## Universal Design for Learning: Addressing Learner Variability 101

## COURSE DESCRIPTION:

In this introductory Universal Design for Learning (UDL) course, participants learn the research basis for and application of UDL to lesson design. Participants engage in teams to also explore helpful technology tools that support instruction in tier one, general education classrooms in order to address the needs of all learners, including diversity of race, socioeconomic, gender, culture, and learning skills. This course is the pre-requisite to Universal Design for Learning: Student Affect and Engagement 201 and Universal Design for Learning: Addressing Learner Variability in Mathematics Instruction 201.

The Universal Design for Learning (UDL) 101 course is designed to equip participants with the ability to evaluate, create, and recreate lesson plans that ensure the engagement and participation of varied learners within a high standards-based curriculum. It also works to build teams of educators who can continue to infuse UDL into lessons beyond the scope of this course. Course sessions have been created within the context of current Massachusetts Curriculum Frameworks and local curriculum requirements to ensure alignment with existing academic standards and benchmarks.

## TEXTS:

Meyer, A., Rose, D.H., & Gordon, D. (2013) Universal design for learning: Theory and practice, Wakefield MA: National Center on Universal Design for Learning. [Online version](http://udltheorypractice.cast.org/login) also available.

Also, refer to the readings within each of the sessions.

## CURRICULUM STANDARDS & FRAMEWORKS:

### Massachusetts [7.08: Professional Standards for Educators](http://www.doe.mass.edu/lawsregs/603cmr7.html?section=08)

(2) (a) 2. Draws on results of formal and informal assessments as well as knowledge of human development to identify teaching strategies and learning activities appropriate to the specific discipline, age, and range of cognitive levels being taught.

(2) (a) 5. Plans lessons with clear objectives and relevant measurable outcomes.

(2) (a) 7. Incorporates appropriate technology and media in lesson planning.

(2) (a) 8. Uses information in Individualized Education Programs (IEPs) to plan strategies for integrating learners with disabilities into general education classrooms.

(2) (d) 2. Works to promote achievement by all learners without exception.

(2) (d) 3. Assesses the significance of learner differences in home experiences, background knowledge, learning skills, learning pace, and proficiency in the English language for learning the curriculum at hand and uses professional judgment to determine if instructional adjustments are necessary.

(2) (e) 3. Maintains interest in current theory, research, and developments in the academic discipline and exercises judgment in accepting implications or findings as valid for application in classroom practice.

### National Board Certification Standards for Professional Educators

* [5 Core Propositions](http://www.nbpts.org/five-core-propositions)
* [Exceptional Needs Standards](http://www.nbpts.org/sites/default/files/documents/certificates/nbpts-certificate-ecya-ens-standards.pdf)

### National Educational Technology Standards

* NETS-T: <http://www.iste.org/standards/nets-for-teachers.aspx>
* NETS-A: <http://www.iste.org/standards/nets-for-administrators.aspx>

## COURSE REQUIREMENTS:

The course is equivalent to a 3 credit, 45 contact hour, graduate level course.

Every weekly session includes one or more of the following:

* Introduction and conclusion face-to-face or video streaming sessions with optional office hours require participants to participate in face to face sessions (video streaming option available for those who cannot attend live) at the beginning and end of the semester and engage in pre, mid, and post reflections. Participants have the option to engage in optional phone or Skype office hours by at any point throughout the course.
* Asynchronous sessions will be completed anytime over the course of the week and include:
	+ - * required readings and/or media to build background comprehension. Use the guiding questions to guide your thinking and learning as you are reading, watching or listening. You are not required to submit answers to these questions.
			* Try It Activities each week to complete. Use the “Pause and reflect” prompts you to think about your experience with the activity and how it applies the readings and research presented during the week.
			* one of the following deliverable assignments (see course map for dates):
			* Synthesis activities (online discussions and community contribution) require you to synthesize the readings, activities and to make connections with your own practice in a discussion format with the other participants in the course. A rubric for participation is included in the appendix.
			* Lesson Analysis and Evaluation Activity: require you to analyze a lesson plan for barriers and evaluate it with one portion of the UDL framework to identify elements of UDL. These are opportunities for you to demonstrate your ability to use the Framework as an evaluative tool.
			* The final assignment requires you to demonstrate emerging abilities to apply what you have learned about research basis of UDL and the UDL framework to evaluate and make suggestions for improving a lesson plan with the UDL Framework. A rubric is included. The final assignment will be shared and reviewed with the community of practitioners who have been developing relationships throughout the course.

### Technology Requirements:

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| Requirement | Microsoft Windows | Apple Macintosh |
| Browsers Supported: | Internet Explorer 9 or laterFirefox: Complete the most recent updateChrome: Complete the most recent update | Safari 6.0 and higherFirefox: Complete the most recent updateChrome: Complete the most recent update |
| Processor Speed: | 1 Ghz or higher | 1 Ghz or higher |
| Bandwidth Required: | 56 Kbps256 Kbps recommended(minimum DSL) | 56 Kbps256 Kbps recommended(minimum DSL) |
| Display (Minimum): | 1024x768 or higher, with 16-bit color | 1024x768 or higher, with 16-bit color |
| Other Hardware: | Speakers (USB headset recommended)Microphone OPTIONAL (USB headset recommended) | Speakers (USB headset recommended)Microphone OPTIONAL (USB headset recommended) |

## EVALUATION OR GRADING POLICY:

Assessment will be based on participation in course synthesis activities such as online discussions, asynchronous video sessions, lesson analysis worksheets, and completion of the final assignment. See rubrics in the appendix for details on how the work will be evaluated. Instructors will provide ongoing assessment throughout the course via timely and relevant feedback to discussion forum postings including comments and post ratings. Authenticity of your work will be verified.

### Quality Expectations:

This course is equivalent to a 3 credit, graduate level courses. The work presented for grades must be rooted in adequate theory and will require a high level of critical thinking, analysis and synthesis of material.

### Point Value Breakdown:

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| Task | Maximum Point Value |
| Seven Online Discussion Syntheses  | 6 points each (42 total) |
| Introduction, Midpoint, and Final Session Reflection Discussion Syntheses | 3 points each (9 total) |
| Three Lesson Analysis and Evaluation Assignments | 8 points each (24 total) |
| Final Assignment  | 25 points  |

### Grade Equivalents: If taking for PDPs If taking for graduate credit

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| --- | --- | --- | --- | --- |
| Letter Grade | Points |  | FSU Letter Grade and Grade Point Average | Points |
| A | 95-100 |  | A (4.0) | 95-100 |
| A- | 90-94 |  | A- (3.7) | 92-94 |
| B+ | 86-89 |  | A-/B+ (3.5) | 89-91 |
| B | 83-85 |  | B+ (3.3) | 86-88 |
| B- | 80-82 |  | B (3.0) | 83-85 |
| C+ | 77-79 |  | B- (2.7) | 80-82 |
| C | 74-76 |  | B/C+ (2.5) | 77-79 |
| C- | 71-73 |  | C+ (2.3) | 74-76 |
| F | 0-70 |  | C (2.0) | 71-73 |
|  |  |  | F (0.0) | 0-70 |

**Academic Integrity:**

Our Academic Integrity policy is as follows: "Materials submitted in this course must represent your own work except where the work of others is properly attributed (cited). The authenticity of your work will be verified. If an instructor feels that there is evidence that work submitted is not your own, infringes on intellectual property rights or does not comply with [US copyright law](http://www.copyright.gov/circs/circ01.pdf), he or she is required to bring this matter to the attention of the Department under whose auspices this course is offered. They will investigate the matter and take any proper actions that might be required. For students taking the course for credit, the matter will also be turned over to institution for investigation. Consequences may include failure of assignment, course failure and jeopardizes the status of your teaching license. If you have questions about this policy, it is your responsibility to see the instructor prior to the due date of the first assignment.”

### Participants with Disabilities:

You should contact the instructor if you need assistance in developing appropriate accommodations.

## CONTENT / TOPICAL OUTLINE

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| **Session Type/Date** | **TOPIC** | **Related Course Goal(s)** | **What is due?**  |
| 1 – Face to face or video streamed option Introduction | **INTRO TO UDL & VARIABILITY IN THE LEARNING CONTEXT**  | * Participants will begin to form partnerships and build team relationships with other educators in the course
* Participants will examine their current beliefs about the nature of ability.
* Participants will understand that ability is determined by the interaction of individual variability and the learning context.
 | Attend the introductory session (live or video streamed)Complete brief reflectionPost a profile to Blackboard |
| 2 – Asynchronous session (complete online)  | * Participants will understand that ability is determined by the interaction of individual variability and the learning context. Learning contexts include (but are not limited to) curricula as well as the learning environment.
* Participants will think about variability, including differences in socioeconomic, gender, race, and culture.
 | Synthesize what you have learned in an online discussion and post a reflection to a peer. |
| 3 – Asynchronous session(complete online) | * Participants will understand that neural networks vary across individuals.
* Participants will understand that the UDL guidelines are a series of levers for addressing learner variability.
 | Synthesize what you have learned in an online discussion and post a reflection to a peer.  |
| 4 – Asynchronous session (complete online)  | * Participants will understand the way that neural networks vary across individuals.
* Participants will understand that the UDL guidelines are a series of levers that can help educators address learner variability.
* Participants will reflect upon how they craft learning goals.
 | Synthesize what you have learned in an online discussion and post a resource idea to the online community site. |
| 5 – Asynchronous session (complete online)  | **RECOGNITION (the ’what’ of learning)** **MULTIPLE MEANS OF REPRESENTATION** | Participants will be able to explain how the recognition networks of the brain are involved in how we gather information, integrate it into concepts, make connections between them, etc.Participants will be able to describe the way that recognition networks vary across individuals and the challenges that this presents for educators. | Synthesize what you have learned in an online discussion and post a reflection to a peer. |
| 6 – Asynchronous session (complete online)  | * Participants will be able to explain how the UDL principle—Multiple Means of Representation—helps educators address the variability in learners’ recognition networks.
* Participants will demonstrate understanding of how the principle Multiple Means of Representation can be used as a lens to evaluate curricula for barriers and elements of UDL.
 | Analyze a lesson and evaluate for elements of UDL. Post your analysis. Add a resource to the online community site. |
| 7–Video streamed Mid-course check in | **REVIEW & REFLECTION** | * Participants will understand that the UDL guidelines are levers for addressing learner variability.
* Participants will understand the way that the UDL framework supports the development of expert learners- regardless of learner’s background, culture, socioeconomic (poverty), gender, or culture.
 | Participate in the webinar or watch the recording.Complete reflection and share with your facilitator. |
| 8 – Asynchronous session (complete online)  | **STRATEGIC NETWORKS** **(the ‘how’ of learning)** **MULTIPLE MEANS OF ACTION AND EXPRESSION** | Participants will be able to explain how the strategic networks of the brain are involved in how we act on information, develop strategies, set goals and express what we know.* Participants will be able to describe the way that strategic networks vary across individuals and the challenges that this presents for educators.
 | Synthesize what you have learned in an online discussion and share ideas with peers. |
| 9 – Asynchronous session (complete online)  | * Participants will be able to explain how the UDL principle: Multiple Means of Action and Expression helps educators address the variability in learners’ strategic networks.
* Participants will demonstrate understanding of how the principle: Multiple Means of Action and Expression can be used as a lens to evaluate curricula for barriers and elements of UDL.
 | Analyze a lesson and evaluate for elements of UDL Action & Expression. Post your analysis. Add a resource to the online community site. |
| 10 – Asynchronous session (complete online)  | **AFFECT** **(the ‘why’ of learning)****MULTIPLE MEANS OF ENGAGEMENT** | * Participants will understand the way that affective networks are involved in motivation and engagement.
* Participants will be able to describe the way that affective networks vary across individuals and the challenges that this presents for educators.
 | Synthesize what you have learned in an online discussion and post a reflection to a peer. |
| 11 – Asynchronous session (complete online)  | * Participants will be able to explain how the UDL principle: Multiple Means of Action and Expression helps educators address the variability in learners’ strategic networks.
* Participants will demonstrate understanding of how the principle: Multiple Means of Action and Expression can be used as a lens to evaluate curricula for barriers and elements of UDL.
 | Analyze a lesson and evaluate for elements of UDL. Post resource ideas to the online community site. |
| 12– Asynchronous session (complete online) | **UDL LESSON PLANNING PROCESS** | * Participants will be able to identify the goals, methods, materials, and assessments in a lesson plan.
 | Synthesize what you have learned and tried in your classroom in an online discussion. Share reflections with a peer. |
| 13– Asynchronous session (complete online)  | **PUTTING IT ALL TOGETHER** | * Participants will demonstrate the ability to use the UDL framework to analyze and evaluate lessons for barriers and elements of UDL.
* Participants will demonstrate the ability to use the UDL framework to create or recreate lessons that address learner variability and support the development of expert learners.
 | Redesign a lesson for the Final Assignment (due one week after the final session) |
| 14 – Final face to face session with option for video streaming  | **REVIEW, REFLECT &** **TAKE AWAYS** | * Participants will reflect with the community of practice that has been working together throughout the course
* Participants will be able to post their final lessons for sharing beyond the scope of this course
* Participants will understand that the UDL guidelines are levers for addressing learner variability and supporting the development of expert learners.
 | Participate in the final session.Complete brief reflectionTurn in your final assignment. |

### RUBRICS

This course is equivalent to a 3 credit, graduate-level courses. The work presented for grades requires a high level of critical thinking, analysis and synthesis of material and must be rooted in adequate theory.

#### Late Submissions:

Work that is submitted after the due date will not receive full credit. If there are extenuating circumstances that warrant late submission of work, you are expected to contact your instructor to develop a plan for submission or makeup. Acceptance of late work is at the discretion of the instructor.

#### Synthesis Activity (Online Discussion) Rubric:

Timely participation in the discussions is intended to maximize your learning and is a key requirement of the course. Your response to the Synthesis Activity Discussion Forum Questions is required by the end of the week when they are due (dates are listed on the syllabus). These responses are considered as part of your grade and consequently should be thoughtful syntheses of the course readings and activities and reflection about how the concepts can be applied to problems of practice. It is also recommended that you post your response early in the week and check back once or twice to respond to a peer. In doing so, you are participating in the community of practice that includes rich discussions among other educators in the field.

The following rubric will be used to assess your participation in the synthesis activities.

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| **Criteria** | **Unacceptable**  | **Acceptable**  | **Target**  |
| **Reflect upon material presented and readings** | 0 Points:Does not reference readings or activities and/or shows minimal or superficial consideration and understanding of the content presented. | 1 Point:References the readings or activities and/or shows consideration and understanding of the content presented.  | 2 Points:References the readings or activities and shows in-depth consideration and understanding of the content presented. |
| **Synthesis of subject matter with instructional practice** | 0 PointsDemonstrates minimal consideration of how the content presented can be used to address a challenge of instructional practice. | 2 Point: Demonstrates consideration of how the content presented can be used to address a challenge of instructional practice.. | 3 Points:Demonstrates innovative consideration of how the content presented can be used to address a challenge of instructional practice. |
| **Quantity and timeliness** | 0 Points:Synthesis and/or comments to peers are not posted on time. |  | 1 Point:Synthesis and comments to peers are posted on time. |

#### Session 6 - Multiple Means of Representation

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| The learner will demonstrate the ability to evaluate an existing lesson to determine whether it includes elements of UDL as outlined in the UDL framework and will explain why. |
|  | *Does not meet expectations* | *Meets some expectations* | *Meets all expectations* |
| ***There is a clearly defined GOAL that is purposeful about the means.*** | 0 Points: There is not a clear goal defined. | 1 Point:The goal is defined but it is not clear whether the means is purposeful. | 2 Points:The goal is clearly defined and the means is purposefully considered in relation to that goal. |
| ***Guideline 1: Provide options for perception*** | 0 Points:Demonstrates little understanding of how the lesson does or does not provide options for perception towards the learning goal. | 1 Point:Demonstrates a limited or partial understanding of how the lesson does or does not provide of options for perception towards the learning goal. | 2 Points:Demonstrates an in-depth understanding of how the lesson does or does not provide options for perception towards the learning goal. |
| ***Guideline 2: Provide options for language, mathematical expressions, and symbols*** | 0 Points:Demonstrates little understanding of how the lesson does or does not provide options for language, mathematical expressions, and symbols towards the learning goal. | 1 Point:Demonstrates a limited or partial understanding of how the lesson does or does not provide options for language, mathematical expressions, and symbols towards the learning goal. | 2 Points:Demonstrates an in-depth understanding of how the lesson does or does not provide options for language mathematical expressions and symbols towards the learning goal. |
| ***Guideline 3: Provide options for comprehension*** | 0 Points:Demonstrates little understanding of how the lesson does or does not provide options for comprehension towards the learning goal. | 1 Point:Demonstrates a limited or partial understanding of how the lesson does or does not provide options for comprehension towards the learning goal. | 2 Points:Demonstrates an in-depth understanding of how the lesson does or does not provide options for comprehension towards the learning goal. |

#### Session 9 - Multiple Means of Action and Expression

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| The learner will demonstrate the ability to evaluate an existing lesson to determine whether it includes elements of UDL as outlined in the UDL framework and will explain why. |
|  | *Does not meet expectations* | *Meets some expectations* | *Meets all expectations* |
| ***There is a clearly defined GOAL that is purposeful about the means.*** | 0 Points: There is not a clear goal defined. | 1 Point:The goal is defined but it is not clear whether the means is purposeful. | 2 Points:The goal is clearly defined and the means is purposefully considered in relation to that goal. |
| ***Guideline 1: Provide options for physical action*** | 0 Points:Demonstrates little understanding of how the lesson does or does not provide options for physical action towards the learning goal. | 1 Point:Demonstrates a limited or partial understanding of how the lesson does or does not provide options for physical action towards the learning goal. | 2 Points:Demonstrates an in-depth understanding of how the lesson does or does not provide options for physical action towards the learning goal. |
| ***Guideline 2: Provide options for expression and communication*** | 0 Points:Demonstrates little understanding of how the lesson does or does not provide options for expression and communication towards the learning goal. | 1 Point:Demonstrates a limited or partial understanding of how the lesson does or does not provide options for expression and communication towards the learning goal. | 2 Points:Demonstrates an in-depth understanding of how the lesson does or does not provide options for expression and communication towards the learning goal. |
| ***Guideline 3: Provide options for executive functions*** | 0 Points:Demonstrates little understanding of how the lesson does or does not provide options for executive functions towards the learning goal. | 1 Point:Demonstrates a limited or partial understanding of how the lesson does or does not provide options for executive functions towards the learning goal. | 2 Points:Demonstrates an in-depth understanding of how the lesson does or does not provide providing options for executive functions towards the learning goal. |

#### Session 11 - Multiple Means of Engagement

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| The learner will demonstrate the ability to evaluate an existing lesson to determine whether it includes elements of UDL as outlined in the UDL framework and will explain why. |
|  | ***Does not meet expectations*** | ***Meets some expectations*** | ***Meets all expectations*** |
| ***There is a clearly defined GOAL that is purposeful about the means.*** | 0 Points: There is not a clear goal defined. | 1 Point:The goal is defined but it is not clear whether the means is purposeful. | 2 Points:The goal is clearly defined and the means is purposefully considered in relation to that goal. |
| ***Guideline 1: Provide options for recruiting interest*** | 0 Points:Demonstrates little understanding of how the lesson does or does not provide options for recruiting interest towards the learning goal. | 1 Point:Demonstrates a limited or partial understanding of how the lesson does or does not provide options for recruiting interest towards the learning goal. | 2 Points:Demonstrates an in-depth understanding of how the lesson does or does not provide options for recruiting interest towards the learning goal. |
| ***Guideline 2: Provide options for sustaining effort and persistence*** | 0 Points:Demonstrates little understanding of how the lesson does or does not provide options for sustaining effort and persistence towards the learning goal. | 1 Point:Demonstrates a limited or partial understanding of how the lesson does or does not provide options for sustaining effort and persistence towards the learning goal. | 2 Points:Demonstrates an in-depth understanding of how the lesson does or does not provide options for sustaining effort and persistence towards the learning goal. |
| ***Guideline 3: Provide options for self-regulation*** | 0 Points:Demonstrates little understanding of how the lesson does or does not provide options for self-regulation towards the learning goal. | 1 Point:Demonstrates a limited or partial understanding of how the lesson does or does not provide options for self-regulation towards the learning goal. | 2 Points:Demonstrates an in-depth understanding of how the lesson does or does not provide options for self-regulation towards the learning goal. |

#### Final Assignment Scoring Rubric:

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|  | **Incomplete Understanding** | **Basic Understanding** | **Target Understanding** |
| *EVALUATE: Indicate clear learning goals, and consideration of assessments, methods and materials used in the original lesson.*  | **0 Points:** No clear learning goal(s) are communicated. Demonstrates a weak or no understanding of elements of a lesson by omitting or misidentifying some or all of the elements (goals, assessments, materials and methods). | **1 Point-2 Points:**Learning goals are present, but are not clear. Elements of a lesson do are not completely understood (goals, assessments, materials, and methods). | **3 Points:** Clear learning goal(s) are communicated. Demonstrates a most of the understanding of elements of a lesson by identifying the elements (goals, assessments, materials and methods) correctly. |
| *DESIGN: Briefly describe how you will adjust goals, assessments, materials and methods and how these changes address learner variability.* | **0-1 Points:** Demonstrates a weak or no understanding of how to adjust goals, assessments, materials and methods because no or very few adjustments were made using the UDL guidelines. | **2-3 Points:** Demonstrates a basic understanding of how to adjust goals, assessments, materials and methods using the UDL guidelines because few adjustments were made and/or the adjustments do not align well to the UDL guidelines. | **4 Points:** Demonstrates complete understanding of how to adjust goals, assessments, materials and methods by making several key adjustments that allow for alignment with the UDL guidelines. |
| *DESIGN: Explain which checkpoints will be included in the revised lesson and why. If you decide not to include some checkpoints, explain why they are not being included.* | **0-1 Points: (Representation)** Demonstrates a weak understanding of how to apply multiple means of representation by applying only a few checkpoints correctly or misapplying the checkpoints and guidelines. | **2-3 Points: (Representation)** Demonstrates a basic understanding of how to apply multiple means of representation by applying some of the checkpoints correctly. | **4 Points: (Representation)** Demonstrates a complete understanding of how to apply multiple means of representation by applying the checkpoints correctly. |
| **0-1 Points: (Action and Expression)**Demonstrates a weak understanding of how to apply multiple means of action and expression by applying only a few checkpoints or misapplying the checkpoints and guidelines. | **2-3 Points: (Action and Expression)**Demonstrates a basic understanding of how to apply multiple means of action and expression by applying some of the checkpoints correctly. | **4 Points: (Action and Expression)**Demonstrates a complete understanding of how to apply multiple means of action and expression by applying the checkpoints correctly. |
| **0-1 Points: (Engagement)** Demonstrates a weak understanding of how to apply multiple means of engagement by addressing only a few checkpoints or misapplying the checkpoints and guidelines. | **2-3 Points: (Engagement)** Demonstrates a basic understanding of how to apply multiple means of engagement by applying some of the checkpoints correctly. | **4 Points: (Engagement)** Demonstrates a complete understanding of how to apply multiple means of engagement by applying the checkpoints correctly. |
| *SUMMARIZE: Provide a summary of the revised plan; include challenges, solutions and a vision of success.* | **0 Points:**The summary of the revised plan is difficult to follow. It is not clear what revisions were made or it is not at all clear why revisions were made. The challenges and solutions are not considered. Learner variability was not considered. | **1 Point-2 Points:**The summary of the revised plan does not describe the revised lesson completely. It is only somewhat clear what revisions or made or why revisions were made. Some challenges and solutions may be considered. Learner variability was only briefly considered. | **3 Points:**The summary of the revised plan adequately describes the revised lesson. It also states the potential challenges you might encounter if teaching this lesson and solutions. Learner variability was thoughtfully considered. |
| *Presentation of deliverable* | **0 Points:** The project presentation or media is difficult to follow (is disorganized or does not include enough explanation). The presentation does not help to demonstrate understanding of how to use UDL to address learning variability. | **1 Point-2 Points:** The project presentation or media is adequately displayed. The presentation helps to demonstrate a good understanding of how to use UDL to address a wide range of learner variability. | **3 Points:** You thoroughly describe how the adjustments made in the goals, assessments, methods and materials in the revised lesson using the checkpoints address learner variability but there are not specific examples included in your description. |

## COURSE CONTENT

### Session 1: Introduction to the Course – Face-to-face (video streaming option)

Introductory session: This session offers participants an introduction to the course, UDL, and the opportunity to learn about the different resources and technologies that will be used in this course. The session will include a tour of Blackboard (separate video) and introduction to the teams of educators they will be collaborating with throughout the course.

**Session Goals:**

* Participants will understand the way that neural networks vary across individuals.
* Participants will begin to form a community of practice with others in the course.

**Session Activity**

1. In this online format, it is difficult to get to know one another. In order to develop this learning community, please go to Blackboard and add your profile. Please take the time to describe details that are relevant to this course. For example, please let the other participants know if this is your first online course, what your goal is in taking the course and what your role in the school is (e.g. 4th grade general educator, music teacher, principal, special education director) and your reason for taking the course. You can also tell people a little about your interests and hobbies and upload a picture of yourself.
2. Read and familiarize yourself with the profiles of others before the web conference. Respond to at least one other participant in the course.
3. Pause and Reflect: After reading some of the profiles of other participants, consider the makeup of this group. How much variability exists among the different people in the group?

**Synthesis: Online Discussion**

Following the introductory session, please post a short reflection to the course online discussion forum answering the following: 1) What have you learned about UDL that you did not already know? 2) What are you looking forward to in the course? 3) Are there any questions that you have about UDL at this point in the course?

### Session 2: Universal Design for Learning: A Paradigm Shift

UDL maintains that the primary impediment to achievement of many learners is an inflexible, “one-size-fits-all” curriculum that is not flexible enough to deal with learner variability- including differences in race, language, gender, socioeconomic (including poverty), and culture. UDL asserts that the onus for dealing with this variability should be on the curricula (rather than on the learners). This premise represents a conceptual shift from traditional ways of viewing learners and the curriculum used to teach. In this session, you will be asked to consider the new way of viewing ability as existing at the intersection of the resources the person has and the demands of the instructional environment.

#### Session Goals:

* Participants will understand that ability is determined by the interaction of individual variability and the learning context. Learning contexts include (but are not limited to) curricula as well as the learning environment.
* Participants will think about variability, including differences in socioeconomic, gender, race, and culture.

#### Build Background: Session Media

* [UDL Theory & Practice, Chapter 1](http://udltp.cast.org/reading?loc=intro.xml_l1969950) - Revisioning Education through UDL (pp. 1-4)

**Questions to guide your understanding**: How did early education develop into a one-size-fits-all approach? How did CAST’s view of students and ability change over time? How did technology play a role in that?

* [The Future is in the Margins: the Role of Technology and Disability in Educational Reform](http://www.udlcenter.org/resource_library/articles/margins). Anne Meyer and David Rose. In *The Universally Designed Classroom and Digital Technologies*. 2005. Cambridge, MA: Harvard Education Press.
**Question(s) to guide your understanding**: In what way are Meyer and Rose challenging the reader to think differently about learners, curricula and the idea of disability?
* [Special Education and the Concept of Neurodiversity](http://thomasarmstrong.com/blog/2010/01/01/special-education-and-the-concept-of-neurodiversity/). Thomas Armstrong. First published in *New Horizons for Learning.* (2005).

**Question(s) to guide your understanding**: In what way is the concept of neurodiversity similar or different from what Meyer and Rose are talking about?

* The story of colonial Martha’s Vineyard: **Choose one of the following**:
1. Burke, J. (2007). [Martha's Vineyard: Hearing had to learn to sign](http://deafness.about.com/cs/featurearticles/a/marthasvineyard.htm) Retrieved from [http://deafness.about.com/cs/featurearticles/a/marthasvineyard.htm](http://d)
2. Wikipedia article [Martha’s Vineyard Sign Language](http://en.wikipedia.org/wiki/Martha%27s_Vineyard_Sign_Language)

**Question(s) to guide understanding**: This story provides an example of ways that people in the margins influenced an entire community. How did fully including the deaf individuals in island life expand the community’s view of ways to represent knowledge, to use varied strategies for expression and to engage everyone?

#### Try It: Session Activity

Choose one of the following activities:

**Option A:**

Reflect on the variability in your own classroom, including differences in race, language, gender, attention, backgrounds, self-regulation, executive function, socioeconomic (including poverty), and culture. Reflect on how thinking about variability differs learning styles or learning labels.

**Option B:**

Try one or two of the following activities: (These activities require Flash 5 player, or a later version. Click here to [get Flash plugin](http://www.macromedia.com/go/getflashplayer)):

* + [Visual Activity](http://www.pbs.org/wgbh/misunderstoodminds/experiences/attexp1a.html)
	+ [Auditory Activity](http://www.pbs.org/wgbh/misunderstoodminds/experiences/attexp2a.html)
	+ [Decoding Activity](http://www.pbs.org/wgbh/misunderstoodminds/experiences/readexp1a.html)
	+ [Memory Activity](http://www.pbs.org/wgbh/misunderstoodminds/experiences/readexp2a.html)
	+ [Graphomotor Activity](http://www.pbs.org/wgbh/misunderstoodminds/experiences/writingexp1a.html)
	+ [Composition Activity](http://www.pbs.org/wgbh/misunderstoodminds/experiences/writingexp2a.html)
	+ [Arithmetic Activity](http://www.pbs.org/wgbh/misunderstoodminds/experiences/mathexp1a.html)
	+ [Spatial Activity](http://www.pbs.org/wgbh/misunderstoodminds/experiences/mathexp2a.html)
	+ [Sequence Activity](http://www.pbs.org/wgbh/misunderstoodminds/experiences/mathexp3a.html)

Pause and Reflect: Consider how the experience in these activities illustrates that ability is a factor of resources and the demands of the context.

#### Synthesis: Online Discussion

Discuss the relationships between the story of Martha’s Vineyard, the concept of neurodiversity and the “The Future is in the Margins.” In what way might the story of colonial Martha’s Vineyard provide a model for thinking about inclusive classrooms? What are the challenges for educators in providing multiple ways of representing information and allowing learners to express information? How do you think doing so could help all learners? In what ways do assumptions about inclusion, community and communication strategies affect how you address learner variability? Be sure to read other participants’ responses and ask them to either clarify or elaborate on a point that they make or offer your own insight into their responses.

 **NOTE:** Be sure to explore and apply the concepts you are learning from the readings, the activities, and your own experience in answering the questions, include what resonated with you and/or what you found puzzling, are wondering or curious about as a result of the new information. Finally, be sure to include how you think you can apply what you have learned in your practice. You can construct your discussion post using a video (such as [Vimeo](https://vimeo.com/)), audio (such as [Vocaroo](http://vocaroo.com/)), upload a document or Power Point that has images or tables, or use the written format.

#### Community Contribution: Review, reflect, and respond to at least two other participants’ posts this week. Include a deeper discussion of neurodiversity, variability, and the role of the context (resources and demands) for learning.

#### Dive Deeper (optional):

[Everyone Here Spoke Sign Language: Hereditary Deafness on Martha’s Vineyard by Nora Groce](http://books.google.com/books?id=K5nbuza--nYC&lpg=PP1&ots=b-mOfWj0et&dq=martha%27s%20vineyard%20sign%20language&pg=PP1#v=onepage&q&f=false)

### Session 3: Research from the Learning Sciences and Introduction to Learner Variability

UDL is based on recent research in the learning sciences that has shown that learner variability is universal. This session examines the ways that, when educators shift their focus toward designing curriculum that accommodates the widest spectrum of learners from the beginning, rather than retrofitting it to accommodate individual learners, the result is curricula that can respond to learner variability.

#### Session Goals:

* Participants will understand that neural networks vary across individuals.
* Participants will understand that the UDL guidelines are a series of levers for addressing learner variability.

#### Build Background: Session Media

* [UDL Theory and Practice, Chapter 3 - The Variability of Learners (pp. 29-32)](http://udltp.cast.org/reading?pageNum=29)
* Watch this brief video where David Rose talks about the concept of learner variability (:54): <http://bit.ly/q4Bd4H> (original link: <http://www.youtube.com/watch?v=rlv6JJQOz64)>

**Questions to guide your understanding:** Is variability of learners rather than the disability a more productive approach for educators? Why?

* Watch this [brief](http://www.udlcenter.org/screening_room/udlcenter/udl#video2) video where David Rose describes how the concept of UDL came to fruition (1:57): <http://www.udlcenter.org/resource_library/videos/udlcenter/udl#video2>
**Questions to guide your understanding:** How did working with learner variability provide the basis for the concept of UDL?

#### Try It: Session Activity

Choose ONE of the following metaphors, read or view the additional information, then reflect on your choice in the discussion forum.

1. Addressing learner variability is like *eating ice cream with a fork.* In what ways do assumptions about adapting, supporting, scaffolding and accommodating learning relate to the use of special devices and assistive technologies to address learner variability?

*Read* [*What is an ice cream fork?*](http://www.google.com/url?q=http%3A%2F%2Fwww.wisegeek.com%2Fwhat-is-an-ice-cream-fork.htm&sa=D&sntz=1&usg=AFQjCNFjzjuj62Ck4REgt5WLlrltRnKFRw)

*Read* Wahl, L. [*Assistive Technology: Enhanced Learning for*](http://www.google.com/url?q=http%3A%2F%2Fwww.edutopia.org%2Fassistive-technology-enhances-learning-all&sa=D&sntz=1&usg=AFQjCNHlNancQbi8aZZ-jLFDumTxNVLZaQ) *All*

1. Addressing learner variability is like *cleaning a dirty bathroom.* In what ways do assumptions about time, work ethic, effort and perseverance affect how you address learner variability?

*Watch* [*Dirty Bathroom*](http://bit.ly/ncQKM5) *(original link:* [*http://www.youtube.com/watch?v=3Co2tGFhisc*](http://www.youtube.com/watch?v=3Co2tGFhisc)*)*

*Read* [*A matter of effort and perseverance*](http://www.eduweb.vic.gov.au/edulibrary/public/publ/research/publ/researcharticle_a_matter_of_effort_and_perseverance.pdf)

1. Addressing learner variability is like *teaching your child to drive a car that has a stick shift.* In what ways do assumptions about potential, challenge, frustration, autonomy, competence, and coping skills affect how you address learner variability?

*Watch* [*Erin learns to drive a stick shift*](http://bit.ly/oCOJSN)*: (original link:* [*http://www.youtube.com/watch?v=nYc9JtyS3fk&feature=related*](http://www.youtube.com/watch?v=nYc9JtyS3fk&feature=related) *)*

#### Synthesis: Online Discussion

Think about how you currently address learner variability. How difficult is it? How does it make you feel when some learners are successful and some are not? How do you design lessons currently to support learner variability?

Which metaphor did you choose in this week’s session activity? Answer the question below that corresponds to the metaphor you chose and also explain why you chose that metaphor and how your experience addressing learner variability reflects similar emotions to the emotions reflected in the metaphor you chose.

* *Eating Ice Cream with a Fork:* In what ways do assumptions about adapting, supporting, scaffolding and accommodating learning relate to the use of special devices and assistive technologies to address learner variability?
* *Cleaning A Dirty Bathroom* In what ways do assumptions about time, work ethic, effort and perseverance affect how you address learner variability?
* *Teaching Your Child To Drive A Car That Has A Stick Shift*: In what ways do assumptions about potential, challenge, frustration, autonomy, competence, and coping skills affect how you address learner variability?

**NOTE:** Be sure to explore and apply the concepts you are learning from the readings, the activities, and your own experience in answering the questions, include what resonated with you and/or what you found puzzling, are wondering or curious about as a result of the new information. Finally, be sure to include how you think you can apply what you have learned in your practice.

You can construct your discussion post using a video (such as [Vimeo](https://vimeo.com/)), audio (such as [Vocaroo](http://vocaroo.com/)), upload a document or Power Point that has images or tables, or use the written format.

### Community Contribution: Review, reflect, and respond to two other participants’ posts this week. Include a deeper discussion of how UDL options for representation, action & expression, and engagement can support high level learning goals in a math context. If there are resources you would like to share to the online community site from this discussion, please post those as well.

### Session 4: Introduction to UDL as a Framework to Address Learner Variability

In this session, you will be introduced to Universal Design for Learning (UDL). UDL provides a framework for understanding the differences among learners (learner variability) and to plan ahead for this. This framework helps to make explicit the ways in which learners are likely to vary—taking all of the dimensions along which learners are naturally varied and providing educators with practical ways to apply that understanding to the learning environment in order to allow more learners access to appropriate and challenging learning experiences. In order to best leverage UDL, there needs to be a clear learning goal identified so that purposeful design of options and supports can be in service of that high level learning outcome.

#### Session goals:

* Participants will understand the way that neural networks vary across individuals.
* Participants will understand that the UDL guidelines are a series of levers that can help educators address learner variability.
* Participants will reflect on how they craft learning goals.

#### Build Background: Session Media

* [UDL Series: Learner Variability and UDL](http://udlseries.udlcenter.org/presentations/learner_variability.html?plist=explore) (15:36) interactive video and PowerPoint

**Questions to guide your understanding:** Why are curricula limited if they are designed for the 'average' learner? What makes learner variability systematic? Why is it important for educators to know about systematic learner variability?

* [Top 10 UDL Tips for Developing Learning Goals](http://castprofessionallearning.org/project/free-top-10-udl-tips-for-developing-learning-goals/) Review these 10 tips for developing learning goals.

Choose one of the following:

* Rose, D., Gravel, J.W., and Domings, Y.M. (2010). [*UDL Unplugged: The Role of Technology in UDL*](http://www.udlcenter.org/sites/udlcenter.org/files/notech_final2.pdf)

**Questions to guide understanding:** Is digital technology a requirement to implement UDL?

* [UDL and Technology](http://www.udlcenter.org/aboutudl/udltechnology)

**Questions to guide understanding:** To what extent does digital technology make implementing UDL easier?

* [Different Paths Up the Same Mountain](https://goalbookapp.com/differentpaths/).

**Questions to guide your understanding:** How can purposeful, flexible options support high learning objectives?

#### Try It: Session Activity

#### Choose one part of a lesson you are working on this week. Reflect on the target learning goal: how do you clearly convey this goal to students? Is the “means” (how) embedded in the goal? Where can there be flexibility in how you provide options (technology or low-tech) in the learning environment to support the variability of students in your classroom?

#### Synthesis: Online Discussion

Choose ONE to discuss:

1. How can designing flexible curricula for the learners “in the margins” help us design learning experiences for all learners? What challenges exist in doing so? How are clear goals essential to having purposeful design? Do you think that designing curricula in this way would affect your ability to accurately assess learners? Provide an example from your Try It activity or tied to your practice to help illustrate and support your answer.

OR

1. Some people feel that digital media and technology are a requirement for UDL implementation. In what ways do you agree or disagree? Provide examples for some non-digital ways that you might alter materials and methods in a classroom (for example, you can use your Try It reflection). Compare your examples with those offered by other participants.

**NOTE:** Be sure to explore and apply the concepts you are learning from the readings, the activities, and your own experience in answering the questions, include what resonated with you and/or what you found puzzling, are wondering or curious about as a result of the new information. Finally, be sure to include how you think you can apply what you have learned in your practice.

You can construct your discussion post using a video (such as [Vimeo](https://vimeo.com/)), audio (such as [Vocaroo](http://vocaroo.com/)), upload a document or Power Point that has images or tables, or use the written format.

#### Community Contribution: Post at least one resource to the online community site (such as Padlet or Google drive) that is a resource you use in your classroom to support learner variability. Note that it does not need to be technology, for example, it could be pencil grips, highlighters, use of an overhead projector, etc. Be creative to share ideas that might be useful for other educators to think about using in their classrooms.

**Survey:**
At this point in the course, *take a poll (see link on Blackboard)* to give your instructor some feedback on how the course is going so far answering the following questions:

* Overall, how do you feel about the course so far? (scale of 1-10)
* Do you feel that you are getting: enough, too much or not enough feedback?
* Do you feel that the feedback is instructive enough to be helpful in improving your work in the discussions afterward? If not, how can it be improved?
* Do you feel the interaction in the discussions is helping you to think more deeply about the content?

#### Dive Deeper (optional):

* Watch this short video [UDL](http://bit.ly/o7aV9t) principles [and Practice](http://bit.ly/o7aV9t) (6:36) (original link: <http://www.youtube.com/watch?v=pGLTJw0GSxk&feature=related)>

Questions to guide your understanding: How do you think offering options can help educators meet learner variability in the classroom?

* Rose, D.H., Hasselbring, T.S., Stahl, S., and Zabala, J. *Assistive Technology and Universal Design for Learning: Two Sides of the Same Coin* (retrived from: <http://smcmtechintheclassroom.pbworks.com/w/file/fetch/86565400/AT_UDL.pdf> )

### Session 5: Learner Variability in the Recognition Networks

This session will explore the recognition networks - parts of the brain that are involved in pattern recognition i.e. the variability that exists in how individuals identify, categorize, and make connections between what we see, hear and read. Beyond simple recognition, these networks help us to build knowledge: develop concepts, understand meaning and connect new learning to knowledge we already have and making predictions based on that knowledge.

#### Session Goals:

Participants will be able to explain how the recognition networks of the brain are involved in how we gather information, integrate it into concepts, make connections between them, etc.

* Participants will be able to describe the way that recognition networks vary across individuals and the challenges that this presents for educators.

#### Build Background: Session Media

* [UDL Theory and Practice: The Variability of Learners](http://udltp.cast.org/reading?loc=chapter2.xml_l1969841): Recognition Networks (pp. 37-40).

Question(s) to guide your understanding: How does understanding the variability in recognition networks help educators in designing curriculum to meet the needs of all learners?

Choose at least one of the following:

* Using the UDL Framework to Support Culturally Diverse Learners (2012). <http://gaia.flemingc.on.ca/~jmior/EDU705Web/Georgian/UDL/UDL%20to%20Support%20Culturall%20Diverse%20Learners.pdf>
* [Eastern and Western Cultures See Things Differently](http://www.sciencedaily.com/releases/2008/03/080305120850.htm)

**Question(s) to guide your understanding:** How do you think a learners’ native culture affect the things he or she pays attention to, the way he or she takes in information and constructs new meaning?

* [“Science Finds New Patterns,”](http://www.news.ucdavis.edu/search/news_detail.lasso?id=7510) UC Davis News & Information. (2005)

**Question(s) to guide your understanding:** How does understanding the variability in recognition networks help educators in designing curriculum to meet the needs of all learners?

#### Try It: Session Activity:

Try at least one of the following illusion activities:

* [The Thatcher Illusion](http://www.google.com/url?q=http%3A%2F%2Fmembers.tripod.com%2F~RBHcognitions%2Fthatc1.htm&sa=D&sntz=1&usg=AFQjCNE337qrpC4_YS3al7XuZA7WkbeOtw): an example of an inverted face illusion with a brief explanation.
* [Illusion Works](http://psylux.psych.tu-dresden.de/i1/kaw/diverses%20Material/www.illusionworks.com/html/jump_page.html): A “collection of optical and sensory illusions” presented at two levels: introductory and advanced. The introductory level includes simple explanations of the illusions, and the advanced level includes more complex explanations.

**Pause and reflect:** When you were doing the illusion activity(s), think about how your recognition networks were processing the information. How do you think it might have differed from the other participants in the course?

#### Synthesis: Online Discussion

Choose ONE:

* How do you think experience impacts the recognition networks? How does learner variability in the recognition networks present challenges for educators? How do you observe variability in the recognition networks of your students in your lessons?

OR

* Consider the importance of the recognition networks to learning. Can you think of ways that you have provided or observed another educator who provide an alternate representation that helped more learners develop concepts, understand meaning and connect new learning to their own background knowledge?

OR

* How do you think a learners’ native culture affect the things he or she pays attention to, the way he or she takes in information and constructs new meaning? Can you think of examples where this may have happened in your own classroom or in a classroom you were observing?
* **NOTE:** Be sure to explore and apply the concepts you are learning from the readings, the activities, and your own experience in answering the questions, include what resonated with you and/or what you found puzzling, are wondering or curious about as a result of the new information. Finally, be sure to include how you think you can apply what you have learned in your practice.
* You can construct your discussion post using a video (such as [Vimeo](https://vimeo.com/)), audio (such as [Vocaroo](http://vocaroo.com/)), upload a document or Power Point that has images or tables, or use the written format.

#### Community Contribution: Review, reflect, and respond to two other participants’ posts this week. Include a deeper discussion of the variability in the representation networks of students and how you currently address that variability in your lessons and classrooms.

#### Dive Deeper (optional):

[Recognition; Dig Deeper](http://udltp.cast.org/reading?pageNum=40) (p.40 Meyer, Rose and Gordon (2013).

[Dyslexia could be diagnosed by MRI brain scan.](http://www.medicalnewstoday.com/articles/264771.php) Medical News Today. (14 Aug. 2013).

### Session 6: The Recognition Networks and Multiple Means of Representation

This session connects learner variability in the recognition networks with the UDL principle that addresses how information is represented or presented (the ‘what’ of learning). This principle guides educators to provide multiple means of representation. During this session you will learn about identifying barriers to representation and providing options that give learners various ways of acquiring information and knowledge.

#### Session Goals:

* Participants will be able to explain how the UDL principle—Multiple Means of Representation—helps educators address the variability in learners’ recognition networks.
* Participants will demonstrate understanding of how the principle Multiple Means of Representation can be used as a lens to evaluate curricula for barriers and elements of UDL.

#### Build Background: Session Media

* [UDL Theory and Practice](http://udltp.cast.org/reading?69&loc=chapter3.xml_l16) - Universal Design for Learning & Multiple Means of Representation (p. 54)
* **Questions to guide your understanding**: What impact could representing information in multiple ways have on students' understanding or on their engagement with the subject?
* [UDL Guidelines](http://www.udlcenter.org/aboutudl/udlguidelines) (read this brief introductory page and take a look at the graphic of the guidelines. This will come up multiple times in the course, so it is a good idea to take a long look at the way the guidelines are set up)
* [UDL Guidelines version – Multiple Means of Representation](http://www.udlcenter.org/aboutudl/udlguidelines/principle1)

**Question(s) to guide your understanding**: How can using Multiple Means of Representation help you address learner variability?

* An overview of Accessible Instructional Materials (AIM) and the National Instructional Materials Accessibility Standard (NIMAS) an [interview with Skip Stahl at CAST](https://www.dropbox.com/sh/k9ouiztfpfghk2a/IhOfZmobRW) (6:54).
* AIM: Simply Said (3:43): this [video](http://www.youtube.com/watch?v=JcPIMlOJJkc) is the product of collaboration between the PACER Center and the AIM Center. It's a quick video on Accessible Instructional Materials (AIM): <http://www.youtube.com/watch?v=JcPIMlOJJkc>

**Question(s) to guide your understanding:** AIM fits nicely into the principle Provide Multiple Means of Representation. How can AIM provide access to instructional content to learners for who printed text is a barrier? Do you think AIM could be useful to learners other than those who qualify for copyright exemption? For whom and how so?

**Try It: Session Activity**

Using a part of one of your lessons this week, you will complete a lesson analysis that will be submitted as your online discussion this week. Be sure to identify the target learning goal. You will then use the UDL Guidelines to reflect on how you offer options for Representation that support that learning goal. You will think about additional barriers there are still in the lesson towards that learning goal. How could offering at least one additional option for representation reduce those barriers?

**Lesson Analysis and Evaluation Assignment:**

1. Download a copy of the UDL Guidelines Lesson Analysis Worksheet for Representation (available on Blackboard). Familiarize yourself with the principle, Provide Multiple Means of Representation, along with the associated guidelines and checkpoints. To explore each checkpoint, go to [the UDL guidelines – Organizer link to examples](https://sites.google.com/site/udlguidelinesexamples/) where you can find explanations and links to examples of how to implement the checkpoints.
2. Choose **ONE** of the following options (a, b, c, OR d):
	1. Observe a colleague teaching a lesson, ideally someone who is taking this course from your school.
	2. OR Videotape yourself teaching part of a lesson and watch it.
	3. OR Review a lesson plan (ideally one you are delivering in the next week or two) you have crafted.
	4. OR Choose one of the lessons listed below:
		1. **Social Studies:** Picturing Modern America (PMA): <http://www.edc.org/CCT/PMA/>
		2. **Science:** The Cell Cycle & Mitosis: <http://www.biology.arizona.edu/cell_bio/tutorials/cell_cycle/main.html>
		3. **English:** A Biography Study: Using Role-Play to Explore Authors' Lives from the Read, Write, Think Website: [http://www.readwritethink.org/lessons/lesson\_view.asp?id=398](http://www.readwritethink.org/classroom-resources/lesson-plans/biography-study-using-role-398.html)
		4. **Math:** Adjustable Spinner from the Project Interactivate website: <http://www.shodor.org/interactivate/activities/AdjustableSpinner/>
3. Fill out the top of the UDL Guidelines Lesson Analysis Worksheet for Representation with your name, the lesson title (and URL if applicable), the lesson goal, and a brief description of the lesson. \*Note the importance of the UDL goal- be sure to review this with your course facilitator if you have questions.
4. Complete the rest of the UDL Guidelines Lesson Analysis Worksheet for Representation using the lesson you have chosen for analysis. Consider each checkpoint contained within the UDL Guidelines and decide whether that checkpoint is ***present***, ***not present***, or if you are ***unsure*** about whether or not it is present in the lesson.
5. What additional option(s) can you add to this lesson to support variability in representation?
6. Save your responses on the worksheet. Be sure to indicate which lesson option you chose at the top of the page. Save As: your first initial, last name (e.g. jsmith.doc). Upload the file to the Blackboard assignment page or email your instructor to make alternative arrangements.

*NOTE: Refer to the* rubric  *for grading criteria.*

**Synthesis: Online Discussion:**

**Community Contribution:** Post at least one resource to the online community site (such as Padlet or Google drive) that gives an example of an option you use in your classroom to support the UDL Guideline Multiple Means of Representation.

### Session 7: Reflection on Sessions 1-6: Synchronous online webinar session

This webinar session (1 hour) is intended to allow you review Sessions 1-6, go over the Recognition Principle Lesson Analysis Worksheet activity, provide a summary of the discussions, highlight the structure of the guidelines, review the supporting neural networks and how goals are important for purposeful UDL design.

**Session Goals**:

* Participants will review that the UDL guidelines are levers for addressing learner variability.
* Participants will understand the way that the UDL framework supports clear, high level learning goals.

## Session Activity:

The session activity this week is to attend the webinar or watch the recording.

**Synthesis: Online Discussion:**

Following the webinar, please post a short reflection to the discussion forum answering the following: 1) What have you learned about UDL in sessions 1-6 that you did not already know? 2) How has any of the content so far impacted your teaching, the preparation of your lessons, or your thinking about your students? 3) What do you hope to learn in the second part of the course? 4) Are there any questions that you have about UDL at this point in the course?

### Session 8: Learner Variability in the Strategic Networks

This session will explore variability in individual strategic networks: the parts of the brain involved in planning and performing tasks: e.g. the variability in the way that individuals organize tasks, express ideas, or solve a problem. These networks are important for developing strategies for learning and expressing what we know.

#### Session Goals:

Participants will be able to explain how the strategic networks of the brain are involved in how we act on information, develop strategies, set goals and express what we know.

Participants will be able to describe the way that strategic networks vary across individuals and the challenges that this presents for educators.

#### Build Background: Session Media

* UDL Theory and Practice -[The Variability of Learners: Strategic Networks (pp. 41-44)](http://udltp.cast.org/reading?loc=chapter2.xml_l1969938)

**Question(s) to guide your understanding:** What kinds of options could support a class with predictable variations in organizational, executive functioning, and working memory skills?

* Video about the life of [Paul Smith](http://www.youtube.com/watch?v=XiHyQhf9qAY). Born in 1921 with cerebral palsy, Paul Smith was kept out of school, but not out of learning; this biographical video describes his art and life.

**Question(s) to guide your understanding:** How important were Paul Smith’s strategic networks in providing him with a way to express himself through his art? If he were included, do you think Paul would have been successful in the schools of the 30’s and 40’s? Would he be successful in the schools of today?

#### Try It: Session Activity:

Go to the following sites and try at least TWO of these activities.

* [Selective Attention Activity](http://www.youtube.com/watch?v=xh-ygRPsfZY&feature=relmfu): follow the directions on the beginning of the video. This is a test of selective attention.
* [The Tower of Hanoi](http://www.coolmath-games.com/0-tower-of-hanoi/), a mathematical puzzle that tests strategic planning. (try changing the number of disks and see if you can come up with a general strategy)
* [The Stroop Effect](http://faculty.washington.edu/chudler/java/ready.html), a mental process activity that measures cognitive inhibition.
* [Sudoku](http://view.websudoku.com/) (Try different levels)

**Pause and Reflect:** When you were exploring these activities, what kinds of strategies did you develop as you worked the problems or puzzles that were presented? Did your strategies change over time?

#### Synthesis: Online Discussion

Choose ONE to discuss:

Consider the importance of the strategic networks to learning. Can you think of examples from your own practice where learners’ strategies were counter to your goals as an educator? How might providing options help to encourage learners to develop strategies that are desirable and help them to achieve the instructional goal?

OR

Think about specific strategies that you and other educators typically use in their instruction to support the strategic networks of learning (goal setting, planning, physically showing what you know). Can you identify the strengths and weaknesses of different strategies of these in relation to the variability in learners’ strategic networks?

**NOTE:** Be sure to explore and apply the concepts you are learning from the readings, the activities, and your own experience in answering the questions, include what resonated with you and/or what you found puzzling, are wondering or curious about as a result of the new information. Finally, be sure to include how you think you can apply what you have learned in your practice.

You can construct your discussion post using a video (such as [Vimeo](https://vimeo.com/)), audio (such as [Vocaroo](http://vocaroo.com/)), upload a document or Power Point that has images or tables, or use the written format.

#### Community Contribution: Review, reflect, and respond to two other participants’ posts this week. Include a deeper discussion of the variability in the strategic networks of the brain. What classroom strategies do you already use to support strategic networks?

#### Dive Deeper (optional):

* [“University of Pittsburgh Scientists Identify How Brain ‘Gets Ready’ to Perform,”](http://www.sciencedaily.com/releases/2000/11/001110073113.htm) University of Pittsburgh Medical Center
* [Strategic Networks: Dig Deeper](http://udltp.cast.org/reading?loc=chapter2.xml_l1969937) (p 44). Meyer, A., Rose, D.H., & Gordon, D. (2013) Universal design for learning: Theory and practice, Wakefield MA: National Center on Universal Design for Learning.

### Session 9: Multiple Means of Action and Expression

This session connects learner variability in the strategic networks with the UDL principle that addresses how information is acted on or expressed (the ‘how’ of learning). This principle guides educators to provide multiple means of action and expression. This session will help you identify barriers to action and expression and suggest options for physical action, expression, communication and executive function so that all learners can act on the content and effectively express their understanding.

#### Session Goals:

* Participants will be able to explain how the UDL principle: Multiple Means of Action and Expression helps educators address the variability in learners’ strategic networks.
* Participants will demonstrate understanding of how the principle: Multiple Means of Action and Expression can be used as a lens to evaluate curricula for barriers and elements of UDL.

#### Build Background: Session Media

* [UDL Theory and Practice: Provide Multiple Means of Action and Expression](http://udltp.cast.org/reading?loc=chapter3.xml_l20) (p. 55) UDL Theory & Practice: [Multiple Means of Action and Expression](http://udltp.cast.org/reading?68&pageNum=41) (pp. 41-44)

**Question(s) to guide your understanding:** How can providing students with options for expression help them learn what strategies work best for them in different contexts?

* [UDL Guidelines – Multiple Means of Action and Expression (National Center for UDL)](http://www.udlcenter.org/aboutudl/udlguidelines/principle2)
* [UDL and Expert Learners](http://www.udlcenter.org/aboutudl/expertlearners)

**Question(s) to guide your understanding:** What does UDL mean by expert learners? Can you think of ways that an educator might help learners develop into expert learners?

* [Executive Function & Self-Regulation](http://developingchild.harvard.edu/science/key-concepts/executive-function/) Center on the Developing Child, Harvard University (retrieved from: <http://developingchild.harvard.edu/science/key-concepts/executive-function/> )
**Question(s) to guide your understanding:** Why is executive function particularly important in a school setting? How could educators increase or reduce executive function demands in a classroom?

#### Try It: Session Activity

Using a part of one of your lessons this week, you will complete a lesson analysis as you did in session 6 that will be submitted as your online discussion this week. Be sure to identify the target-learning goal. You will then use the UDL Guidelines to reflect on how you offer options for Action and Expression that support that learning goal. You will think about additional barriers there are still in the lesson towards that learning goal. How could offering at least one additional option for action and expression reduce those barriers?

**Lesson Analysis and Evaluation Assignment:**

* Download a copy of the UDL Guidelines Lesson Analysis Worksheet for Action & Expression (available from Blackboard). Familiarize yourself with the principle, Provide Multiple Means of Action & Expression, along with the associated guidelines and checkpoints. To explore each checkpoint, go to [the UDL guidelines – Organizer link to examples](https://sites.google.com/site/udlguidelinesexamples/) where you can find explanations and links to examples of how to implement the checkpoints.
* Choose **ONE** of the following options (a, b, c, OR d):
	1. Observe a colleague teaching a lesson, ideally someone who is taking this course from your school.
	2. OR Videotape yourself teaching part of a lesson and watch it.
	3. OR Review a lesson plan (ideally one you are delivering in the next week or two) you have crafted.
	4. OR Choose one of the lessons listed below:
		1. **Social Studies:** Picturing Modern America (PMA): <http://www.edc.org/CCT/PMA/>
		2. **Science:** The Cell Cycle & Mitosis: <http://www.biology.arizona.edu/cell_bio/tutorials/cell_cycle/main.html>
		3. **English:** A Biography Study: Using Role-Play to Explore Authors' Lives from the Read, Write, Think Website: [http://www.readwritethink.org/lessons/lesson\_view.asp?id=398](http://www.readwritethink.org/classroom-resources/lesson-plans/biography-study-using-role-398.html)
		4. **Math:** Adjustable Spinner from the Project Interactivate website: <http://www.shodor.org/interactivate/activities/AdjustableSpinner/>
* Fill out the top of the UDL Guidelines Lesson Analysis Worksheet for Action & Expression with your name, the lesson title (and URL if applicable), the lesson goal, and a brief description of the lesson. \*Note the importance of the UDL goal- be sure to review this with your course facilitator if you have questions.
* Complete the rest of the UDL Guidelines Lesson Analysis Worksheet for Action & Expression using the lesson you have chosen for analysis. Consider each checkpoint contained within the UDL Guidelines and decide whether that checkpoint is ***present***, ***not present***, or if you are ***unsure*** about whether or not it is present in the lesson.
* What additional option(s) can you add to this lesson to support variability in action & expression?
* Save your responses on the worksheet. Be sure to indicate which lesson option you chose at the top of the page. Save As: your first initial, last name (e.g. jsmith.doc). Upload the file to the Blackboard assignment page or email your instructor to make alternative arrangements.

*NOTE: Refer to the* rubric  *for grading criteria.*

**Synthesis: Online Discussion**

**Community Contribution:** Post at least one resource to the online community site (such as Padlet or Google drive) that gives an example of an option you use in your classroom to support the UDL Guideline Multiple Means of Action & Expression.

#### Survey:

At this point in the course, *take another poll (see link on Blackboard)* to give your instructor some feedback on how the course is going so far answering the following questions:

* Overall, how do you feel about the course so far? (scale of 1-10)
* Do you feel that you are getting: enough, too much or not enough feedback?
* Do you feel that the feedback is instructive enough to be helpful in improving your work in the discussions afterward? If not, how can it be improved?
* Do you feel the interaction in the discussions is helping you to think more deeply about the content?

### Session 10: Learner Variability in the Affective Networks

This session will explore affective networks – parts of the brain involved in motivation and engagement in learning, i.e. the variability that exists in how individuals’ interest is recruited and sustained or how individuals are challenged, and excited. These networks are important for developing and sustaining interest and attention for learning.

#### Session Goals:

Participants will be able to explain how the affective networks of the brain are involved in motivation and engagement.

Participants will be able to describe the way that affective networks vary across individuals and the challenges that this presents for educators.

#### Build Background: Session Media

* [UDL Theory and Practice: Affective Networks](http://udltp.cast.org/reading?loc=chapter2.xml_l1969929) (pp. 33-36)
* **Question(s) to guide your understanding:** How does understanding the functions of the affective networks help in designing curriculum to meet the needs of all learners? How important do you think affect is in learning? Why?
* “[We Feel, Therefore We Learn: The Relevance of Affective and Social Neuroscience to Education](http://www-bcf.usc.edu/~immordin/papers/Immordino-Yang%2BDamasio_2007_RelevanceofNeurotoEdu.pdf),” Immordino-Yang, M.H. & Damasio, A. in Mind, Brain, and Education. (2007). Volume 1, Number 1. (PDF download)

**Question(s) to guide your understanding:** How is emotion tied to cognition?

Choose one of the following:

* ”[How Not to Talk to Your Kids](http://nymag.com/news/features/27840/)” Bronson, P. (2007). New York Magazine

**Question(s) to guide your understanding:** What message are adults sending when they praise children? How can switching the type feedback we give help kids to persist in the face of difficulty?

* [Carol Dweck: The Effect of Praise on Mindset](http://youtu.be/TTXrV0_3UjY) – watch this video on the effect of types of praise on learner motivation (3:26) Questions to guide your understanding: How do you think educators can impact motivation and engagement? Was the video on the research on praise surprising to you? How so? How might knowing this help you to impact learning?

* [Culture is Key to Interpreting Facial Emotion](http://www.sciencedaily.com/releases/2007/04/070404162321.htm)

**Question(s) to guide your understanding:** How do you think a learner's native culture impacts the way he/she is motivated or engaged?

#### Try It: Session Activity

Reflect on how you give feedback to students. This week, try one new strategy for how you give feedback and ensure that it is (1) mastery oriented and (2) related to the intended learning goal you have set forth for that part of the lesson (for example, it could be verbal feedback during an activity or written feedback on papers).

#### Synthesis: Online Discussion

Do you believe that our emotions have an impact on how we experience the world (e.g. what we see, what we hear, what we do, what we pay attention to)? Why or why not? What did you try this week for the Try It activity? What do you observe differently in your students? Provide examples from your own practice to illustrate and support your answer.

**NOTE:** Be sure to explore and apply the concepts you are learning from the readings, the activities, and your own experience in answering the questions, include what resonated with you and/or what you found puzzling, are wondering or curious about as a result of the new information. Finally, be sure to include how you think you can apply what you have learned in your practice. You can construct your discussion post using a video (such as [Vimeo](https://vimeo.com/)), audio (such as [Vocaroo](http://vocaroo.com/)), upload a document or Power Point that has images or tables, or use the written format.

**Community Contribution:** Review, reflect, and respond to two other participants’ posts this week. Include a deeper discussion of how the role of variability in the representation networks of students in math contexts. How is this variability an asset and something that can be designed for proactively?

#### Dive Deeper (optional):

* [“](http://www.cedu.niu.edu/~shernoff/pdf/shernoff.spq.pdf)Student [Engagement in High School Classrooms from the Perspective of Flow Theory,”](http://www.cedu.niu.edu/~shernoff/pdf/shernoff.spq.pdf) Shernoff, D. J., Csikszentmihalyi, M., Schneider, B., & Steele Shernoff, E. In *School Psychology Quarterly;* Summer 2003; 18, 2; pg. 158-176. retrieved from: <http://www.cedu.niu.edu/~shernoff/pdf/shernoff.spq.pdf>
* [“Parallel Memories: Putting Emotions Back Into The Brain,”](http://www.edge.org/3rd_culture/ledoux/ledoux_p1.html)www.edge.org
* [“Why whites of eyes spell ‘danger,’”](http://news.bbc.co.uk/2/hi/health/4102981.stm) BBC News
* “[Mihaly Csikszentmihalyi: Motivating People to Learn](http://www.edutopia.org/mihaly-csikszentmihalyi-motivating-people-learn%22%20%5Ct%20%22_blank),” Edutopia Staff
* Read and do the Dig Deeper activity in the interactive book: [UDL Theory and Practice](http://udltp.cast.org/reading?loc=chapter2.xml_l1969839) (p. 36).

### Session 11: The Affective Networks and Multiple Means of Engagement

This session connects learner variability in the affective networks with the UDL principle that addresses how learners are motivated and engage with learning (the ‘why’ of learning). This principle guides educators to provide multiple means of engagement. During this session you will learn about how to identify barriers to learner engagement and how to suggest options for learning that recruit interest, sustain effort and persistence, and promote self-regulation.

#### Session Goals:

* Participants will be able to explain how the UDL principle: Multiple Means of Engagement helps educators address the variability in learners’ affective networks.
* Participants will demonstrate understanding of how the principle Multiple Means of Engagement can be used as a lens to evaluate curricula for barriers and elements of UDL.

#### Build Background: Session Media

* [UDL Theory and Practice: Provide Multiple Means of Engagement](http://udltp.cast.org/reading?loc=chapter3.xml_l8) (pp. 52-53) and UDL Theory & Practice: [Affective Networks](http://udltp.cast.org/reading?46&loc=chapter2.xml_l1969929) (pp. 33-36)
Questions to guide your understanding: How does the UDL principle Multiple Means of Engagement help educators address learner variability in the affective networks of learners?
* [UDL Guidelines Structure](http://www.udlcenter.org/resource_library/videos/udlcenter/udl#video1)

**Question(s) to guide your understanding:** What is the logic behind the vertical structure of the UDL guidelines? How does this help us develop expert learners?

**OR**

* Review this Padlet site with [Multiple versions of the UDL Guidelines](https://padlet.com/aposey/udlguidelines)
	+ [The Surprising Science of Motivation](http://www.wimp.com/surprisingmotivation) – Watch this interesting video (10:47) on the science of motivation.

**Question(s) to guide your understanding:** Was the research that Dan Pink referenced surprising? Does it change the way you think about motivating learners in your classroom? How do you think this can apply to teaching and learning?

#### Try It: Session Activity

Use a part of one of your lessons this week, you will complete a lesson analysis that will be submitted as your online discussion this week. Be sure to identify the target learning goal. You will then use the UDL Guidelines to reflect on how you offer options for Engagement that support that learning goal. You will think about additional barriers there are still in the lesson towards that learning goal. How could offering at least one additional option for engagement reduce those barriers?

**Lesson Analysis and Evaluation Assignment:**

1. Download a copy of the UDL Guidelines Lesson Analysis Worksheet for Engagement (available from Blackboard). Familiarize yourself with the principle, Provide Multiple Means of Engagement, along with the associated guidelines and checkpoints. To explore each checkpoint, go to [the UDL guidelines – Organizer link to examples](https://sites.google.com/site/udlguidelinesexamples/) where you can find explanations and links to examples of how to implement the checkpoints.
2. Choose **ONE** of the following options (a, b, c, OR d):
	1. Observe a colleague teaching a lesson, ideally someone who is taking this course from your school.
	2. OR Videotape yourself teaching part of a lesson and watch it.
	3. OR Review a lesson plan (ideally one you are delivering in the next week or two) you have crafted.
	4. OR Choose one of the lessons listed below:
		1. **Social Studies:** Picturing Modern America (PMA): <http://www.edc.org/CCT/PMA/>
		2. **Science:** The Cell Cycle & Mitosis: <http://www.biology.arizona.edu/cell_bio/tutorials/cell_cycle/main.html>
		3. **English:** A Biography Study: Using Role-Play to Explore Authors' Lives from the Read, Write, Think Website: [http://www.readwritethink.org/lessons/lesson\_view.asp?id=398](http://www.readwritethink.org/classroom-resources/lesson-plans/biography-study-using-role-398.html)
		4. **Math:** Adjustable Spinner from the Project Interactivate website: <http://www.shodor.org/interactivate/activities/AdjustableSpinner/>
3. Fill out the top of the UDL Guidelines Lesson Analysis Worksheet for Engagement with your name, the lesson title (and URL if applicable), the lesson goal, and a brief description of the lesson. \*Note the importance of the UDL goal- review this with your course facilitator if you have questions.
4. Complete the rest of the UDL Guidelines Lesson Analysis Worksheet for Engagement using the lesson you have chosen for analysis. Consider each checkpoint contained within the UDL Guidelines and decide whether that checkpoint is ***present***, ***not present***, or if you are ***unsure*** about whether or not it is present in the lesson.
5. What additional option(s) can you add to this lesson to support variability in engagement?
6. Save your responses on the worksheet. Be sure to indicate which lesson option you chose at the top of the page. Save As: your first initial, last name (e.g. jsmith.doc). Upload the file to the Blackboard assignment page or email your instructor to make alternative arrangements.

*NOTE: Refer to the rubric*  *for grading criteria.*

**Synthesis: Online Discussion**

**Community Contribution:** Post at least one resource to the online community site (such as Padlet or Google drive) that gives an example of an option you use in your classroom to support the UDL Guideline Multiple Means of Engagement.

**Session 12: The UDL Lesson Planning Process**

This session consists of practical applications of the UDL framework to instructional practice by outlining the UDL Lesson Planning Process. This session unpacks the four elements of curriculum, which CAST defines as goals, assessments, methods and materials.

In order to effectively understand how to design or redesign a lesson plan, it is important to be able to establish and articulate clear goals and to identify each element of the curriculum. With a clearly articulated goal as a guide, it is clear which methods and materials can be used to provide options for recognition, strategic and affective networks using the UDL guidelines and still maintain the integrity of the lesson.

#### Session Goals:

* Participants will be able to identify the goals, methods, materials, and assessments in a lesson plan.
* Participants will reflect on how UDL offers a framework for purposeful, proactive design for variability during a lesson.

#### Build Background: Session Media

* [UDL Theory and Practice, Designing for All: What is a UDL Curriculum?](http://udltp.cast.org/reading?loc=chapter5.xml_l1970046) (pp. 68-83)
* [What does it mean to say the curricula are Disabled?](http://www.udlcenter.org/aboutudl/udlcurriculum/disabledcurricula) OR [How does UDL Address Curricular Disabilities?](http://www.udlcenter.org/aboutudl/udlcurriculum/addressdisabledcurricula)

**Question(s) to guide understanding:** How does UDL define curriculum? In what way are curricula disabled? How do you think using UDL can address curricular disabilities?

* Review the PAL Process Summary page (available on Bb).

#### Try It: Session ActivityTake one part of a lesson this week. Reflect on how you assess whether students are achieving the intended learning goal for that part of the lesson. How are you formatively or summatively assessing their learning? How are you using formative assessments to impact teaching strategies, materials, and methods?

#### Synthesis: Online Discussion

How does the UDL Lesson Planning process align with what you currently do? How does having a clear goal influence the materials and methods you make available to your learners? Reflect on the Try It activity from this week. How do you use formative and summative assessments (1) to inform instruction and (2) to measure to the intended learning goal? How can clear goals (and rubrics) allow for flexibility in some of your assessments? How does the UDL planning process support the variability of learners you have in your classroom to become expert learners (purposeful, strategic, and motivated)?

**NOTE:** Be sure to explore and apply the concepts you are learning from the readings, the activities, and your own experience in answering the questions, include what resonated with you and/or what you found puzzling, are wondering or curious about as a result of the new information. Finally, be sure to include how you think you can apply what you have learned in your practice.

You can construct your discussion post using a video (such as [Vimeo](https://vimeo.com/)), audio (such as [Vocaroo](http://vocaroo.com/)), upload a document or Power Point that has images or tables, or use the written format.

### Community Contribution: Review, reflect, and respond to two other participants’ posts this week. Include a deeper discussion of how you envision the UDL planning process will support your work to design lessons that support variability of learners.

### Session 13: Putting it All Together

You will choose a lesson you’ve taught, or observed, or from a website (suggested below), analyze it using the UDL Guidelines, and create a plan for adjusting or revising the lesson to better address the learner variability in your classroom and to achieve the intended learning goal. Use the instructions below for details. They will reflect on how this lesson is now designed for the full range of learner variability including differences in race, language, gender, socioeconomic (including poverty), and culture. This variability is proactively designed for from the onset in a general education, inclusion classroom (tier one instruction) through the use of the UDL Guidelines.

#### Session Goals:

* Participants will demonstrate the ability to use the UDL framework to analyze and evaluate lessons for barriers and elements of UDL in a general education setting (tier one) to address the variability of learners, including differences in race, language, gender, socioeconomic (including poverty), and culture.
* Participants will demonstrate the ability to use the UDL framework to create or recreate lessons that address learner variability and support the development of expert learners towards high learning goals.

#### Build Background: Session Media

Review materials from this course and the feedback you have received from the facilitator and your peers.

Explore at least one online resource:

* [UDL Exchange](http://udlexchange.cast.org/home) is a place to browse and build resources, lessons and collections.
* [UDL Book Builder](http://bookbuilder.cast.org/), a digital book platform designed with UDL features.
* [UDL Studio](http://udlstudio.cast.org/), similar to UDL Book Builder, a digital book platform designed with UDL features.
* [Prezi](http://www.prezi.com), an alternative to Power Point.
* [Vocaroo](http://vocaroo.com/), an audio recording device

**Final Assignment:**

Directions:

1. CHOOSE a part of a lesson you’d like to adjust or revise to better meet the needs of the learner variability in your classroom. This should be a lesson you or your colleague observed or taught yourself. If you are not a classroom teacher, you may think of another learning event you would like to design using the UDL framework (for example, a faculty meeting you are leading, parents’ night, school or campus tour, or classroom syllabus).
2. EVALUATE the existing lesson:
* Indicate the goals, methods, materials, and assessments used in the original lesson. \*Note the importance of establishing a clear learning goal.
* Using the UDL Guidelines and their associated checkpoints ([Provide Multiple Means of Engagement, Provide Multiple Means of Representation and Provide Multiple Means of Action & Expression](https://sites.google.com/site/udlguidelinesexamples/)), describe which checkpoints are present and which checkpoints are not present in the original lesson.
1. DESIGN the new lesson: Develop a plan for how you might adjust or revise the lesson.
* Describe how you will adjust the goals, assessments, methods and materials in the revised lesson and how these changes address learner variability.
* Explain which additional checkpoints will be included in the revised lesson. For the checkpoints that will not be included in your revision, explain why they won’t be included. NOTE: Designing instruction is a thoughtful process. All choices should be made deliberately as a means of helping learners achieve the instructional goal. Although it is not necessary for all checkpoints to be addressed in any particular lesson, but each checkpoint should be *considered* in your lesson analysis.
1. SUMMARIZE: Provide a summary of your redesigned lesson; include the challenges you might encounter in the revised lesson and ideas about how you will address those challenges;
2. PRESENT your work: The way you choose to present your work is up to you, but remember that the purpose of this assessment is for you to demonstrate your understanding of how to use the UDL framework. Be sure that the medium you choose is selected carefully and set up to clearly to demonstrate your understanding. Choose ONE of the options below, or email your instructor to discuss alternatives:
	* Fill out the guided worksheet
	* Use Padlet or [UDL Exchange](http://udlexchange.cast.org/browse.3) (a tool for sharing and developing lessons)
	* Create a PowerPoint or [Prezi](http://www.prezi.com) presentation (no longer than 10 slides or transitions).
	* Create a [Glogster](http://www.glogster.com) web poster.
	* Create a wiki or website.
	* Produce a video (no longer than 5 minutes).
	* Write a paper (no longer than 5 pages).

NOTE: See the rubric for the criteria that your instructor will use to assess your work.

#### Optional (not graded) Discussion:

Post questions about the project, readings, etc. to the Café Forum this week. Check to see if you can help answer any of your peers’ questions.

Note that your project will become part of a greater collection of resources and lessons that may be reviewed by future participants- in a growing collaboration of UDL educators.

#### Additional Resources:

* Meo G. (2008). [*Curriculum planning for all learners; applying universal design for learning (UDL) to a high school reading comprehension program*](http://www.udlcenter.org/sites/udlcenter.org/files/CurriculumPlanningforAllLearners_0.pdf)*. Preventing School Failure 52*(2), 21-30.
* [Beyond the Text](http://www.csb-cde.ca.gov/Documents/Electronic%20Book%20Access%20Handout.doc): Comparison chart of e-book and digital talking book (DTB) hardware and software

### Session 14: Final Session - Face-to-face (video streaming option)

This final webinar session (1 hour) is intended to allow you review Sessions 8-13, go over the final assignment and share progress you have made towards completing this assignment, provide a summary of the discussions, and share next steps for UDL implementation.

**Session Goals**:

* Participants will reflect with the community of practice that has been working together throughout the course
* Participants will be able to post their final lessons for sharing beyond the scope of this course
* Participants will understand that the UDL guidelines are levers for addressing learner variability and supporting the development of expert learners.

**Session Activity:**

The session activity this week is to attend the session or watch the video streaming or recording.

**Synthesis: Online Discussion:**

Following the webinar, please post a short reflection to the discussion forum. You are not the same educator you were when you began this course. 1) What have you learned about UDL that you did not already know? 2) How did the content impact your teaching, the preparation of your lessons, or your thinking about your students? 3) What next steps will you take to continue your own professional growth after this course? 4) Are there any questions that you have about UDL at this point?

**Assignment:**

Your final assignment is due to your facilitator next week.