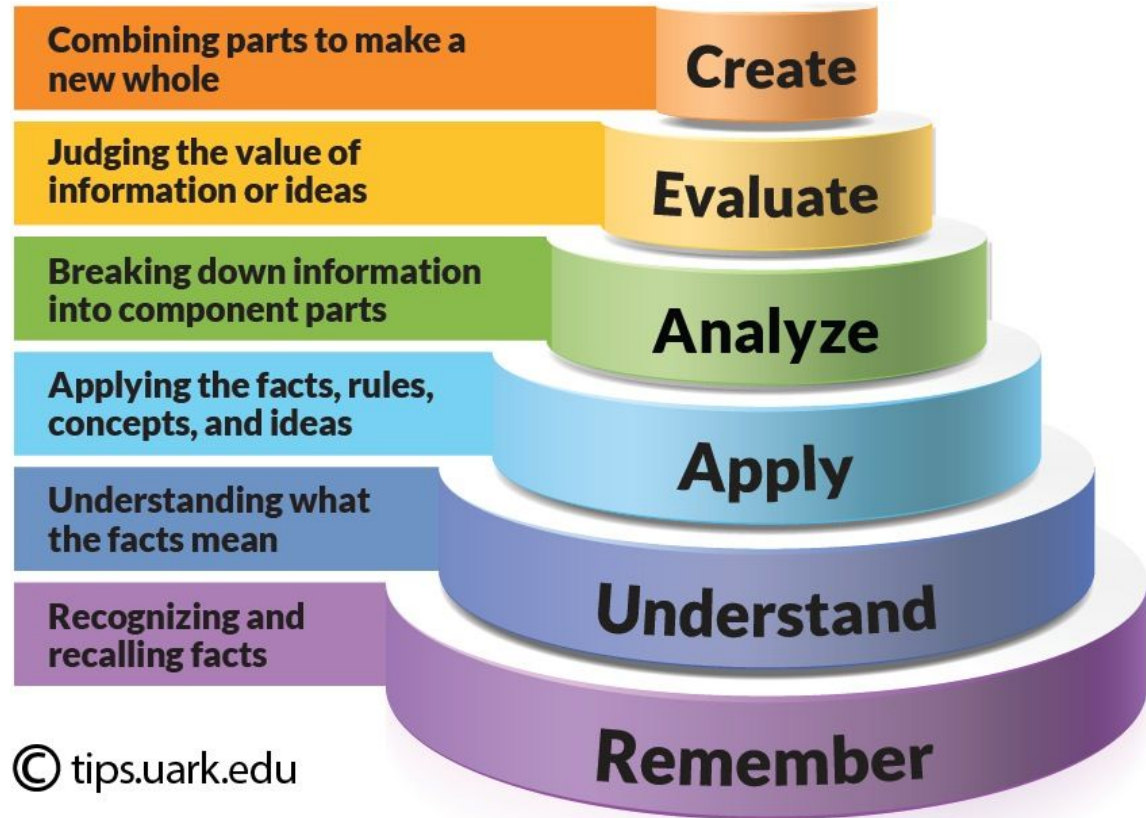
Self-regulation allows them to more effectively direct their cognitive activity by voluntarily setting learning goals, identifying methods for achieving them, actively pursuing those methods, and tracking progress toward the goals. Regulating one’s learning requires monitoring of activities, thoughts, and emotions and making the adjustments necessary to achieve goals. It also is **facilitated when the expectations of educators accommodate learners’ interests** and developmentally appropriate work, so that **learners take responsibility for their goals and perceive that they have the power to make important decisions related to their mode of learning.**” –How People Learn II

Bloom's Taxonomy



Bloom's taxonomy

Let's try and brainstorm questions about regression at each level of Bloom's taxonomy. ([Inspiration](#))



Bloom's taxonomy verb chart - [more here](#)

Remember	Understand	Apply	Analyze	Evaluate	Create
Cite	Add	Acquire	Analyze	Appraise	Abstract
Define	Approximate	Adapt	Audit	Assess	Animate
Describe	Articulate	Allocate	Blueprint	Compare	Arrange
Draw	Associate	Alphabetize	Breadboard	Conclude	Assemble
Enumerate	Characterize	Apply	Break down	Contrast	Budget
Identify	Clarify	Ascertain	Characterize	Counsel	Categorize
Index	Classify	Assign	Classify	Criticize	Code
Indicate	Compare	Attain	Compare	Critique	Combine

Mystery activity

Post-activity reflection

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Reflection

Unusual or unexpected situation you ran into this quarter

- They seemed to think that they knew more than I did on the issue, and would keep brushing off my suggestions to jump to a different idea that they had. They would reply to my suggestions with, "no that won't work" or "that doesn't make sense".
- 7 students waiting for me at the same time because I was the only tutor during that period and the PA is due that night.
- The first few people that came to my office hours had already done the entire homework assignment and just wanted to check their work.
- A student once submitted a handwritten note that their long-term partner broke up with them and they needed to drop the homework. I was concerned about the student's mental health and whether they'd fall behind in the class.

Unusual or unexpected situation you ran into this quarter

- A student came to my office hours (twice) and hadn't even read the assignment before showing up. Both times, they opened the assignment for the first time during office hours and immediately started asking me questions that were basically aimed at getting the answer. Every question felt like it was testing whether I'd confirm their guesses or just tell them what to write.
- A student and I spent over half an hour debugging their code, but we couldn't figure out what was causing the error.
- I caught someone cheating on the midterm.
- The WiFi went down in the HDSI tutoring room, and a few students still came up asking me content questions. Without internet or access to course materials, I couldn't confidently help them on the spot.

Unusual or unexpected situation you ran into this quarter

- When a student had an issue surrounding their file management instead of a Java coding problem.
- I had to catch a bird while we were proctoring skill tests because it was flying around the room and screeching!

How has being a tutor met with your expectations so far?

- Less tutoring and more behind the scenes stuff like grading and creating questions, but still a good amount of tutoring.
- What I did not fully expect was how much I'd have a deeper understanding of the course content in return.
- I met and made connections with so many other tutors whom some of them are now my friends.
- I was expecting to have more students at office hours.
- It has been a lot more chill than I thought it was going to be.
- I don't enjoy it as much as I thought I would. I was hoping for more meaningful interactions or chances to explain deeper concepts, but a lot of it feels transactional or surface-level.
- I expected it to be a lot scarier than it really is.

What skills do you still need to work on to be a better tutor?

- Communication skills.
- Not only remembering names but using them.
- Trying to identify the problem, which just comes with experience and more practice.
- I've found that if I fix an issue and then explain what the problem was then the student is already tuned out because the error got fixed, but if you do it the other way around, then they are listening more closely and will better internalize what you are trying to explain to them.
- Efficiently prepare for office hours.
- Asking guiding questions to make sure students are catching up well with what I am saying.

What skills do you still need to work on to be a better tutor?

- I'd like to get better at managing those kinds of situations, where students come in unprepared, without making them feel discouraged or called out.
- I want to work on being proactive with course material and predict what students might need help with in office hours.
- Being more patient when students are really stuck—I want to get better at guiding them without jumping to the answer too fast.
- Not panicking when I need to take a minute to recollect my thoughts before I can adequately explain the concept to the student.
- Check in with the students' understanding more often.
- Being more confident.

Getting rehired as a tutor: it's all about **initiative**

- Give one specific instance where you showed initiative (visible to the instructor is a plus!)
- Thinking ahead, what can you do to be more visible to the instructor?

Final assignment

Elevator pitch

An elevator pitch is a short description of your background and experience that introduces yourself to career and business connections in a compelling way. It is called an elevator pitch because you should be able to present it during a short period of time, like an elevator ride. Please write a sample elevator pitch (150-250 words) emphasizing your tutoring experience. Include the following:

- Who are you?
- What do you do? (emphasizing your tutoring experience)
- What do you want?
- Why should the person you are talking to care?

Example structure

[Who are you] Hi! My name is First Last and I am an X year XYZ major at UCSD. In addition to my coursework, I am also a tutor for my XX course. [What do you do] For this job, I help students having difficulties on the homework and XYZ concepts. I also helped the instructor with XYZ. [What do you want] I am looking for a data science internship at your company. [Why should the person care] If I am picked for the role, I will bring the same level of dedication and enthusiasm to the project.

Note: Your response should be longer and more detailed than the example to meet the 150-250 word requirement.

Resume section

Create a mock section for your resume about your tutoring experience. As you create the section, please think about and elaborate on the following aspects.

Feel free to include details, numbers, and evidence. Keep it brief!

- What skills have you learned or developed while tutoring?
- What is the highlight of your tutoring experience?
- What tasks did you do?
- What skills and knowledge did you apply while tutoring?
- What makes YOU a unique tutor? What did you do that really stands out?

Use this as an opportunity to reflect on the quarter.

Example structure

Tutor for DSC XYZ: Course Name

- [task/highlight] Answered XX+ student questions via the online class forum.
- [skills developed] Learned how to create unit tests using XYZ tools.
- [tasks] Developed XX+ comprehensive rubrics used for grading exam questions.
- [knowledge applied] Applied an understanding of XYZ in weekly office hours.
- [unique to you] Sole tutor responsible for leading weekly discussions recapping the course material.