COURSE DESCRIPTION:

This Universal Design for Learning (UDL) 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. 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.

Most teachers understand the importance of motivation on learning; yet they feel that there is little they can do to impact student motivation. Is motivation purely emotional? Is motivation a cognitive skill that teachers can help students develop? In this course, you will examine how motivation and emotions interact with learning and how UDL promotes deep engagement in learning through the promotion of learners who are deeply engaged, self-aware and self-determined. In this course, you will think critically about the relevant research regarding the interdependence of affect and cognition and the underpinnings of motivation. Participants will apply these theoretical constructs to their instructional practice to not only recruit student interest, but also help students sustain effort and persistence, and manage their emotions effectively.

Curriculum Standards & Frameworks:

Massachusetts 7.08: Professional Standards for Educators
(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
• Exceptional Needs Standards

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 either synchronous or asynchronous sessions.

- **Synchronous (web conference) sessions** (9% of your grade) require you to attend and participate in 3 synchronous (web conference) sessions (at the beginning, middle and end of the semester). NOTE: If you cannot attend the session, you are required to watch the recording (posted to Blackboard within 48 hours) and summarize it for your instructor (you can choose the way you want to do this. For example: write a 1-page essay, a podcast, a PowerPoint, etc. This needs to be submitted within 7 days of the session.

- **Asynchronous sessions** (42% of your grade) can be completed anytime over the course of the week and include:
  - **required readings and/or media**. 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.**
  - **required activities** to complete. Use the “Pause and reflect” prompts to think about your experience with the activity. **You are not required to submit answers to these questions.**
  - **one of the following deliverable assignments** (see course map for dates)
    - **Synthesis activity (online discussions)** requires you to reflect upon the readings, the activity 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 & Evaluation worksheet** (10% of your grade) requires you to analyze a lesson plan and case videos with one portion of the UDL framework. These are opportunities for you to show your understanding of how to use the UDL Framework.
    - **Case Study UDL analysis** (10% of your grade) Requires you to analyze the case you have proposed for your final assignment to identify elements of UDL with the Engagement principle of the UDL framework.
    - **The final assignment** (29% of your grade) requires you to apply what you have learned to examine a problem of practice through the lens of engagement and make suggestions for improving a lesson plan with the UDL Engagement Guidelines. A rubric is included in the appendix.

**Deliverables:**

**Introductions**: You will be asked to create and post a brief professional introduction in your profile.

**Surveys**: You will be asked to give your instructor some feedback.

**Lesson Analysis**: require you to analyze a lesson plan with the Engagement principle of the UDL framework and to identify elements of UDL. This is an opportunity for you to show your understanding of how to use the Framework as an evaluative tool.

**Synthesis Activity (online discussions)**: 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. Each of the weeks listed, you are required to post a thread to the discussion forum and reply to your peers.

**Video Case Analyses:** You will be prompted watch a video and to make comments or annotations that focus on the UDL engagement guidelines and checkpoints.

**Deliverable - Case Study Proposal:** Submit a proposal of the case study you will use for the final assignment to the discussion forum. There is an opportunity to receive feedback from a peer. You are also required to provide a review of your peer’s project.

**Deliverable - Case Study UDL Analysis:** Requires you to analyze the case you have proposed for your final assignment to identify elements of UDL with the Engagement principle of the UDL framework. This is an opportunity for you to use the UDL Framework as an evaluative tool for your case. You will use what you learn in the final assignment. NOTE: The case study is a reflective narrative that (1) identifies a *problem of practice around engagement*; (2) analyzes the resources and demands of the curriculum and environment;

**Final Assessment – Engagement Case Study:** You will submit an engagement case study based on your own work. The case study is a final reflective narrative that (1) identifies a *problem of practice around engagement that you proposed in session 5*; (2) reanalyzes the resources and demands of the curriculum and environment (based on feedback from session 11); (3) reanalyzes and identifies affective barriers to learning (based on feedback from session 11); (4) proposes multiple, flexible UDL options to support expert learning strategies that support engagement; (5) justifies why the strategies were selected using the theories and research explored in the course; and (6) reflects upon what was learned from this case that is relevant for universally designing options for all learners. Links will be provided to the UDL Guidelines/Educator Worksheet and the *Engagement Case Study Rubric*. Feedback you receive and your new insights will be integrated into the final product.

**Technology Requirements:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Microsoft Windows</th>
<th>Apple Macintosh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Versions Supported:</td>
<td>Windows 7</td>
<td>OS X 10.6 (a.k.a. Snow Leopard)</td>
</tr>
<tr>
<td></td>
<td>Windows Vista</td>
<td>OS X 10.5 (Intel) (a.k.a. Leopard)</td>
</tr>
<tr>
<td></td>
<td>Windows XP, Service Pack 3</td>
<td></td>
</tr>
<tr>
<td>Browsers Supported:</td>
<td>Internet Explorer 6.x, 7.x, and 8.x</td>
<td>Safari 2.0 and higher</td>
</tr>
<tr>
<td></td>
<td>Firefox 1.5 and above</td>
<td>Firefox 1.5 and above</td>
</tr>
<tr>
<td></td>
<td>(recommended Java)</td>
<td>Java Runtime Environment (JRE) 5.x or higher</td>
</tr>
<tr>
<td>Processor Speed:</td>
<td>1 Ghz or higher</td>
<td>1 Ghz or higher</td>
</tr>
<tr>
<td>Memory (Minimum):</td>
<td>128 MB</td>
<td>256 MB</td>
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<tr>
<td></td>
<td>256 MB or higher recommended</td>
<td>512 MB or higher recommended</td>
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<tr>
<td></td>
<td>1 GB for Windows Vista or 7</td>
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</tr>
<tr>
<td>Bandwidth Required:</td>
<td>56 Kbps</td>
<td>56 Kbps</td>
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<tr>
<td></td>
<td>256 Kbps recommended</td>
<td>256 Kbps recommended</td>
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<tr>
<td></td>
<td>(minimum DSL)</td>
<td>(minimum DSL)</td>
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</table>

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To test your system regarding the requirements below, go to http://www.ilinc.com/services/support and click on the “Join” button to join the session test. You should also see all green checkmarks in the System QuickCheck box on the same page. Be sure to test your speakers and/or headset while you are in the session test! To test the Java version on your computer, go to http://www.java.com/en/download/testjava.jsp.

EVALUATION OR GRADING POLICY:
Assessment will be based on participation in course synthesis activities such as online discussions (42% of grade), web conference sessions (9% of grade), lesson analysis worksheet (10% of grade), case analysis worksheet (10% of grade), and completion of the final assignment (29% of grade). 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.

Point Value breakdown:

<table>
<thead>
<tr>
<th>Task</th>
<th>Maximum Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seven Online Synthesis Activities (Discussions)</td>
<td>6 points each (42 total) *The Online Synthesis Activity for Session 5 is where you will submit your Final Assignment Proposal and Peer Review.</td>
</tr>
<tr>
<td>Participate in Three Web Conference Sessions</td>
<td>3 points each (9 total)</td>
</tr>
<tr>
<td>Lesson Analysis Assignment (Session 4)</td>
<td>10 points</td>
</tr>
<tr>
<td>Final Assignment Proposal and Peer Review (Session 5)</td>
<td>*See above.</td>
</tr>
<tr>
<td>Case Study UDL Analysis Worksheet (Session 10)</td>
<td>10 points</td>
</tr>
<tr>
<td>Final Assignment</td>
<td>29 points</td>
</tr>
</tbody>
</table>

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**GRADING SYSTEM**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>95-100</td>
</tr>
<tr>
<td>A-</td>
<td>90-94</td>
</tr>
<tr>
<td>B+</td>
<td>86-89</td>
</tr>
<tr>
<td>B</td>
<td>83-85</td>
</tr>
<tr>
<td>B-</td>
<td>80-82</td>
</tr>
<tr>
<td>C+</td>
<td>77-79</td>
</tr>
<tr>
<td>C</td>
<td>74-76</td>
</tr>
<tr>
<td>C-</td>
<td>71-73</td>
</tr>
<tr>
<td>F</td>
<td>0-70</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawn</td>
</tr>
<tr>
<td>IN</td>
<td>Incomplete</td>
</tr>
<tr>
<td>IP</td>
<td>In-Progress</td>
</tr>
</tbody>
</table>

**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, 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.
## COURSE MAP:

<table>
<thead>
<tr>
<th>Session Type/Date</th>
<th>TOPIC</th>
<th>Related Course Goal(s)</th>
<th>What is due?</th>
</tr>
</thead>
</table>
| 1 – Web conference session (real time) **Introduction to the Course and Each Other** | INTRO TO UDL & VARIABILITY MULTIPLE MEANS OF ENGAGEMENT AFFECT (the ‘why’ of learning) | • Participants will learn about the different resources and technologies that will be used in the course. | Attend session or submit a summary  
Post a profile to Blackboard |
| 2 – Asynchronous session (complete online) **Learner Variability and Introduction to Universal Design for Learning (UDL)** | | • Participants will understand that learner variability is the norm.  
• Participants will understand that the UDL guidelines are a series of levers that can help educators address learner variability. | Participate in an online discussion |
| 3 – Asynchronous session (complete online) **Affective Networks and Multiple Means of Engagement** | | • Participants will understand how providing Multiple Means of Engagement helps provide access to the varied affective networks of learners. | Participate in an online discussion (video case analysis) |
| 4 – Asynchronous session (complete online) **The Interrelationship of Emotion and Cognition** | EMOTION AND COGNITION | • Participants will understand the way that emotion impacts cognition.  
• Participants will understand the way that a learner’s perception of the balance between resources and demands impacts learning and performance. | Poll  
Lesson analysis |
| 5 – Asynchronous session (complete online) **Motivation and Self Determination** | | • Participants will understand the difference between intrinsic and extrinsic motivation.  
• Participants will understand how to design a social environment that optimizes learners’ levels of motivation. | Case study proposal |
| 6 – Asynchronous session (complete online) **The Impact of Stress on Cognition** | | • Participants will understand how stress impacts cognition. | Participate in an online discussion (video case analysis) |
| 7 – Web conference session (real time) | REVIEW & REFLECTION | • Participants will reflect about what they know about the importance of engagement in learning and how they as teachers (and parents) can impact student motivation. | Attend session or submit a summary |
| 8 – Asynchronous session (complete online) **Fixed and Growth Mindsets** | MANIPULATING THE CONTEXT TO MAXIMIZE ENGAGEMENT | • Participants will understand the difference between a fixed and a growth mindset.  
• Participants will understand how a growth mindset can encourage persistence.  
• Participants will understand how to cultivate a growth mindset in their students. | Participate in an online discussion |
| 9 – Asynchronous session (complete online) | Grit and Persistence in Learners | • Participants will understand what is unique about grit and persistence.  
• Participants will understand how other concepts from the course may impact grit and persistence.  
• Participants will understand how the design of the learning environment can impact grit or persistence in students. | Poll  
Participate in an online discussion |
| 10 – Asynchronous session (complete online) | The Concept of Flow | • Participants will understand the concept of the zone of proximal development and Flow.  
• Participants will be able to identify flow states. | Case study analysis |
| 11 – Asynchronous session (complete online) | Developing Self-Regulation | • Participants will understand what self-regulation is and how it can be taught.  
• Participants will understand why social understanding and emotional self-regulation are crucial to developing expert learners. | Participate in an online discussion (video case analysis) |
| 12 – Asynchronous session (complete online) | Applying Research to Practice | PUTTING IT ALL TOGETHER | Work on Final Assignment |
| 13 – Asynchronous session (complete online) | Putting it all Together | • Participants will reflect and offer final comments of how UDL and conceptual understanding of dimensions of affect will tie to their practice.  
• Participants will refine their ‘problem from practice’ that can be analyzed using the UDL Guidelines. | Work on Final Assignment |
| 14 – Web conference and final assignment | Summary Session | REVIEW, REFLECT & TAKE AWAYS | Attend session or submit a summary |
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 they might be applied to your 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.

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

Lesson Analysis Worksheet: Multiple Means of Engagement
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.
<table>
<thead>
<tr>
<th>The Lesson: Indicate the goals, assessments, methods and materials used in the original lesson.</th>
<th>Does not meet expectations</th>
<th>Meets some expectations</th>
<th>Meets all expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>0 Points:</strong></td>
<td>Does not demonstrate an understanding of elements of a lesson by identifying all of the elements (goals, assessments, materials and methods) correctly.</td>
<td><strong>1 Point:</strong></td>
<td>Demonstrates an understanding of elements of a lesson by identifying all of the elements (goals, assessments, materials and methods) correctly.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Guideline 1: Provide options for recruiting interest</th>
<th>Does not meet expectations</th>
<th>Meets some expectations</th>
<th>Meets all expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>0 Points:</strong></td>
<td>Demonstrates little understanding of how the lesson does or does not provide options for recruiting interest.</td>
<td><strong>1-2 Point:</strong></td>
<td>Demonstrates a limited or partial understanding of how the lesson does or does not provide options for recruiting interest.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Guideline 2: Provide options for sustaining effort and persistence</th>
<th>Does not meet expectations</th>
<th>Meets some expectations</th>
<th>Meets all expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>0 Points:</strong></td>
<td>Demonstrates little understanding of how the lesson does or does not provide options for sustaining effort and persistence.</td>
<td><strong>1-2 Point:</strong></td>
<td>Demonstrates a limited or partial understanding of how the lesson does or does not provide options for sustaining effort and persistence.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Guideline 3: Provide options for self-regulation</th>
<th>Does not meet expectations</th>
<th>Meets some expectations</th>
<th>Meets all expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>0 Points:</strong></td>
<td>Demonstrates little understanding of how the lesson does or does not provide options for self-regulation.</td>
<td><strong>1-2 Point:</strong></td>
<td>Demonstrates a limited or partial understanding of how the lesson does or does not provide options for self-regulation.</td>
</tr>
</tbody>
</table>

**Case proposal (problem of practice) and peer review**
Submit to the discussion forum by the due date listed in the course.

<table>
<thead>
<tr>
<th>Does not meet expectations</th>
<th>Meets some expectations</th>
<th>Target Understanding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Peer Review</strong></td>
<td><strong>0 Points:</strong></td>
<td><strong>1 Point:</strong></td>
</tr>
<tr>
<td>Did not complete a peer review and/or did not submit draft to peer or</td>
<td>Provided basic feedback and suggestions to peer.</td>
<td>Provided in-depth* and meaningful feedback and suggestions to peer.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Context</th>
<th><strong>0 Points:</strong></th>
<th><strong>1 Points:</strong></th>
<th><strong>2 Points:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrates a weak or no understanding of the variability of the learners, instructional environments, and contexts.</td>
<td>Demonstrates a basic understanding of the variability of the learners, instructional environments, and contexts.</td>
<td>Demonstrates a functional understanding of the variability of the learners, instructional environments, and contexts.</td>
<td></td>
</tr>
</tbody>
</table>
The Problem of Practice

<table>
<thead>
<tr>
<th>The Problem of Practice</th>
<th>0 Points:</th>
<th>1 Points:</th>
<th>2 Points:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Demonstrates a weak or no understanding of instructional issues or curricular barriers for learners or does not include a goal or vision of success.</td>
<td>Demonstrates a basic understanding of instructional issues and curricular barriers for learners. Includes a goal or vision of success.</td>
<td>Demonstrates a functional understanding of instructional issues and curricular barriers for learners with some references to course big ideas and readings. Includes a goal or vision of success.</td>
</tr>
</tbody>
</table>

* Provides examples/explains rationale; if tactic is not present in the lesson, provides examples of how it might be incorporated.

Case Analysis (Session 10)

<table>
<thead>
<tr>
<th>Goal and Case Description</th>
<th>Does not meet expectations</th>
<th>Meets some expectations</th>
<th>Meets all expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Guideline 1:</strong> Provide options for recruiting interest</td>
<td>0 Points: Does not include a goal and/or a description of the case.</td>
<td>1-2 Points: Demonstrates a limited or partial understanding of how the case does or does not provide options for recruiting interest.</td>
<td>3 Points: Demonstrates an in-depth understanding of how the case does or does not provide options for recruiting interest.</td>
</tr>
<tr>
<td><strong>Guideline 2:</strong> Provide options for sustaining effort and persistence</td>
<td>0 Points: Demonstrates little understanding of how the case does or does not provide options for sustaining effort and persistence.</td>
<td>1-2 Points: Demonstrates a limited or partial understanding of how the case does or does not provide options for sustaining effort and persistence.</td>
<td>3 Points: Demonstrates an in-depth understanding of how the case does or does not provide options for sustaining effort and persistence.</td>
</tr>
<tr>
<td><strong>Guideline 3:</strong> Provide options for self-regulation</td>
<td>0 Points: Demonstrates little understanding of how the case does or does not provide options for self-regulation.</td>
<td>1-2 Points: Demonstrates a limited or partial understanding of how the case does or does not provide options for self-regulation.</td>
<td>3 Points: Demonstrates an in-depth understanding of how the case does or does not provide options for self-regulation.</td>
</tr>
</tbody>
</table>
### Final Assignment Scoring Rubric:

<table>
<thead>
<tr>
<th></th>
<th>Does not meet expectations</th>
<th>Meets some expectations</th>
<th>Target Understanding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revision of Context</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>0 Points:</strong></td>
<td>Revision demonstrates a basic or weak understanding of the variability of the learners, instructional environments, and contexts.</td>
<td>Revision demonstrates a functional understanding of the variability of the learners, instructional environments, and contexts.</td>
<td>Revision demonstrates a thorough and nuanced understanding of the variability of the learners, instructional environments, and contexts.</td>
</tr>
<tr>
<td><strong>Revision of the Problem of Practice</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>0 Points:</strong></td>
<td>Revision demonstrates a basic or weak understanding of instructional issues or curricular barriers for learners.</td>
<td>Revision demonstrates a functional understanding of instructional issues and curricular barriers for learners with some references to course big ideas and readings.</td>
<td>Revision demonstrates a thorough and nuanced understanding of instructional issues and curricular barriers for learners by using course big ideas to support a hypothesis, inquiry question, or theory of action.</td>
</tr>
<tr>
<td><strong>UDL Understanding Application/Use</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>0-1 Points:</strong></td>
<td>Review makes weak or no references to specific UDL principles, guidelines, or checkpoints.</td>
<td>Review makes few references to specific UDL principles, guidelines, or checkpoints.</td>
<td>Review shows a functional understanding of the UDL guidelines by correctly referencing some (4-5) checkpoints that correspond to features of the assessment, method, or material.</td>
</tr>
<tr>
<td></td>
<td>0-1 Points:</td>
<td>2-3 Points:</td>
<td>4-5 Points:</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>UDL Application/Use</strong></td>
<td>Review makes weak or no connections between the guidelines/points and the specific features of the assessment, method, or material.</td>
<td>Review makes a few connections between the guidelines/points and the specific features of the assessment, method, or material but does not adequately explain why the feature help educators address the checkpoints.</td>
<td>Review demonstrates a functional understanding of how the specific features of the assessment, method, or material can help educators address some of the checkpoints.</td>
</tr>
<tr>
<td><strong>Applying Theories to Practice</strong></td>
<td>Submission doesn't reference weekly readings or activities.</td>
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<td>Submission doesn't reference course readings and/or shows minimal or superficial consideration of the content, because there is minimal or no evidence of how the UDL guidelines relate to his/her instructional practice or experience.</td>
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<tr>
<td><strong>Reflection and Summary</strong></td>
<td>The reflection may be difficult to follow. It may not include a complete description of the materials, methods and/or assessments. It may be unclear how it will address learner variability. The plan may not state the potential challenges and solutions.</td>
<td>The reflection may not completely describe the revised lesson (does not include a complete description of the materials, methods and assessments) and/or it may not be completely clear how it will address learner variability. The reflection may not completely state the potential challenges and solutions.</td>
<td>The reflection completely describes the revised lesson (including the materials, methods and assessments) and how it will address most learner variability. It also states the potential challenges and solutions.</td>
</tr>
<tr>
<td><strong>Presentation of Deliverable</strong></td>
<td>The project presentation or media is difficult to follow (is disorganized). The presentation does not demonstrate understanding of how to use UDL to address learning variability.</td>
<td>The project presentation or media helps to demonstrate a basic understanding of how to use UDL to redesign lessons that address learning variability.</td>
<td>The project presentation or media is clear and helps to demonstrate a good understanding of how to use UDL to address a wide range of learner variability.</td>
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Session 1: Introduction to the Course - Synchronous Web Conference Session

This session includes a synchronous (real-time) web conference session offers participants the opportunity to meet your instructor and to learn about the different resources and technologies that will be used in this course. The session will include a tour of Blackboard and the National Center for UDL website. The session will include interactive polls and an opportunity to ask questions.

Watch & Read (required for the web conference):
- Watch this brief 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?
- UDL at a Glance  A short (4:38) video created by CAST that illustrates the three principles of Universal Design for Learning.
  Questions to guide your understanding: How can the UDL framework help educators address learner variability?

Session Activity:
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. Read and familiarize yourself with the profiles of others before the web conference.

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?

NOTE: If you cannot attend the session, you are required to watch the recording (posted to Blackboard within 48 hours) and summarize it for your instructor. You can choose the way you want to do this. For example: write a 1-page essay, create a podcast, a PowerPoint, etc. This needs to be submitted to your instructor within 7 days.

Session 2: Learner Variability and Introduction to Universal Design for Learning (UDL)

In this asynchronous session, participants will focus on the key foundation of Universal Design for Learning. UDL is based on recent research in the learning sciences that has shown that learner variability is the norm. As a result, UDL maintains that the primary impediment to achievement of many learners is inflexible, “one-size-fits-all” curricula that are not flexible enough to deal with learner variability. 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. 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.

In this course, the focus will be on the Engagement Principle (Guideline 3) and how supporting the Recognition Principle (Guideline 1) and Action and Expression Principle (Guideline 2) also support
Engagement. Additional consideration will be made on the importance of identifying clear goals in order to provide flexible and accessible supports, and how that specifically can tie to engagement.

Session Goals:
1. Participants will examine their current beliefs about the nature of ability.
2. Participants will understand that ability is determined by the interaction of individual variability and the learning context.
3. Participants will understand that neural networks vary across individuals.
4. Participants will understand that the UDL guidelines are a series of levers that can help educators address learner variability.

Watch & Read:
- **UDL Theory & Practice, Chapter 1 - 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?
- **Question(s) 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?
- **UDL Series: Learner Variability and UDL** (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?
- **Using the UDL Framework to Support Culturally Diverse Learners** (2012). [Access link provided]
  - **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?

Session Activities:
- **UDL Online Section – Introduction** (3 pages)
- **UDL Online Section - Multiple Means of Engagement** (4 pages)
  In this section of UDL Online you will watch a short video demonstrating a digital learning tool. After watching the video, click on the Activity tab for some guided practice using the guidelines to evaluate the tool shown in the video. After you complete the activity, click on the “examples” button to check your answers.
  - **Pause and Reflect:** How do you think the UDL principle “use multiple means of engagement,” relates to the variability in the affective networks of learners? Think about a curriculum that is not flexible and does not provide options that engage all learners. Remember to think about ALL learners (those with special talents and those who struggle with school work).

Synthesis Activity (Online Discussion):
**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.
1. One of the assumptions of UDL is that all students (no matter how varied) can learn. In order to help all students learn, the framework helps educators see where learners are most likely to vary and to offer options to account for that variability. 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? Do you think that designing curricula in this way affects your ability to accurately assess learners? Provide an example from your practice to help illustrate and support your answer.

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?

OR

2. How can offering options engage students in learning? How do you think that can the UDL Principle Multiple Means of Engagement help support learner variability from the beginning? Relate to your practice: What are some sources of variability in your classroom? How will you consider your lesson design in light of this variability?

Dive Deeper (optional):

Session 3: The Interrelationship of Emotion and Cognition
In this asynchronous session, participants will explore the literature on how emotion impacts cognition. We will examine different definitions of emotion and consider how neuroscience has informed these definitions. We will also discuss the role of appraisal, valence and arousal in emotion. Participants will consider how UDL can support both emotion and cognition in the classroom through reflective lesson design using the UDL Engagement Guidelines. These topics will be introduced in this week and discussed more thoroughly throughout the semester.

Session Goals:
1. Participants will understand the way that emotion impacts cognition.
2. Participants will understand that a learner’s perception of the balance between resources and demands impacts learning and performance.
3. Participants will be able to identify the way educators can adjust a learner’s perception of the balance between resources and demands to impact engagement with learning.

Optional (feel free to watch these at any time during the course): Brain Rules – An open resource from the Harvard Graduate School of Education. In these short videos and associated vocabulary and self checks, Dr. Todd Rose provides an overview of basic brain anatomy: The Neuron; Brain Organization; The Cerebrum; Frontal Lobe; Sensory Lobes.

Watch & Read:
- Read the PowerPoint (link on Blackboard) for Session 3. Be sure to read the slides and the speaker notes (which expand on the information on the slides). This PowerPoint will provide you with some important definitions and information to guide your understanding this week.
Watch a short video that helps us understand how one researcher defines emotion (3:45).
http://www.youtube.com/watch?v=DHDnlVuVr3M

“We Feel, Therefore We Learn: The Relevance of Affective and Social Neuroscience to Education,” Immordino-Yang, M.H. & Damasio, A. in Mind, Brain, and Education. (2007). 1(1), pp. 3-10. (PDF download)

Question(s) to guide your understanding: How did the metaphor of emotions being the ‘shelves that hold the cognitive glassware’ align with your thinking of the interaction of emotion and cognition?


Question(s) to guide your understanding: How do you think that the UDL guidelines offer guidance on the way demands and resources can be manipulated to support optimal cognitive and emotional functioning in learning?

Session Activities/Assignment:

1. Video Case #1: Watch the video example Cell Lesson (4:28) with a focus on affect. Using the UDL Guidelines Analysis Worksheet, analyze this video in terms of emotional engagement strategies and student engagement. Use specific observations from the video as evidence for engagement. Considering the UDL guidelines for engagement, answer the questions below. Post your reflection to the discussion forum:
   a. What do you think the teacher’s goal is in this lesson?
   b. How is student affect being manipulated in this clip? How does this relate to cognition?
   c. Has the teacher helped to balance the students’ perception of demands and the resources in the environment? How so?
   d. What supports were available within the design of the lesson to be a resource for the students?
   e. Which UDL engagement guidelines do you think is being well represented (support your answer)? Why?
   f. Which UDL engagement guidelines would your recommend he include to enhance the lesson further (why do you think this?)
   g. Do you think that designing a lesson that managed student affect has helped the teacher keep the level of challenge high in the lesson?

Synthesis Activity (Online Discussion):

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.

Post your reflection from the Cell Lesson. How has the teacher helped to balance the students’ perception of demands and the resources in the environment? What supports were available within the design of the lesson to be a resource for the students?
Comment on one of the UDL Engagement Checkpoints that you feel was particularly well represented (or not well represented). Do you think that designing a lesson that managed student affect has helped the teacher keep the level of challenge high in the lesson? Be sure to comment on some of the other participants’ posts.

**Dive Deeper (optional):**
- Damasio, *Descartes Error*: Chapter 3-4 (Case in Chapter 4: damage to amygdala, ventromedial prefrontal cortex: area of intersection emotion and reason)
- 1 hour lecture of neuroscience of emotions from a Google Talk: [http://www.youtube.com/watch?v=tSHyA3NFVs](http://www.youtube.com/watch?v=tSHyA3NFVs)

**Session 4: Affective Networks and Multiple Means of Engagement**
In this asynchronous session, participants will learn about the third principle in the UDL framework (Multiple Means of Engagement) and how this principle helps to make explicit the ways in which learners are likely to vary in the affective networks—taking all of the dimensions along which learners are naturally varied and providing educators with practical ways to apply that understanding to the designing lessons that allow more learners access to appropriate and challenging learning experiences.

**Survey:**
At this point in the course, *take a survey (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 goals:**
1. Participants will understand that UDL helps educators translate research to instructional practice.
2. Participants will understand that providing Multiple Means of Engagement helps provide access to the varied affective networks of learners.
3. Participants will analyze and evaluate a lesson for elements of Multiple Means of Engagement as outlined in the UDL guidelines.

**Watch & Read:**
- *UDL Theory and Practice: Affective Networks* (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?
- *UDL Theory and Practice: Provide Multiple Means of Engagement (pp. 52-53)*
  **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 – about this representation*
- *UDL guidelines – Multiple Means of Engagement*
**Question(s) to guide your understanding:** What does UDL mean by developing expert learners?

- **UDL Guidelines Structure** (3:44) David Rose talks about the structure of the guidelines.

**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?

- **UDL and Technology**

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

**Lesson Analysis/Evaluation Assignment:**

1. Download a copy of the UDL Guidelines Lesson Analysis Worksheet for Engagement on Blackboard. Familiarize yourself with the principle, Provide Multiple Means of Engagement, along with the associated guidelines and checkpoints. To explore each checkpoint, go to [UDL Guidelines 2.0 - Organizer links to examples](http://www.edc.org/CCT/PMA/) where you can find explanations and links to examples.

2. Take a lesson you have used, observed or choose one from those listed below and think about how it was designed to support learner variability in the affective network.
   - **Social Studies:** Picturing Modern America (PMA): [http://www.edc.org/CCT/PMA/](http://www.edc.org/CCT/PMA/)
   - **Science:** The Cell Cycle & Mitosis: [http://www.biology.arizona.edu/cell_bio/tutorials/cell_cycle/main.html](http://www.biology.arizona.edu/cell_bio/tutorials/cell_cycle/main.html)
   - **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/lessons/lesson_view.asp?id=398)
   - **Math:** Adjustable Spinner from the Project Interactivate website: [http://www.shodor.org/interactivate/activities/AdjustableSpinner/](http://www.shodor.org/interactivate/activities/AdjustableSpinner/)

3. Consider at least one way to improve the lesson using a specific UDL Guideline from the Engagement Principle (Guidelines, 7, 8 or 9).

4. Fill out the top of the second page of the [UDL Guidelines Lesson Analysis Worksheet for Engagement](http://www.edc.org/CCT/PMA/) with your name, the lesson title (and URL if applicable), the lesson goal, and a brief description of the lesson.

5. Complete the rest of the [UDL Guidelines Lesson Analysis Worksheet for Engagement](http://www.edc.org/CCT/PMA/) using the lesson you have chosen. Consider each checkpoint contained within the UDL Guidelines and evaluate whether that checkpoint is **present**, **not present**, or if you are **unsure** about whether or not it is present in the lesson. Be sure to include any additional **comments** about how the lesson does or does not address the checkpoint. It is not sufficient to simply list the checkpoints that are present or not present. You need to provide an explanation of why.

6. Save your responses on the worksheet. Be sure to indicate which lesson your 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:** This assignment intended to be done as an exercise to practice making connections between your practice and the UDL Engagement Guidelines. The feedback you receive will help you to develop more skill in identifying UDL in your lessons and to consider how you can expand them further. You are not expected to be an expert at this point. We will be building on this understanding as you view the case stories with the guidelines throughout the course.

**Dive Deeper (optional):**

- Rose, D., Gravel, J.W., and Domings, Y.M. (2010). *UDL Unplugged: The Role of Technology in UDL*
Session 5: Motivation and Self Determination
In this asynchronous session, participants will consider the importance of motivation for education: at best, people are curious, vital, self-motivated, strive to learn, and put forth effort and commitment. Self-determination theory (SDT) is an approach to motivation, which considers what motivates people to act. Learner variability in motivation exists, from external rewards and extrinsic motivation to the sustained internal, intrinsic motivation. Additionally, several factors are presented by the research to impact motivation, including the difference between control and autonomy, learners’ feelings of competence, and relatedness. Discussion of the continuum of intrinsic and extrinsic motivation will be considered in light of strategies to build learning contexts that foster autonomy and competence. Consideration of the UDL Engagement Guidelines will be made in order to consider how to design an environment that optimizes a student’s level of motivation.

Session Goals:
1. Participants will understand the difference between intrinsic and extrinsic motivation.
2. Participants will be able to explain how students’ sense of agency impacts motivation to learn.
3. Participants will be able to analyze a social environment that can optimize learners’ levels of motivation.
4. Participants will identify a problem of practice related to engagement.

Watch & Read:
- Read Self Determination Theory (E. Deci & R. Ryan)
- Watch Ed Deci talk about motivation on TED talk (14:06)
  Question(s) to guide your understanding: How does Deci define motivation? How does he contrast the concept of the quality and quantity of motivation? Do controlled and autonomous motivation differ in helping students reach an identified goal? How do social and cultural factors impact people’s sense of control over situations? What is the importance of context and goal setting supporting students’ sense of autonomy, in competence and relatedness?
  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?

Session Activity:
- Try The Tower of Hanoi, a mathematical puzzle. Spend at least 20 minutes perfecting your strategies on the puzzle.
  Pause and Reflect: How did you appraise the situation? How motivated were you to do the puzzle? Do you think you were intrinsically or extrinsically motivated? Why? What impacted your motivation (either positive or negative)? Did you have any preconceived notions based on your ability in the subject matter? Why? Would you have appreciated more choices? Why? How did you end up doing on the puzzle?

Discussion: Final Assignment Case Study Proposal and Peer Feedback:
This week’s discussion will be to post your proposal for the final assignment to the Discussion Forum and provide a peer with feedback. Hence, there are two components:
1. Identify a problem of practice (related to engagement) upon which you would like to focus your final project. Include a description of:
   a. the current context in which the problem is situated and
   b. the problem of practice related to engagement (identify the student or students and/or teachers),
   c. the challenge and the strategies you have tried.
   d. your goal for this problem of practice and vision of success

2. Provide some meaningful feedback on at least one peer’s problem of practice (see rubric for appropriate feedback.

For example:

a. Define context:
   I am a high school biology teacher in xxx public school. I have been teaching for ten years and each year I have approximately 125 students in total in my classes and all students are mandated to take my biology course in order to graduate. Generally, I feel as though I have an engaging class: over the years I have accumulated many effective lab activities that students enjoy and I generally do not have discipline problems. Most students do well on the final state biology exam and my administrators are pleased with that. However, due I do have students in my class who do not want to be there and I find engagement can be a barrier for some of the students. For this project, I am going to focus on one of these ‘unengaged’ students.

b. Define the ‘problem of practice related to engagement. Remember innovation often begins in the margins. We learn from interactions with students who can inform our practice for everyone. UDL starts in the margins, but it can apply to and improve learning for the whole class.
   ‘Geoff’ is a high school senior who has taken my biology class twice already and has not yet passed. He is one of the oldest students in my class (most students take biology as freshman and pass),and is not happy to have to take my class for a third time. He feels ‘too cool’ as a senior in a class with many freshman students. Generally ‘Geoff’ comes into my classroom, is not disruptive, but does not follow the routines and protocols of the day (for example, he does not take out his notebook, he does not do the warm up activity, he does not usually have his homework done). ‘Geoff’ currently has a 60% in my class and may not pass again, which means he may not graduate.

c. Describe the challenge and the strategies you have tried
   His advisor, his parents, and I have all been in communication and ‘Geoff’ is aware of the predicament, however, he is not making changes in his engagement of the course.

d. Describe your goals and what you think successful implementation will look like.
   The goal of this is to _________________. My vision of success is ___________.

Dive Deeper (optional):

New vocabulary: motivation, intrinsic motivation, internalization, integration, extrinsic, self-determination theory
Session 6: The Impact of Stress on Cognition

In this asynchronous session, participants will explore the way that stress impacts learning. You will remember from session 4, there are numerous factors that can influence a learner’s subjective appraisal of a learning situation including genes, the context, and past experience. Building upon the understanding of the resource-demand model, participants will think about their lesson/environment design and their students. How does research on stress help you think about decisions that you make in your day-to-day interactions with students? The discussion will focus specifically on how the UDL Engagement Guidelines can help provide options that minimize stress and, therefore, support curricular design.

Session Goals:
1. Participants will understand how stress impacts cognition.
2. Participants will identify the way that a learning environment impacts students’ affect.
3. Participants will propose ways that the engagement guidelines help educators adjust the context, resources and demands to minimize potential stressors and support students’ affect.

Watch & Read:
- Sian Beilock is a psychology professor at The University of Chicago and one of the world’s leading experts on the brain science behind “choking under pressure” and the many factors influencing all types of performance. Watch Sian Beilock talk about the science of “choking” (14:42) or underperforming in stressful situations.
  Question(s) to guide your understanding: How does stress impact performance? How does belief impact performance? How can this help you support students to avoid choking?
- Listen to Sian Beilock talk about the impact of stereotypes on “choking” (0:44)
  Question(s) to guide your understanding: Given what you just heard about stereotypes, how might previous failure or labels such as learning disabilities impact student performance?

Watch:
- Stress: Portrait of a Killer (4:39)
  - Why does psychological stress turn on the stress response? (1:29)
  - What about stress management? (2:44)
  - Does the stress response differ in men and women? (1:28)
  - Are 21st Century humans more stressed out than our predecessors? (1:03)
  Question(s) to guide your understanding: How is stress different from fear? Why is stress hazardous to health? How can you apply this information to your classroom?

Read:
- Brain Rules: Stress (part 1-5): What happens in the brain when we are under stress? How does stress impact memory, cognitive performance?
  Question(s) to guide your understanding: Is all stress bad? What is the tipping point between challenge and stress? Have you seen this in your students?

Check for Understanding: take the Stress Quiz to see how much you have learned about stress. You will post the results in the chat window during the synchronous session next week.

Session Activities:
- Video Case 1: Watch the video example: Paper Chase scene (3:25): First, watch the video to understand the story. Second watch the video with a focus on affect. Using the UDL Guidelines Analysis Worksheet, analyze this video in terms of emotional engagement strategies and student engagement. Use specific observations from the video as evidence for engagement. Think about the relationship of emotion and cognition and answer the questions below. Post your reflection to the discussion forum.
1. From your perspective, what are the resources and demands in this classroom?
2. What is the professor’s perception of this student?
3. What do you think the professor’s goal is?
4. What do you think the student’s goal is?
5. What do you think the student perceived in relation to the balance of the resources and demands?
6. What do you think the role of context in the student’s perception?
7. What was the affective result of the student’s perception?
8. Do you think the professor’s goals were achieved?
9. What did the student learn?

**Synthesis Activity (Online Discussion):**

**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.

Think about the readings in relation to the activity that you just experienced. How does context impact a student’s stress response? How do the student’s perception of resources and demands impact stress at many different points through the day (e.g. transitions, gym class versus math class, recess)? Reflect on how the information from the readings, media and activities inform your thinking about the problem of practice you identified earlier in session 4. Propose ways that the engagement guidelines help you think about how to adjust the context, resources and demands to minimize potential stressors and support students’ affect.

**Dive Deeper (optional):**
- Watch the entire episode: Stress, Portrait of a Killer (56:04):  
  [http://www.youtube.com/watch?v=eYG0ZuTv5rs](http://www.youtube.com/watch?v=eYG0ZuTv5rs)
- Descartes’ Error: Eliot, Ch. 3 - lack of affect to disturbing pictures and poor real-life ‘low affect’, but still has conceptual understanding of social convention
- Scientific American Frontiers video - Worried sick:  
- Homeostasis:  

**Session 7: Synchronous Web Conference Session**

This synchronous web conference session is intended to allow you to participate and share your reflections and new understandings with other participants. will provide a review of sessions 1 through 6 and will allow you to share your new understanding about the importance of engagement in learning and how we as teachers (and parents) can impact student motivation. We will review the key details from readings and activities that considered motivation and stress and how maximizing motivation and minimizing stress can be supported with the UDL Guidelines for Engagement and from the perspective of the resource-demand, valence/arousal models. We will review the Engagement Analysis Worksheet. We will also talk about the MTSS and how UDL supports this important initiative.

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Required Reading (we will be discussing this in the session):

- Massachusetts Tiered System of Support (MTSS) PDF

Questions to guide your understanding: Now that you know more about UDL and the MTSS, how do you think UDL can be used to support the MTSS?

Pause and Reflect: How has any of the content so far impacted your teaching, the preparation of your lessons, or your thinking about your students? What do you observe in your class; do you observe your students differently?

NOTE: If you cannot attend the session, you are required to watch the recording (posted to Blackboard within 48 hours) and summarize it for your instructor. You can choose the way you want to do this. For example: write a 1-page essay, create a podcast, a PowerPoint, etc. This needs to be submitted to your instructor within 7 days.

Session 8: Fixed and Growth Mindsets: How Feedback Encourages or Discourages Persistence

Mindsets are sets of beliefs that we hold about abilities. People with a growth mindset believe that the brain and intelligence is like a muscle that can be developed like a muscle. People with a ‘fixed’ mindset believe that they have a specific, fixed constellation of abilities and talents: they are either talented or not and that talent or intelligence is the reason for success or failure. Research on mindsets has show that students who hold a growth mindset perform better under conditions of challenge than those who have a fixed mindset. Mindsets can be learned and can be taught or changed. Research suggests that specific kinds of feedback promote either a fixed or growth mindsets.

In this asynchronous session, participants will explore fixed and growth mindsets and consider how different kinds of feedback and how we can foster a growth versus a fixed mindset in our students. Participants will learn how to provide mastery-oriented feedback that impacts a student’s willingness to engage with and persist in challenging academic tasks. Focus will be explicitly tied to UDL Guideline 8.4 (increase mastery-oriented feedback).

Goals:
1. Participants will understand how a growth mindset can encourage persistence.
2. Participants will be able to distinguish the difference between a fixed and a growth mindset.
3. Participants will be able to cultivate a growth mindset in learners.

Watch & Read:
- Watch: The Pygmalion Effect and the Power of Positive Expectations (5:59)
  Question(s) to guide your understanding: As you watch consider, how did the teachers’ expectations impact student behavior and performance? What implications may this have for your classroom? How did teacher feedback impact student achievement and persistence?
- Watch: Carol Dweck: The Effect of Praise on Mindset – watch this video on the effect of types of praise on learner motivation (3:26)

OR
**Question(s) to guide your understanding:** Reflect on something you have struggled with in the past. Do you think you have a fixed or a growth mindset? Did you avoid or embrace the challenge? Did you persist or give up quickly?

**Session Activities:**
- **Brainology** is a set of online interactives designed to help students develop a growth mindset.
  1. Sign up for an account (go to your email and click on the link to take the free preview).
  2. Click on 'Launch Brainology' on the upper left-hand menu.
  3. Read Chris and Dahlia’s e-journals and the brain book.

**Pause and Reflect:** As you went through the Brainology preview take note of how the authors are trying to build a growth mindset in the users.

**Synthesis Activity (Online Discussion):**
**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.

Increasing the mastery-oriented feedback that we use in a classroom is one way to provide options that help students sustain effort and persistence. How might the research on mindset impact your thinking of your ‘case’ example that you proposed in week 5? Observe and reflect on the feedback you give your students throughout the week. Can you think of any feedback that successfully motivated students (or yourself)? Relate a ‘case’ example either from one of your students or from your own experience that exemplifies how feedback may have impacted persistence or motivation (either positively or negatively) with a specific task or assignment.

**Dive Deeper (optional):**
- **Read:** [Reducing the Gender Achievement Gap in College Science: A Classroom Study of Values Affirmation](http://www.sciencemag.org/content/330/6008/1234), (26 November 2010) *Science* (330) 6008 pp. 1234-1237.

**Session 9: Grit and Persistence in Learners**
In this asynchronous session, participants will consider how the design of the environment or learning context can impact persistence or grit of students. Grit is considered to be the ‘sticking with it’ over a long time and is different from intelligence and talent. How does having a clear goal impact persistence? Do the hardest working students necessarily do better than those who do not work hard? What ‘unlocks’ grit and persistence; can it be taught?

Through activities and readings, participants will consider variability in ‘grit’ and how context can impact persistence. How might offering choice to students help them to find authentic relevance in topics that interest them, and may help engage in learning in school? How can the designing lessons with the UDL Guidelines (specifically, guideline 8—provide options for sustaining effort and persistence; heighten the salience of goals and objectives—8.1; guide appropriate goal setting—6.1; enhance capacity for monitoring progress—6.4;) improve students’ grit and persistence with challenging tasks?
Survey:
At this point in the course, take another survey (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 Goals:
1. Participants will understand the way that grit and persistence impact learning.
2. Participants will understand the way that goals, expectations and mindset impact grit and persistence.
3. Participants will be able to apply knowledge from research to evaluate a learning environment that supports the development of grit and persistence in students.

Watch & Read:

Question(s) to guide your understanding: Do you agree with Duckworth’s assertion that grit is more important to success than intelligence? Why or why not?

- Either watch a video about Paul Smith, typewriter artist: http://www.youtube.com/watch?v=XiHyQhf9qAY
  OR
- Read Paul’s story: http://www.squidoo.com/typewriterartist

Question(s) to guide your understanding: Do you think that persistence came easily to Paul Smith? Do you think he was born with persistence or do you think he gained persistence from his experiences?

Session Activities:
1. Brain Sciences.com is a freely available web-based platform with rigorously tested and scientifically proven tests of memory, attention, reasoning and planning. Many of the tests are variants on paradigms that have been used in functional neuroimaging studies (using PET and fMRI). Go to Brain Sciences.com and sign up for an account.
2. Flow (not to be confused with the concept of flow, which we will talk about next week). Flow is a simple puzzle game to connect matching colors with a pipe to fill a grid to solve the puzzle.
   a. Choose to Play or How to Play (if you want to read instructions).
   b. Choose the regular pack.
   c. Advance through the levels.

Pause and Reflect: Did you find the activities difficult? At what level did you start? What did you observe about yourself in your appraisal of the situation, your perception of the resources and the demands and your persistence with the activities?
3. Take the Grit test.
Pause and Reflect: How did you score on the grit test? Do you think your score is accurate? Do you think it correlates with your observations of your persistence in the other activities?

Synthesis Activity (Online Discussion):
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.

What is unique about ‘grit,’ as opposed to intelligence, conscientiousness or self-discipline? How did you perceive persistence before this week’s session? As a teacher, is persistence always perceived as a good thing? Have this week’s readings and media changed your opinion? Do you think of grit as a personality trait or something that we as educators can support the development of? How could mastery oriented feedback support the development of grit? As an educator, can you think of situations where grit could be considered negative? Reflect upon a specific example of a student or students you have had in the past who have not shown persistence or grit. Consider the UDL guidelines to think about how you could support the development of persistence or grit in students.

Dive Deeper (optional):
- Take the Big 5 personality survey: http://www.outofservice.com/bigfive/ (referenced in the Duckworth article)

New vocabulary: grit, trait

Session 10: The Concept of Flow
In this asynchronous session, participants will explore Mihalyi Czikzentmihalyi’s theory of flow. We will be exploring the following essential questions: What is flow? How does flow theory help explain student engagement and enjoyment in learning? How does a student’s zone of proximal development (ZPD) relate to flow states and how can educators use the UDL framework to help design environments that enable learners’ to work within their ZPDs? As educators, providing a balance of resources and demands as well as inclusion of the UDL guidelines for engagement, we can outline strategies for the design of lessons and activities that maximize opportunities to reach flow:

1. The goals should be clear and salient (guideline 8.1)
2. The goals are achievable; and the challenge level and skill level are both high (guideline 8.2)
3. Clear and immediate feedback that promotes self-reflection (guideline 9.3)

Session Goals:
1. Participants will be understand the concepts of the zone of proximal development and flow.

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2. Participants will be able to identify flow states.
3. Participants will be able to identify aspects of a learning environment that promote deep engagement with learning.

Watch & Read:

1. Watch a brief video that explains Vygotsky’s theory of the zone of proximal development (3:02):
   http://www.youtube.com/watch?v=0BX2vnEqLL4
   Question(s) to guide your understanding: How does the concept of ZPD further enhance the demands versus resources model presented above? Do these provide you with a way to think about student variability?
2. TED Talks: Mihalyi Czikszentmihalyi: Flow the Secret to Happiness 18:56
   Questions to guide your understanding: How does helping to keep students within their zone of proximal development (ZPD) improve the changes for deep engagement or Flow experiences?

Session Activities:
Choose one of these short videos and answer the questions below. Use the answers to inform your analysis of the case you are doing for the final assignment.
   c. http://www.youtube.com/watch?v=NR=1&v=AnPYBGYjsw (3:01)

   1. Do you think the person in the video you chose experiences a flow state?
   2. Why or why not? Can you support your answer with evidence from the video?
   3. Do you think it is possible for students in a classroom to experience a state of flow?
      How do you think the resources and demands model is like flow?
   4. Do you think flow is desirable from an instructional perspective? Why or why not?
   5. What qualities of a classroom might contribute to the possibility of students achieving flow?

Case (problem of practice) Analysis

Similar to the assignment you did when you analyzed a lesson using the UDL engagement guidelines, you are now putting that skill together with the problem of practice that you identified earlier in the course. You will analyze your problem of practice, using the UDL principle, Multiple Means of Engagement.

1. Download a copy of the UDL Case Analysis Worksheet - Multiple Means of Engagement 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 UDL Guidelines 2.0 – Organizer links to examples where you can find explanations and links to examples.
2. Fill out the UDL Guidelines Case Analysis Worksheet for Engagement with your name, the goal, and a brief description of your problem of practice (the case you proposed in session 5).
3. Complete the rest of the worksheet based on the lesson that is currently in place (the lesson that is part of the problem of practice). Consider each checkpoint contained within the UDL Guidelines and evaluate whether that checkpoint is present, not present, or you are unsure. Be sure to include
any additional comments about how the case proposed does or does not address the checkpoint. It is not sufficient to simply list the checkpoints that are present or not present. You need to provide an explanation of why.

4. Save your responses on the worksheet. Be sure to include information about your case at the top. 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.

5. Refer to the rubric for grading criteria.

NOTE: This assignment intended to be done as an exercise to practice making connections between your case story and the UDL Engagement Guidelines. The feedback you receive will help you to develop more skill in identifying UDL in the revised case. You are not expected to be an expert at this point. We will be building on this understanding as you view the video case stories with the guidelines throughout the course.

Week 11: Developing Self-Regulation (purposeful, self-regulated learners)
Self-regulated learners have social and emotional intelligence. Self-regulation is key to the development of expert learners. In this asynchronous session, participants will reflect on the value of social and emotional intelligence. They will consider how neuroscience may inform their practice as educators, especially is it relates to maximizing affect and engagement through the implementation of the UDL engagement guidelines, specifically guideline 9: provide options for self-regulation. Questions considered include: How can the design of the instructional environment impact the development of social and emotional intelligence? How can developing self-regulation improve learning in the content areas?

Session Goals:
1. Participants will identify ways that educators promote the development of self-regulation.
2. Participants will identify ways that educators use the UDL guidelines for engagement to support the development of self-regulation.
3. Participants will understand the way that the UDL framework supports the development of expert learners.

Watch & Read:
- Embodied Brains, Social Minds (13:29) The neurobiology of social emotions http://www.youtube.com/watch?v=RViuTHBIOq8
  Question(s) to guide your understanding: What did you learn about the brain that was new? How did you feel when you heard the story of the woman from Sudan? How did it tie to one of the concepts we’ve discussed so far this semester (such as grit, motivation, mindset, flow)? What did you learn about the co-regulation of the mind and body? How might this relate to your teaching practice?
  Question(s) to guide your understanding: What is Emotional Intelligence and why does it matter? How important is emotional intelligence? Can you relate this article to how students need to be prepared for the working world? With what do you agree or disagree with in the arguments put forth?
- Explore: Building Comprehension through Social Understanding (BCSU) is a “worked example” designed by CAST researchers to translate a body of research on how children develop social and emotional understanding in the service of improving reading comprehension. BCSU consists of

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six universally designed digital books; each book addresses one aspect of emotional understanding as it also builds students skills to improve reading comprehension.

**Question(s) to guide your understanding:** How can developing social and emotional intelligence help children develop into expert learners? This example leverages the variability in the affective dimension of learning to improve academic learning in reading comprehension. Can you think of ways that this can be done in other academic subject areas?

**Session Activities:**

- **Video Case 3:** Watch the video example: [How to Teach Math as a Social Activity](#). Using the UDL Guidelines Analysis Worksheet, analyze this video in terms of emotional engagement strategies and student engagement. Use specific observations from the video as evidence for engagement. Think about how the relationship of emotion and cognition plays out in each case and answer the questions below. Post your reflection to the discussion forum.

  **Questions to guide your viewing:**
  1. What do you think the teacher’s goal is in this lesson?
  2. How is student affect being manipulated in this clip? How does this relate to cognition?
  3. How is the teacher teaching self-regulation in the service of math learning?
  4. Has the teacher helped to balance the students’ perception of demands and the resources in the environment? How so?
  5. What supports were available within the design of the lesson to be a resource for the students?
  6. Which UDL engagement guidelines do you think is being well represented (support your answer)? Why?
  7. Which UDL engagement guidelines would your recommend he include to enhance the lesson further (why do you think this?)

**Synthesis Activity (Online Discussion):**

**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.

Think back to all of the topics from the semester—the interrelationship of emotion and cognition. How can developing social and emotional intelligence help children develop self-regulation? This week, you examined two *worked examples* that leverage the variability in the affective dimension of learning to improve academic learning more broadly (reading comprehension and math). How did the teacher in the video (math as a social activity) use the UDL guidelines for engagement? Can you cite examples?

**Dive Deeper (optional):**

- **Introduction to Emotional Intelligence** (SIY Leadership Institute)
- **SIY Leadership Institute** – Video Library

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**Session 12: Applying Research to Practice**

In this asynchronous session, participants will have the chance to reflect on their ‘problem of practice’ case (relating to engagement). They will have an opportunity to begin reviewing the topics covered, making ties to readings, activities, and research from the semester. They will work collaboratively with a peer to clarify their case and to consider how the UDL framework and UDL Engagement Guidelines may support the interaction of the learner in the environment. Participants will also consider the importance of affect and expectations for learning.

**Session Goals:**
1. Participants will synthesize research from one line of work in affective neuroscience.
2. Participants will begin to apply research to a problem of instructional practice related to engagement.

**Watch & Read:**
- Think about a topic that resonated with you from the readings, media and activities. How might you use what you learned in terms of helping you find solutions to your problem of practice? The following are short readings that are either blog posts or short readings that are translational (connecting research to practice in concrete ways). Choose one (or more) of these short readings (or videos) that you think will help connect and clarify your understanding of research to your problem of practice:

  **Emotion and Cognition:**
  - Social-Emotional Needs Entwined with Students' Learning, Security (PDF) In *Education Week* (Jan. 2013)

  **Motivation:**
  - [Cracking the nut: unleashing students' intrinsic motivation to learn](#)
  - [Boosting Achievement with Messages that Motivate](#)
  - [Three Critical Elements Sustain Motivation](#)

  **Stress:**
  - [Easy Solutions for Test Anxiety](#)
  - [Math Anxiety](#)

  **Mindsets:**
  - [Grading for Growth in a High-Stakes World](#)
  - [Developing a Growth Mindset School Culture](#)
  - [The Power of Mistakes: Creating a Risk-tolerant Culture at Home and School](#)

  **Grit and Persistence:**
  - [Even Geniuses Work Hard](#)

**Final Assignment:**
The final assignment is an engagement case (problem of practice) analysis based on your own work. It will represent a final reflective narrative. This is a culmination of the work you have done so far. You will incorporate the new knowledge you have built in this course and build upon the work you have submitted (in the proposal you did earlier in the course and the UDL analysis of the problem of practice that you did a few weeks ago) incorporating the feedback you received.

**Essential components:**
1. **REDEFINE** the context.
2. **REDESCRIBE** the case (a ‘problem of practice’ around engagement) that you proposed earlier in the course.

3. **RESTATE** the goal.

4. **RESTATE** the outcome. What does successful implementation look like? **NOTE:** Be sure that your revisions reflect your new knowledge and the feedback you received.

5. **Develop a plan** for how you might adjust or revise the lesson. Use the feedback you received in your analysis (from session 11) and any new knowledge and to fine tune your lesson. You are free to either include a revised worksheet or use another means of showing this. Keep in mind that this is not an evaluation of UDL, but a redesign. This should answer the question: How am I using the UDL guidelines to address the ‘problem of practice’?
   - The redesign will:
     i. suggest multiple, flexible UDL options to support expert learning strategies that support engagement;
     ii. explain why the strategies were selected using the theories and research explored in the course.
   **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.

6. **UDL:** What specific UDL Guidelines and Checkpoints (with a focus on Engagement, but feel free to include the Action and Expression and Representation Guidelines) did you use to redesign the lesson to try to address your problem of practice? Why?

7. **SUMMARIZE:** What topic from the readings and activities this semester has informed your problem of practice? Describe how the reading/activity informed your thinking. How did UDL inform your thinking about your problem of practice? Together, what did you learn from considering your case study using UDL and engagement readings about addressing learner variability in engagement?
   - Use the following guiding question and prompts if you wish:
     iii. What did you learn from addressing this problem of practice about supporting the variability of all students?
        1. Using the Engagement Guidelines, I thought specifically about Guideline 8…
        2. I **redesigned the lesson** by . . .
        3. I thought about observing ______through this activity and observed.

8. **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 (on Blackboard)
   - Use UDL Exchange (a tool for developing UDL lessons)
   - Create a PowerPoint or [Prezi](https://prezi.com) presentation (no longer than 10 slides or transitions).
   - Create a [Glogster](https://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.

Dive Deeper (optional):

Session 13: Putting it all Together
In this asynchronous session, participants will reflect upon how attention to the affective dimension of learning has the potential to promote deeper engagement in learning and, hence, amplify all other aspects of teaching and learning. They will consider how their understanding of affect and classroom observations and lesson design may have been informed through their work this semester. Participants will reflect upon how UDL and conceptual understanding of dimensions of affect will tie to their practice and incorporate this into the final assignment.

Participants will refine their ‘problem from practice’ that can be analyzed using the UDL Guidelines and can be considered in light of the affective theories studied over the semester. Direct connection will be made to the UDL Guidelines and curriculum design.

Session Goals:
1. Participants will be able to apply knowledge the UDL Guidelines to evaluate curricula that address variability in the affective networks of learners.
2. Participants will analyze resources, demands, curriculum, and environment for affective barriers and supports for learning;
3. Participants will apply knowledge the UDL Guidelines to promote deep engagement;
4. Participants will apply the UDL guidelines to a problem of practice in order to support the development of expert, self-regulated learners.

Watch & Read:
- Re-read any article(s) from the semester and reflect on the new perspective you now have as a result of having read and re-read that article.
- Choose additional readings that relate to your final project topic. You can consult with your peer reviewer and/or facilitator on this.

Session Activity/Assignment:
Continue to work on your final project (read, rewrite) due to facilitator the week after the last web conference (see Blackboard for exact date)

Optional (not graded) Discussion:
Feel free to post questions about the project, readings, etc. to the discussion board this week. Check to see if you can help any of your peers’ questions.

Dive Deeper (optional):

Session 14: Summary Session: Synchronous Web Conference Session
Session note: The web conference session is intended to allow you to participate and share your reflections and new understandings with other participants in this synchronous session. In this final synchronous session, participants will return to their original thoughts about the role of affect in learning.
and reflect about their own learning/process this semester. Facilitators will provide a review of sessions 8 through 13, and provide time for group reflection and questions about the final assignment.

**Final Assignment:**
Final project due to facilitator next week.

**NOTE:** If you cannot attend the session, you are required to watch the recording (posted to Blackboard within 48 hours) and summarize it for your instructor. You can choose the way you want to do this. For example: write a 1-page essay, create a podcast, a PowerPoint, etc. This needs to be submitted to your instructor within 7 days.

**Readings and Resources:**


HeroicImaginationTV. (2011, September, 25). *The pygmalion effect and the power of positive expectations* [Video file]. Retrieved from: http://www.youtube.com/watch?v=hTghEXKNj7g


LTPTENSIDR. (2011, October, 16). *Stress, portrait of a killer - Full documentary* [Video file]. Retrieved from: [http://www.youtube.com/watch?v=eYG0ZuTv5rs](http://www.youtube.com/watch?v=eYG0ZuTv5rs)


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