

# Using Google Apps and Web-Based Technology to Support UDL

PRDV 73528

Online: 1.0 Credit

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Technology integration is the incorporation of technology resources and technology-based practices into the daily routines, work, and management of schools. Technology resources are computers and specialized software, network-based communication systems, and other equipment and infrastructure. Practices include collaborative work and communication, Internet-based research, remote access to instrumentation, network-based transmission and retrieval of data, and other methods.



Universal Design for Learning (UDL) is a way of thinking about teaching and learning that gives all students equal opportunity to learn. At its core, UDL means that a teacher designs learning experiences in flexible ways to meet the needs of individual learners. When taking a UDL approach, teachers prepare the learning environment with flexible means, methods, and materials that will allow them to better meet the needs of every student.

## **Course Description**

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This course will focus on the use of Google Apps and web-based technology to facilitate differentiation in the classroom. Participants will gain an understanding of the elements of differentiation and will demonstrate their ability to differentiate through the use of technology.

## **Course Objectives**

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Participants will gain a better understanding of effective teaching strategies through exploration of the elements of differentiation. Through improved proficiency in Google Apps and Web-based technology, teachers will gather tools for differentiation in their classrooms. This, in turn, will lead to increased student engagement through the use of differentiated instruction.

- As a result of the learning experiences in the course, educators will become more cognizant of student variability and how that knowledge of Universal Design for Learning (UDL) can transform teaching and learning to improve the outcomes of all learners.
- As a result of the learning experiences in the course, educators will become more competent in their ability to remove the barriers that prevent some students in the district from learning and engaging in challenging, accessible, curriculum.
- As a result of the learning experiences in the course, educators will incorporate UDL principles to foster reflection and continuous improvement in their professional practice.

## **Course Requirements**

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The course is designed as a collaborative four-week online learning experience. Course material is arranged in modules and should be viewed in the order listed. There is no textbook to buy. All material is posted on the University eLearning platform. The first two modules are open when the course begins. The last two will be made available after the second week. Students may expect to spend three hours each week participating on the discussion board, posting to a private Journal or class collaboration space, and reviewing course material.

## **Grading Criteria**

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Grades are recorded in the course grade book on a weighted points system. Students may view their progress using the My Grades Tool listed under Student Tools. The orientation activity, posts to the discussion board and class collaboration are all included in the Participation grade. Students are also expected to post weekly reflections to the discussion forum and submit a written assignment as the final grade.

## Assignments

	POINTS POSSIBLE	WEIGHTED GRADE
<b>PARTICIPATION</b>		<b>25%</b>
Introduction (Who is in the room? Blog Post)	5	
Discussion Board Posts	10	
Class Collaboration (discussion/blog)	10	
<b>REFLECTION</b>		<b>25%</b>
Reflection (Blog Post)	25	
<b>ASSIGNMENTS</b>		<b>50%</b>
	50	

## Course Expectations

Participation in all assignments and course discussions is required. If you anticipate being away during any part of this course, make plans to have access to a computer connected to the Internet. Late work is not accepted.

Participants are also expected to have basic computer skills, know how to search the web, understand how to send an email and attach a file, and have basic file management skills. A fairly new computer connected to the Internet works best with the Learning Platform and familiarity with the learning management tool is also advised.

If you are new to Blackboard or online courses, please review the Blackboard student tutorials or download the PDF file before you begin the course.

## Massachusetts Frameworks/Standards

Each weekly unit will incorporate 2016 Massachusetts Digital Literacy and Computer Science Curriculum and ISTE Standards for Teachers.

### [2016 Massachusetts Digital Literacy and Computer Science Curriculum Standard 2: Digital Tools and Collaboration \(DTC\)](#)

- Digital tools are applications that produce, manipulate, or store data in a digital format (e.g., word processors, drawing programs, image/video/music editors, simulators, Computer-Aided Design (CAD) applications, publishing programs).
- Digital tools are critical for conducting research, communicating, collaborating and creating in social, work, and personal environments. The use of digital tools is integral to success in school and career.
  - Digital Tools: Digital tools are used to create, manipulate, analyze, edit, publish, or develop artifacts. Individuals and groups identify, evaluate, select, and adapt new tools as they emerge.
  - Collaboration and Communication: A variety of digital tools are used to work collaboratively anytime and anywhere, inside and outside the classroom, both synchronously and asynchronously, to develop artifacts or solve problems, contribute to the learning of others, and communicate.
  - Research: A variety of digital tools are used to conduct research, answer questions, and develop artifacts to facilitate learning and convey understanding. Access to the internet.

## ISTE Standards for Educators

1. **Learner:** Educators continually improve their practice by learning from and with others and exploring proven and promising practices that leverage technology to improve student learning.  
Educators:
  - 1c: Stay current with research that supports improved student learning outcomes, including findings from the learning sciences.
2. **Leader:** Educators seek out opportunities for leadership to support student empowerment and success and to improve teaching and learning.
  - 2b: Advocate for equitable access to educational technology, digital content and learning opportunities to meet the diverse needs of all students.
  - 2c: Model for colleagues the identification, exploration, evaluation, curation and adoption of new digital resources and tools for learning.
3. **Designer:** Educators design authentic, learner-driven activities and environments that recognize and accommodate learner variability. Educators:
  - 5a: Use technology to create, adapt and personalize learning experiences that foster independent learning and accommodate learner differences and needs.
  - 5b: Design authentic learning activities that align with content area standards and use digital tools and resources to maximize active, deep learning.
  - 5c: Explore and apply instructional design principles to create innovative digital learning environments that engage and support learning.
4. Design and Develop Digital Age Learning Experiences and Assessments
5. Model Digital Age Work and Learning

## Course Syllabus

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### **Module 1: What is Differentiated Instruction and UDL Look Like? How Does Google Apps for Education Support DI & UDL?**

**Objective:** Deepen your understanding of Differentiate Instruction and Universal Design for Learning and your ability to use, features of DI & UDL as it relates to your work as an educator.

#### ***Differentiated Instruction***

##### **Videos:**

- Do Schools Kill Creativity? | Sir Ken Robinson | TED Talks
- Differentiated Instruction in the Classroom at Mesquite Elementary School
- Station Rotation: DI to Reach All Learners

##### **Discussion:** Differentiated Learning in the Classroom

In which ways, do you differentiate learning in your classroom? Do you have an easy way that works for you?

## **What is UDL?**

### **Essential Questions**

Why would we use UDL as a framework for teaching and learning?

How do I design learning that addresses learner variability and reduces barriers to learning for all students?

### **Objective:**

All educators will demonstrate understanding of the UDL framework, the concept of variability, and the focus on removing barriers.

### **What does UDL mean for Educators?**

- To deepen your understanding of UDL go to CAST and learn about [Universal Design for Learning \(Links to an external site.\)Links to an external site.](#)
- Create an account with CAST - <http://udltheorypractice.cast.org/login> (Links to an external site.)Links to an external site.

### **UDL Strategies/Resources**

- [UDL Kick Start Guide](#)
- [Gradebook](#)
- [UDL Examples and Resources](#)

### **Read Chapter 4 (Explore the examples to Dig Deeper)**

### **Video: [UDL: Reducing Barriers to Learning](#)**

### **Assignment:**

Assignment Objective: To create a universally designed activity that removes barriers and increases engagement for all participants.

Directions: Exploring the different UDL Strategies/Resources.

1. Explore as many of the UDL Strategies/Resources below as you can.
2. Produce a demonstration of your understanding of the benefits of UDL. This can be a written reflection, a video, a song, Flipgrid Reflection or another creative demonstration of your choice.
3. Submit your product to me as your assignment.

## **Module 2 & 3 Implementing Differentiated Instruction and UDL Strategies**

**Objective: Objective:** Explore strategies and begin implementing them into our instruction. How G-Suites & Web-based tools supports learning in your classroom.

Where does Google Apps for Education fit in to all this? UDL does not require technology to be implemented. However, technology can be a very powerful tool. It embeds digital literacy into learning which is a relevant 21st century skill, with relevance being part of the UDL guidelines. For some students, it also allows them to use skills and technologies they are already comfortable with. Building on existing student knowledge is also within the UDL guidelines.

**Video:** Universal Design for Learning Explained with Lego

### **Differentiated Instruction & UDL Strategies**

- Easy Ways to Differentiate in the Classroom using Google and Chrome Apps and Extensions
- Differentiate with Learning Menus/Choice Boards or Playlist Using Google Docs!
- How to Use HyperDocs in the classroom

### **Readings: UDL in the Classroom**

- [5 Examples of Universal Design for Learning in the Classroom](#)
- [Universal Design for Learning: Meeting the Needs of All Students](#)
- [What are UDL-aligned strategies?](#)

### **Optional Reading:**

- [Technology Integration](#) from George Lucas Foundation: Edutopia A site with technology integration examples, video, lessons, and many useful links. If you click on the Teaching Modules link you will find subject area specific integration resources.

### **Assignment: Integrating UDL**

Based on what you learned in this module, as well as what you have read, redesign an existing project or assessment that you currently teach.

- Which new tools could you integrate?
- How would that help you to better differentiate?

In addition to thinking about how it could support struggling learners, how could you also create a technology rich lesson that would enrich some of your accelerated students? Post your response in the class discussion forum. Make sure to reference grading rubric before posting.

### **Discussion: UDL Technology Tools**

Choose three tools from this module (or something that you want to try - that is approved for use), describe the tool and how the tool supports UDL, as well as how you may use it within your classroom instruction

### **Reflection: Learning Menus/Playlist & HyperDocs**

- How will you incorporate HyperDocs and Learn Menus into your instruction?
- Add your reflection to our class FlipGrid

### **Module 4: Final Assignment**

Considering UDL and DI take a lesson plan and reinvent it using the resources and tools you choose to that we explored in previous modules. The lesson should clearly indicate flexibility and various modes of collecting, relating, creating and donating to account for the different learners in your classroom.

### **Accommodations:**

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Framingham State University offers equal opportunities to all qualified students, including those with disabilities and impairments. The University is committed to making reasonable accommodations, as we are necessary to ensure that its programs and activities do not discriminate or have the effect of discriminating on the basis of disability. Academic Support serves students with learning and psychiatric disabilities as well as students with visual, mobility and hearing impairments. If you need further information please visit the website at: [Center for Academic Support](#) or contact Ms. LaDonna Bridges, Director of Academic Support/Disability Services, in the Center for Academic Support and Advising (CASA) at 508-626-4906 or [lbridges@framingham.edu](mailto:lbridges@framingham.edu).