



# Technology and Learning Connections

## Book Study Guide

### *Universal Design for Learning in the Classroom: Practical Applications*

“Universal Design for Learning (UDL) is a set of principles for curriculum development that gives all individuals equal opportunities to learn.” (National Center on UDL) By following UDL guidelines, teachers can meet the needs of a diverse student population and extend learning opportunities to all students. Many states and schools are using UDL principles and guidelines to help meet the requirements of standards-based instruction for all learners.

Instructional goals, lesson plans, instructional activities, and assessments that are designed around UDL principles can be quickly customized and adjusted by teachers and by students. The Universal Design for Learning framework provides options in the way information is presented to students, options in how students demonstrate their knowledge and skills, and options in the ways students are engaged. These options reduce barriers to instruction and provide built-in accommodations and supports to help all students meet high achievement expectations.

The book *Universal Design for Learning in the Classroom* includes examples of how to apply UDL principles across subject areas and grade levels. Specific subject areas addressed include reading, writing, science, mathematics, history, and the arts. Each chapter includes a description of real-world challenges and barriers to the implementation of UDL and provides suggestions for how to overcome those challenges.

This book study guide packet includes the following:

1. Suggestions for setting up a book study.
2. Introduction to Universal Design for Learning.
3. Advance organizer for each chapter of the book.
4. Additional resources for Universal Design for Learning.

The suggestions for setting up a book study include options on using just one copy of the book as well as options using multiple copies, where each participant has a book to study. Additional books can be ordered at the sources below.

Amazon.com - <http://amzn.to/1h5viNf>

Guilford Press - <http://bit.ly/1ahE3VM>

You can download the PDF version of this study guide with active links at <http://bit.ly/19GKVeP>.

## Setting up a Book Study

A study group is a collection of individuals who gather together to increase their understanding on a topic. Study groups build on the social aspect of learning, with responsibilities for sharing information and facilitating the meetings being rotated through the group. Members of study groups are peers and should feel comfortable sharing with each other.

A book study group uses a book as the core content, providing educators an opportunity to engage in a school-wide dialogue. The structure of the book *Universal Design for Learning in the Classroom* makes it well suited for use by a book study group. If your school staff are already accustomed to participating in a book study, just include this book. However, if you don't have a functional book study group in your school, use some of the ideas below to incorporate this book into staff meetings or local professional development activities.

### **Single Book Options**

When you only have one copy of the book the meetings tend to become presentation based. This can sometimes be an advantage. For each meeting someone should take the responsibility to review a chapter and prepare a presentation to share the content with the rest of the staff. This can provide a high degree of control over the group learning process. For extremely busy staff this can free the group members from preparation responsibilities. The presenter reviews the content and prepares to share an overview at each meeting. The group members prepare by reading the focus statement and discussion questions on the advance organizer included in this study guide. The presenter responsibilities can pass to a different staff member each week. This can be an excellent model to follow when developing basic awareness on a topic.

The depth of learning can be increased by adding follow-up activities. With this model, each presentation would include a list of resources, tools, or strategies that the participants can try out in the classroom. During the guided discussion time participants brainstorm possible classroom implementation activities. When the group comes together for the next meeting, their first activity would be sharing the results of their classroom implementation, followed by a presentation on the new content, guided discussion, and planning new follow-up activities.

This model works well when addressing Universal Design for Learning in general and for cross-curricular activities such as reading and writing. For middle and high school settings, teachers may need to break into sub-groups when addressing specific content areas such as math, science, history, or the arts. However, any sub-groups should still share their experiences with all the staff.

## Multiple Book Options

Providing each staff member a copy of the book will enable the person in charge of each meeting to move from a teacher/presenter to a facilitator. Each participant will be responsible for reading the chapter or section of text and coming to the meeting prepared to discuss what he or she has read. While this model requires a commitment on the part of each person to prepare for the meeting, the depth of discussion and engagement can be greatly enhanced.

Follow-up activities are still important, but time considerations should be taken into account. For example, one meeting may focus on the content and the next meeting could focus on implementation. While providing options for time management, alternating the intent of each meeting will help keep the discussion focused. For meetings that review content, the discussion will focus on the content presented in the book. For meetings where teachers share classroom implementation, the discussion will focus on what worked, what didn't, and what each teacher learned from the experience. This model can take longer, but it can result in a higher depth of learning and understanding.

As with the single book models, the above model works well when addressing Universal Design for Learning in general and cross-curricular activities such as reading and writing. For middle and high school settings, teachers may need to break into sub-groups when addressing specific content areas such as math, science, history, or the arts. However, any sub-groups should still share their experiences with all the staff.

## Introduction to Universal Design for Learning – Setting the Stage

There are several resources you can share with your staff to help introduce them to Universal Design for Learning prior to the book study. These resources can help set the stage with simple, general overviews of the content that will be covered in the book. Consider any of the following:

1. Videos about UDL from the National Center on Universal Design for Learning - <http://bit.ly/KoHKgh> - try *UDL at a Glance*, and *The Principles of UDL*.
2. Principal's Research Review on UDL - <http://bit.ly/16icxzR> - a great resource from the National Association of Secondary School Principals - <http://www.nassp.org/>
3. UDL Handout - <http://www.tlc-mtss.com/assets/udl-handout.pdf> - a one page overview of the UDL principles with an additional page of resources and UDL tools.
4. The UDL Interactive Wheel - <http://bit.ly/1d7KUvg> - explore this interactive tool to see UDL applications and strategies.

## Book Advance Organizer

Following is a breakdown of each chapter of the book, with a focus statement and a list of discussion questions. The discussion questions follow the main headings within each chapter. Each participant should read the focus statement and discussion questions prior to going over the chapter content. Then go through the discussion questions as a group.

### Chapter 1

Focus: Provides an introduction to UDL in a question and answer format.

#### Discussion Questions

- What are the three groups of brain networks addressed in UDL?
- Why are these networks important in teaching and learning?
- What are the UDL principles?
- Is UDL special education or general education?
- What does it mean to say that UDL applies to the whole curriculum?

### Chapter 2

Focus: Provides an overview of the UDL Guidelines – a set of checkpoints to help educators plan and structure curricula.

#### Discussion Questions

- What are the UDL Guidelines and how do they relate to the UDL principles?
- What are some examples of providing multiple means of representation?
- What are some examples of providing multiple means of action and expression?
- What are some examples of providing multiple means of engagement?
- How could you use the UDL Guidelines when developing a lesson plan?

### Chapter 3

Focus: Addresses how UDL and reading comprehension strategies can be blended in a digital learning environment to meet the needs of all learners.

#### Discussion Questions

- What are some of the differences in how printed text and digital text can hinder or support struggling readers?
- How can providing multiple means of representation help a struggling reader?
- How can providing multiple means of action and expression help a struggling reader?
- How can providing multiple means of engagement help a struggling reader?

## Chapter 4

Focus: Addresses how UDL principles can be used to scaffold writing in a digital environment and make writing instruction more effective and engaging.

### Discussion Questions

- What are some challenges to teaching writing and learning to write?
- How can the three UDL principles be used to support learning to write?
- How can the three UDL principles be used to support teaching persuasive writing?
- How can UDL strategies be used to support writing across the curriculum?
- What are some examples of formative assessment for writing?

## Chapter 5

Focus: Addresses how to use UDL to support all learners in thinking about, talking about, and doing science.

### Discussion Questions

- What are some potential barriers to learning science?
- How can UDL strategies be used to address barriers to learning science in the classroom?
- How can technology be used to help students engage in science text and content?
- How can technology be used to support numerical communication?
- How can technology be used to support projects and experiments?

## Chapter 6

Focus: Addresses how to use UDL to support all learners in the areas of conceptual understanding, procedural fluency, strategic competence and adaptive reasoning in mathematics.

### Discussion Questions

- What is the impact of the recognition networks on the understanding of mathematics?
- What is the impact of the strategic networks on the understanding of mathematics?
- What is the impact of the affective networks on the understanding of mathematics?
- How can UDL provide scaffolds for practice and performance in mathematical thinking?
- How can you help students independently select tools and scaffolds to support mathematical thinking?

## Chapter 7

Focus: Addresses how UDL principles can be used to support all learners in a problem-based, inquiry-centered approach to history.

### Discussion Questions

- What are some of the challenges inherent in a traditional history curriculum?
- How can you use UDL principles to help set instructional goals for history?
- How can you use UDL principles in selecting instructional materials for history?
- How can you use the UDL principles to increase the flexibility in the instructional methods used to teach history?
- How can you use the UDL principles to ensure that assessment activities truly measure what a student knows?

## Chapter 8

Focus: Addresses how to use UDL to engage all learners in the arts, including painting, music, and dance.

### Discussion Questions

- Describe how an artist, a general education teacher, and a special education teacher might collaborate to integrate language arts and dance.
- How can UDL principles be used to support a visual arts lesson?
- Describe the process of identifying and removing barriers to music instruction using UDL solutions.
- What are some ways you can use the UDL Guidelines to increase student engagement in the arts?

## Chapter 9

Focus: Demonstrates how UDL can be applied in low-tech or no-tech settings because the principles are focused on teaching and learning, not technology.

### Discussion Questions

- What are some examples of providing multiple means of representation using low-tech or no-tech?
- What are some examples of providing multiple means of action and expression using low-tech or no-tech?
- What are some examples of providing multiple means of engagement using low-tech or no-tech?

## Chapter 10

Focus: Provides an overview of the national emphasis on UDL, including the incorporation of UDL in teaching preparation and professional development.

### Discussion Questions

- How is the American classroom changing?
- How are teaching and student expectations changing?
- The Collaborative Partnerships and Special Education (EDSP 422) course UDL lesson is divided into three distinct phases. What are these phases, and how could you replicate them in this UDL study group?
- Give an example of how UDL principles can be found in emerging technologies. Explain how your example supports all students.

## Additional Universal Design for Learning Resources

UDL Book Study Guide in PDF Format with Active Links - <http://bit.ly/19GKVeP>

National Center on Universal Design for Learning - <http://www.udlcenter.org/>

UDL Guidelines - <http://www.udlcenter.org/aboutudl/udlguidelines>

UDL Guidelines Single Page Handout - <http://bit.ly/1jIBIt5>

UDL Wheel / Online - <http://bit.ly/1d7KUvg>

UDL Wheel / Printed - <http://bit.ly/1bcPQPX>

UDL Infographic - <http://www.tlc-mtss.com/assets/udl-infographic.jpg>

AT & UDL Newsletter

View December 2013 issue here - <http://conta.cc/1bPYHt4>

Sign up to receive the newsletter by email here - <http://bit.ly/RbYqqT>

Principal's Research Review on UDL - <http://bit.ly/16icxzR> - This is a great resource from the National Association of Secondary School Principals - <http://www.nassp.org/>

Universal Design for Learning Handout - <http://bit.ly/LF3ntB>

Exploring Technology & Learning Connections: UDL - <http://www.efdlrs.net/ent/data/udl.html>

Reading & Study Digital Tools - [http://www.tlc-mtss.com/assets/digital\\_tools.pdf](http://www.tlc-mtss.com/assets/digital_tools.pdf)

Supporting Academic, Social, and Psychological Engagement with iOS Apps - <http://bit.ly/1eTmloX>

Professional Development Alternatives (PDA) – <http://www.pda-ese.org> – The PDA is a set of online facilitated modules that provides comprehensive, high quality professional development. Coordinated through the FDLRS Network (<http://www.fdlrs.org>), the PDA Program is free of charge to all Florida educators. The *Technology for Student Success: An Introduction* module includes information on accessible instructional materials, assistive technology, instructional technology, and Universal Design for Learning.

