

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



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

Session Interactive Component



<http://bit.ly/frogOLC2021>

- **Use for session activities**
- **Use to ask questions**
- **Begin with a simple introduction**

Create a definition of self-paced eLearning (SPeL)



Apply this definition to design parameters when creating self-paced elearning (SPeL).



bit.ly/frogOLC2021



Self-paced eLearning 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.

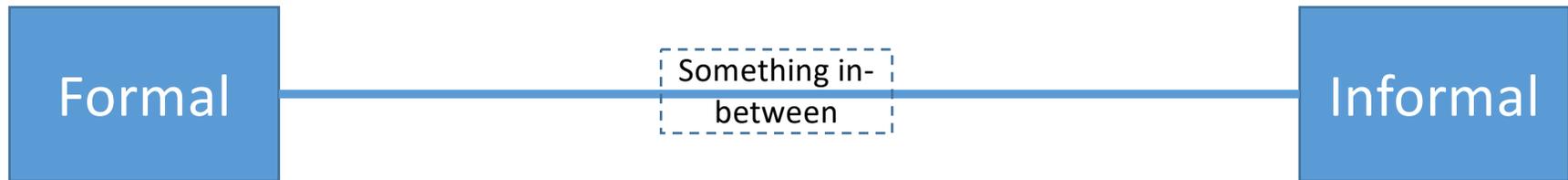




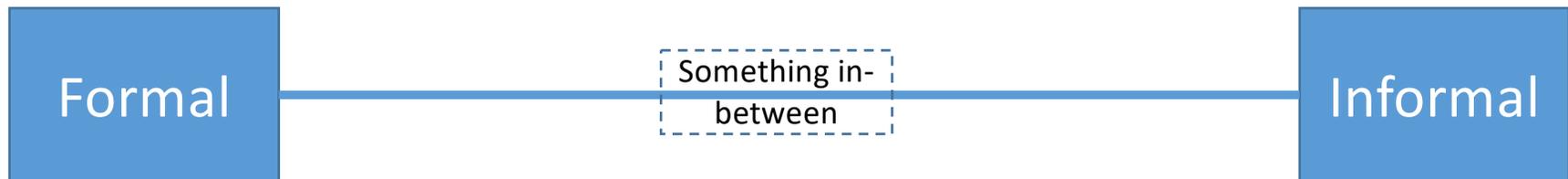
Let's take a step back...

And try to define
within our learning
experience.

Define



Activity: Establishing how SPeL fits into a spectrum between formal and informal learning



Using the sheet to type different types of eLearning and categorize them between formal or informal.

QUESTION: *Can we create a threshold of SPeL from this list?*



LINK

Establishing 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?



Davidson-Shivers, et al. (2018), Reigeluth (1999)

A Deeper Evaluation: Looking at affordances that may support SPeL

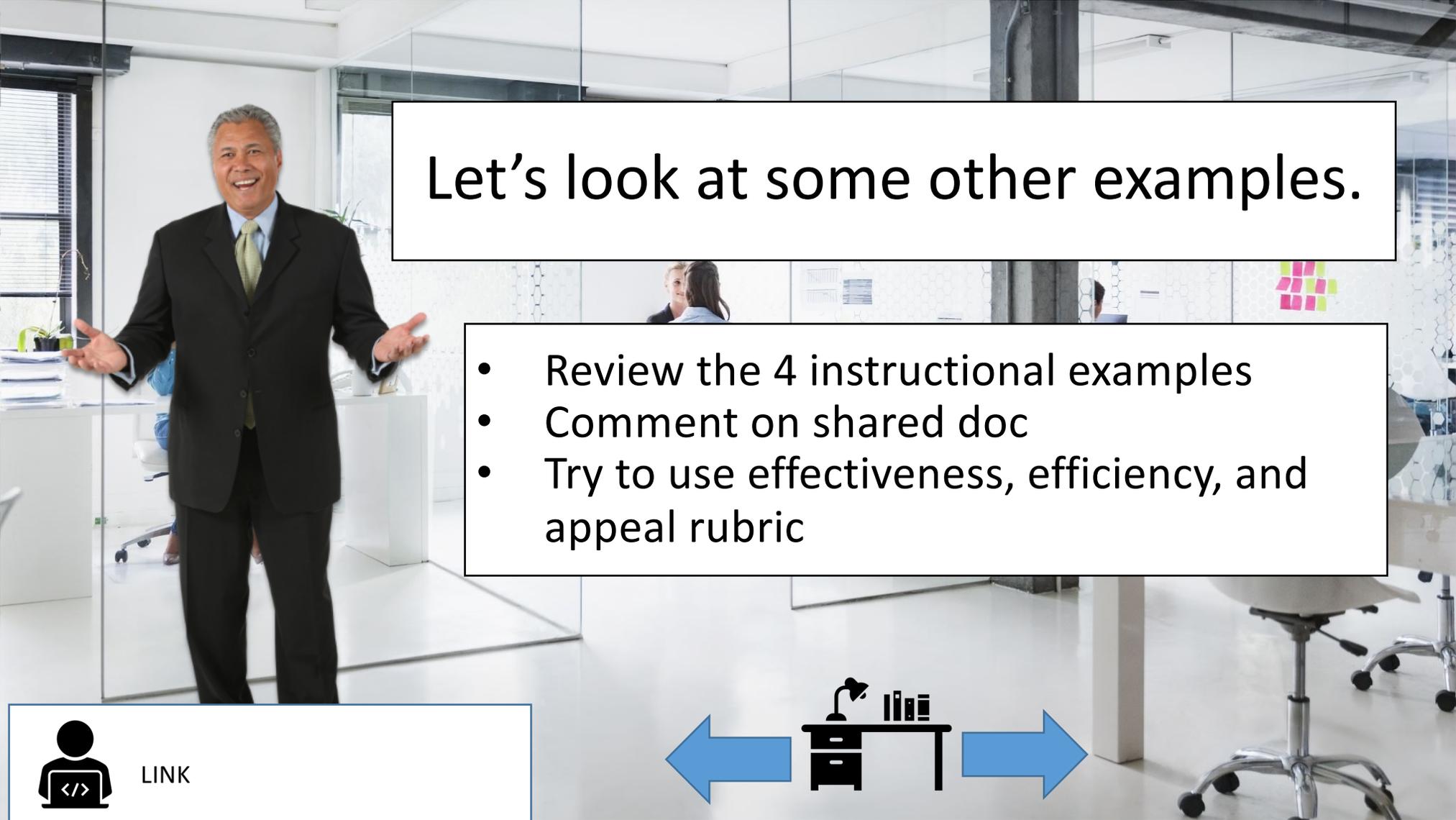
- Interactivity
- Adaptability
- Feedback
- Choice
- Nonlinear access
- Linked representations

Challenge
to SPeL

- Open-ended learner input
- Communication with other people

Checking our
notes for
questions...





Let's look at some other examples.

- Review the 4 instructional examples
- Comment on shared doc
- Try to use effectiveness, efficiency, and appeal rubric



LINK



Example 1: UW Madison – Sexual Harassment Training

Preventing Sexual Harassment and Sexual Violence at UW-Madison

A screenshot of a blue training slide titled "Preventing Sexual Harassment and Sexual Violence for Faculty and Staff". The slide features a section titled "Why is this training important to me?" which is circled in orange. This section contains three bullet points: "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.", and "Those who observe harassment, or provide support to victims are also impacted." Below the bullet points is a paragraph explaining that these statistics show the prevalence of harassment at UW-Madison and that the training aims to increase awareness and provide actions for those affected. At the bottom left, there is a source citation: "Source: U.S. Equal Employment Opportunity Commission". At the bottom center, there is a button labeled "Frequently Asked Questions" with a question mark icon and the text "(Opens in a new window)".

**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 of these situations, perhaps makes you more sensitive toward 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)



LINK

Source: University of Wisconsin – Madison Canvas

UW Madison – Sexual Harassment 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.

UW Madison – Sexual Harassment Training

Must proceed in order

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	Definition
Sexual Assault	Scenario 1
Dating and Domestic Violence	Scenario 2
Stalking	
Consensual Relationships Policy	

Definition

- 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](#)

CC

Search... [Speaker] [Play] [Refresh] [PREV] [NEXT]

Example 2 - Scrum Alliance: Scrum Foundations

- Watch videos to whatever order
- After watching a credit is received

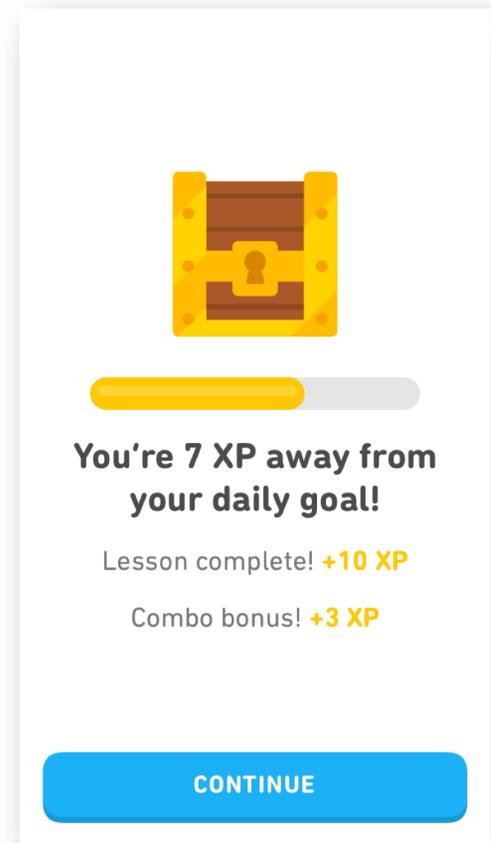


LINK

Source: <https://www.scrumalliance.org/>

The screenshot shows the Scrum Alliance website's eLearning series page. At the top, there's a navigation bar with 'ScrumAlliance' logo and menu items like 'Certification', 'Agile Organizations', 'Events', 'Resources', 'About Scrum', and 'LOG IN'. The main heading is 'Scrum Foundations eLearning Series'. Below it, a paragraph explains that the 14-part series is based on the Scrum Guide. A list of sections follows: 'Scrum Theory and Values' (05:47), 'Scrum Values' (3:16), 'Scrum Roles' (1:42), 'Scrum Roles' (2:39), 'Scrum Events' (3:34), 'Sprint Planning Meeting' (7:35), 'Daily Scrum' (3:40), 'Sprint Review' (2:35), 'Sprint Retrospective' (2:25), and 'Scrum Artifacts' (3:48), 'Product Backlog' (2:20), 'Product Backlog Refinement' (2:16), 'Sprint Backlog' (2:33), and 'The Increment and Definition of Done' (01:58). A recommendation to watch in order and download a transcript is provided. Below the text are tabs for 'Scrum Theory and Values', 'Scrum Roles', 'Scrum Events', and 'Scrum Artifacts'. The main content area features a diagram titled 'Scrum (n): A framework' showing a triangle with 'Team Decides' at the base, 'Roles' at the top, and 'Events' on the left. A 'Rules' box with checkmarks and red X's is on the left. 'Artifacts' like 'Product Backlog' and 'Sprint Backlog' are on the right. A text box states: 'If the team or the organization were to decide to remove or alter any of the components or their rules,'. At the bottom, a video player shows '01 - Scrum Theory' and '02 - Scrum Values' with a 1:39 duration. A note says 'Watching all videos in this series earns you one Scrum Education Unit (SEU®) credit.' and a copyright notice for 2017 Peter Green is at the very bottom.

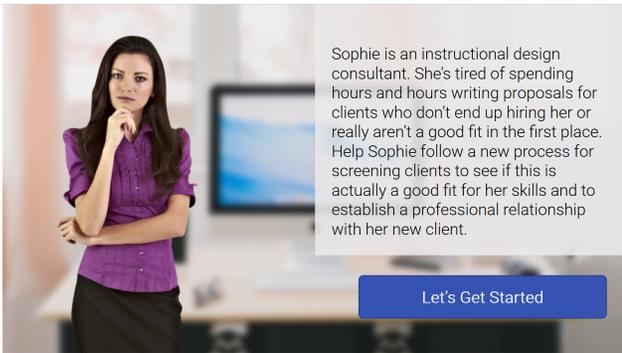
Example 3 - Duo Lingo App: Spanish



LINK

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

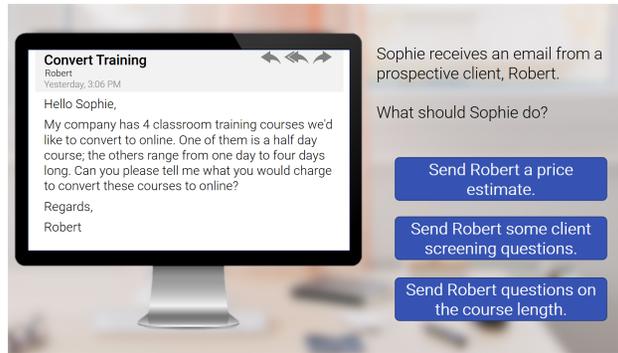
Example 4 - Scenario-based branched learning



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.

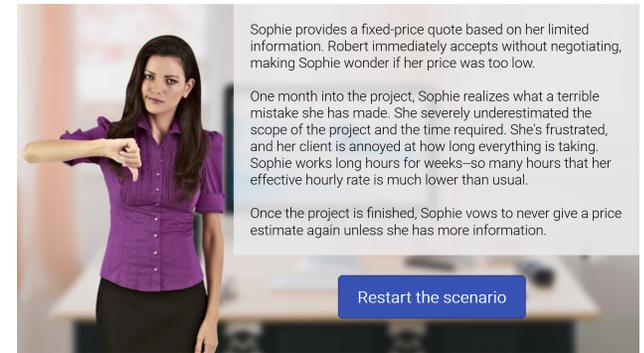
What should Sophie do?

Send Robert a price estimate.

Send Robert some client screening questions.

Send Robert questions on the course length.

Choice page



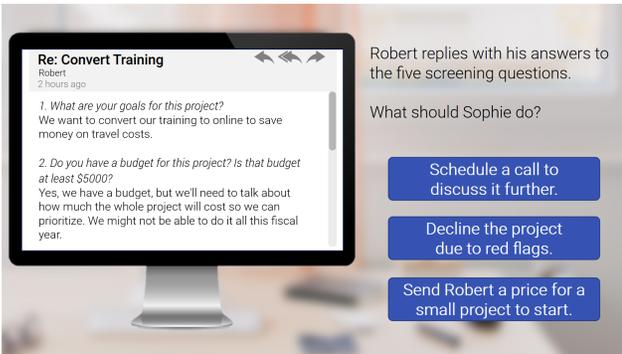
Sophie provides a fixed-price quote based on her limited information. Robert immediately accepts without negotiating, making Sophie wonder if her price was too low.

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.

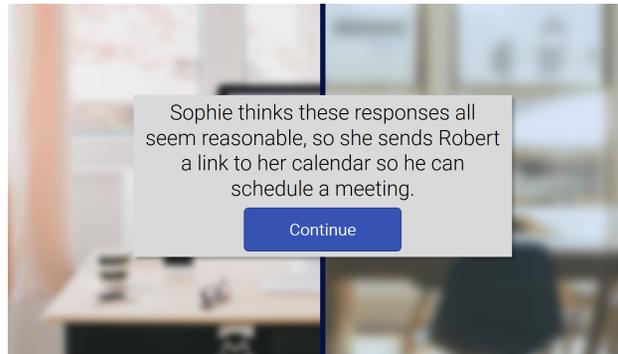
What should Sophie do?

Schedule a call to discuss it further.

Decline the project due to red flags.

Send Robert a price for a small project to start.

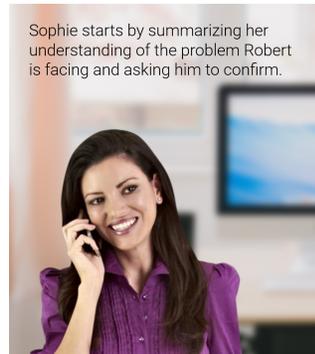
Choice page 2



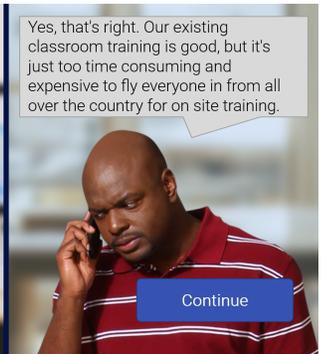
Sophie thinks these responses all seem reasonable, so she sends Robert a link to her calendar so he can schedule a meeting.

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



LINK

<https://www.syniadlearning.com>

Checking our
notes for
questions...



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

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

THINK ALOUD: What influences certain design choices?



LINK

Extracting SPeL from JPeL (just plain eLearning)

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

(Design for best cognitive impact)

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

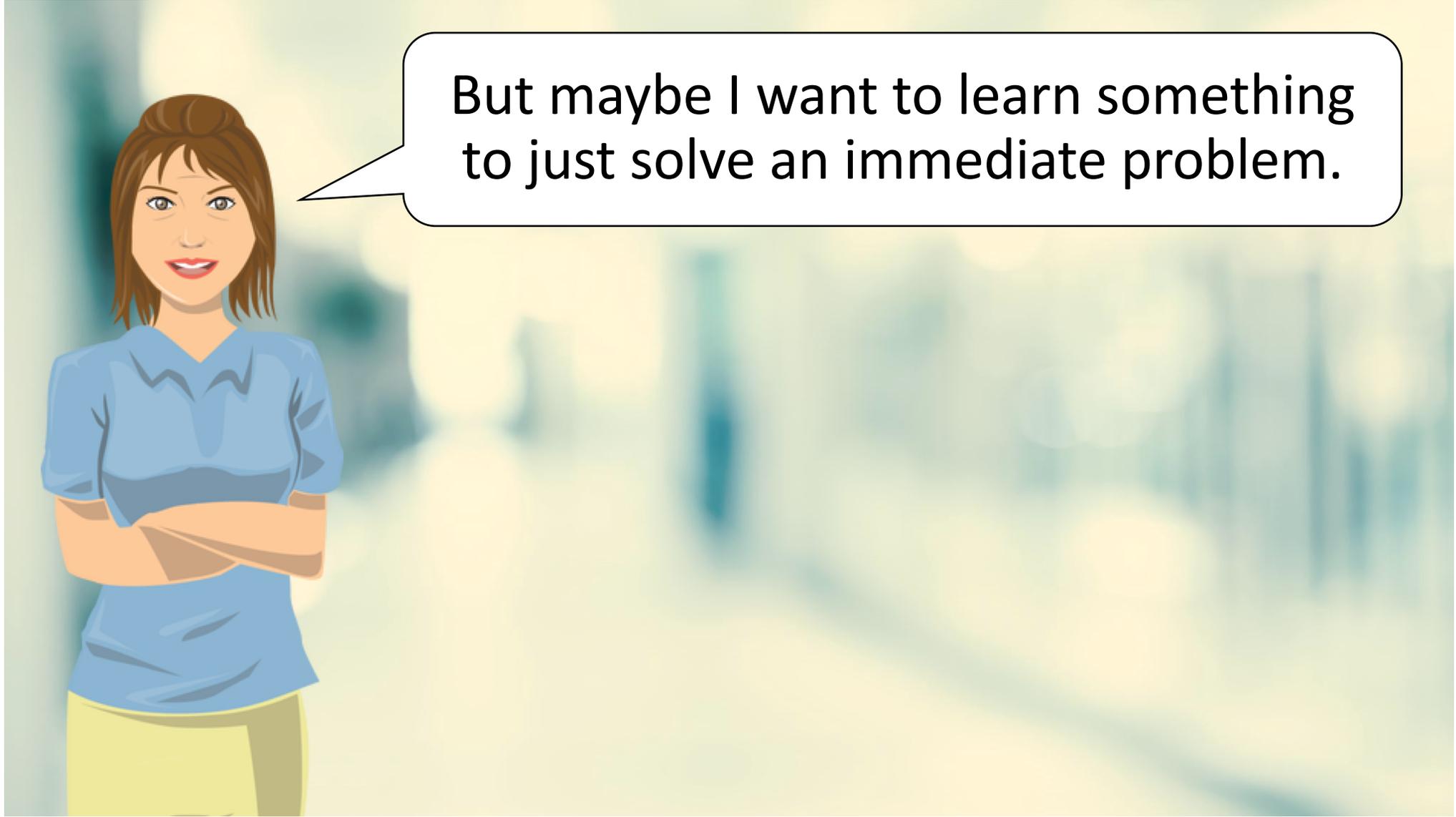
Extracting SPeL from JPeL (just plain eLearning)

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...

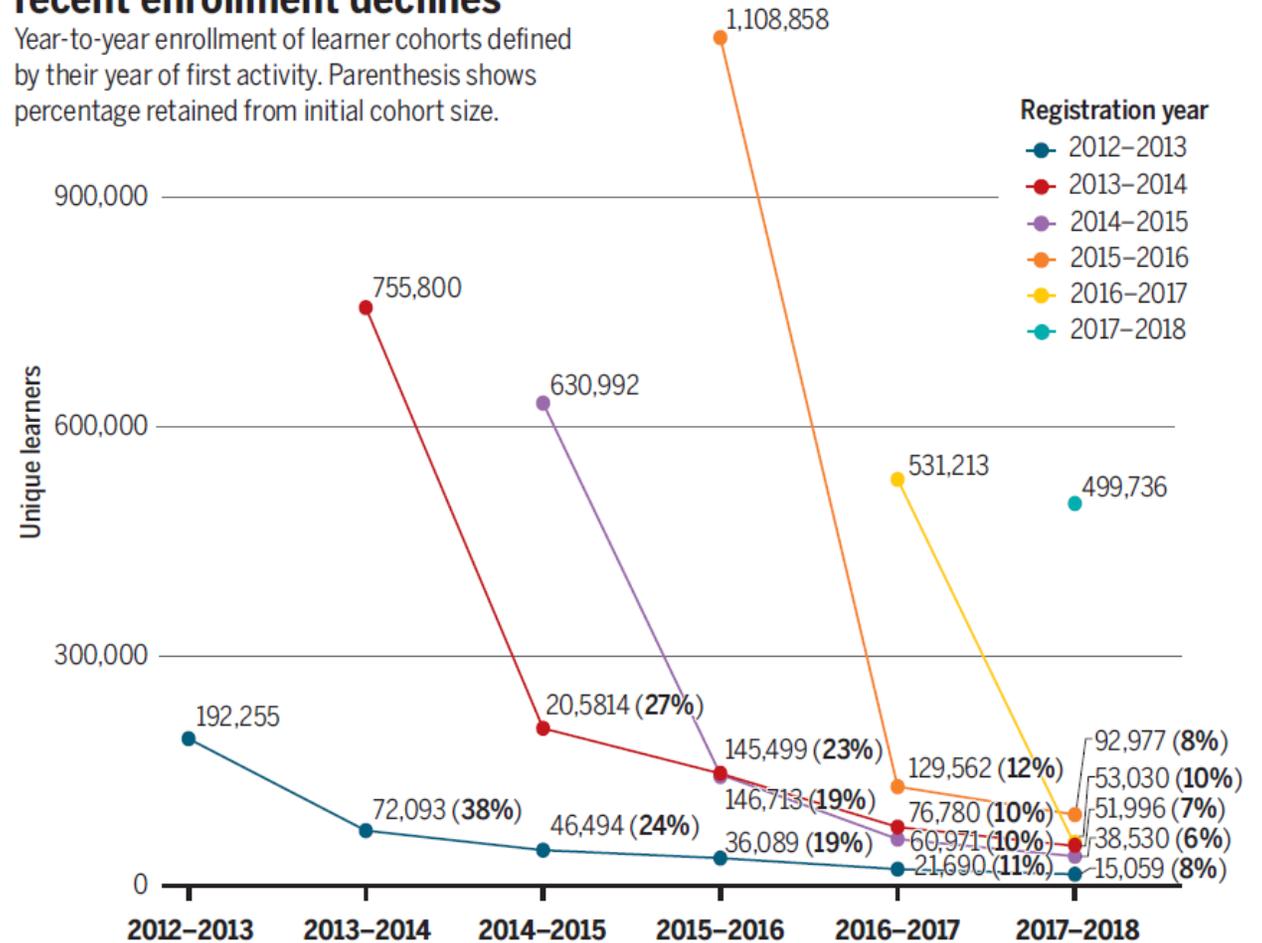
An illustration of a woman with brown hair tied back, wearing a blue short-sleeved shirt and a yellow skirt. She has her arms crossed and is looking towards the viewer. A speech bubble originates from her, containing the text. The background is a blurred, warm-toned indoor setting.

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.



MOOC Completion Rate - Lederman (2019)

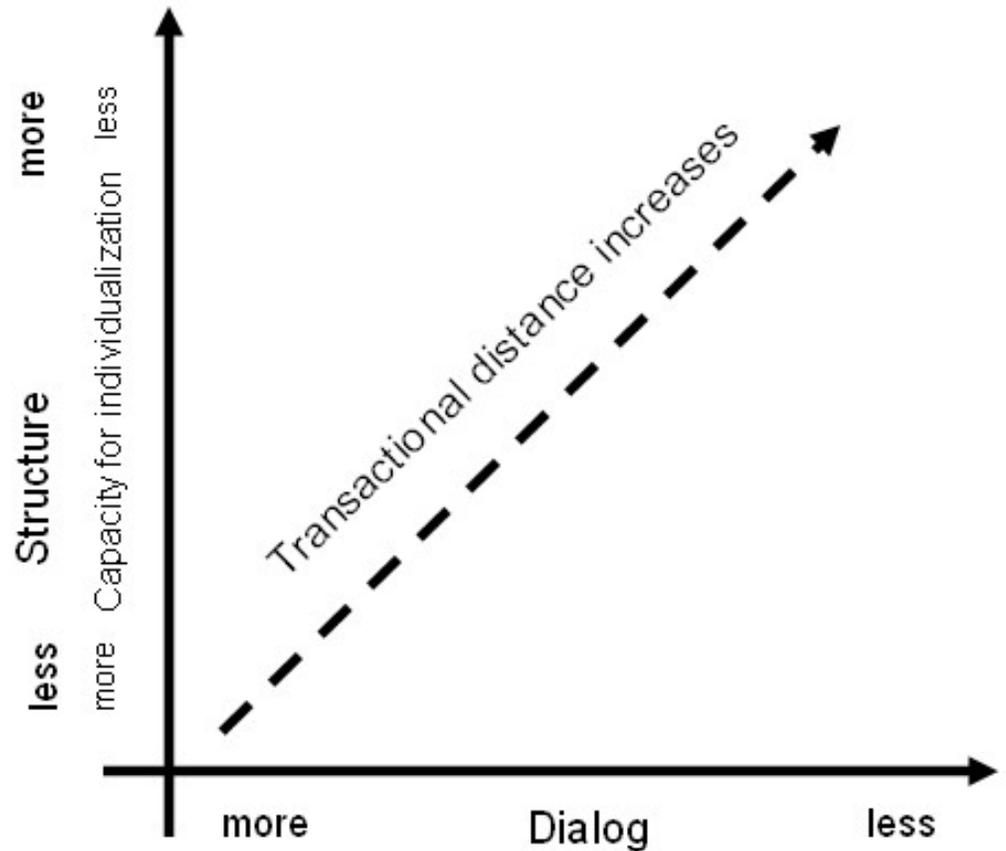


How else might we start to think about this phenomenon of self-paced eLearning?

Another perspective

Theory of Transactional Distance (TTD)

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



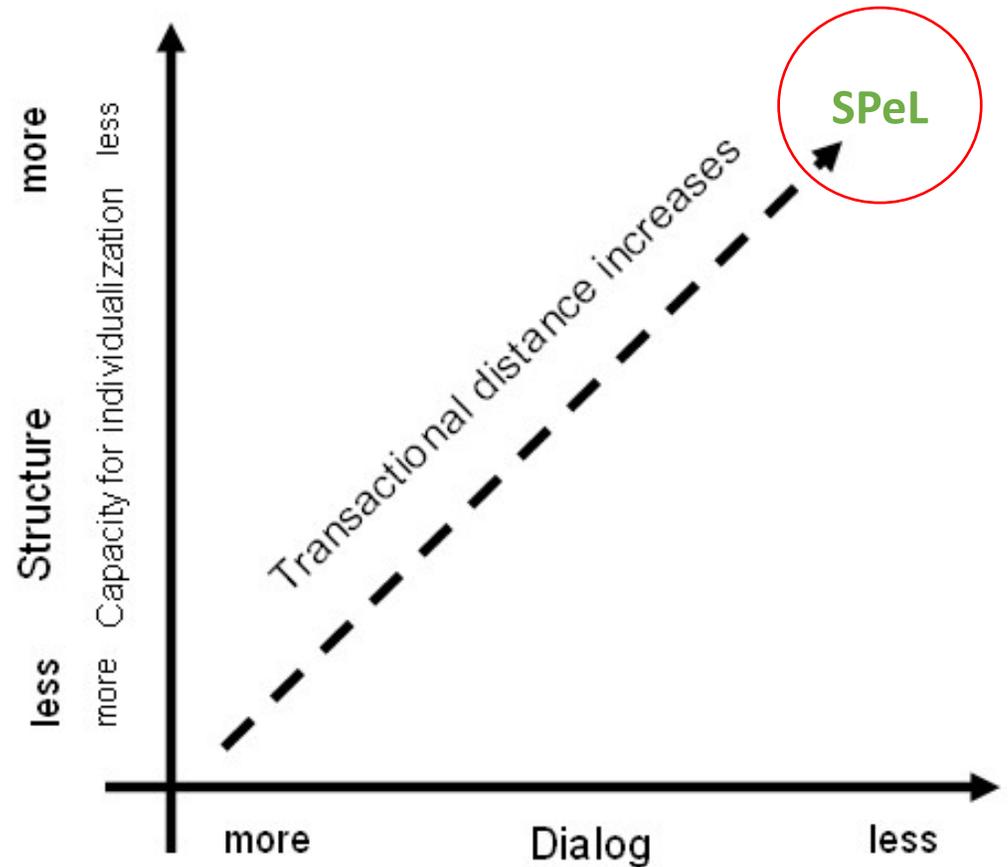
Moore (1997)

Saba & Shearer (2018)

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

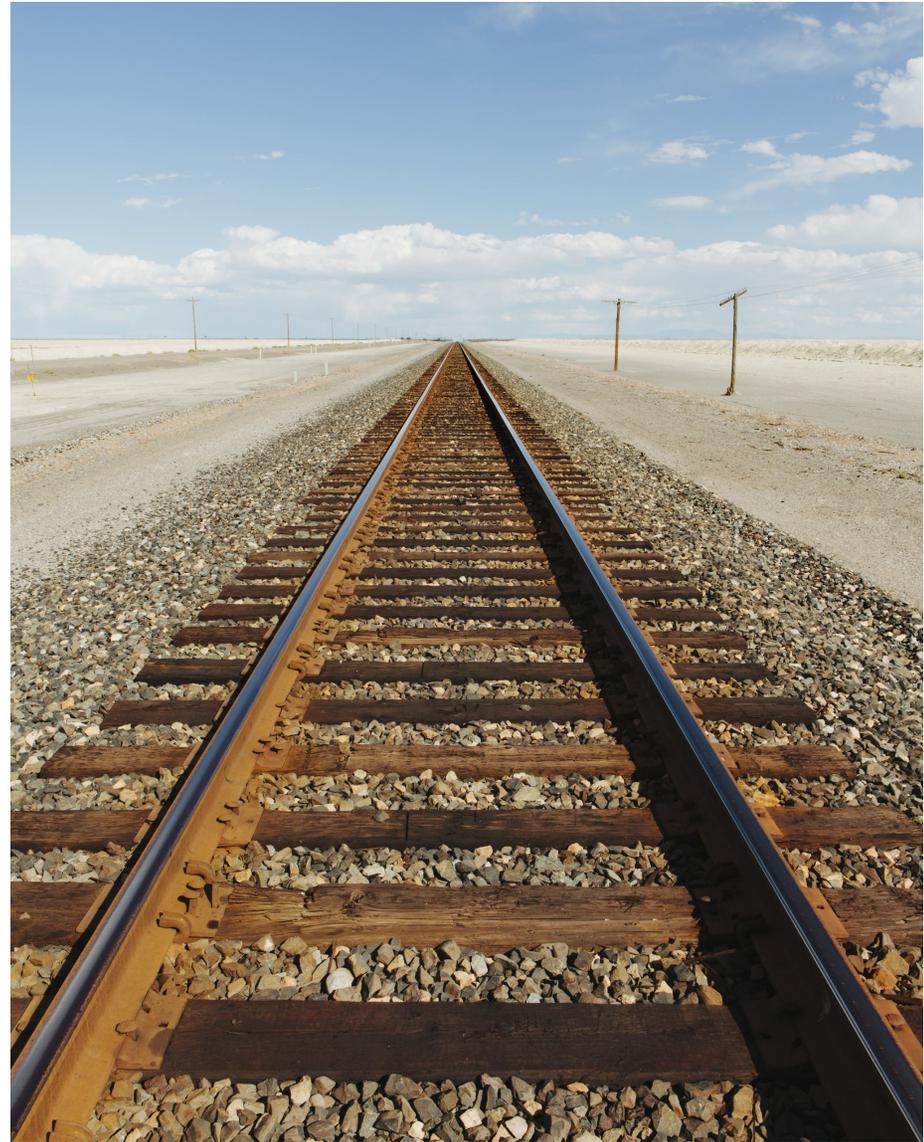
- Structure – highly structured
- Dialogue – none
- Autonomy – limited learner choice

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



SPeL Design Considerations

STRUCTURE: Adaptive design but also restrictive

- Calling out the “Modality Principle”
- Loss of autonomy when forced to listen
- Design for interactivity over passive listening
- May need to break the “Redundancy Principle”
- Adaptive learning can really mean “testing out”

Clark & Mayer (2016)



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

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

SPeL Design Considerations

AUTONOMY: Need to train learners to be self-regulated

- Real world tasks
- Guide learners to identify goals and how to achieve them
- Use assessments to guide learners
- Clue learners into how course design may impact their learning

Huh & Regiulth (2017)
Watson (2017)

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.

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

[Frequently Asked Questions](#)

- 🔖 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:

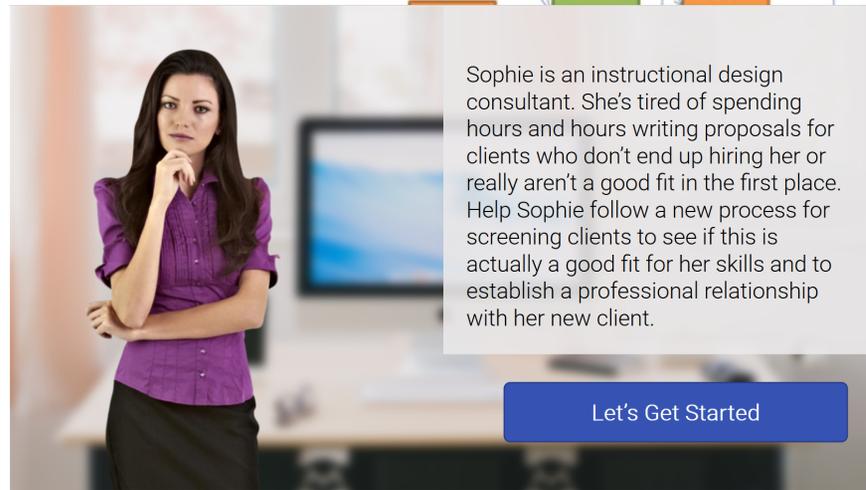
<ul style="list-style-type: none">• Section One: Definitions and Prevention Strategies 30 minutes<ul style="list-style-type: none">◦ We want to increase your awareness. Please be thorough when you encounter scenarios. Consider how those involved in	<ul style="list-style-type: none">• Section Two: Being Supportive and Knowledgeable 12 minutes<ul style="list-style-type: none">◦ We want you to know how to respond or help. Focus on actions you may be able to take. Learn "The 3 Ds".	<ul style="list-style-type: none">• Section Three: Reporting Options and Campus Policies 22 minutes<ul style="list-style-type: none">◦ As you explore this section you should leave with confidence that there are support options if you or someone you know ever
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Source: University of Wisconsin – Madison

SPeL Design Considerations

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

- May add cognitive load to learner resulting in poor decisions
- More autonomy may impact efficiency
- Look to Heutagogy (self-determined learning) for non-linear design



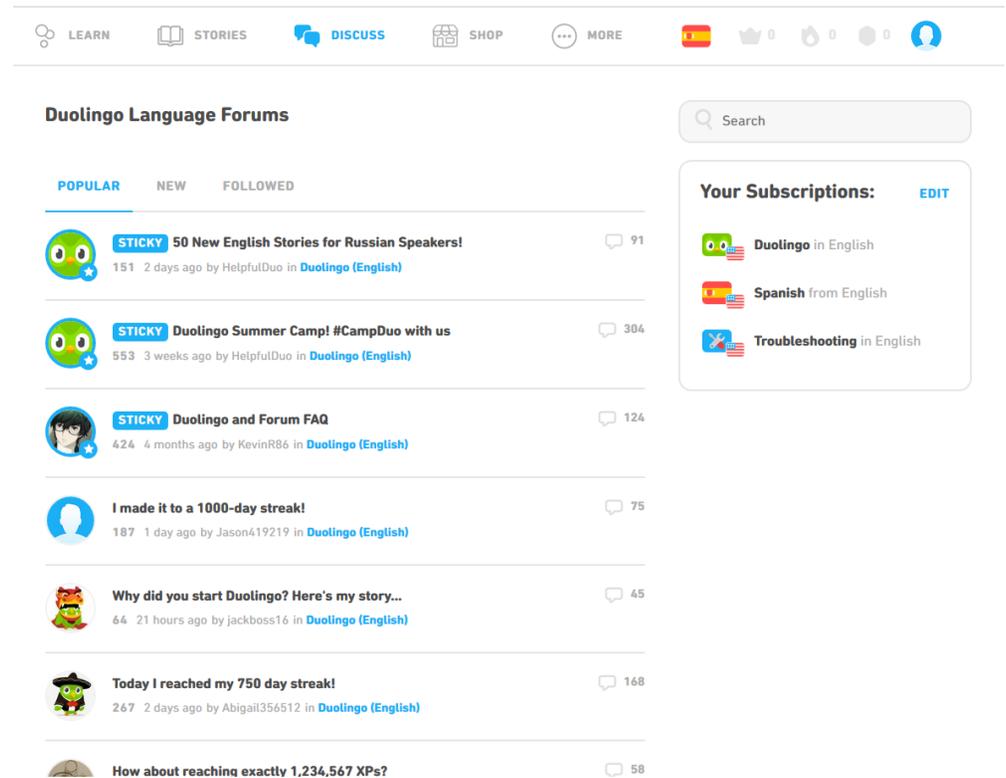
Clark & Mayer (2016)
Blaschke & Hase (2019)

<https://www.syniadlearning.com>

SPeL Design Considerations

DIALOGUE: **The missing piece in SPeL. How can a shared understanding occur?**

- Co-creation of knowledge (Connectivism)
- Difficult to capture
- Learner needs to know when to reach out
- Missing from many SPeL courses



The screenshot shows the Duolingo Language Forums interface. At the top, there are navigation icons for LEARN, STORIES, DISCUSS, SHOP, and MORE. Below the navigation is the forum title "Duolingo Language Forums" and a search bar. The forum is categorized into POPULAR, NEW, and FOLLOWED. The list of posts includes:

- STICKY** 50 New English Stories for Russian Speakers! (91 replies, 2 days ago)
- STICKY** Duolingo Summer Camp! #CampDuo with us (304 replies, 3 weeks ago)
- STICKY** Duolingo and Forum FAQ (124 replies, 4 months ago)
- I made it to a 1000-day streak! (75 replies, 1 day ago)
- Why did you start Duolingo? Here's my story... (45 replies, 21 hours ago)
- Today I reached my 750 day streak! (168 replies, 2 days ago)
- How about reaching exactly 1,234,567 XPs? (58 replies)

On the right side, there is a "Your Subscriptions:" section with an "EDIT" button, listing subscriptions for Duolingo in English, Spanish from English, and Troubleshooting in English.

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

Design and Implementation Challenges for SPeL

Accessibility

Equity

Learner
Motivation

Fidelity



Is “Click Next” effective, efficient, and appealing?

Menu Transcript Resources

1. Quantitative Methods: An I...
1.1. AP Biology | Quantitati...
1.2. Navigating the Online ...
1.3. Your Presenters
1.4. Introduction: The Chall...
1.5. Goals of This Online ...
1.6. A Caveat
1.7. Designing Instruction: ...
1.8. Double Duty with the ...
1.9. Artificial Selection Lab...
1.10. Artificial Selection La...
1.11. Artificial Selection La...
1.12. Artificial Selection La...
1.13. Artificial Selection La...
1.14. Data Exploration: Cot...
1.15. A Problematic Graph
1.16. The More Useful Hist...
1.17. Check for Understan...
1.18. Generating Questions
1.19. Check for Understan...
1.20. Introducing Some Ba...
1.21. The Sample Mean
1.22. Capturing Variation
1.23. Predicting: Standard ...
1.24. Graphic Representati...
1.25. Predicting: Populatio...
1.26. A Normal Curve
1.27. Empirical Rule?
1.28. Empirical Rule Simula...
1.29. From Empirical Rule t...
1.30. Empirical Rule Sprea...
1.31. Just a Warning
1.32. From Empirical Rule t...

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

AP CollegeBoard

Next >

Source: College Board AP Central

Or even this...

Amazing Trainings Trial Version 18 Days left Buy Now

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: Default Dashboard Add Dashboard

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

Learning Time Spent per Course
YTD All

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

Courses Enrolled & Completed
YTD All

Course	Enrolled	Completed
Code..	1.0	0.0
Ethic..	1.0	0.0
HR Po..	2.0	0.0
Intro..	1.0	0.0
Leave..	1.0	0.0
Soft..	1.0	0.0
Soft..	1.0	0.0

Source: <https://elearningindustry.com>



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Thank you!
—
Kevin Forgard