Design for Learning 2 - Foundation

Overview of the Instructional Design Process (Week 1 Lesson)
Welcome to Week 1!

Online learning has become ubiquitous. Libraries and librarians need to be present where our patrons are working, and increasingly that means online.

This overview includes:
- Advance Organizer for Week 1 (video)
- The Importance of Online Teaching and Learning for Libraries (video)
- Approaches to Instructional Design (reading, with challenge question)
- Selected Vocabulary (list, with challenge question)
- Learning Perspectives (reading, with challenge question)
- Learning Styles (reading)
- Reflection (activity)
- Universal Design for Learning (video, with challenge question)
- Summing Up Week 1 (video)
- Additional Resources (list)

Before beginning your work in this lesson, please make sure you have downloaded the **workbook** for this module - that is where you will enter your reflection activity.

In addition to the back/next buttons at the bottom of each page, you can use the lesson menu (on the side or below, depending on your device) to move through the lesson.

**Advance Organizer for Week 1**

**Video Transcript:**
"Foundation Module Week 1: Advance Organizer"
[https://youtu.be/wl8GA6_nZaE](https://youtu.be/wl8GA6_nZaE)

Hello everyone and welcome to Week One of the Foundation Module!

Each week of the Foundation Module I'll begin with an advance organizer. An advance organizer is an instructional design term and since this is a Foundation Module that will go through the steps of the instructional design process, it's a good place to introduce the term.

But what exactly does it mean? Well, an advance organizer can be this little video that I'm going to do, with the purpose of queuing you in to what we'll be doing this week during the module, and it can be in different forms. It could be a short little video to introduce a topic to set the goals of the learning for the students or it could be in the form of a graphic organizer. Let's say you were going to teach a process and there were several steps of the process. The graphic organizer could outline the several steps on a broad view like a bird's eye view but not get into
detail or it could be a concept map, if you're teaching a new concept, or a principle and it could show how different concepts are interrelated but not get into the deep detail yet.

So, the purpose is to utilize this as a cognitive strategy for learners to help them organize their learning right from the get-go. We've learned through research in instructional design that advance organizers are really helpful for learners, all learners including those with disabilities. It really does help them organize themselves and give them a sense of confidence and we know that when we set clear expectations for learning confidence increases and that is a measure of motivation.

So, without further ado, I'm going to provide the advance organizer for this week and I also want to mention that all of our instructors for the Design for Learning Series will be providing you advance organizers at the beginning of each week of their instruction and because we're all different teachers and some of us have different styles we may use different ways of introducing you to content. I like using video as a presentation method in an online format. Others may use a text-based format and some others may use a visual format like I mentioned before, graphic organizers for example.

So, this week since there are a number of topics my advanced organizer will simply queue you in on what we'll be talking about. We'll start by considering the importance of online learning. I'll tell you about several approaches to instructional design and we'll think about some different perspectives on learning. Have you ever heard of learning styles? We'll talk about those too, and finally I'll introduce you to principles of Universal Design for Learning or UDL. There also will be a chance for you to challenge yourself: to, for example, terminology related to online learning. Plus, there will be a reflection and I'll provide some additional resources. So, whenever you're ready to begin, let's dig in!

The Importance of Online Teaching and Learning for Libraries

Video Transcript:
“Foundation Module Week 1: Importance of Online Instruction”
https://youtu.be/1y2wzphSK3A

In academic libraries particularly, information literacy workshops and courses may be taught online as separate units of instruction or librarians are embedded in online courses to provide information literacy consultations as needed by the learners and teaching faculty. Indeed, “The Guidelines for Instruction Programs in Academic Libraries” recognizes the need for librarians to have the education, experience, and expertise to use instructional design strategies and design instructional programs (Association of College and Research Libraries, 2003;2011).
WebJunction's "Competency Index for the Library Field." (2014) includes instructional design and instruction competencies as well as online learning and teaching related competencies for many kinds of library specializations. Public and special librarians in all sizes and types of libraries are increasingly involved in providing information literacy and other kinds of instruction to their communities. They have also been recognizing the need for a library instruction or perhaps a library programming presence online. K-12 librarians are adapting to the needs of learners who are attending online classes for elementary and secondary schools.

In a nutshell, librarians are instructors – teachers – and always have been. The trend towards spending more of our professional time and skills helping our patrons (clients, consumers, users and members) to meet their information needs and less time managing physical collections, has made this a priority.

**Approaches to Instructional Design**

Instructional design is a process that utilizes learning and instructional theories to design and develop learning materials to meet specific learner needs. If you have been teaching for a while, you are probably familiar with one or more instructional design models. For example, ADDIE is a model that has been around for many years and stands for Analysis, Design, Development, Implementation and Evaluation. It has been used both for face-to-face and online learning. ADDIE takes a somewhat linear approach but it is possible to also see it as an iterative model if you look at step 5- Evaluation – as a way to assess effectiveness and make improvements on the next go around.

You may also have heard of Gagne’s *Nine Events of Instruction* which has proven immensely useful in the systematic design of instruction and begins with gaining the attention of the learner, a critical element that also relates to motivating learning.

Others include *Inquiry-Based Learning, Problem-based Learning*, the *Discovery Model*, Vygotsky’s *Sociocultural Learning Theory*, Wiggins and McTighe’s *Backward Design*, and more.

*Clipart courtesy of [http://leanforward.com](http://leanforward.com) through a Creative Commons license.*
Challenge Yourself!

1. ADDIE stands for . . .
   A. Analysis, Design, Development, Implementation and Evaluation
   B. Analysis, Design, Deconstruction, Implementation and Evaluation
   C. Ability, Design, Development, Identity and Evaluation

Selected Vocabulary

<table>
<thead>
<tr>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Design</td>
</tr>
<tr>
<td>eLearning</td>
</tr>
<tr>
<td>Online Learning</td>
</tr>
<tr>
<td>Blended Learning</td>
</tr>
<tr>
<td>Learning Styles</td>
</tr>
<tr>
<td>Synchronous Learning</td>
</tr>
</tbody>
</table>
system are examples. Synchronous learning promotes real-time collaboration.

<table>
<thead>
<tr>
<th>Asynchronous Learning</th>
<th>Refers to the aspects of an online learning environment that allow students to participate in learning according to their own pace and schedules.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Management Systems</td>
<td>A learning management system or LMS is software designed to allow an educator to create, deliver, and assess instruction. Moodle, the system you are on now, is an example of a learning management system. Blackboard is another. Educational institutions such as universities use LMSs to deliver online instruction.</td>
</tr>
</tbody>
</table>

**Challenge Yourself!**

2. When learners interact with the instructor and/or with other learners at the same time, that is referred to as . . .
   - A. synchronous learning
   - B. asynchronous learning

**Learning Perspectives**

A number of learning perspectives have influenced the instructional design of content presented online and in face-to-face teaching and learning environments. Below are several of the most widely-known perspectives.

- **The developmental** perspective presented by Jean Piaget and others describes how we learn as we grow and mature developmentally over time.
- **The behavioral** perspective describes teaching and learning through operant conditioning using both positive (e.g., rewards) and negative feedback (e.g., punishment).
- **The cognitive** perspective describes the mechanisms we use to learn, how we re-use skills in knowledge in new situations, and how we build on these over time.
- **The social cognitive** perspective of Albert Bandura and colleagues brings together aspects of behavioral, developmental, and cognitive perspectives and describe how we learn from interaction with each other and our environment, formally and informally. Modeling is a key element of this perspective.
- **The constructivist** perspective is learner-centered and includes the individual learner’s entry behaviors and learner characteristics as a starting point for teaching and learning. In this view, it is the learner who constructs his or her own learning and creates
meaning. Inquiry based learning and the discover learning perspective of Jerome Bruner
could be considered under this perspective.

For the Design 4 Learning program, we have selected a model that we believe you can
incorporate into whatever philosophical approach to teaching and learning you hold. It is Diane
Kovac's 7-Steps of Effective Online Teaching and Learning and encompasses many of the models
that exist. We will introduce the model next week. For now, let’s explore one more topic that
has influenced instructional design for many decades, learning styles.

Challenge Yourself!

3. Which of these learning perspectives is learner-centered and focuses on the learner
constructing his or her own learning and creating meaning?
   A. social cognitive
   B. behavioral
   C. constructivist

Learning Styles
Should They Influence Our Instructional Design?

Defining the Concept of Learning Style

Learning styles are referred to as individuals’ preferences for how they learn best. This
includes their preferred modes for receiving information. Some of us claim to be more
visual learners while others prefer print or a combination of print with audio support to
name just a few preferences. Learning styles can include cognitive, personality, and sensory
styles. Yet, learning styles is a somewhat contested construct. There have been a
number of studies that support the existence of distinct learning styles in the past and that
these styles influence how students learn best (e.g., Tulbure, 2011); however, there have
also been studies that have found no evidence to support learning styles (e.g., Massa &
Mayer, 2006; Pashler, McDaniel, Rohrer, & Bjork, 2008).
There are a number of learning styles measures available and we’ll mention just a few here. *Kolb’s Learning Styles Inventory* is theorized on the basis of a cycle of learning that includes experience, reflection, conceptualizing and generalizing based on active experimentation (McLeod, S.A. (2013). The famous *Myers-Briggs Type Indicator* is based on the identification and description of sixteen personality types and has also been used to describe learning styles although it has some criticism in recent years. Dunn and Dunn developed a learning style model based on five stimuli including environmental, emotional, sociological, physiology, and psychology. This is called the Dunn and Dunn *Productivity Environmental Preference Survey* (Dunn, 1990). If you do an Internet search, you are likely to discover some free online questionnaires based on a number of learning styles models.

**Learning Styles and Instructional Design**

One thing that most can agree upon is that students learn in diverse ways and that differentiated instruction is a critical consideration for online teaching. This brings us to the question posed in the header of this section: Should learning styles influence our instructional design? Think for a moment about your own personal preferences for receiving information. Then, consider the students you have had in the past. Have you noticed any patterns in their preferences? Is it possible that even if there is a lack of empirical support that we might want to present instruction in a variety of modes? How do you think your own preferences for receiving information influences your teaching? This is food for thought for your reflection on learning styles. What do you think?

**Suggested Reading**

Smolarek and Hora offer a succinct review of learning styles theory which will help further prepare you for our discussion. Access this brief report:


The following references may be helpful to D4L learners who wish to dig even deeper into learning styles.

**References**


Reflection

Reflection is a metacognitive strategy that we will use throughout the D4L learning modules. Metacognition is simply thinking about thinking but of course that is an oversimplification. We'll be discussing metacognition in a later module. Reflection is an especially good strategy to use for self-paced and self-contained learning modules like the D4L series. Here’s your reflection for this week:

Think about your own learning style. How do you prefer to receive information? Is there one primary way or do you like to receive and learn information in a variety of ways?

Go to your workbook for this module and find the reflection for Week 1. Write a few sentences to reflect on your learning style.

Universal Design for Learning

Video Transcript:
“Foundation Module Week 1: Introduction to Universal Design for Learning”
https://youtu.be/QfnSDN0EJM8

This is a brief introduction to Universal Design for Learning.

Universal Design for Learning or UDL is defined as, “a set of principles for curriculum development that give all individuals equal opportunities to learn” (CAST.org). Librarians can and should use UDL principles to design and deliver online instruction that can be understood by all learners. In this mini-lecture, I’ll introduce you to the concept of UDL but you’ll be
revisiting UDL again in future modules, such as the module devoted entirely to the topic of Diversity.

Understanding UDL is important in designing both online and face to face learning environments and instruction.

There are several principles that make up UDL. Each of them can help librarians provide a variety of options to students when planning lessons. I want you to notice that the word “multiple” comes up in each principle.

**Principle 1:** Provide *multiple* means of representation.

**Principle 2:** Provide *multiple* means of action and expression.

**Principle 3:** Provide *multiple* means of engagement.

Let's take a look at each one of these principles.

Principle 1 involves the online instructor providing multiple means of representing the content and materials you deliver to your learners whether they are adult learners or children. We generally plan lessons for whole groups of learners but each *individual* has a way in which he or she learns best. Remember, when we talked about learning styles earlier in this week’s module? Well, they come into play here, too. So, it is important that you incorporate a variety of presentation methods in order to reach all of your learners.

How do you do this? One thing to keep in mind is flexibility. Try to be flexible in your presentation techniques so that you include all learners. For example, instead of presenting content primarily or only in print form, try adding an audio component for students who prefer to receive information in an audio context. Include visuals for those who do best with visual representations. Include active learning strategies for those kinesthetic learners who need to be moving and active. And by the way, active learning doesn’t just relate to physical activity but also includes activating students’ deeper thinking about content. We’ll be talking more about active learning strategies in the weeks and modules to come throughout the D4L series.

So when planning lessons, don’t be rigid, be flexible so that you engage all the senses of a learner. Think “multi-modal!” That simply means that you present learning through multiple modes such as audio, video, gaming, and a myriad other ways that online learning environments allow us to do! By the end of the D4L series of modules, you will be able to create multimodal learning environments that stimulate all the senses of your learners!

Principle 2: Provide *multiple* means of action and expression. This second UDL principle involves allowing students to demonstrate that they have learned what you intended for them to learn. That doesn’t always have to be a test or written assignment. Again, think “multi-modal!” When
we talk about assessing learning in Week 4 of this Foundation Module, you’ll discover other creative ways to assess learning.

When you know a student’s abilities and preferred learning style, you will be able to design ways in which he or she can express learning that best suits their unique strengths and abilities. Some may love sharing their learning through creating a video. Others may want to create a game. Some may actually prefer writing the report. So, getting to know your learners which we’ll talk more about next week will be important.

The third and final UDL principle is to provide multiple means of engagement. Engagement refers to how students participate in the lesson you are teaching and the ways they are motivated to learn. My own research has looked at learning motivation including their perceived competence and autonomy and so the topic of motivation is very important to me, personally. Keeping and sustaining student interest in the learning materials and making the learning relevant are two aspects of motivation and motivational design. Another is providing opportunities for students to build confidence so we’ll be talking more about that, too. Motivation plays a critical role in learning. In your role, you will have to help students push through frustrations when the challenge level is high because you want them to sustain that effort in order to be successful. And effort is a measure of motivation.

Providing options is important. Perhaps, you allow students to solve a problem as a team, or for K-12 child with a particular disability, you design a task that you know they can successfully complete.

Those are the three broad principles that make up Universal Design for Learning. Using UDL principles is how librarians can reach all their online learners and it will some take practice to learn how to incorporate these principles into your lessons on a regular basis. That’s why we will revisit UDL again in other modules and you will have opportunities to practice.

As you do practice, and learn more about UDL and the strategies for incorporating UDL, you will become more confident about your own ability to construct online learning environments that make learning enjoyable for all your learners, not just those with disabilities, but all learners. That’s perhaps why it’s referred to as UNIVERSAL design for learning.
Challenge Yourself!

4. Now that you have been introduced to UDL, consider the types of strategies you might use with your learners to address the different principles. Match each item to the correct response.

A. I will provide strategies to create interest, demonstrate relevance, and build student confidence.
B. I will incorporate a variety of ways of presenting my content such as videos, print, audio, and games.
C. I will provide ways for students to demonstrate their learning that builds on their strengths and interests.

1. Multiple Means of Representation
2. Multiple Means of Action and Expression
3. Multiple Means of Engagement

Summing up Week 1

Video Transcript:
“Foundation Module Week 1: Summing Up”
https://youtu.be/hy4deKb-tAo

Summing up, we've covered a lot this week. In our introduction, basically, to instructional design, we've talked a little bit about why it's important but we've also talked about different instructional design approaches and that's important that you realize that, because we're going to be utilizing a specific approach which is a seven-step approach that I'll introduce next week to you.

But it's not the only approach. There are others, and that's why I wanted to introduce you to just a few of them today. One thing is that they do have commonalities and I think it was important that we mentioned that this week as well.

We also talked about some learning perspectives, we talked about terminology, and we talked a little bit about Universal Design for Learning and UDL is something that you will again learn more about in the Diversity Module which is the one that comes after the Foundation Module.

So, we did cover a lot this week. I hope you did take that opportunity to challenge yourself and I hope you enjoyed participating in that self-reflection of sorts. So, with that in mind I will look forward to seeing you in the next week of this Foundation Module.
Additional Resources

For this week's instruction, you may find the following resources helpful.


Videos

- All of this week's videos are available on a playlist at YouTube: [https://www.youtube.com/playlist?embed=no&list=PLw6HBD7UyT3nKkQsX0KGsD-SzlheYb1B](https://www.youtube.com/playlist?embed=no&list=PLw6HBD7UyT3nKkQsX0KGsD-SzlheYb1B)

Answer Key:

2. A - synchronous learning
   Synchronous learning happens in real time, but with asynchronous learning, learners may work at different times, when it's convenient for them.
3. C - constructivist
4. A - 3, B - 1, C - 2