



INSTRUCTIONAL  
DESIGNERS

INNOVATION CREW

# Defining quality learning in self-paced eLearning: Practices and challenges

Kevin Forgard

UW-Madison SOE, WCER, WIDA

Forgard, K. G. (2021). "Defining quality learning in self-paced eLearning: Practices and challenges". OLC Innovate 2021

# Session Interactive Component



<http://bit.ly/frogOLC2021>

# Kevin Forgard



Senior Instructional Designer at  
University of Wisconsin – Madison

Worked in eLearning and  
instructional technology

Currently develops self-paced  
eLearning for K-12 educators

Introduce yourself  
on the shared  
document.



<http://bit.ly/frogOLC2021>

# Session agenda

- ① Discuss how self-paced e-learning fits within a formal and informal learning framework
- ② Introduce some evaluation criteria
- ③ Review examples
- ④ Present the Theory of Transactional Distance framework
- ⑤ Discuss impact on SPeL design



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Are self-paced learning products effective?



# Self-paced e-Learning in Hawaii

Hello. My name is Ali. I am here to teach you about Self-paced eLearning.

Please read through the next 25 slides and take the test at the end to earn a badge.

Click next to begin!



We're focusing on learning



Where does self-paced learning  
fit on this continuum?





*The traditional distinction between formal and informal education is blurred once we recognize that physical location is no longer a constraint on where and how people learn...*

(Burbules, p16, 2010 - From *Ubiquitous Learning* Chapter 2)



Formal

Something  
in-between

Informal

**ACTIVITY:** Record any learning experience you have had by placing it somewhere on this continuum.



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# Debrief

**Is there a clear distinction between the two poles?**

**How can this impact the design of formal and informal learning events?**



**Pick two**

CHEAP

FAST



GOOD

# Evaluation criteria: A simple rubric

- **Effectiveness** – Are there clear learning goals that learners can achieve?
- **Efficiency** – Can the learning goals be achieved in a timely manner?
- **Appeal** – Are the instructional materials interesting and useable?



# Further affordances

Interactive

Adaptable

Feedback system

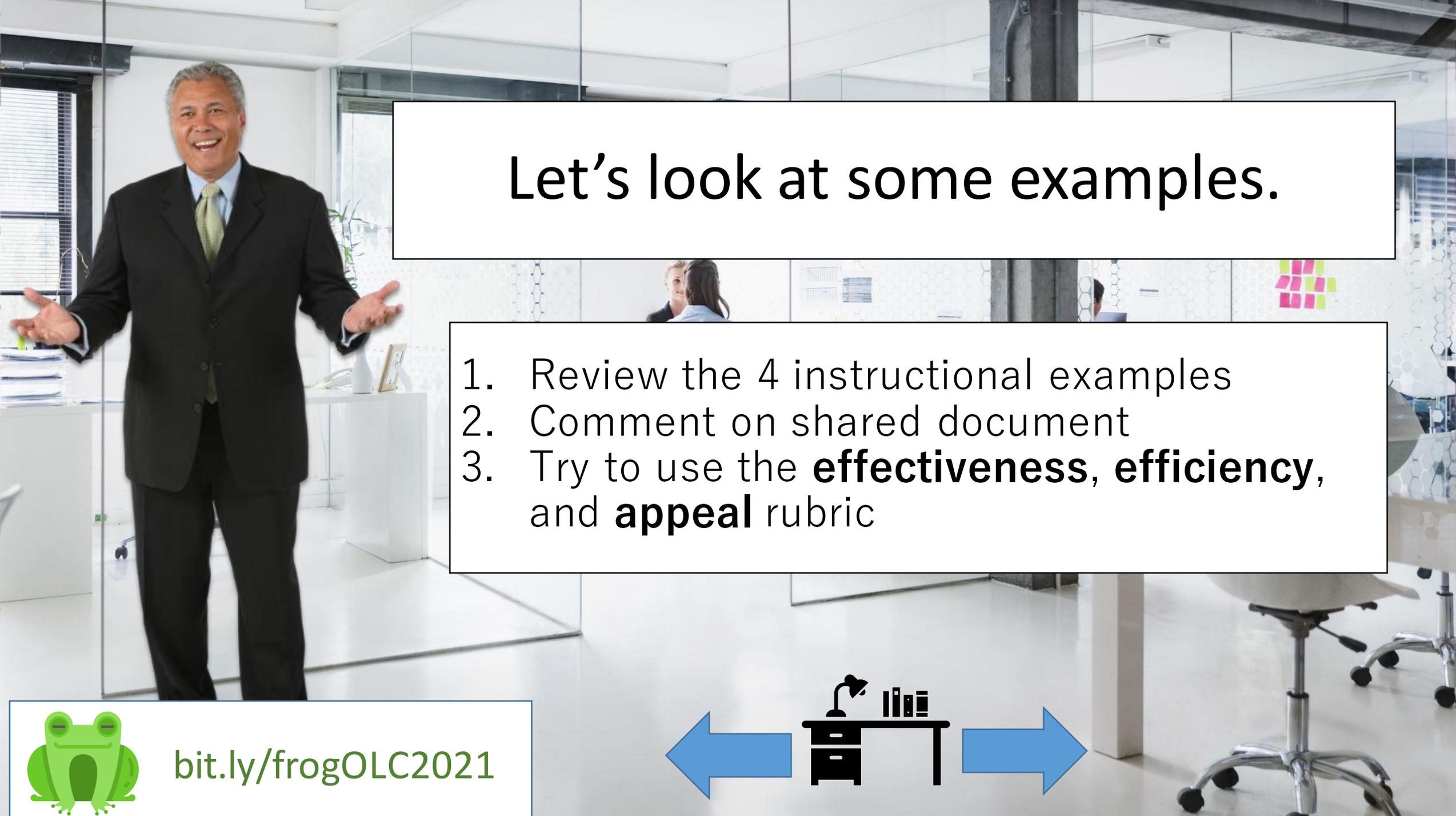
Nonlinear access &  
choice

## CHALLENGES

Open-ended learner input  
Communication with other learners



Question break



Let's look at some examples.

1. Review the 4 instructional examples
2. Comment on shared document
3. Try to use the **effectiveness**, **efficiency**, and **appeal** rubric



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# Example 1: UW Madison – Compliance Training

## Preventing Sexual Harassment and Sexual Violence at UW-Madison

### Preventing Sexual Harassment and Sexual Violence

*for Faculty and Staff*

#### Why is this training important to me?

- 40-70% of female workers and 10-20% of male workers experience workplace sexual harassment.
- Victims of harassment often have negative emotional, physical, and financial impact.
- Those who observe harassment, or provide support to victims are also impacted.

These statistics show that Sexual Harassment and Sexual Violence are present at UW-Madison. We hope this training increases your awareness to these situations, perhaps makes you more sensitive towards your own behaviors, and provides you with actions to take if you are affected or know of someone that is being affected by the behaviors described in this training.

Source: [U.S. Equal Employment Opportunity Commission](#) 

 Frequently Asked Questions

(Opens in a new window) 



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Source: University of Wisconsin – Madison Canvas

# Example 1: UW Madison – Compliance Training

2

## View the employee training

-  **Screen reader users:** Please use the [alternative HTML version](#) of *Preventing Sexual Harassment and Sexual Violence* to complete this training requirement
-  The interactive training **will offer to resume** where you leave off. Click "Yes" to resume.
-  Campus network connection is recommended.
-  The training includes audio. Please connect headphones or turn on speakers.
-  Recommended browsers: (Mac) Chrome, Safari, Firefox | (Win) Chrome, Safari, IE 10+

 [Begin Interactive Training Module](#)

## How can I get the most benefit from this training?

*Focus on the following for each section:*

- **Section One: Definitions and Prevention Strategies** | 30 minutes
  - We want to increase your awareness. Please be thorough when you encounter scenarios. Consider how those involved in each scenario may be impacted.
- **Section Two: Being Supportive and Knowledgeable** | 12 minutes
  - We want you to know how to respond or help. Focus on actions you may be able to take. Learn "The 3 Ds".
- **Section Three: Reporting Options and Campus Policies** | 22 minutes
  - As you explore this section you should leave with confidence that there are support options if you or someone you know ever needs help.

# Example 1: UW Madison – Compliance Training

Resources | Escape

Section 1

Menu Script Glossary

- ▶ INTRODUCTION
- ▼ SECTION ONE
  - Definitions and Prevention Str...
  - ▼ Key Definitions of Behaviors
    - Sexual Harassment**
    - Sexual Assault
    - Dating and Domestic Viole...
    - Stalking
    - Consensual Relationships
  - Impact on Survivors
  - Knowledge Check
  - Prevention and Response Str...
  - Victimization Data
  - Bystander Intervention
  - Bystander Intervention: The T...
- ▶ Scenarios: Bystander Interve...
- Bystander Intervention Summ...
- What Will You Do?
- Knowledge Check

- ▶ SECTION TWO
- ▶ SECTION THREE
- ▶ COMPLETION

Search...

**Sexual Harassment**

Sexual Assault

Dating and Domestic Violence

Stalking

Consensual Relationships Policy

CC

Definition Scenario 1 Scenario 2

- Unwelcome **sexual advances** or requests for **sexual acts**, unwelcome **physical behavior** or **words** that are sexual.

*Illegal and Unacceptable*

**Hostile Environment Sexual Harassment**

- Behavior that substantially **interferes** with one's work or academic career or creates **intimidating, hostile** or **offensive** work or education environment.

**Quid Pro Quo ("this for that") Sexual Harassment**

- When submitting to or rejecting this behavior influences employment or academic opportunities and decisions.

- UW-Madison [Sexual Harassment and Sexual Violence policy](#)
- State definition of [sexual harassment](#)

◀ PREV NEXT ▶

Must proceed in order



# Example 2: Adobe Education Exchange

Adobe Education Exchange

My Education Exchange Discover Browse Community

PARTICIPANT   
**Kevin Forgard**  
Instructional Designer Madison, Wisconsin, United States

1 Courses 0 Resources 0 Discussions 150 Total Points

Activity Courses Teaching Resources Discussions Community

## My Learning

Complete course work by Dec 31, 2021 6:00 PM CST



**Cultivating Digital Literacy**  
Learn how to support essential skills in your campus, course or class.

15% Completed

Basic Principles of Design

SELF-PACED COURSE

**Basic Principles of Design**  
Learn and teach the fundamentals of great design in any classroom.

16% Completed



SELF-PACED COURSE

**Design Graphics with Your Students**  
Understand, learn and teach the basics of graphic design with Adobe

0% Completed

A GET STARTED COURSE



SELF-PACED COURSE

**Adobe Creativity in Every Class**  
Learn to enhance creativity in your classroom with Adobe Creative

0% Completed



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# Example 2: Adobe Education Exchange

Adobe Education Exchange  My Education Exchange Discover Browse Community     Adobe

## Cultivating Digital Literacy

Overview Announcements Instructors About

0.5 of 3 hours Complete (15%) Course Ends: Dec 31, 2021 6:00 PM CST

Completed 2 of 13

 **Cultivating Digital Literacy** 

Learn the importance of cultivating digital literacy in your campus, course or class.

### Section 1

1. [What is digital literacy?](#) 
2. [Digital literacy in relation to other skills](#) 
3. **[Why digital literacy is important for learning](#)** 
4. [Why digital literacy is important for careers](#) 
5. [Why digital literacy is essential in our everyday lives](#) 
6. [Digital literacy in the humanities, arts and design](#) 
7. [Digital literacy in STEM](#) 

Up Next: [Why digital literacy is important for learning](#)



### Help & Support

-  [FAQs](#)
-  [Tech Support](#)
-  [Unenroll from this Course](#)
-  [Share](#)

# Example 2: Adobe Education Exchange

**Adobe Education Exchange**

## Cultivating Digital Literacy

1374 Enrolled

Program Help & Support

**Cultivating Digital Literacy**

Learn the importance of cultivating digital literacy in your campus, course or class.

Section 1

1. What is digital literacy?
2. Digital literacy in relation to other skills
3. **Why digital literacy is important for learning**
4. Why digital literacy is important for careers
5. Why digital literacy is essential in our everyday lives
6. Digital literacy in the humanities, arts and design
7. Digital literacy in STEM
8. School-wide digital literacy
9. Approaches to teaching digital literacy
10. Access, inclusion and digital literacy
11. Adobe's tools that support digital literacy
12. Assignment
13. Additional resources to continue your learning journey

## Why digital literacy is important for learning

In this lesson, you'll learn about why digital literacy is important for learning in any context or discipline. Our experts and educators then share examples that illustrate the importance of digital literacy in increasing learning outcomes for students.



Here are some more great examples of lesson plans and creative projects that you can adapt for your own educational context, or even assign directly to your students.

## Inspiration | Digitizing the research paper with sound

Through Adobe tools, we leverage new possibilities opened up by using digital literacy and technologies. A few decades ago it would

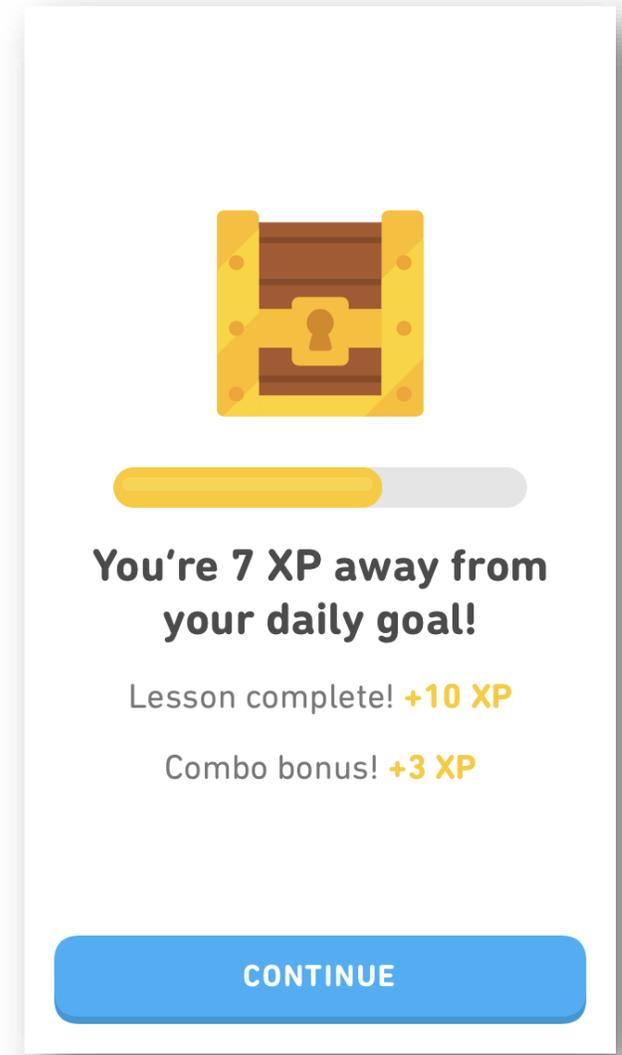
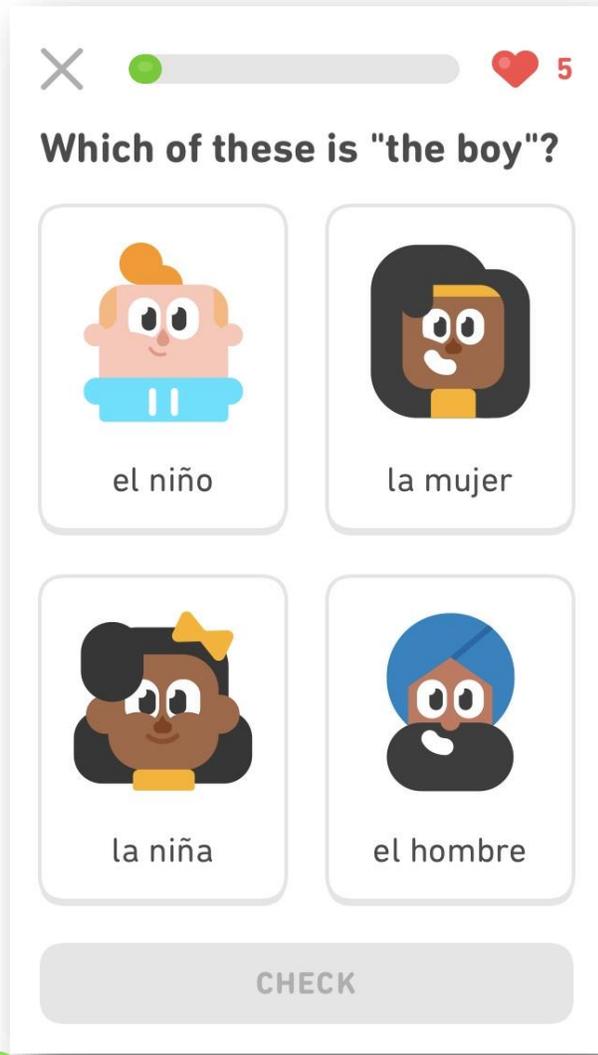
Back

0.5 of 3 hours Complete (15%)

Course Ends: Dec 31, 2021 6:00 PM CST

Next

# Example 3 - Duo Lingo App: Spanish



[bit.ly/frogOLC2021](https://bit.ly/frogOLC2021)

Source: <https://www.duolingo.com>

# Example 4 - Scenario-based branched e-learning



Sophie is an instructional design consultant. She's tired of spending hours and hours writing proposals for clients who don't end up hiring her or really aren't a good fit in the first place. Help Sophie follow a new process for screening clients to see if this is actually a good fit for her skills and to establish a professional relationship with her new client.

Let's Get Started

Start page



**Convert Training**  
Robert  
Yesterday, 3:06 PM

Hello Sophie,  
My company has 4 classroom training courses we'd like to convert to online. One of them is a half day course; the others range from one day to four days long. Can you please tell me what you would charge to convert these courses to online?

Regards,  
Robert

Sophie receives an email from a prospective client, Robert.

What should Sophie do?

Send Robert a price estimate.

Send Robert some client screening questions.

Send Robert questions on the course length.

Choice page



Sophie provides a fixed-price quote based on her limited information. Robert immediately accepts without negotiating, making Sophie wonder if her price was too low.

One month into the project, Sophie realizes what a terrible mistake she has made. She severely underestimated the scope of the project and the time required. She's frustrated, and her client is annoyed at how long everything is taking. Sophie works long hours for weeks--so many hours that her effective hourly rate is much lower than usual.

Once the project is finished, Sophie vows to never give a price estimate again unless she has more information.

Restart the scenario

Wrong choice feedback



**Re: Convert Training**  
Robert  
2 hours ago

1. What are your goals for this project?  
We want to convert our training to online to save money on travel costs.

2. Do you have a budget for this project? Is that budget at least \$5000?  
Yes, we have a budget, but we'll need to talk about how much the whole project will cost so we can prioritize. We might not be able to do it all this fiscal year.

Robert replies with his answers to the five screening questions.

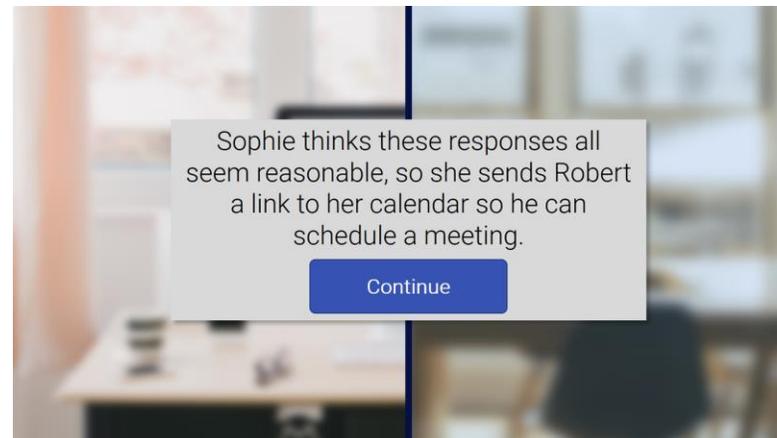
What should Sophie do?

Schedule a call to discuss it further.

Decline the project due to red flags.

Send Robert a price for a small project to start.

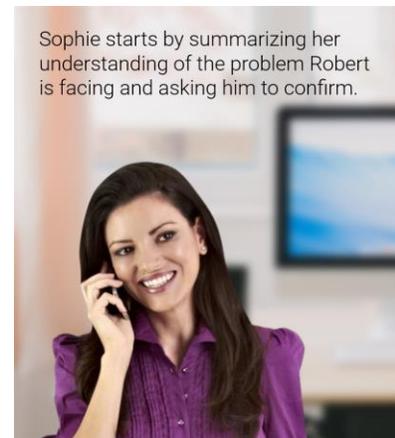
Choice page 2



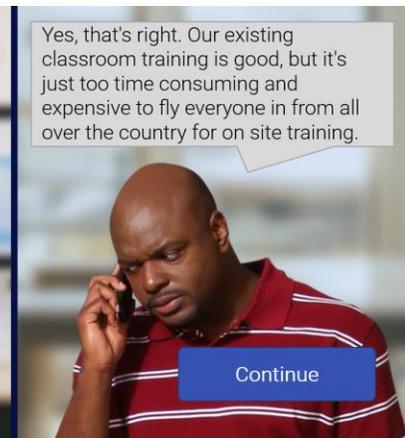
Sophie thinks these responses all seem reasonable, so she sends Robert a link to her calendar so he can schedule a meeting.

Continue

Correct choices leads to scenario...



Sophie starts by summarizing her understanding of the problem Robert is facing and asking him to confirm.



Yes, that's right. Our existing classroom training is good, but it's just too time consuming and expensive to fly everyone in from all over the country for on site training.

Continue

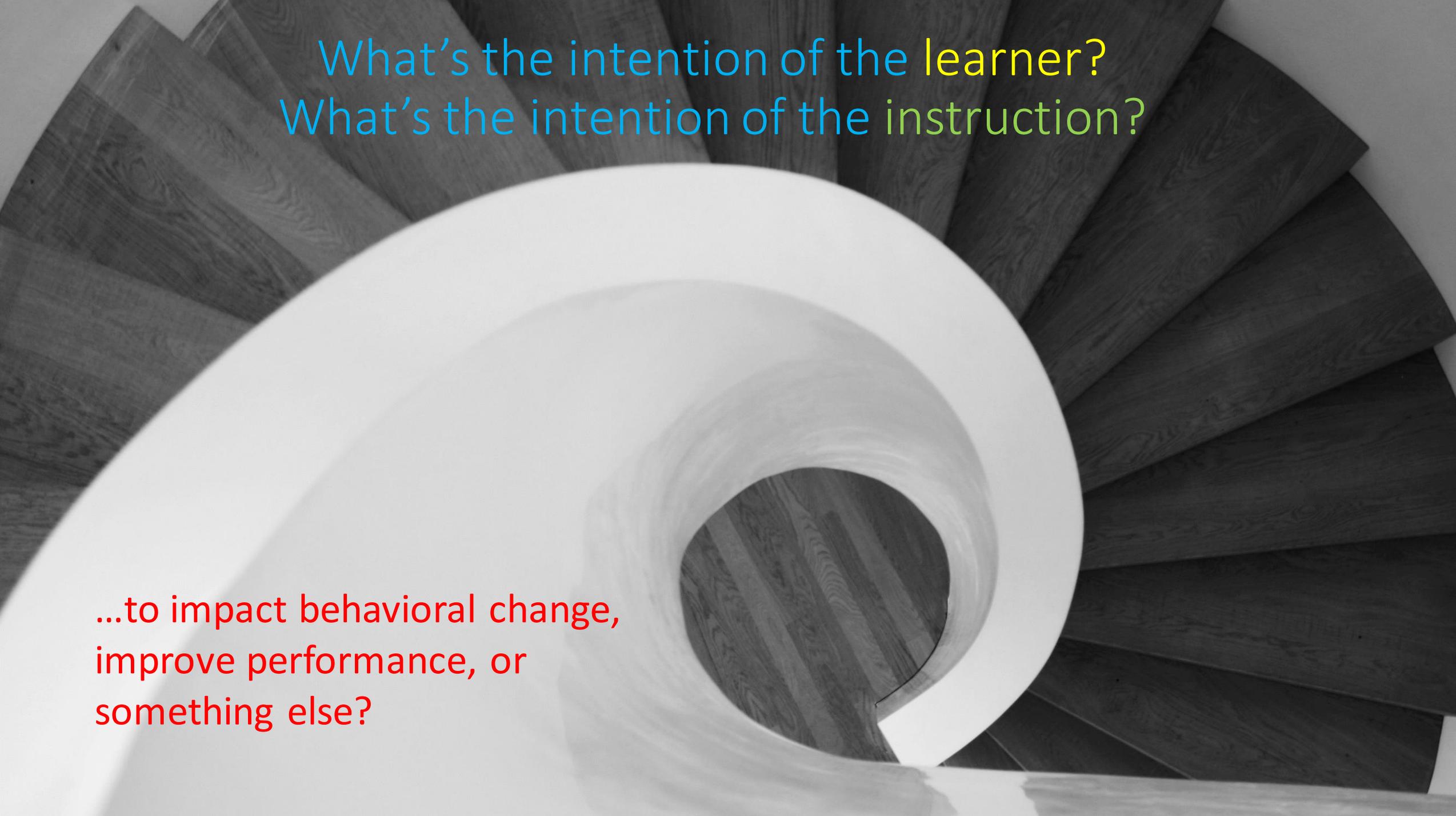


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<https://www.syniadlearning.com>



Let's review our  
comments

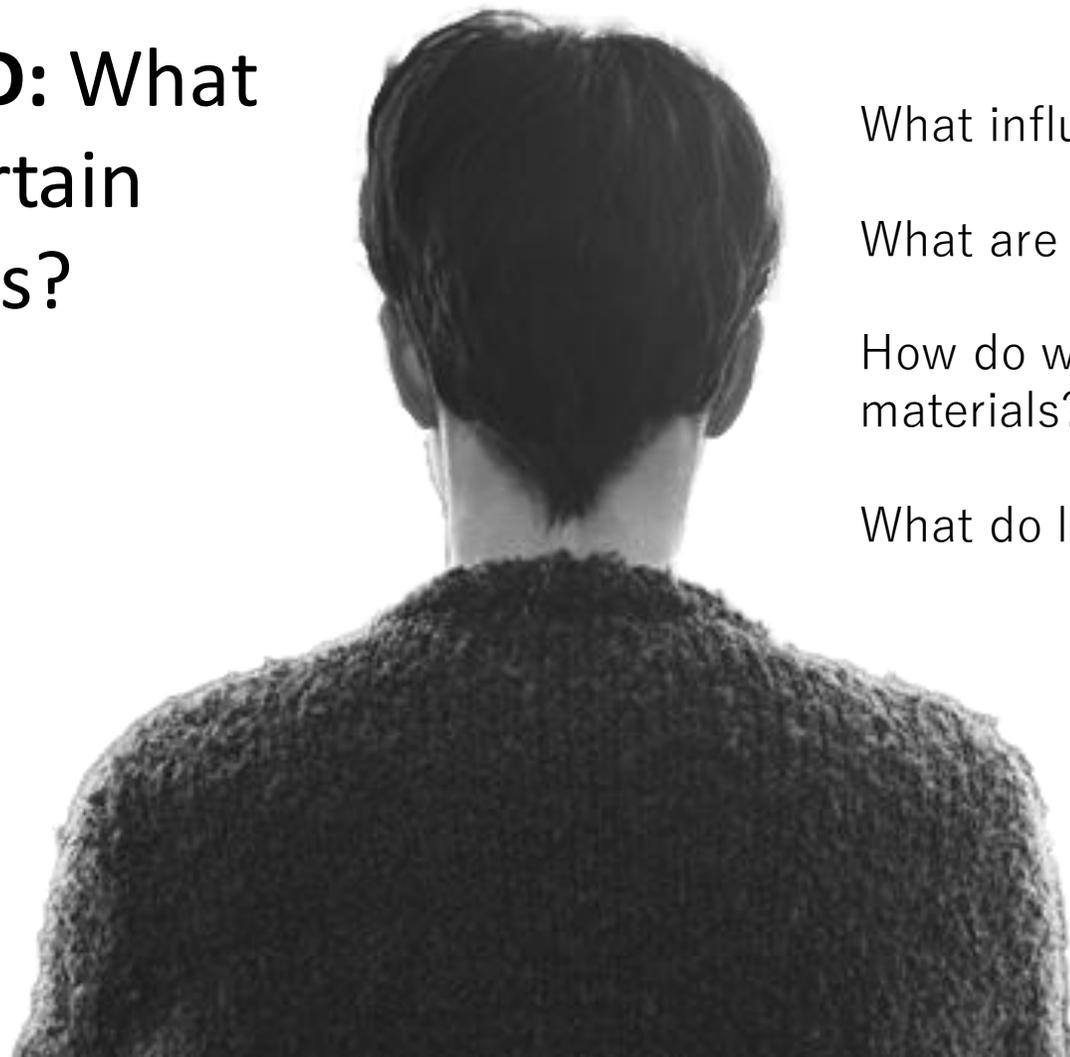


What's the intention of the learner?  
What's the intention of the instruction?

...to impact behavioral change,  
improve performance, or  
something else?

What's the intention of the learner?  
What's the intention of the instruction?

**THINK ALOUD:** What influences certain design choices?



What influences our design choices?

What are the needs?

How do we expect learners to engage with the materials?

What do learners expect?



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# Extracting SPeL from JPeL (just plain e-Learning)

## Thought-leader Perspectives

Michael Allen: *Michael Allen's Guide to eLearning*

(Design to motivate)

Ruth Clark and Richard Mayer: *eLearning and the Science of Instruction*

(Design for best cognitive impact)

*How People Learn II: Learners, Contexts, and Cultures (and HPL I)*

(Design for best cognitive impact)





## SPeL Definition Idea?

Learners consuming learning materials at their own pace and dedicated time in an unfacilitated learning environment.

**So, what's the purpose or instructional problem SPeL is trying to solve?**

To impact behavioral change, improve performance, or...

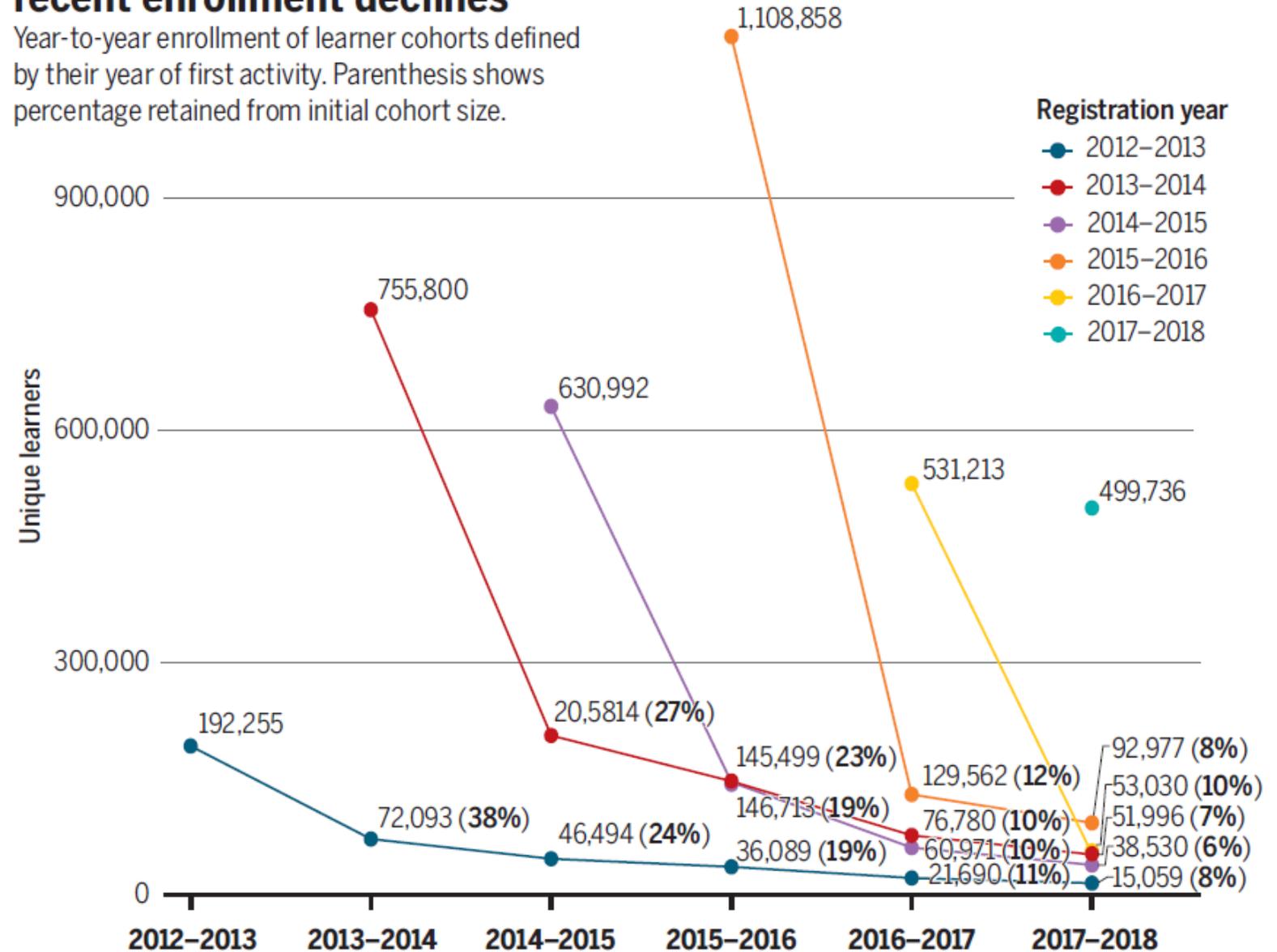


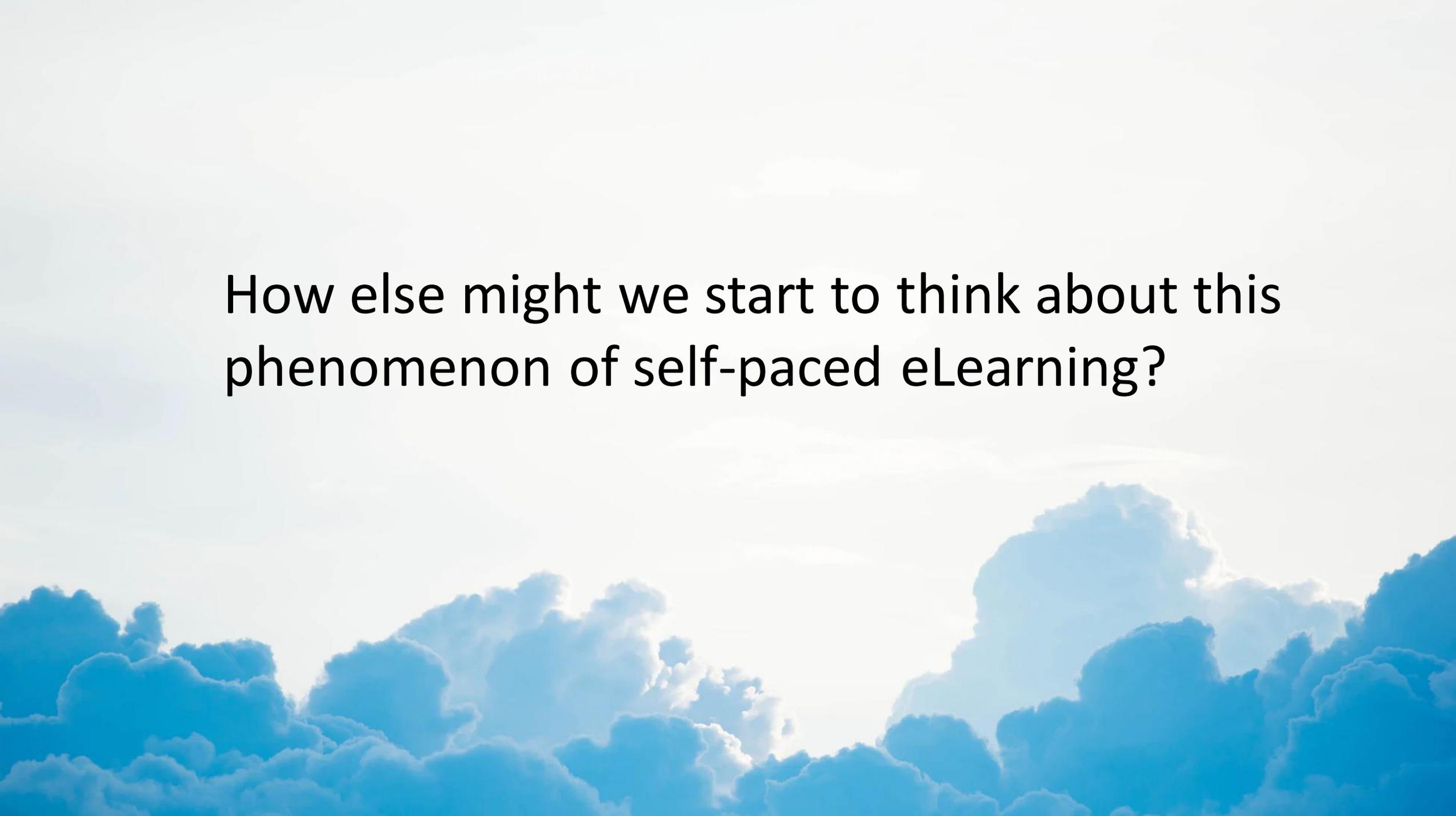
But maybe I want to learn something to just solve an immediate problem.

# Mooc Retention Rates

## Consistently low retention and recent enrollment declines

Year-to-year enrollment of learner cohorts defined by their year of first activity. Parenthesis shows percentage retained from initial cohort size.



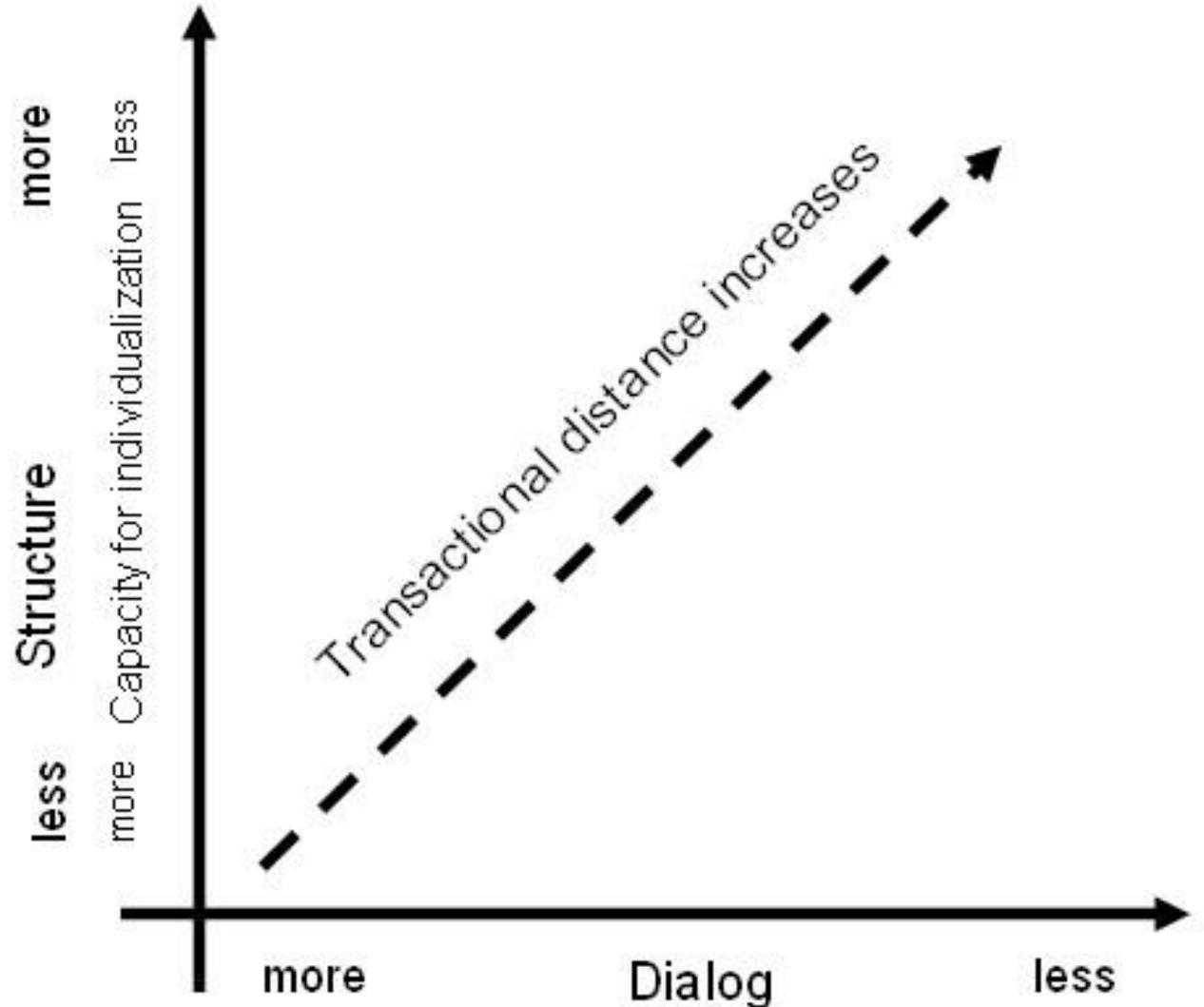


How else might we start to think about this phenomenon of self-paced eLearning?

# Another perspective

## Theory of Transactional Distance (TTD)

- Structure – design of course
- Dialogue – responses between learner and educator
- Autonomy – learner choice



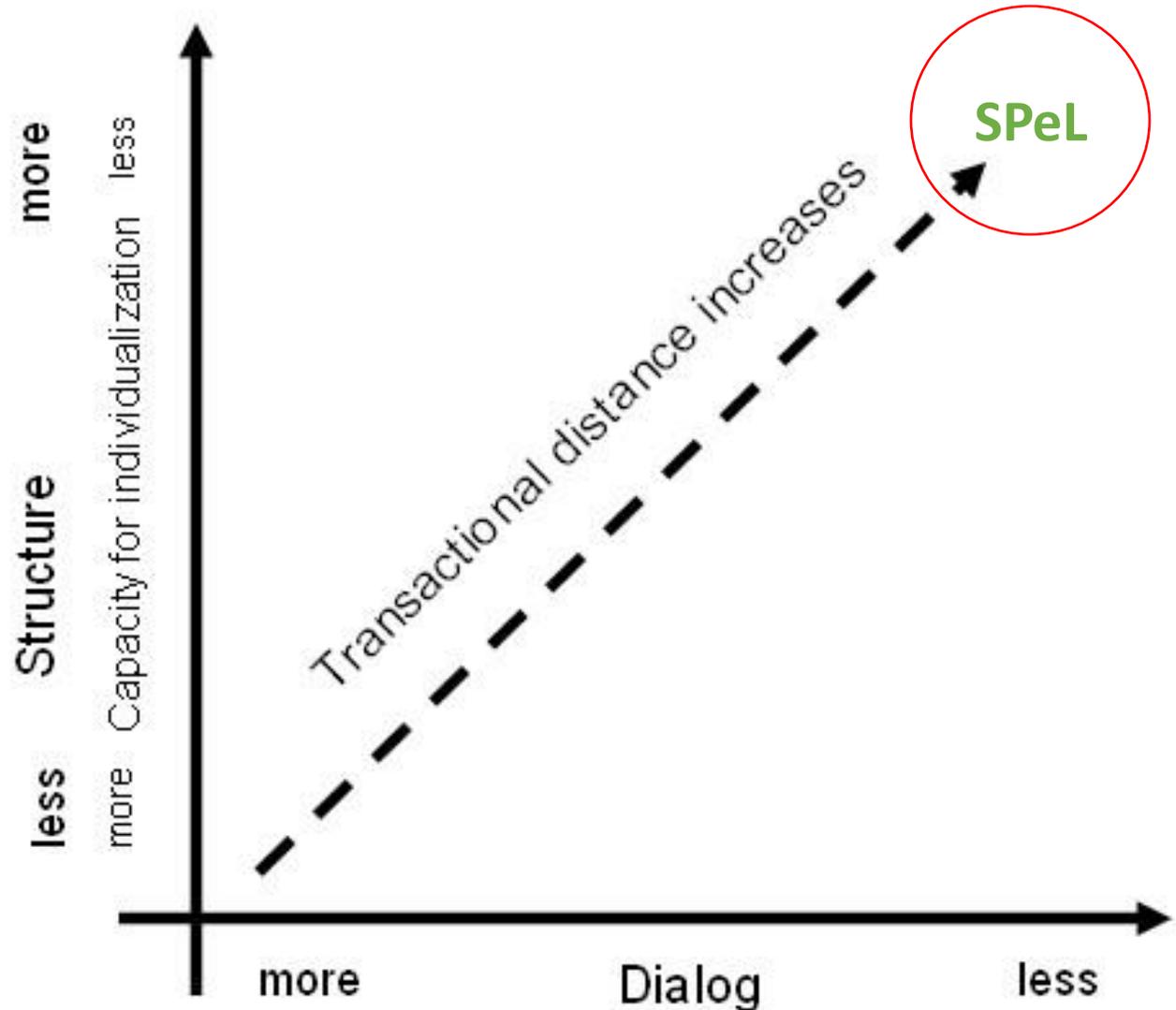
Moore (1997)

Saba & Shearer (2018)

# Self-paced eLearning seen through the Theory of Transactional Distance (TTD)

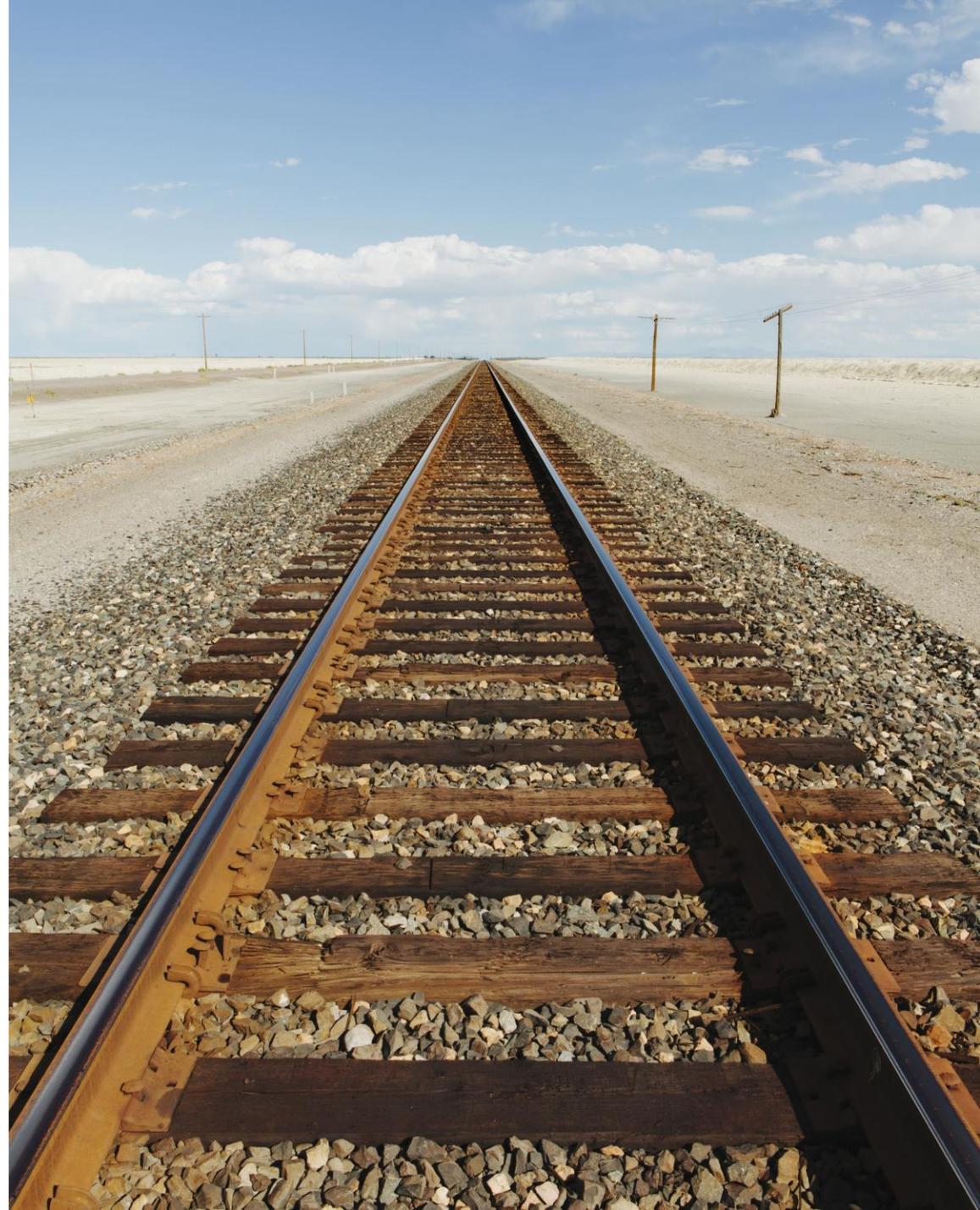
- Structure – highly structured
- Dialogue – none
- Autonomy – limited learner choice

Think about how this may match our discussion between formal and informal learning.



# What happens when you “lock” a learner in self-paced linear course?

- Highly structured
- Limited (or programmed) autonomy
- No dialogue



# Design Considerations

STRUCTURE: Adaptive design but also restrictive



**Take a test to jump ahead!**

It takes about 5 minutes, and adapts to your level by getting harder (or easier) based on your answers.

**START**

**CANCEL**

# Design Considerations

AUTONOMY: Need to train learners to be self-regulated

## Why is this training important to me?

- 40-70% of female workers and 10-20% of male workers experience workplace sexual harassment.
- Victims of harassment often have negative emotional, physical, and financial impact.
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These statistics show that Sexual Harassment and Sexual Violence are present at UW-Madison. We hope this training increases your awareness to these situations, perhaps makes you more sensitive towards your own behaviors, and provides you with actions to take if you are affected or know of someone that is being affected by the behaviors described in this training.

Source: [U.S. Equal Employment Opportunity Commission](#)

🔗 Frequently Asked Questions

2

## View the employee training

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- 🔊 The training includes audio. Please connect headphones or turn on speakers.
- 🖥️ Recommended browsers: (Mac) Chrome, Safari, Firefox | (Win) Chrome, Safari, IE 10+

▶ Begin Interactive Training Module

## How can I get the most benefit from this training?

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Source: University of Wisconsin – Madison

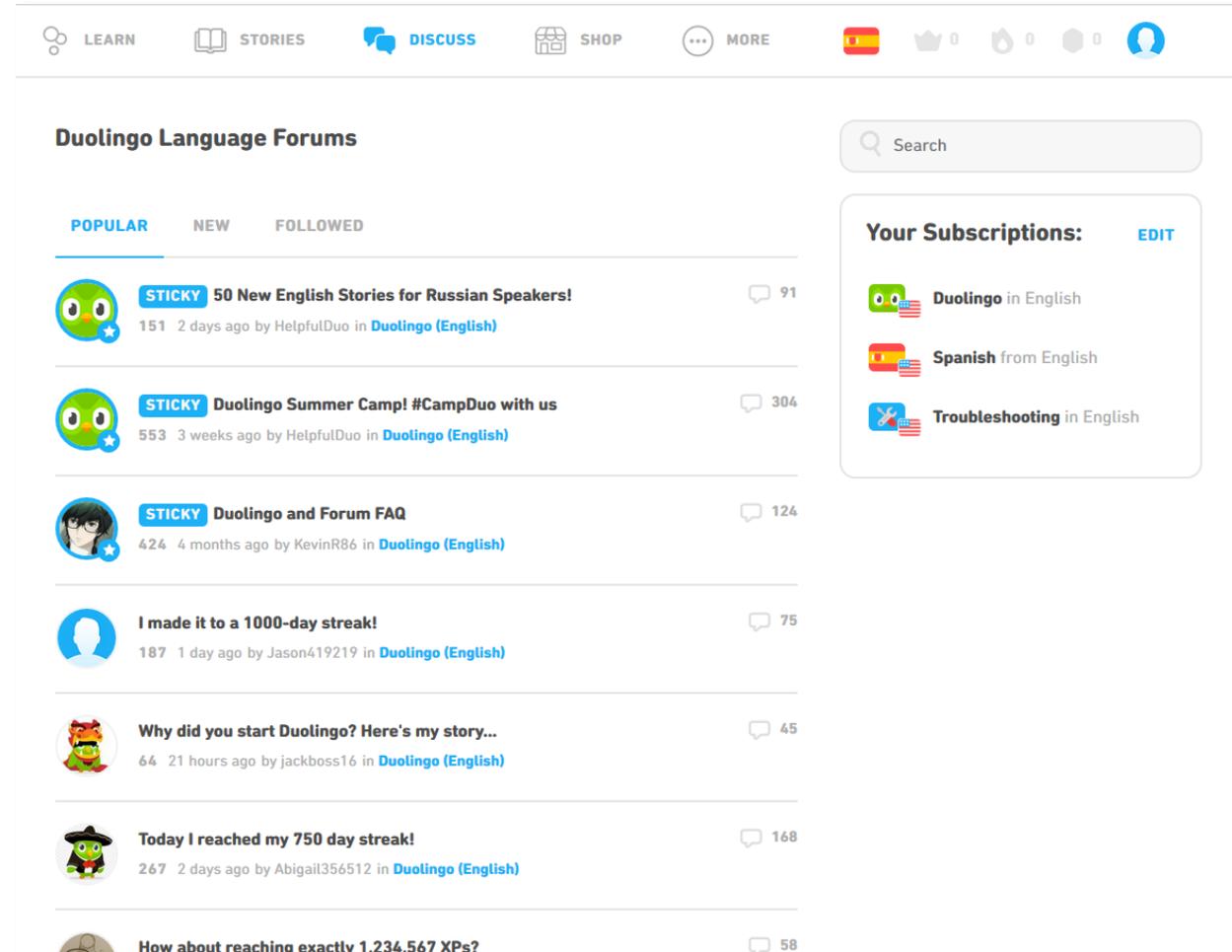
# Design Considerations

**AUTONOMY:** Provide learner control of content, pacing, and support



# Design Considerations

**DIALOGUE:** The missing piece in SPeL.  
How can we design for a shared understanding?



Source: <https://www.duolingo.com>

# Design and Implementation Challenges for SPeL

Accessibility

Equity

Learner  
Motivation

Fidelity



Are designs like this effective, efficient, and appealing?

Menu Transcript Resources

- 1. Quantitative Methods: An Introduction
  - 1.1. AP Biology | Quantitative Methods
  - 1.2. Navigating the Online Course
  - 1.3. Your Presenters
  - 1.4. Introduction: The Challenge
  - 1.5. Goals of This Online Course
  - 1.6. A Caveat
  - 1.7. Designing Instruction: The Challenge
  - 1.8. Double Duty with the AP Course
  - 1.9. Artificial Selection Lab
  - 1.10. Artificial Selection Lab
  - 1.11. Artificial Selection Lab
  - 1.12. Artificial Selection Lab
  - 1.13. Artificial Selection Lab
  - 1.14. Data Exploration: Cofounder
  - 1.15. A Problematic Graph
  - 1.16. The More Useful Histogram
  - 1.17. Check for Understanding
  - 1.18. Generating Questions
  - 1.19. Check for Understanding
  - 1.20. Introducing Some Basic Statistics
  - 1.21. The Sample Mean
  - 1.22. Capturing Variation
  - 1.23. Predicting: Standard Deviation
  - 1.24. Graphic Representation
  - 1.25. Predicting: Population
  - 1.26. A Normal Curve
  - 1.27. Empirical Rule?
  - 1.28. Empirical Rule Simulation
  - 1.29. From Empirical Rule to Normal Distribution
  - 1.30. Empirical Rule Spread
  - 1.31. Just a Warning
  - 1.32. From Empirical Rule to Normal Distribution

**AP Biology**  
Quantitative Methods: An Introduction to Descriptive Statistics  
With Brad Williamson and Jennifer Pfannerstill

AP CollegeBoard

Next >

Or even this...

- [Getting Started](#)
- MANAGE
- [Courses](#)
- [Learning Programs](#)
- [Learning Plans](#)
- [Certifications](#)
- [Catalogs](#)
- [Skills](#)
- [Users](#)
- [Reports](#)
- CONFIGURE
- [Gamification](#)
- [Badges](#)
- [Feedback](#)
- [Email Templates](#)
- [Company Info](#)
- [Billing](#)

## Reports Add

[Sample Reports](#)   [My Reports](#)   [Subscribed Reports](#)

Create various types of reports to track and monitor learning activities. Click ADD to start creating reports. Reports can be grouped together on a dashboard. You can have multiple dashboards that you can also share with other users in the system. All reports or dashboards that you create will show up under 'My Reports'.

[View Course Reports](#)

View Dashboard:  [Add Dashboard](#)

### Default Dashboard ▼

Description: My default dashboard.  
Shared With: This dashboard cannot be shared.

#### Learning Time Spent per Course - ▼

YTD  ▼

User	Time Spent
Allen Part..	1.0
MUKUL LELE	0.1
Mukul	5.5
STEVE WAUGH	0.1

#### Courses Enrolled & Completed - ▼

YTD  ▼

Course	Enrolled	Completed
Cod..	1.0	0.0
Ethi..	1.0	0.0
HR Po..	2.0	2.0
Intro..	1.0	0.0
Leave..	1.0	0.0
Soft ..	1.0	1.0
Soft ..	1.0	1.0

Source: <https://elearningindustry.com>

Forgard, K. G. (2021). "Defining quality learning in self-paced eLearning: Practices and challenges". OLC Innovate 2021

Contact  
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@kforgard  
Linkedin/kevinforgard

Thank you!  
—  
Kevin Forgard