

UDL Lite (Universal Design for Learning)

Holly B. Parker and J. Dickinson Center for Teaching & Learning

Nate Gondelman and Keith M. Williams Center for Academic Success

Learning Objectives for this workshop

- 1. Participants will be able to describe the characteristics of UVM students.
- 2. Participants will be able to identify teaching resource partners for learning accommodations and tutoring.
- Participants will discuss teaching ideas informed by Universal Design for Learning.

Who do you think your students are?



First-Year Class of 2022

- 1. How many first-year students enrolled in UVM this year?
 - A. 2350
 - B. 2515
 - C. 2600
 - D. 2725
- 2. What % of the incoming class are Vermonters?
 - a. 9%
 b. 16%
 c. 23%
 d. 36%

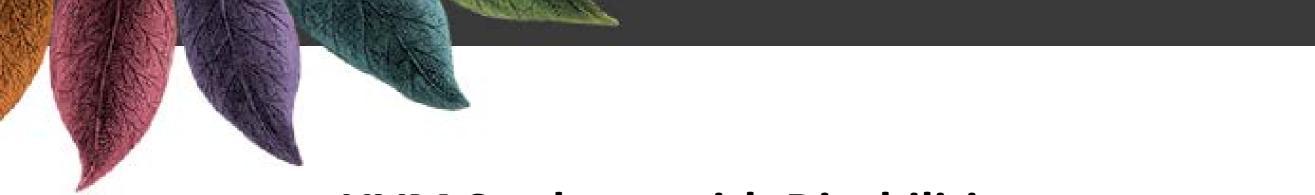
Class of 2022

- 3. What % of these students identify as students of color?
 - a. 16% b. 12% c. 9%
- 4. How many U.S. states are represented among the incoming class?
 - a. 39 b. 43 c. 49
- 5. How many total applications did UVM receive?
 - a. 4,956
 b. 9,525
 c. 17,021
 d. 21,991

Our changing students

Students will be

- More diverse (age, students with disabilities, students of color, first generation)
- Students of color will outnumber white students nationally
- Women will continue to outnumber men
- Students will expect to see education built around technology/will want to design own curriculum
- Students will be more restless about traditional educational methods: lecture format



UVM Students with Disabilities

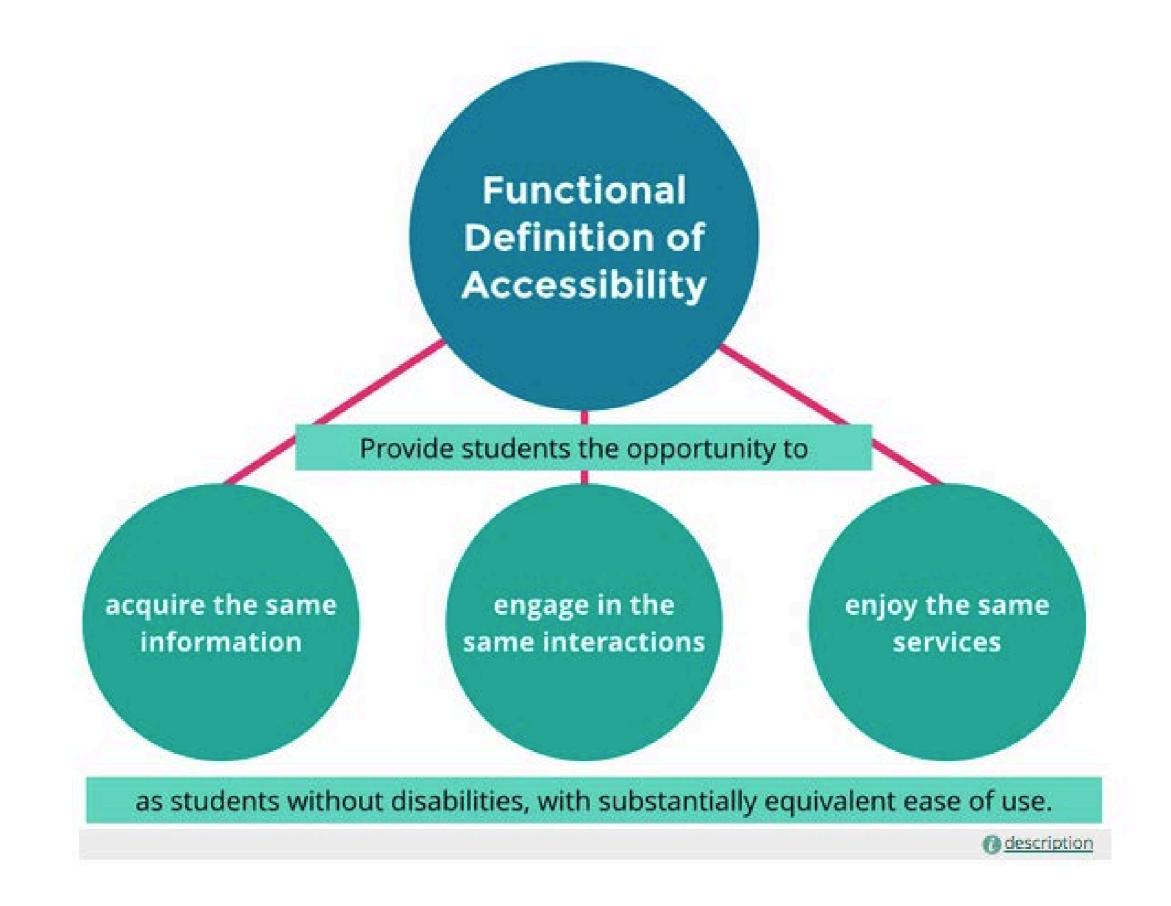
- 18% of the U.S. population have disabilities
 - ADA Update: A Primer for State and Local Governments, 2015

- Over 10% of UVM students are served by Student Accessibility Services
 - 1,352 out of 13,005 undergrads graduate, medical, post-baccalaureate and nondegree students were served last year



Types of Disabilities

- ADD/ADHD
- Blind/Vision
- Deaf/Hearing Loss
- Developmental
- Learning
- Mobility
- Psychiatric
- Systemic/Chronic/Episodic Illness
- Speech/Language
- Traumatic Brain Injury



http://udloncampus.cast.org/page/policy_legal#.Vc3pTVNViko

Common Accommodations

- Note taker
- Extended time on tests (through the Exam Proctoring Center)
- Quiet space for tests extended time on tests extended time on tests
- Use of a computer in class and/or on exams
- Materials, PowerPoints, etc. in advance

UVM Rights & Responsibilities

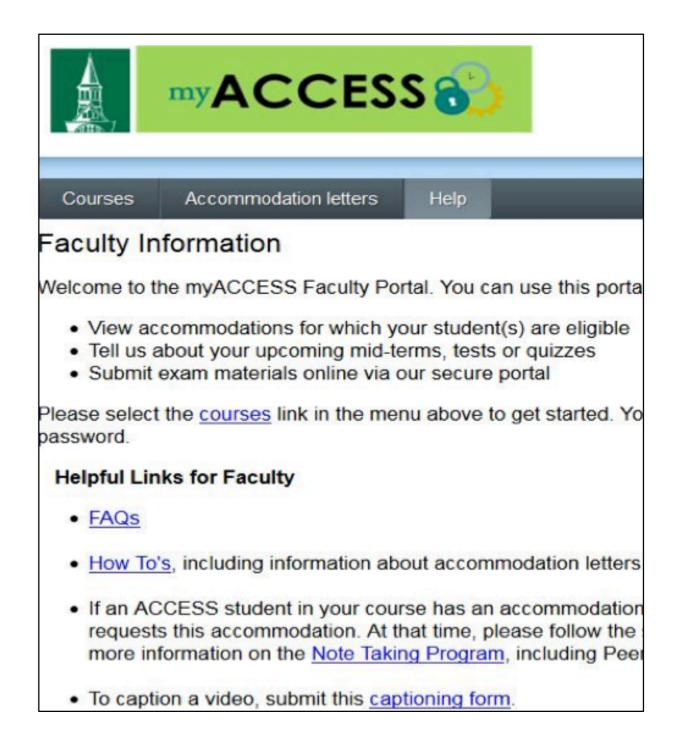
	Faculty	Dean's Office	SAS
Maintain academic and technical standards	\checkmark	\checkmark	
Maintain confidentiality of information and records	\checkmark	\checkmark	\checkmark
Engage in an interactive process with a student	\checkmark		\checkmark
Ensure students with disabilities are not discriminated against	\checkmark	\checkmark	\checkmark

Student Rights & Responsibilities

- Provide documentation for Student Accessibility Services to confirm whether a student has a disability
- Receive reasonable accommodations that provide equal access
- Determine WHO will receive disability-related information and WHEN (accommodations become effective upon notification)
- Students attend a required workshop, orienting them to services available

myACCESS: Managing Disability Accommodations

- myACCESS provides feedback and information for faculty and students through a secure online web portal
- Students can email accommodation letters
- Faculty can view accommodations for all courses
- The majority of letters are disbursed during the first three weeks of the semester





Tutoring Center

	2017-2018	2016-2017	2015-2016	2014-2015
Total Contacts	13,876	12,586	15,082	15,010
Unique Students	2,907	2,441	2,636	2,527

First Year of College as a Transitional Environment

Average High School Class	Average College Class
Teacher has teaching degree	Instructor is specialist, not necessarily trained in teaching
Highly structured	Less structured
Classes meet every day	Class meets 2-3 times a week
Regular quizzes and assignments	Quizzes and assignments vary in frequency
Frequent reminders about due dates, assignments, etc.	Syllabus may be only reminder of due dates
Teacher bears most of the "responsibility" load	Student bears most of the "responsibility" load
Independent thought not always rewarded	Independent thinking expected

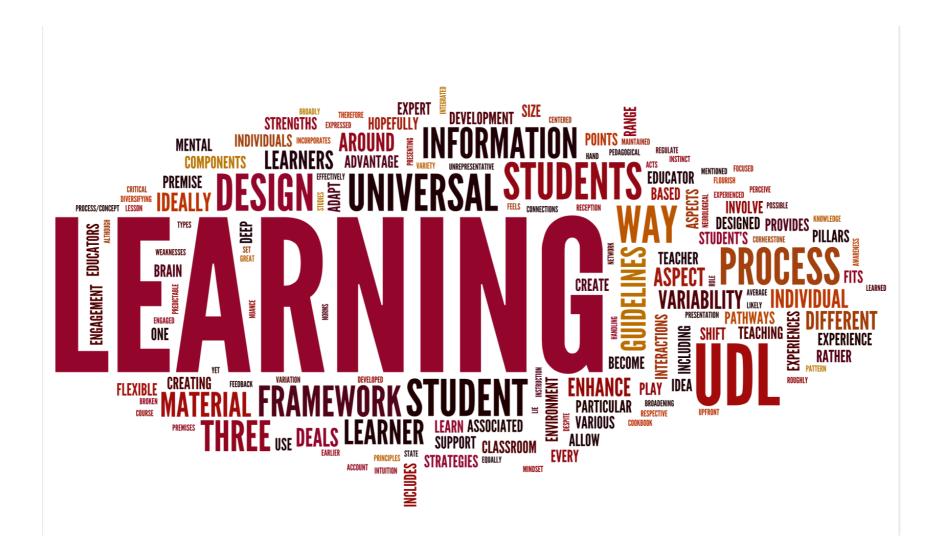
Do you have questions about students with disabilities or providing tutoring for your course?

Contact: Student Accessibility Services Nate Gondelman Student Accessibility Services, Services Manager <u>Nathan.Gondelman@uvm.edu</u> 656-7841

Tutoring Center

Keith Williams Tutoring Center, Program Director <u>Keith.M.Williams@uvm.edu</u> 656-7964

CTL's approach to course design We do UDL!



UDL principles are based on neuroscience research and Universal Design in architecture



CLEARING A PATH FOR PEOPLE WITH SPECIAL NEEDS CLEARS THE PATH FOR EVERYONE!

Designing for ALL

Universal Design in Architecture



- Intentional approach to design
- Anticipates a variety of needs
- Broadens usability to public
- More economical
- Respects human diversity

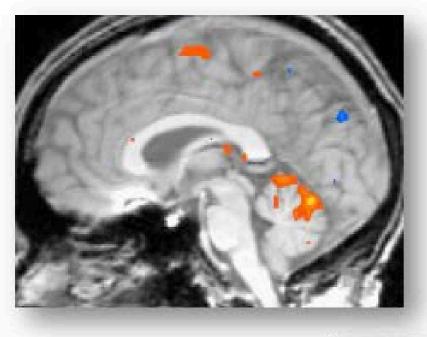
What kind of Universal Design solutions are located on your campus or in the community?

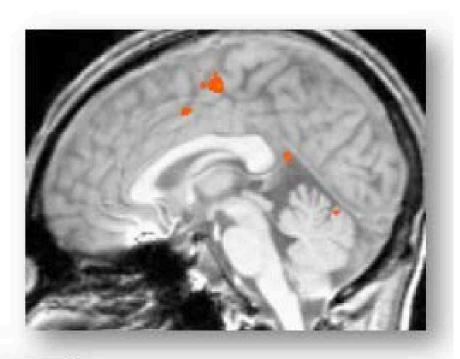
Reducing Barriers to Student Learning

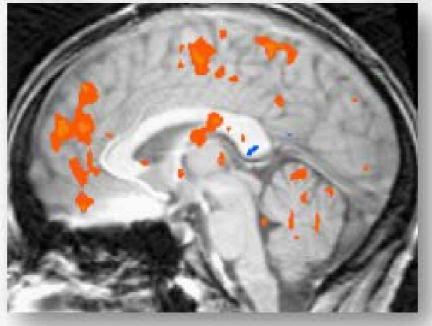
UD	UDL
Physical Environment	Instructional Environment
Physical barriers may exist in our architectural environment	Learning barriers may exist in our curricular environment
Proactive design of physical space	Proactive design of curriculum and instruction
Physical retrofitting can be costly and is often inelegant	Instructional accommodations can be time consuming and difficult to implement



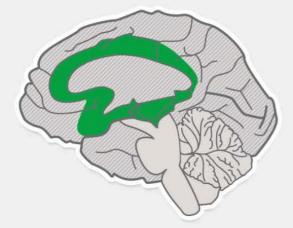
Learner Variability







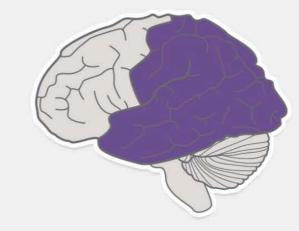
AFFECTIVE NETWORKS: THE WHY OF LEARNING



Engagement

For purposeful, motivated learners, stimulate interest and motivation for learning.

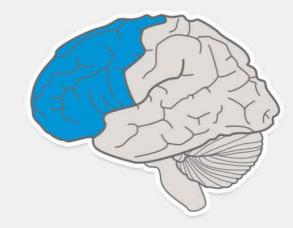
RECOGNITION NETWORKS: THE WHAT OF LEARNING



Representation

For resourceful, knowledgeable learners, present information and content in different ways.

STRATEGIC NETWORKS: THE HOW OF LEARNING



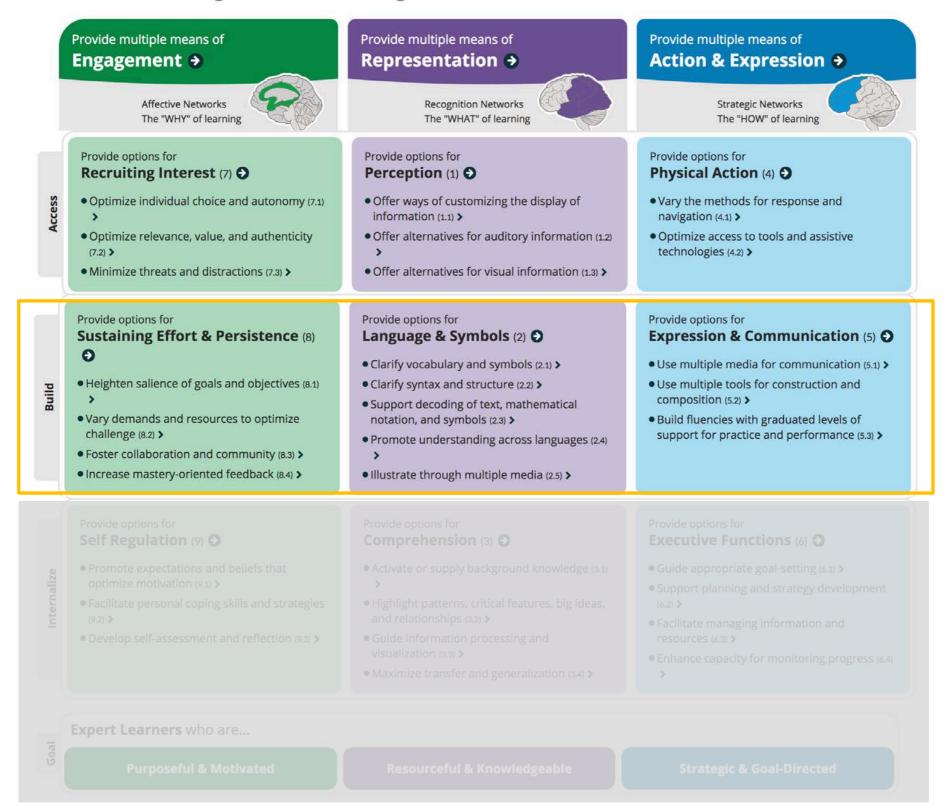
Action & Expression

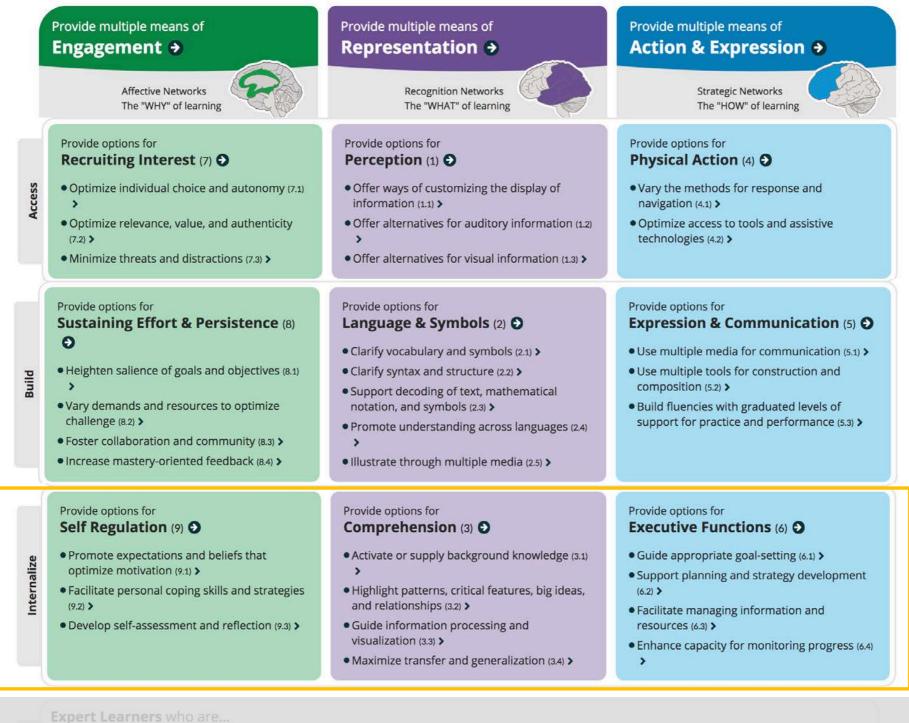
For strategic, goal-directed learners, differentiate the ways that students can express what they know.

http://www.cast.org/our-work/about-udl.html/



Provide multiple means of Engagement →		Provide multiple means of Representation →	Provide multiple means of Action & Expression •	
	Affective Networks The "WHY" of learning	Recognition Networks The "WHAT" of learning	Strategic Networks The "HOW" of learning	
	 Provide options for Recruiting Interest (7) Optimize individual choice and autonomy (7.1) Optimize relevance, value, and authenticity (7.2) Minimize threats and distractions (7.3) 	 Provide options for Perception (1) Offer ways of customizing the display of information (1.1) > Offer alternatives for auditory information (1.2) > Offer alternatives for visual information (1.3) > 	 Provide options for Physical Action (4) ● • Vary the methods for response and navigation (4.1) > • Optimize access to tools and assistive technologies (4.2) > 	
	Expert Learners who are			





urposeful & Motivated

Resourceful & Knowledgeable

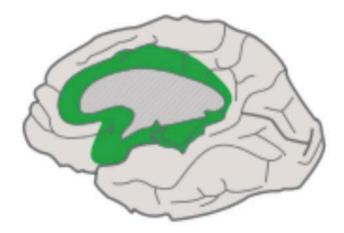
Strategic & Goal-Directed

(Provide multiple means of Engagement €	Provide multiple means of Representation →	Provide multiple means of Action & Expression 🔊
	Affective Networks The "WHY" of learning	Recognition Networks The "WHAT" of learning	Strategic Networks The "HOW" of learning
Access	 Provide options for Recruiting Interest (7) Optimize individual choice and autonomy (7.1) Optimize relevance, value, and authenticity (7.2) > Minimize threats and distractions (7.3) > 	 Provide options for Perception (1) Offer ways of customizing the display of information (1.1) > Offer alternatives for auditory information (1.2) > Offer alternatives for visual information (1.3) > 	 Provide options for Physical Action (4) Vary the methods for response and navigation (4.1) > Optimize access to tools and assistive technologies (4.2) >
Build	 Provide options for Sustaining Effort & Persistence (8) Heighten salience of goals and objectives (8.1) Heighten salience of goals and objectives (8.1) Vary demands and resources to optimize challenge (8.2) > Foster collaboration and community (8.3) > Increase mastery-oriented feedback (8.4) > 	 Provide options for Language & Symbols (2) Clarify vocabulary and symbols (2.1) > Clarify syntax and structure (2.2) > Support decoding of text, mathematical notation, and symbols (2.3) > Promote understanding across languages (2.4) > Illustrate through multiple media (2.5) > 	 Provide options for Expression & Communication (5) Use multiple media for communication (5.1) > Use multiple tools for construction and composition (5.2) > Build fluencies with graduated levels of support for practice and performance (5.3) >
Internalize	 Provide options for Self Regulation (9) ● Promote expectations and beliefs that optimize motivation (9.1) > Facilitate personal coping skills and strategies (9.2) > Develop self-assessment and reflection (9.3) > 	 Provide options for Comprehension (3) Activate or supply background knowledge (3.1) Highlight patterns, critical features, big ideas, and relationships (3.2) > Guide information processing and visualization (3.3) > Maximize transfer and generalization (3.4) > 	 Provide options for Executive Functions (6) Guide appropriate goal-setting (6.1) > Support planning and strategy development (6.2) > Facilitate managing information and resources (6.3) > Enhance capacity for monitoring progress (6.4) >
Goal	Expert Learners who are Purposeful & Motivated	Resourceful & Knowledgeable	Strategic & Goal-Directed



What can we do to make learning more accessible to our students?

Principle One: Provide Multiple Means of Engagement Emotions and Learning are closely tied together

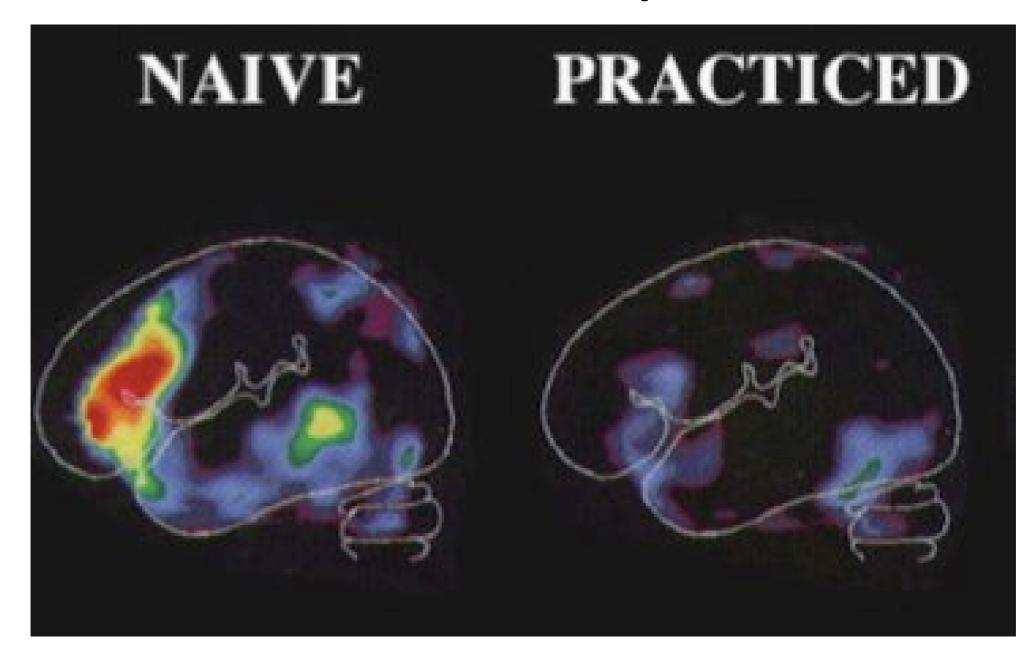


Provide Multiple Means of Engagement Purposeful, motivated learners

- Decrease distraction
- Create a welcoming environment

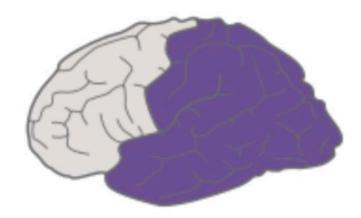
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Learning and Energy Novice vs. Expert



MRI – Novice and Expert Thinking Courtesy of David Rose, Ph.D. (CAST)

Principle Two: Provide Multiple Means of Representation



Provide Multiple Means of Representation

Resourceful, knowledgeable learners

Create visuals, audio, text and video to assist with explanations of difficult concepts.

EPIDEMIOLOGY

Are people more likely to be obese if they enter into a romantic relationship?
 Do people have a greater likelihood of becoming obese the longer they live together?

Entry Into Romantic Partnership

Obviously. Single ladies are burning tons of kcals doing this: http:// www.youtube.com/watch? v=4m1EFMoRFvY.

Is Associated With Obesity

BMI is highly correlated between spouses; however, less is understood about the underlying mechanism(s) by which the development of obesity in one individual increases the risk of obesity in his/her spouse. The objective of this study is to investigate whether romantic partnership and duration of cohabitation are related to incident obesity and obesity-promoting behaviors. We used two data sets from the National Longitudinal Study of Adolescent Health: (i) 6,949 US adolescents (wave II, 1996) followed into adulthood (wave III, 2001–2002) and (ii) 1,293 dating, cohabiting, and married romantic couples from wave III, including measured anthropometry and self-report behavior data. In the longitudinal cohort, we used sex-stratified logistic regression models to examine the risk of incident obesity by longitudinal romantic relationship status and duration of time spent living with a romantic partner. In the Couples Sample, we used multinomial logistic regression to predict concordance in outcomes: obesity, moderate-to-vigorous physical activity, and screen time by romantic partnership and duration of time living with a romantic partner. Individuals who transitioned from single/dating to cohabiting or married were more likely to become obese than those who were dating at both waves. Partner concordance for negative, obesity-related behaviors was strongest for married couples and couples who lived together ≥2 years. The shared household environment may increase the likelihood of becoming obese, influence partner concordance, and may be an important target for obesity intervention.

Obesity (2009) 17, 1441-1447. doi:10.1038/oby.2009.97

INTRODUCTION

Marital status is associated with improved health, including lower mortality (1) and decreased cigarette smoking (2). Conversely, marriage is inconsistently associated with body weight and obesity; some find higher obesity with marriage (3–5), while others observe the association in one gender (6,7), or not at all (8). Discrepant find is may be due to crosssectional study designs, inconsisten frol for confounding factors, or population differences. Longitudinal studies in older adults suggest that marital transitions significantly influence body weight (9,10); however, little is known about how changes in romantic relationships influence obesity in young adults of diverse ethnicities.

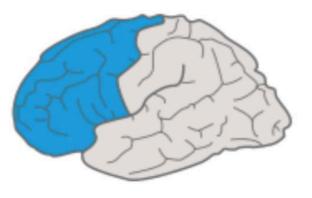
BMI is highly correlated between married spouses (11–17), and may result from: (i) assortative mating (the propensity for individuals to select romantic partners with similar behaviors and body types) and/or (ii) shared household environment (18–20). However, the complex nature in which assortative mating and shared household environment independently and jointly influence spousal concordance remains poorly understood (19). Examining the effects of marriage duration and cohabitation duration on spousal concordance is a critical component in disentangling the influence of assortative mating and the shared household environment (18). Increased partner concordance among couples who cohabit or are married and/or live together for longer (vs. shorter) durations would suggest that common environmental factors play a greater role (relative to assortative mating) in similarities between spouses. Yet, findings are inconsistent (11,18,19,21) and the literature is dominated by data on married couples (11–18); thus precluding opportunities to effectively tease apart the effects of assortative mating and the shared household environment.

To address these limitations, we used data from a US nationally representative, prospective study to determine whether romantic relationships were related to obesity and obesityrelated behaviors. First, we used longitudinal data from the larger cohort to investigate the association of incident obesity with longitudinal changes in romantic relationship and duration of time living with a romantic partner, hypothesizing that entry into (and duration of) a shared (vs. nonshared) household would be associated with greater likelihood of incident obesity. Second, we present data on partner concordance of obesity and associated health behaviors in a linked subsample of romantic couples, hypothesizing greater concordance in obesity-related behaviors among married and cohabiting couples and couples with longer duration of living together.

So studies will just look at one point in time, they won't control for things like age or ethnicity, or they only look at one region of the country.

Longitudinal data means that they had data on the same people over a period of time. So they could look at whether someone started a new relationship and how their weight changed depending on whether they moved in with that person or how long the relationship lasted, etc.

Principle Three: Provide Multiple Means of Expression



Provide Multiple Means of Action & Expression Strategic, goal-directed learners

- Use small assessments to gauge where students are missing important knowledge,
- Allow students to show you what they know in a variety of ways.

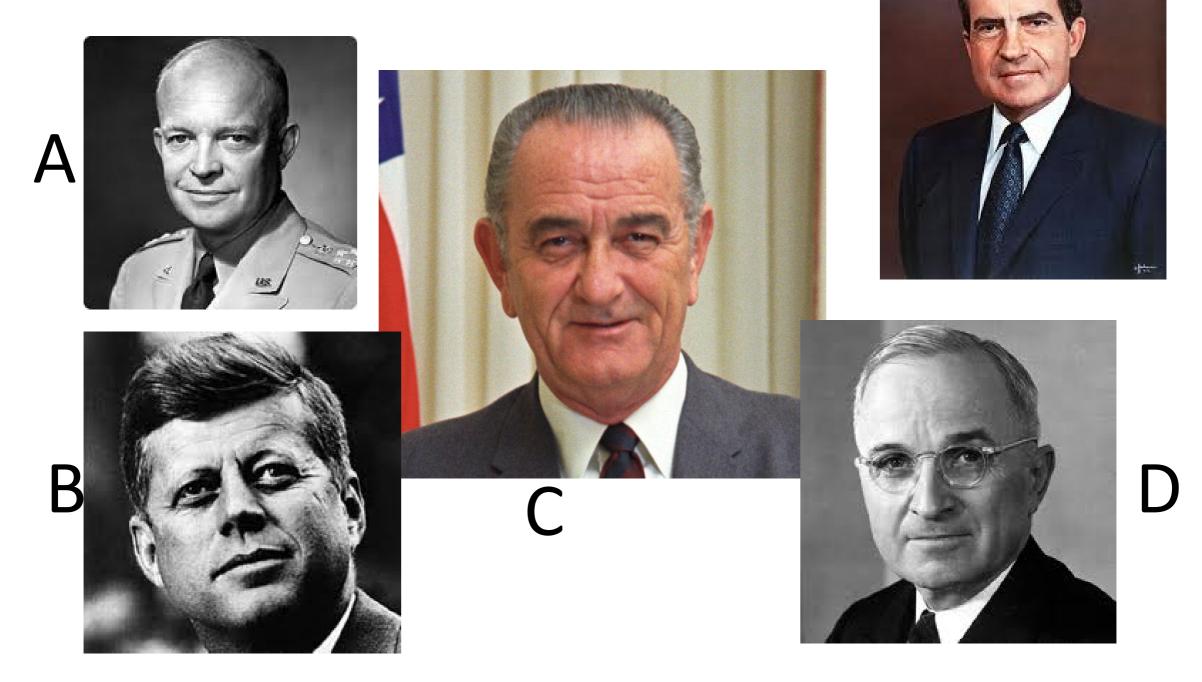
Who was president from April 1945 until January 1953?

- A. Franklin Roosevelt
- B. Dwight Eisenhower
- C. John F. Kennedy
- D. Harry Truman
- E. Woodrow Wilson

[Nicole Phelps, Intro History]

Which of these men was president first?

"Prior knowledge/best guess"



Presidential Timeline



Harry Truman April 1945 – January 1953



Dwight Eisenhower January 1953 – January

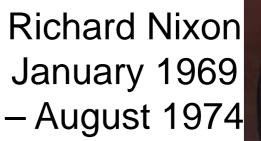
1961



John F. Kennedy January 1961 – November 1963

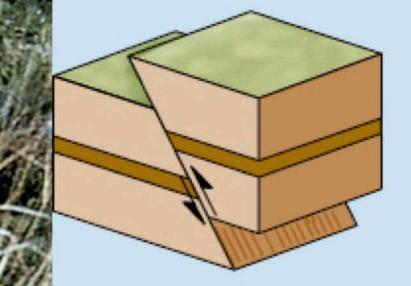


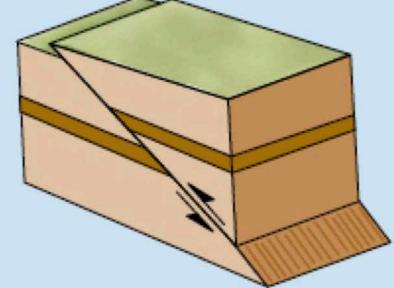
Lyndon B. Johnson November 1963 – January 1969

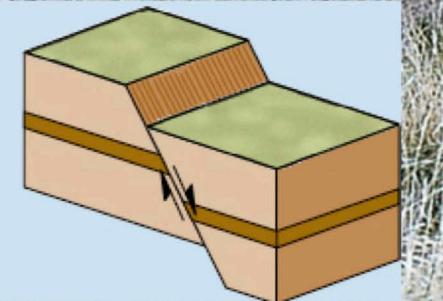




This fault is most similar to which of the below block diagrams?









Think of three things you could do in one of your courses to address ONE UDL Horizontal Band of Principles.

- Write: On your own brainstorm three ideas, one for each principle
- Talk: Share your thoughts with the person next to you
- Report out: A few faculty pairs will share with the larger group

What can you do to your course to make it more UDL?

- 1. Use daily agendas in class,
- 2. Activate student's prior knowledge
- 3. After 20 30 min of concentration give students a 1-2 minute scheduled "brain break."
- 4. Try using maps, images and video, as well as text to convey course material,
- 5. Use CTL web resources and workshops to learn new techniques, along with CTL Open Hours!

Use this syllabus statement

In keeping with University policy, any student with a documented disability interested in utilizing accommodations should contact SAS, the office of Disability Services on campus. SAS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations, which are communicated to faculty in an accommodation letter. All students are strongly encouraged to meet with their faculty to discuss the accommodations they plan to use in each course. A student's accommodation letter lists those accommodations that will not be implemented until the student meets with their faculty to create a plan. Contact SAS: A170 Living/Learning Center; 802-656-7753; access@uvm.edu; or www.uvm.edu/access

Resources for support

- Student Accessibility Services
- Center for Teaching & Learning
- Writing in the Disciplines Program
- Center for Cultural Pluralism
- Office of International Education
- Community-University Partnerships and Service Learning (CUPS)



Contact Information:

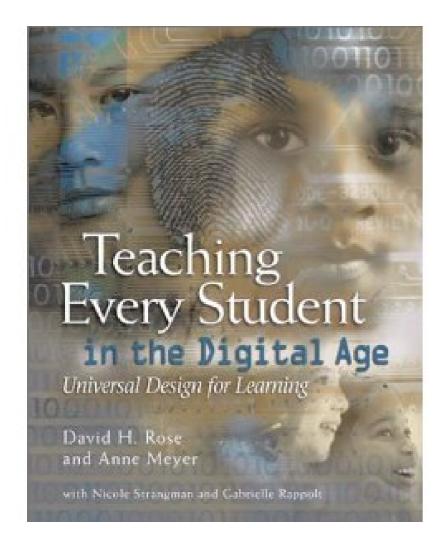
Holly.Parker@uvm.edu

Jennifer.Dickinson@uvm.edu

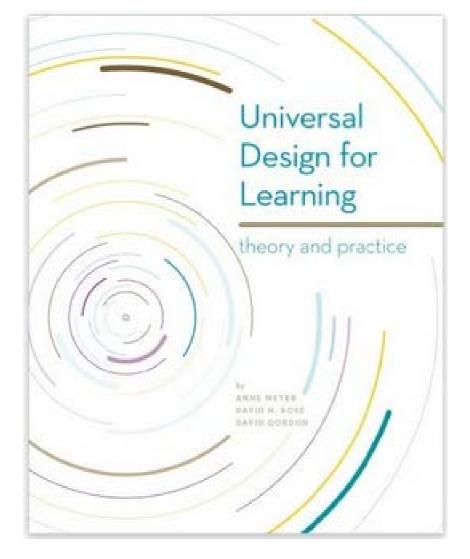
Exit Card

- First side Describe something new that you learned in this session that can help you in your teaching.
- Second side tell us something you still have a question about.

Universal Design for Learning



David Rose & Anne Meyer, 2002



David Rose & Anne Meyer, David Gordon, 2013

http://udltheorypractice.cast.org/

UDL References

- <u>http://www.udlcenter.org/aboutudl/whatisudl</u>
- <u>http://www.cast.org</u>
- <u>http://udltheorypractice.cast.org/</u>
- <u>http://udloncampus.cast.org/</u>
- Variability image from CAST 2014: <u>http://slideplayer.com/slide/4287707/</u>
- Naïve and Practiced Learning images: CAST, David Rose
- Photos of UDL book covers: Amazon.com
- UDL guidelines: CAST 2013, <u>http://udloncampus.cast.org/wicket/resource/org.cast.cwm.xml.FileXml</u> <u>DocumentSource/opt/tomcat-</u> <u>oncourse/content/downloads/guidelines_graphicorganizer_new.pdf</u>
- Man in Wheelchair with Button: <u>https://www.google.com/search?q=button+to+open+door&source=lnms</u> <u>&tbm=isch&sa=X&ved=0ahUKEwj-</u> <u>qOSO1s3OAhVEOiYKHb2tAIsQ_AUICCgB&biw=1024&bih=474#imgrc=01</u> <u>QZJqAcvzrUVM%3A</u>