Learning Design Lab: Why, What, and How

Introduction

Upon hearing that my non-learning designer coworkers at UMGC wanted to know more about the world of learning design—were, in fact, clamoring to know what lay behind this mysterious job title—I took on the task of designing a professional development course all about learning design.

How Did I Do This?

Following the ADDIE model, I analyzed my learners. As my colleagues in other units are constantly onboarding others or training the rest of us in protocols and software, I decided to build a lab that would enable my learners to do while learning—to build something practical that would help us all.

I made sure I had some formative evaluation touchpoints during the lab development in order to obtain and use feedback.

The Lab: A Guided Tour

Here's a link to the Canvas course; please email me at Lhaup15150@hotmail.com if you'd like to get in and poke around.

On the following pages, I'll take you on a whirlwind tour, showing some of the choices I made in bringing this complex discipline to life.

![Learning Design Lab]

The lab begins with an **intro page** containing all the information you could possibly require regarding policies, navigation, grading, and so forth.

About This Course

Greetings!

If you're here, it's because you have some kind of interest in learning design. Maybe you entered the lab out of curiosity—what do learning designers do, after all? What's behind this fancy-sounding title? Or, maybe you want to engage in some professional development. Perhaps you yearn for a certificate with which to decorate your office. Or, like Lauren circa 2016, you're contemplating a career move and wondering if learning design is a good choice for you. Alternatively, you may just want to design a learning experience for your colleagues, children, or friends.

Regardless of your reason, welcome to the Learning Design Lab!

Basic Information

Why Am I Here?

If you have questions or comments, the **Course Cafe** is the place to bring them up.

Course Cafe
Lauren Hauptman

All Sections

> Use this space to ask me, Lauren, any questions about any part of this course. I'm here to help! Your lab partners may also be able to answer questions.
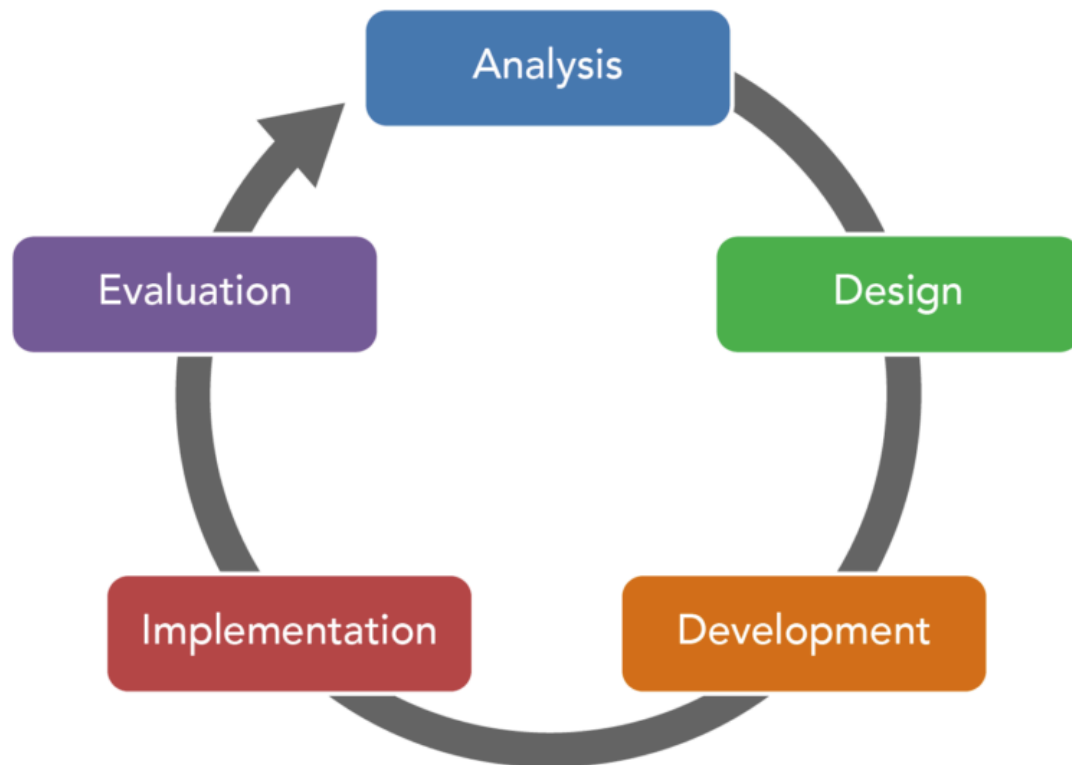
| ⇐ About This Course | Course Introduction ⇨ |

Learning Design Lab

A **welcome page** greets you, providing a look at the course as a whole and how it is structured.

I found the ADDIE graphic on Lumen; it's Creative Commons-licensed, so I was able to modify it later on, as you'll see.

Welcome

The ADDIE Model

Source: Lumen Learning. CC BY: Attribution

You're here because you want to learn about learning design. Congratulations! You already have a key quality of learning designers: intellectual curiosity. This and some mindfulness are really all you need; after all, according to UMBC

Learning Design Lab

Of course, you're encouraged to **introduce yourself** to your cohort. You probably already know each other, but you can explain why you're taking the lab. Perhaps we'll learn other fun tidbits about you.

Introduce Yourself
Lauren Hauptman

All Sections

You're likely taking this lab with coworkers—people you've known for years and with whom you've engaged in plenty of hallway conversations. But there's always more to learn, and this is a great way to bond before we embark on our learning design journey.

> Introduce yourself! Let us know why you're here. What are your passions? How would you like to make use of the learning design skills you develop in this lab? Is there anything you're particularly curious about?

Once you've hobnobbed a bit, click Next to go to Lesson 1: Analysis.

*Standard rules of discussion etiquette apply in all Learning Design Lab discussions. Please refer to the Touro College Rules of Netiquette for Online Discussion Boards as needed.
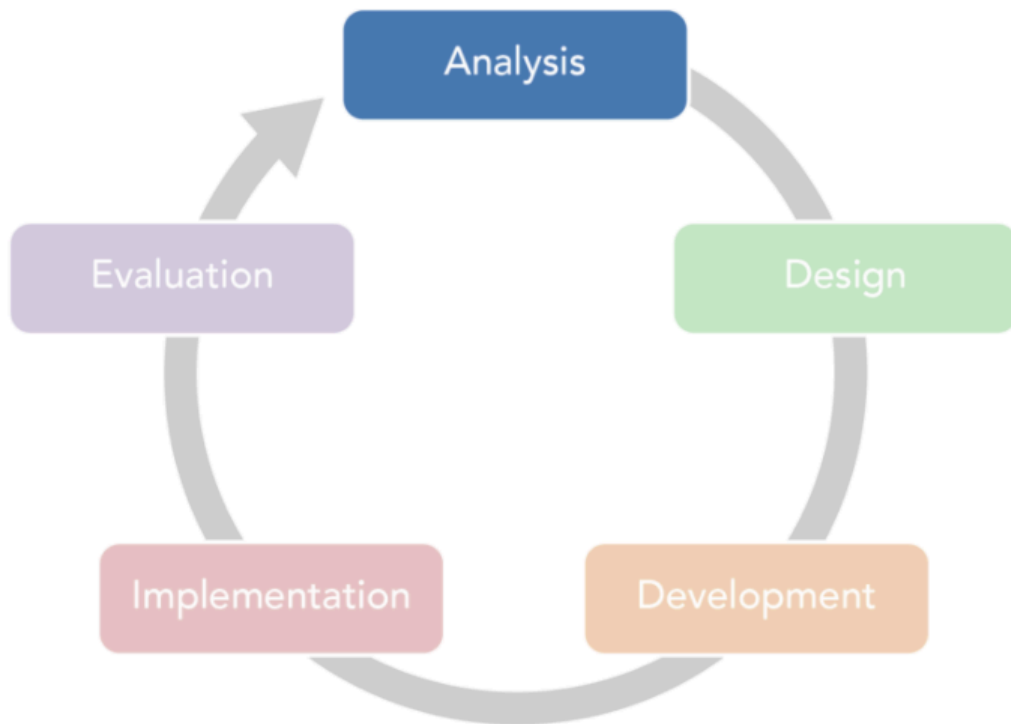
⇦ Welcome	Lesson 1: Analysis ⇨

Now, we begin!

The lesson intros all start with the same ADDIE model, showing which phase you're in.

1.1 Lesson 1 Introduction

ADDIE: Design Phase

Source: adapted from Lumen Learning. CC BY: Attribution

![Learning Design Lab logo — an owl] Learning Design Lab

The intros are kept snappy, and the **learning outcomes** are presented in digestible form so as not to try your patience with contextual qualifiers only learning designers care about.

Welcome to the analysis phase of ADDIE!

In this lesson, you'll do the following:

- identify a learning need
- identify your learner
- analyze your learner

Your lesson deliverable is a learner analysis completed in the Learner Analysis Worksheet.

Lesson time: approximately 2–4 hours

⇦ Course Introduction	1.2 Why Analyze the Learner? ⇨

Based on user feedback, I manually added **progress bars** and "where am I?" indicators to the bottom of every screen. Time-consuming? Yes. Worth it? Very much so!

Throughout the lab, I employ various strategies to bring the content to life.

I use **examples**:

1.2 Why Analyze the Learner?

Before we identify a learning need, let's talk about why we analyze the learner. Why not just figure out what we need to teach and jump right into teaching it?

Consider this scenario:

> You're hired to conduct a cybersecurity training for a client. You develop a really cool series of videos and quizzes with animated storylines that you know are going to dazzle your learners. Yet, you receive scathing feedback. Why?
>
> Alas, you made an assumption about your learners. You envisioned a gaggle of digital non-natives who would fall prey to the most obvious phishing scams. Your learners are sophisticated IT types who needed an equally high-level training. In their eyes, you're the rube.

Have you ever had an experience where an instructional event did not match your need? Perhaps you attended a lecture

and characters who reappear throughout the course:

1.3 Focus: Four Learners

Let's meet four learners. They all need to learn about Excel.

Ravi	Alice	Joy	Pete
• high school senior • watches YouTube during his spare time • wants to learn college-level skills	• retired grandmother • would like to budget better • has downloaded Microsoft Office Suite but never used it	• mid-30s manager of a boutique store • uses Excel all the time • is eager to supplement her skills	• college freshman • thinks school is boring • is learning about Excel to fulfill a requirement

Should these learners all start at a foundational level?

And sometimes-humiliating "case studies" featuring yours truly:

playing with spreadsheet data. Maybe he'll try to improve on this promising start now that he knows what he's capable of.

Example From the Lab Tutor

When I, Lauren, took LDT 620—the technology course—I was terrified. I knew I would fail to learn any tools and would bomb the course. The very first assignment was to create a presentation using an unfamiliar software. I forced myself to learn PowerPoint, fell in love with the tool, and managed to create a rotating duck. This gave me the confidence boost I needed to get through the rest of the course.

Finally, it helps to **give the learner control over the learning** (Ambrose et al., 2010; Dirksen, 2016). This includes letting the learner

But, there's plenty of research-based information as well.

3.3 Universal Design for Learning (UDL)

Using different media helps you get your message across to all learners. It's one of the tenets of universal design for learning (UDL).

Universal design for learning (UDL) is a research-based set of principles intended to help you reach all learners effectively (TEAL Center, 2010). One of the UDL principles is to **present your content in varied ways** (text, image, animation, etc.) so that you can (a) make your content accessible to all learners, and (b) teach learners who learn better from one type of format than another.

The nonprofit CAST, whose mission is to promote UDL in curriculum development, tells us (2018),

> Classroom materials are often dominated by information in text. But text is a weak format for presenting many concepts and for explicating most processes. Furthermore, text is a particularly weak form of presentation for learners who have text- or language-related disabilities. Providing alternatives—especially illustrations, simulations, images or interactive graphics—can make the information in text more comprehensible for any learner and accessible for some who would find it completely inaccessible in text.

Some people—like your lab tutor, ahem—really like text. Text is composed of words, which are a wonderfully malleable tool. Text can

I make sure you know where to find tools you might need.

3.5 Finding the Tools

Here are just some of the tools that can help you create or manipulate media content. Most will give you a free trial, but make sure you can access and share what you created once the trial is over.

This is just a tiny sampling. Below, we list ways of finding more.

Media	A few tools
Images	**Photos:** Photoshop, Fotor, GIMP **Illustrations and icons:** AutoDraw, PowerPoint **Graphs:** Excel, Google Sheets, H5P **Screenshots:** Snipping Tool, keyboard shortcuts
Screencasts	- iorad, Screencastify, Screencast-O-Matic, Loom; also note that some LMS, like Canvas, provide built-in screencasting tools **With quizzing functionality:** Camtasia
Videos	- iVideo, Adobe Spark, PowerPoint **With interactivity:** PlayPosit, Panopto, Edpuzzle, H5P

and I use **citations and references** throughout to let you know that I used real sources and not just my own thoughts:

References

Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M., & Norman, M. K. (2010). *How learning works: Seven research-based principles for smart teaching*. San Francisco, CA: Jossey-Bass.

Clark, R. C., & Mayer, R. E. (2016). *e-Learning and the science of instruction* (4th ed.). Hoboken, NJ: Wiley.

Dirksen, J. (2016). *Design for how people learn* (2nd ed.). San Francisco, CA: New Riders.

The lab includes **videos**, both homemade:

2.3 Backward Design

What is *backward design*? The following video will shed some light on this concept.

[Transcript] 📄

Backward design begins by identifying a **learning outcome**, choosing the **assessment** that will help you measure the

and store-bought.

Learning Design Lab
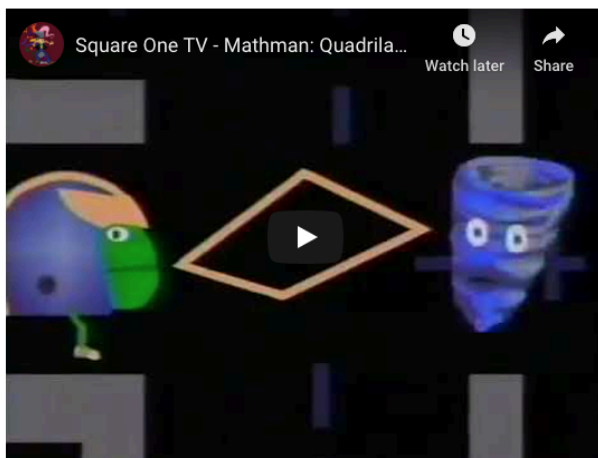
Monty Python, for example, tell us how NOT to teach:

However, there are good and bad ways of developing content. Observe this Monty Python video.

Transcript

whereas Mathman tells us how to design an exemplary learning experience.

Watch this episode of Mathman. Then, watch it again and make a mental (or physical) list of all the learning strategies you see.

Transcript

In order to help you remember key ideas, I use graphics such as **icons**:

Gagné's Nine Events of Instruction

	Event	Purpose
🔔	1. Gain attention	set the tone; ensure that the learners are ready and attentive; banish distraction
🗺️	2. Describe the learning outcome	set the direction; tell the learners what the learning will help them to do
		prepare the learners to understand

and refer to them again on the pages where I elaborate on the concepts.

2.13 Event 1: Gain Attention

	Event	Purpose
🔔	1. Gain attention	set the tone; ensure that the learners are ready and attentive; banish distraction

When I first encountered this concept, I groaned mightily.

"Gain attention?!" I thought. "Is this based on some juvenile idea that you need to hook your learners by sh inserting a blinking rainbow pony into your classroom? My learners should be attracted to my tutelage by Anyone who doesn't feel this way can stay home and good riddance."

Luckily, *gain attention* does not actually mean dangling a cupcake in front of your learner. In fact, cupcakes as we'll see.

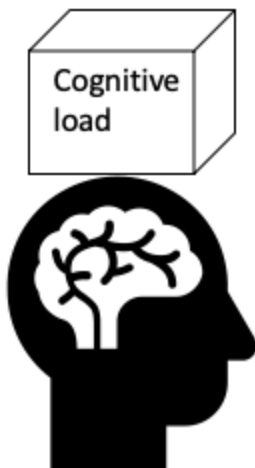To prevent this kind of misinterpretation of Gagné's event, let's call it something else; something that spea

I use illustrations I created in PowerPoint to bring concepts to life.

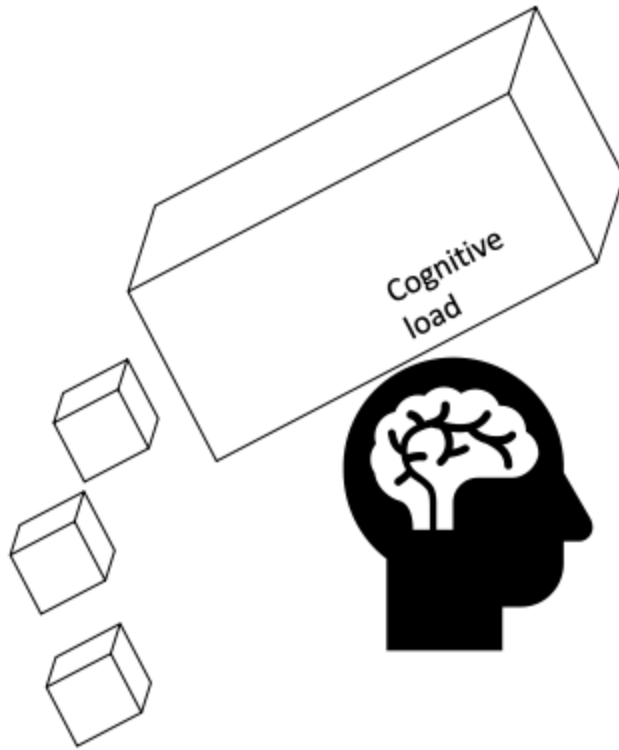Here's a simple way of visualizing long-term memory storage and use.

Encoding →   Retrieval →

PowerPoint can also teach us about cognitive load:

Cognitive load

… which must be kept manageable or else.

Cognitive load

![Learning Design Lab logo]

I also use **screenshots** that indicate how to do—and not do—various things.

The following screen is in Lesson 2, but you'd never know it. The breadcrumbs don't tell you where you are in t
you're on a page rather than a discussion or assignment area. There is no table of contents, just tabs indicating
These web design lacunae are actually a known problem in Canvas (Wuest, 2015).

Learning > Pages > 3. Stimulate Recall of Prior Knowledge
?

Home	View All Pages
Assignments	
Discussions	
Grades	3. Stimulate Recall of Prior Knowled
People	
Pages	
Files	

		Event		Purpose	
				prepare the learners to	

All media is **ADA-compliant**, with alt text, transcripts, and closed-captioning.

The Learning Design Lab has many **scaffolds**:

Now, you'll write the learning outcome, a statement explainin
knowledge.

This sounds easy, but be careful! Outcomes are deceptively si
document; it will come in handy throughout your career.

Bloom's Taxonomy 📄

Bloom's taxonomy can help you

- identify the right skill level for the learning outcome
- make the learning outcome measurable and observable
- identify the best way to assess mastery

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The link opens up a rainbow-colored PDF on Bloom's Taxonomy.

Some of the scaffolds are homemade, like the Learner Analysis Worksheet and the Design Plan Worksheet.

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Learner Analysis Worksheet

Use this worksheet to get to know your learner and his or her needs. Add or delete rows as you see fit.

Your name:

Learning goal:

Information-gathering approach:

Learner Information

Demographics

Factor	Your Notes
Age	
Gender	

And, I direct you to outside sources when appropriate.

Quality Matters (QM)

Based in our very own Annapolis, Quality Matters (QM) was started by a small group of online educators. It's now a nonprofit staffed by professionals all around the country, with nearly 1,500 subscribers. The organization creates research-based rubrics and offers a certification program so that teachers and learning designers can qualify to peer-review online courses (QM, 2020).

Here is one of the QM rubrics, perhaps the one most useful to you.

> QM Continuing and Professional Education Rubric ⌕

Open SUNY Course Quality Review (OSCQR)

The Online Learning Consortium (OLC) uses the Open SUNY Course Quality Review (OSCQR, pronounced *Oscar*) rubric, which, like QM, focuses on accessibility as well as other design elements. Developed by cross-functional teams including learning designers, librarians, and technologists, OSCQR is based on learning design models, Bloom's taxonomy, and other influences (OLC, 2020). The teams who created it conducted a gap analysis with QM and other standards, so it's meant to fill in some perceived holes.

> Open SUNY Course Quality Review (OSCQR) Rubric ⌕

QM and OSCQR are organized differently but have many similarities. You may notice that OSCQR likes to get into the weeds of

The lab has **self-assessments** where you can test your knowledge:

2.5 Check Your Knowledge: Using Bloom's

Started: Apr 11 at 6:03pm

Quiz Instructions

Check your knowledge of outcomes and assessments. Answer each question to the best of your ability and see our feedback at the end. This knowledge check will help you apply Bloom's taxonomy and align learning design elements.

Question 1	6 pts

Jake is taking a six-lesson class on bike maintenance. Match each of his assignments with the correct Bloom's taxonomy level.

label parts of a bike   [Choose] ⌄

explain what each part of a bike does   [Choose] ⌄

demonstrate how to use parts of a bike   [Choose] ⌄

point out the specific bike part   [Choose] ⌄

as well as reflection questions.

Have you encountered any scaffolds in this lab?

?

What about the Learner Analysis Worksheet?

Come to think of it, the Design Plan Worksheet is a scaffold too.

They're all over the place!

There are **discussions** both to share and peer-review work:

1.7 Discussion: Share Your Learner Profile

Lauren Hauptman

All Sections

Post your learner profile and graphic. Attach your Learner Analysis Worksheet as well.

... Tell us about your process. How did you conduct your analysis? What factors in the worksheet did you find most relevant? Did you end up revising your learning goal?

Did you find this exercise valuable? Why or why not?

See what your lab partners have come up with and share any thoughts or suggestions.

When you feel ready, click Next to submit your worksheet to the lab tutor.

⇦ 1.6 Activity: Analyze Your Learner	1.8 Lab Deliverable: Learner Analysis ⇨

And to relax and unwind while practicing skills:

2.17 Discussion: Story Corner
Lauren Hauptman

All Sections

That was a lot of information. Let's forget everything and go get a caffeinated beverage. Take a deep breath: You've accomplished quite a bit!

We've talked about storytelling a few times in this part of the lesson. Take this opportunity to tell a story yourself. This could be

- a story a mentor told that helped you learn something
- a story you made up (maybe just now) to teach about something
- a story about how you learned something (ref. my *premises* story)
- another kind of story altogether

> Read the stories of your lab partners. Did you find the story effective? If so, why? Is there anything you would do to make it even more effective?

Enjoy this well-deserved break, then click Next to move on to more events.

![Learning Design Lab](owl logo) Learning Design Lab

Each of the five lessons ends with a **deliverable**. The deliverables are iterative and eventually lead to the creation of your wonderful, user-tested learning experience.

5.9 Lab Deliverable 5: Revised Learning Experience

Submit Assignment

Due No Due Date   **Points** 0
Submitting a text entry box, a website url, a media recording, or a file upload

✓ Submit your revised learning experience. YOU'RE DONE! You'll receive a Learning Design Lab certificate within a week and any feedback from the lab tutor within three business days.

Congratulations! This was quite a journey.

Please help us by filling out the course survey. After all, the Learning Design Lab needs user feedback as well! Your thoughts will help us refine this experience for future learners.

Finally, save or print the toolkit, glossary, recommended resources, and other takeaways. You'll always have access to this course section, too, should you want to review anything.

Congratulations again for getting through all of ADDIE! You are several steps closer to becoming a learning design master.

Click Next if you'd like to share any final reflections on this experience.

> **Note:** Submission of the completed deliverable will result in a Complete for this assignment.

![Learning Design Lab]

A learning experience worth its salt will always have a reflection at the end:

Now that you're all done, reflect on the learning design experience, from analysis to design to development to implementation to evaluation.

No matter how discrete or sprawling your learning experience, you must have an opinion on what you've gone through.

> 💬 Did you learn anything you didn't know before? Did anything surprise you? Dismay you? Daunt you? Did we kindle an interest in learning design as a career?
>
> If you'll apply what you learned in your job, let us know how.

Thank you for participating!

| ⇐ Lesson 5: Evaluation | Course Evaluation ⇨ |

And a way for you to register what you liked and didn't like.

Evaluation Form

Please fill out our evaluation form. If you'd prefer to access the form on Google, click the link to open the form in a new window ↗.

Learning Design Lab Evaluation Form

Now that you've completed the course, please let us know what you thought. We'll use your feedback to improve the Learning Design Lab.

This evaluation is anonymous.

What was your reason for participating in the lab?

![Learning Design Lab]

The course ends with some takeaways you can download and print.

Recommended Resources

Click the link below for a printout of books, articles, and other resources.

Recommended Resources 📄

Learning Design Toolkit

Click the links below for tools that will help you in future learning design endeavors. The Lab Lesson Takeaways document gives you a quick-and-dirty overview of the course content. The rest of the documents should be familiar. You can also print any page in this course.

Lab Lesson Takeaways 📄

Learner Analysis Worksheet 📄

Design Plan Worksheet 📄

Bloom's Taxonomy 📄

Learning Design Glossary

Click the link below for a glossary of some of the terms and concepts you've encountered in this course.

[Learning Design Glossary](#)

⇦ Learning Design Toolkit	END OF COURSE

◂ Previous