New Faculty Teaching Session

August 18, 2023

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Some Slides Created by Dr. Sasha Marine
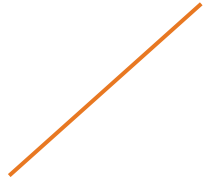
Session Preview

Backward Design

Learning Activity

Planning a Lesson

Faculty Resources

Discussion & Q&A
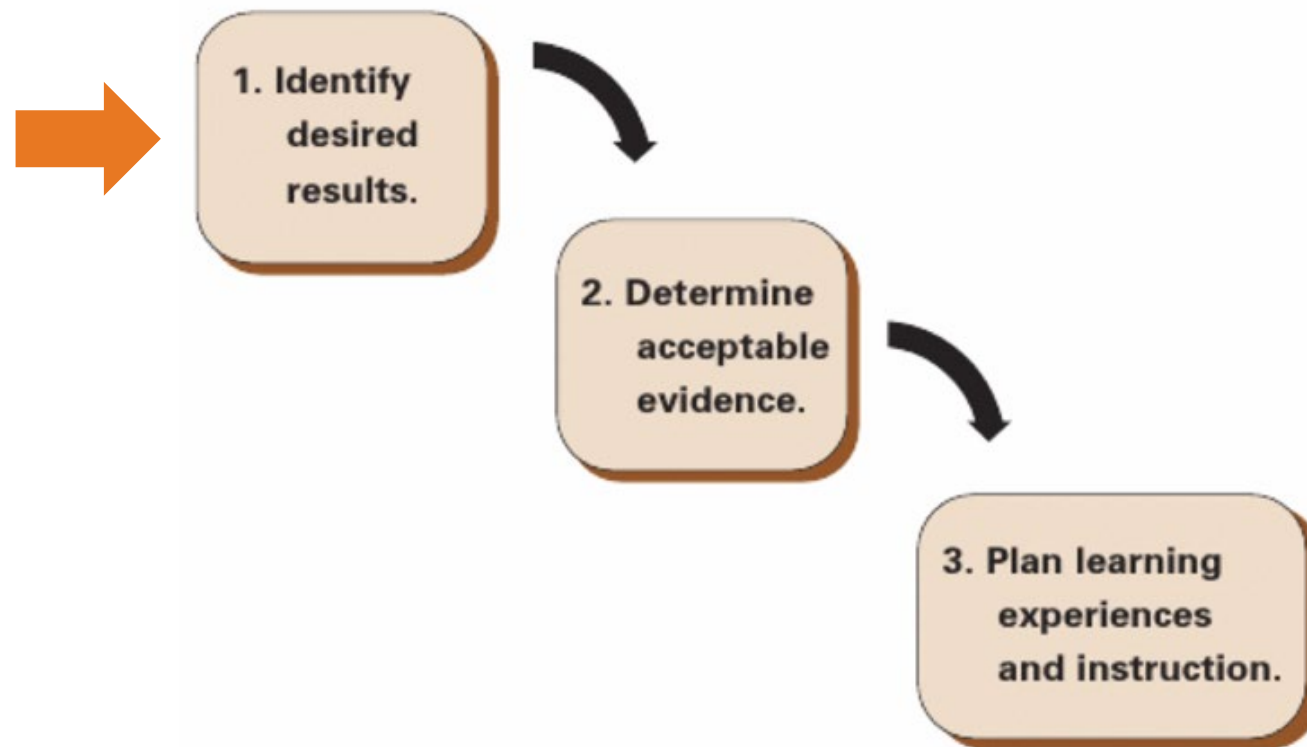
Backward Design

Activity

Spend a few minutes thinking about your favorite teachers and reflect on the following questions.

- What made these teachers some of your favorites? In other words, what did these teachers do - or what qualities did the teachers have - that made them come to mind as some of your favorites?

- What did the teachers do to help you learn?

Backward Course Design

Figure 1.1
UbD: Stages of Backward Design

1. Identify desired results.

2. Determine acceptable evidence.

3. Plan learning experiences and instruction.

Bowen, R. S. (2017). Understanding by Design. Vanderbilt University Center for Teaching. Retrieved May 13, 2023, from https://cft.vanderbilt.edu/understanding-by-design/
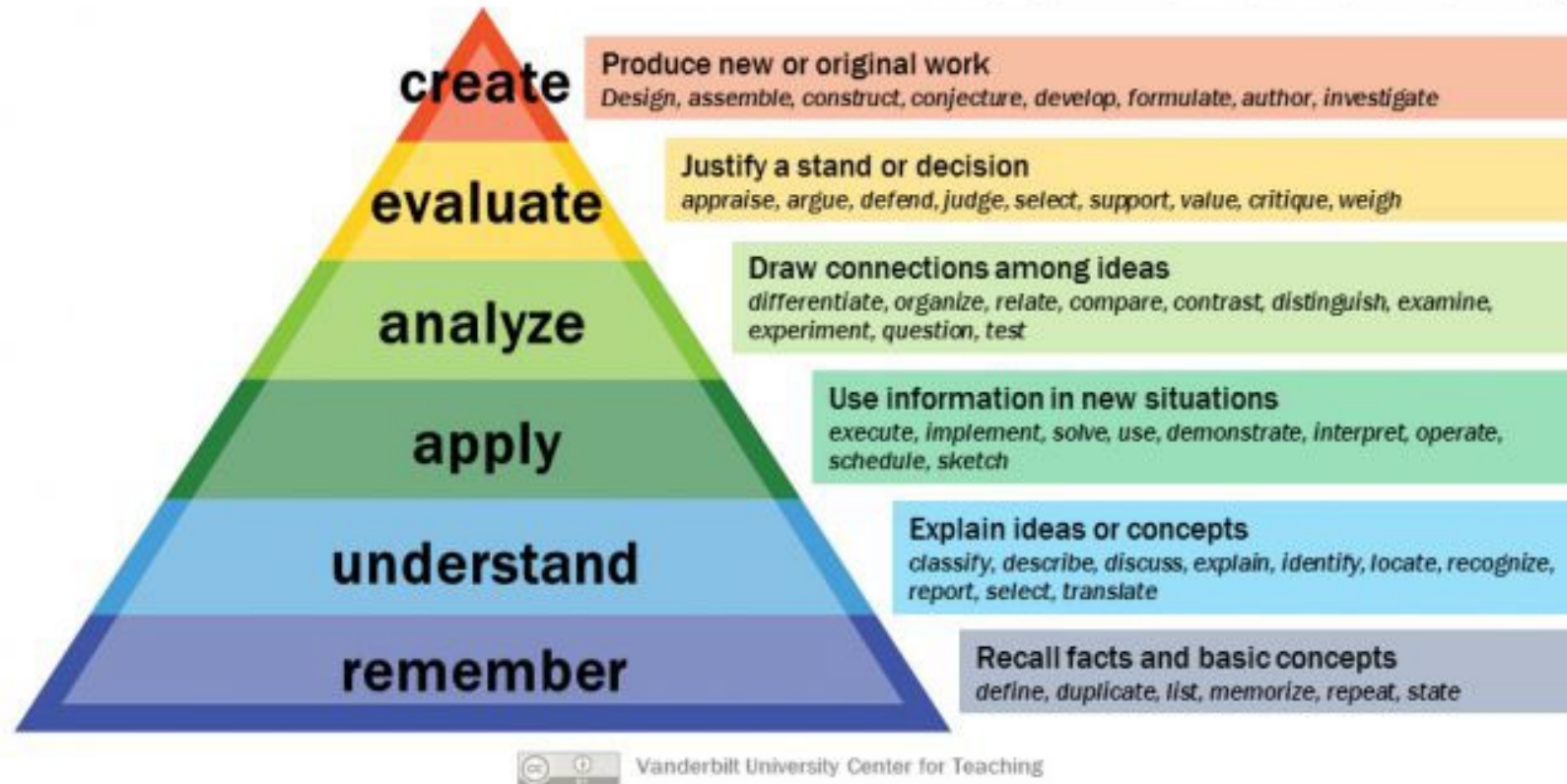
Learning Objectives → Classroom

Center for Excellence In
TEACHING AND LEARNING

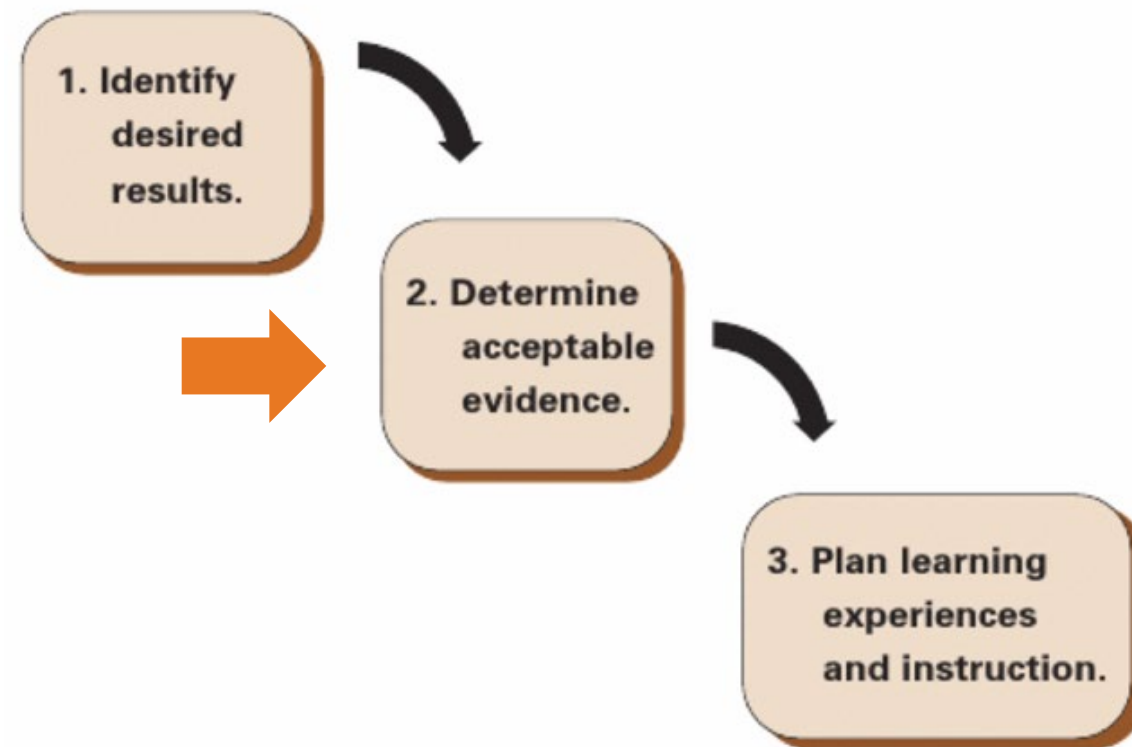| LEARNING OBJECTIVE(S)	ASSESSMENT(S)	TEACHING ACTIVITIES

Bloom's Taxonomy

Armstrong, P. (2010). Bloom's Taxonomy. Vanderbilt University Center for Teaching. Retrieved [May 14, 2023,] from https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/

Aligning Learning Objectives with Assessments

Backward Course Design

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Assessment

"ASSESSMENTS allow the instructor to check the degree to which the students are meeting the learning objectives."

https://www.cmu.edu/teaching/designteach/design/learningobjectives.html

Formative Assessment = for learning levels of understanding, usually lower stakes

Summative Assessment = for evaluation of students' cumulative learning, usually higher stakes

https://teaching.berkeley.edu/resources/course-design-guide/design-effective-assessments

Assessment Examples

"Classroom Assessment Techniques" – Center for Excellence in Teaching and Learning, Virginia Tech

https://teaching.vt.edu/content/dam/teaching_vt_edu/resources/ClassroomAssessment.pdf
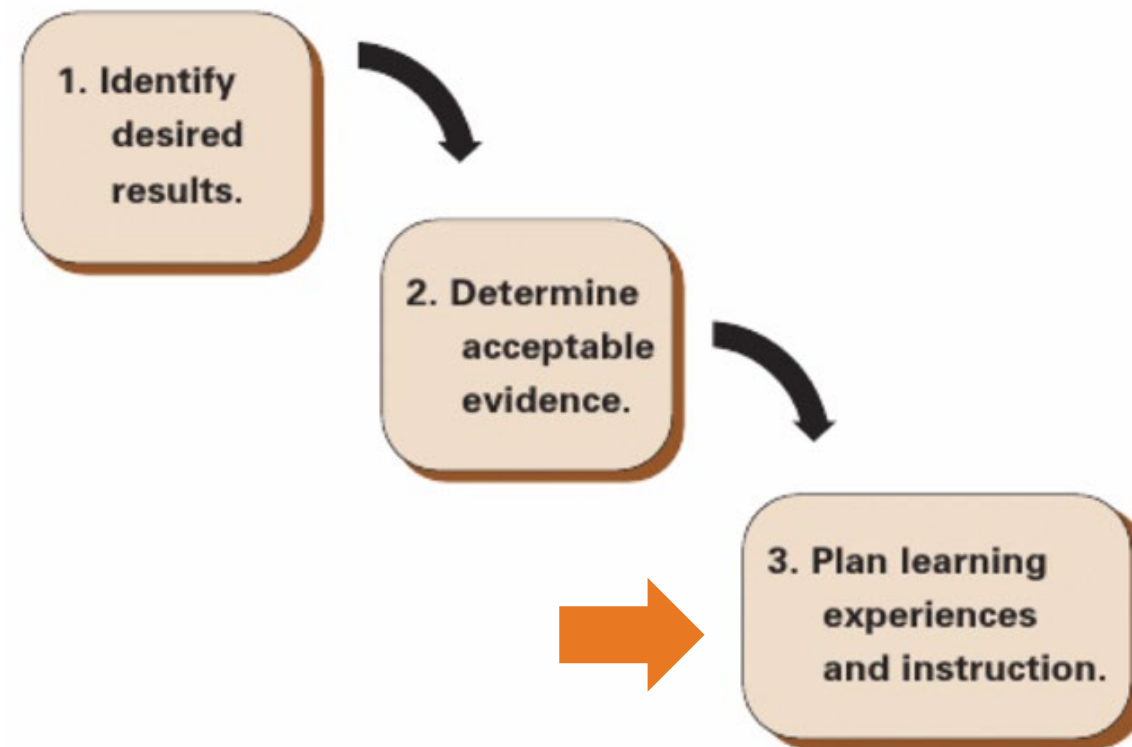
"Potential Assessments" – Eberly Center, Carnegie Mellon University

https://www.cmu.edu/teaching/designteach/design/assessments.html

Connecting Learning Objectives and Assessments with Teaching Activities

Backward Course Design

Figure 1.1
UbD: Stages of Backward Design

1. Identify desired results.

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Bowen, R. S. (2017). Understanding by Design. Vanderbilt University Center for Teaching. Retrieved May 13, 2023, from
https://cft.vanderbilt.edu/understanding-by-design/

Teaching Activities

"INSTRUCTIONAL STRATEGIES are chosen to foster student learning towards meeting the objectives"

https://www.cmu.edu/teaching/designteach/design/learningobjectives.html

"Active Learning and Interactive Lecturing" – Center for Excellence in Teaching and Learning, Virginia Tech

https://teaching.vt.edu/content/dam/teaching_vt_edu/resources/Interactive%20Lecturing(3).pdf
https://teaching.vt.edu/teachingresources/active-learning-and-interactive-lecturing.html

"Identify Appropriate Instructional Strategies" – Eberly Center, Carnegie Mellon University

https://www.cmu.edu/teaching/designteach/design/instructionalstrategies/index.html
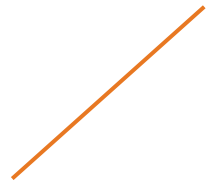
Learning Activity

Let Your Opinion Be Known

Each of you has a sheet of paper with the word AGREE on one side and the word DISAGREE on the other side.

We are going to cover a few statements and you need to declare whether you AGREE or DISAGREE by holding up your sheet of paper.

Statement 1

People learn best when taught in their learning style. For example, an auditory learner learns best when listening to a lecture.

To date, there is a lack of empirical evidence to support this claim.

Statement 2

People learn more when re-reading material versus practicing a recall activity.

When testing the performance of students who are re-reading material versus conducting a recall activity, the performance is higher for re-reading if the testing is done in a short timeframe (for example, within 5 minutes).

However, as you increase the amount of time between the task and the test, students who practice a recall activity perform better than those who re-read the material.

Statement 3

The more feedback you give students, the better they will perform.

The timing and quality of feedback is more important than the amount of feedback.

Statement 4

Intelligence is fixed so if you struggled with math in high school, you will struggle with math in college.

A person's intelligence can change over time and students can learn more if they have a growth mindset framework.

Statement 5

Multitasking is an effective method of learning.

Multitasking can introduce confusion, reduce concentration, and increase cognitive load, all resulting in less learning.

Short Activity

Everyone needs to find one other person to work with (partner up with one person).

Designate one person as a recorder and one person as a speaker.

Each speaker is going to perform a task as the other person times the task (you can use a stopwatch function on a phone). You can start when I say "GO"

Recite the days of the week in chronological order starting with Monday.

Short Activity

Each speaker has one more task and the other person must once again start the timer when I say "GO"

Recite the days of the week in alphabetical order.

Takeaways

- Researchers have been able to develop a large literature on learning.
- Instructors can help students achieve greater success in courses by understanding and implementing the results of this research

Steps for Planning Class Time

The Center for Research on Teaching and Learning at the University of Michigan (Milkova, n.d.) also shares the following steps for creating lesson plans.

- "Outline learning objectives" (para. 4-5)
- "Develop the introduction" (para. 6-7)
- "Plan the specific learning activities (the main body of the lesson)" (para. 8)
- "Plan to check for understanding" (para. 9-10)
- "Develop a conclusion and preview" (para. 11)
- "Create a realistic timeline" (para. 12)

After planning, you will be reading to present the lesson to student and reflect on what went well and what you'd like to do differently next time (para. 13-14).

Milkova, S. (n.d.). "Strategies for effective lesson planning," Center for Research on Learning & Teaching, University of Michigan, https://crlt.umich.edu/gsis/p2_5

Template for Planning Class Time

1. Entry: An Anticipatory Set (Pre-class to 5 minutes)
   Have an activity, reflection, review question ready

2. Direct Instruction (approx. 20 minutes)*
   Organized content with key points
   Interactive lecturing

3. Guided Practice
   What does practice look like in your discipline? What should students practice doing?
   This can be individual, pairs, think-a-loud activities
   The key is: faculty are GUIDING students in their practice

4. Independent Practice (this can begin in class and carry over as an out-of-class assignment)

5. Exit: Have a wrap-up/closure activity (5 minutes)
   Exit Ticket: Muddiest point, Greatest Take-away, Next Steps

*** Many faculty pace their class (especially classes over one hour) with the Direct Instruction/Guided Practice being iterated twice:
   Direct Instruction/Guided practice/Direct Instruction/Guided Practice

Resources for Faculty

Help with Canvas for Instructors

https://4help.vt.edu/sp?id=kb_article&sysparm_article=KB0012968&sys_kb_id=cf09fb231becb19063110f66624bcb68&spa=1

Best Practices for Canvas Course Design

https://4help.vt.edu/sp?id=kb_article&sys_id=7ef92a731babed50098aea04604bcba8

Help with Canvas for Students

https://4help.vt.edu/sp?id=kb_article&sys_id=da8d57901bc0bd14098aea04604bcb2c

For help with A/V in the classroom

https://www.classroomav.vt.edu/access.html

If a student is not performing well in your course

https://advising.vt.edu/advising-resources/vtears.html

Introduction to SSD

Services for Students with Disabilities (SSD)

- Located in Lavery Hall on campus
- Aims to "level the playing field" by removing barriers
- Ensures VT is in compliance with the Americans with Disabilities Act (ADA), Rehabilitation Act, etc.

Accommodation information is confidential

- You will be provided with an official letter that clarifies accommodation(s)
- Letter may be provided by student or by SSD office (elbert.accessiblelearning.com)
- Also access through faculty portal

Keep in mind

To obtain the accommodation(s), the student has:

- Submitted an application to SSD
- Provided necessary documentation*
- Met with an access team advisor

Accommodations may be granted for temporary injuries, such as broken bones, concussions, etc.

SSD also offers academic coaching to students

*Per SSD webpage: "Students with readily observable disabilities (e.g., wheelchair user, white cane user) do not need to submit documentation."

SSD information continued

[Examples](#) of accommodations

- Extended time for assessments (double-time common)

SSD information continued

[Examples](#) of accommodations

- Extended time for assessments (double-time common)

To modify in Canvas, select the timed Quiz

- Then "Moderate this quiz" (upper right)
- Then pencil icon (far right) with student's name
- Enter additional time* in pop up window, then save

Can proctor paper assessments yourself or schedule at [Werth Testing Center](#)

*Will **not** supersede assessment deadline. Consequently, students with extended time must begin assessment earlier to ensure full time.

More on Testing Center

Students sign in and out

- Will receive email notification if incomplete / no show

Earlier reservations needed for final exams

- Before Thanksgiving for fall semester (e.g., 11/22/22)
- Week after break for spring semester (e.g., 03/28/23)
- Start times of 8 a.m., 1 p.m., or 5:30 p.m.

During finals week, SSD proctoring 250-350 exams per day, so expect delays in exam return

SSD information continued

[Examples](#) of accommodations

- Extended time for assessments (double-time common)
- Note-taking assistance

SSD information continued

[Examples](#) of accommodations

- Extended time for assessments (double-time common)
- Note-taking assistance

SSD does not provide note-takers

- Can ask for volunteers or assign as UTA / GTA duty

Will need to "[register](#)" note-taker with SSD, so person can upload notes to SSD's Canvas page

SSD information continued

[Examples](#) of accommodations

- Extended time for assessments (double-time common)

- Note-taking assistance

- Reduced distraction environment for testing

SSD information continued

[Examples]{.underline} of accommodations

- Extended time for assessments (double-time common)
- Note-taking assistance
- Reduced distraction environment for testing
- Deadline extension (24 hrs common)

SSD information continued

[Examples](#) of accommodations

- Extended time for assessments (double-time common)
- Note-taking assistance
- Reduced distraction environment for testing
- Deadline extension (24 hrs common)

To modify in Canvas, select the assignment

- Then edit and scroll down to "Assign"
- Then "+Add" and enter student's name and deadline
- Then save

SSD information continued

[Examples](#) of accommodations

- Extended time for assessments (double-time common)
- Note-taking assistance
- Reduced distraction environment for testing
- Deadline extension (24 hrs common)
- Assistive technology (E-reader, alternative text, closed captioning, ASL interpreters, etc.)

SSD information continued

Examples of accommodations

- Extended time for assessments (double-time common)
- Note-taking assistance
- Reduced distraction environment for testing
- Deadline extension (24 hrs common)
- Assistive technology (E-reader, alternative text, closed captioning, ASL interpreters, etc.)

Generally provided by SSD, but when in doubt, email SSD to confirm

- May want to list on testing reservations

SSD information continued

[Examples](#) of accommodations

- Extended time for assessments (double-time common)
- Note-taking assistance
- Reduced distraction environment for testing
- Deadline extension (24 hrs common)
- Assistive technology (E-reader, alternative text, closed captioning, ASL interpreters, etc.)
- **Access to food or drink**

SSD information continued

[Examples](#) of accommodations

- Extended time for assessments (double-time common)
- Note-taking assistance
- Reduced distraction environment for testing
- Deadline extension (24 hrs common)
- Assistive technology (E-reader, alternative text, closed captioning, ASL interpreters, etc.)
- Access to food or drink
- May leave class or exam

SSD information continued

Examples of accommodations

- Extended time for assessments (double-time common)

- Note-taking assistance

- Reduced distraction environment for testing

- Deadline extension (24 hrs common)

- Assistive technology (E-reader, alternative text, closed captioning, ASL interpreters, etc.)

- Access to food or drink

- May leave class or exam

- Class absence without grade penalty

Also keep in mind

Accommodations are <u>not retroactive</u>

Reasonable notice is required for implementation
- For example, reservations at Testing Center must be made <u>at least</u> 3 days in advance; finals an exception

Students cannot schedule exams at Testing Center

Faculty are <u>not expected</u> to re-teach lecture / lab for student with class absence accommodations

Also continued …

Student should notify you in advance
of deadline, when using extension accommodation

- Per SSD webpage: "not intended to be used as a time management tool and/or used for every assignment"
- Contact SSD if a student requests this accommodation more than 3 times in a semester-long course

Accessible Technologies Services Lab (110 Newman Library)

Faculty have the right to contact SSD to request clarification or to consult on procedures

Final considerations

Anticipate 10-20% of enrolled students may have accommodations

- National statistics: 1 in 4 have some type of disability

Be organized, with regard to course accessibility letters, making testing reservations, etc.

Other useful resources

Center for Excellence in Teaching and Learning (CETL)

- Mid-semester feedback (survey students about class – what is working well, not working, should be changed)

- Teaching Observations (classroom management, student engagement, etc.)

- One-on-one consulting (planning a new course, designing assessments, instructional strategies, etc.)

- Teaching philosophy support

Other useful resources

Center for the Integration of Research, Teaching and Learning (CIRTL)

- Founded in 2003; currently includes 45 universities
- Offers free online courses on variety of topics including: facilitating difficult conversations, teaching-as-research, fostering student belonging, etc.

edX

- Learning platform founded by Harvard and MIT
- Offers free and verified ($) online courses on a variety of topics including: inclusive leadership, STEM and sustainability, the science of learning, etc.

Q&A

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Interactive Lectures

The Pros (and Cons) of Lectures

According to McKeachie (2002), lectures are good for:

- Sharing up-to-date information with students
- Pulling together information from many sources
- Adapting material to the students in your course
- Assisting students with effective reading skills
- Highlighting key points, concepts, etc.
- Stimulating student interest
- Motivating students through the lecturer's enthusiasm

But what are some common challenges faced when lecturing?

McKeachie, W. J. (2002). *McKeachie's teaching tips: Strategies, research, and theory for college and university teachers* (6th ed.). Boston, MA: Houghton Mifflin.

Creating Interactive Lectures

Below are some tips for designing and delivering interactive lectures:

- Know your audience and situation
- Understand how listening works and promote active listening
- Prepare your lecture content with relevant material and a variety of supporting materials
- Organize your lecture effectively (i.e., intro, main points, transitions, and conclusion)
- Incorporate listening breaks for engagement and processing
- Practice and refine YOUR physical and vocal lecture delivery
- Consider the use of presentational aids carefully
- Evaluate and reflect on each lecture to identify strengths and areas for improvement

Learn more about interactive lectures at CETL's website!

https://teaching.vt.edu/content/dam/teaching_vt_edu/resources/Interactive%20Lecturing(3).pdf

Student Engagement

What is Active Learning?

"[A]ctive learning is commonly defined as activities that students do to construct knowledge and understanding."
Brame, C. (2016). Active learning. Vanderbilt University Center for Teaching. Retrieved Sept. 13, 2022, from https://cft.vanderbilt.edu/active-learning/

"Active learning includes any type of instructional activity that engages students in learning, beyond listening, reading, and memorizing."
The Derek Bok Center for Teaching and Learning, Harvard University. Active learning. Retrieved Sept. 13, 2022, from https://bokcenter.harvard.edu/active-learning (and check out the "Tipsheet: Active Learning" on that site, too!)

"In a course focused on active learning, students are truly engaged in the learning process. . . . They are constantly processing what they are learning."
Center for Research on Teaching and Learning, University of Michigan. Introduction to active learning. Retrieved Sept. 13, 2022, from https://crlt.umich.edu/active_learning_introduction

Active Learning in Class

Below is a list of common in-class engagement strategies.

- Discussions
- In-Class Writing/Reflection
- Polling Activities
- Group Work
- Case Studies
- In-Class Practice
- Guest Speakers/Panels

What other strategies could we add to the list?

Find more strategies on CETL's website!

https://teaching.vt.edu/content/dam/teaching_vt_edu/resources/LearningPauses.pdf

Positive Classroom Climate

Establishing your class presence

- Remember first impressions are important
- Get to know the class (i.e., early connections, checking in)
- Leverage your strengths
- Establish communication patterns and strategies (between you and students)
- Give helpful feedback focused on improvement
- Engage with students during office hours

Understanding what is unique/special about the course

- Shared experiences, shared challenges

Establishing student interdependence

- Facilitate student academic connections, such as study groups

Final Thoughts & Q&A

Optional Reflection Activity

Watch the video "The One Thing All Great Teachers Do" - https://www.youtube.com/watch?v=WwTpfVQgkU0 - and reflect using the following prompts:

- What is your "Ranger Bill" story? In other words, what positive learning experience from your past stands out to you and why?

- How would you finish the statement: "A great teacher..."

- How do you think you can apply the concepts of C.A.R.E.?

> Celebrate mistakes
> Appreciate differences
> Relay feedback
> Evaluate themselves

CETL Support Services

Observations

Consultations

Mid-Semester Feedback
- Weeks 5-10
- Faculty report this service (when used correctly) has a positive impact on course evaluations

Sign up here: https://teaching.vt.edu/OurServices/evaluations.html