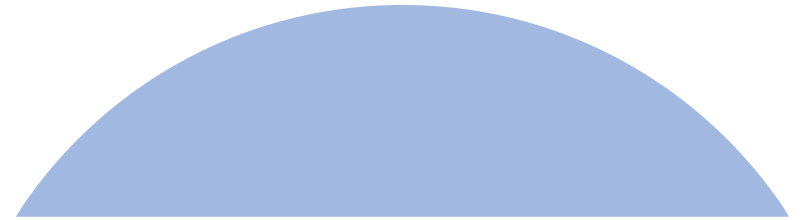




# The Future of Online Learning

Diana Laurillard

UCL Knowledge Lab



**Why** do we need  
high quality  
online learning?



**What** counts as  
high quality  
online learning?



# Outline

Why do we need high quality online learning?

What counts as high quality online learning?

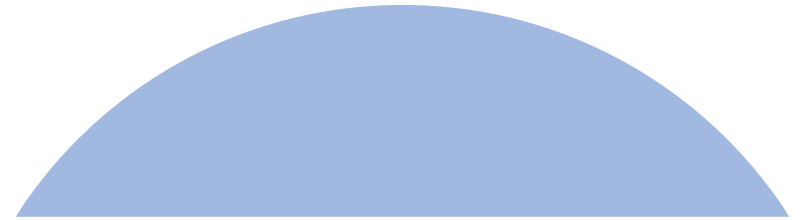
What makes a good online learning design?

Building knowledge about high quality online learning





Why do we need high  
quality online learning?



# The UN Sustainable Development Goals



Quality education for all underpins all the SDGs

# Why do we need high quality online learning?

## Pandemics

Globally, over 1.2 billion children are out of the classroom

All university students will be studying at least partly on line this year

A collaborative global approach to health and wellbeing requires universal education

## Sustainability

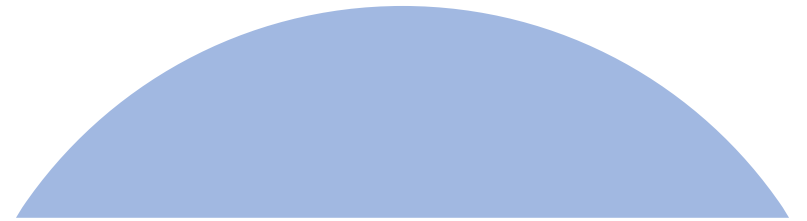
Around 2.4% of global CO2 emissions come from aviation. The industry is responsible for around 5% of global warming.

Globally, only 20% of the population have ever taken a flight. We frequent flyers contribute a very disproportionate share of emissions.

Reducing air travel is one of the most effective things individuals can do to shrink their carbon footprints.



What counts as high  
quality online learning?



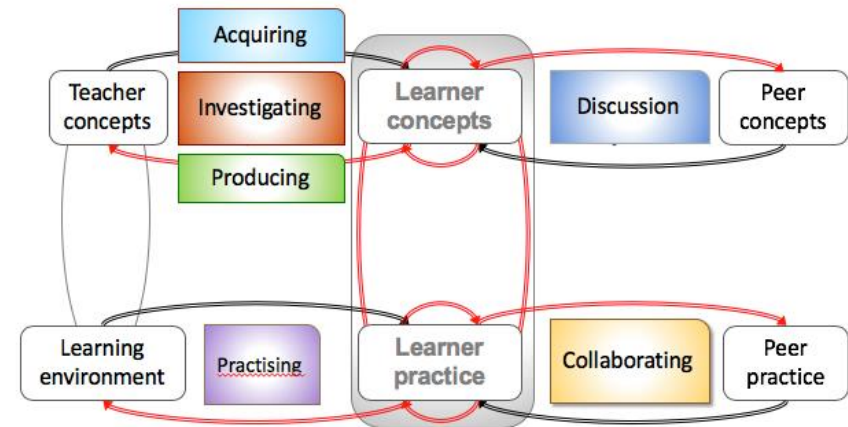
# What counts as high quality learning?

## The Conversational Framework

Derived from theories and research on learning and teaching (Laurillard, 2002, 2012)

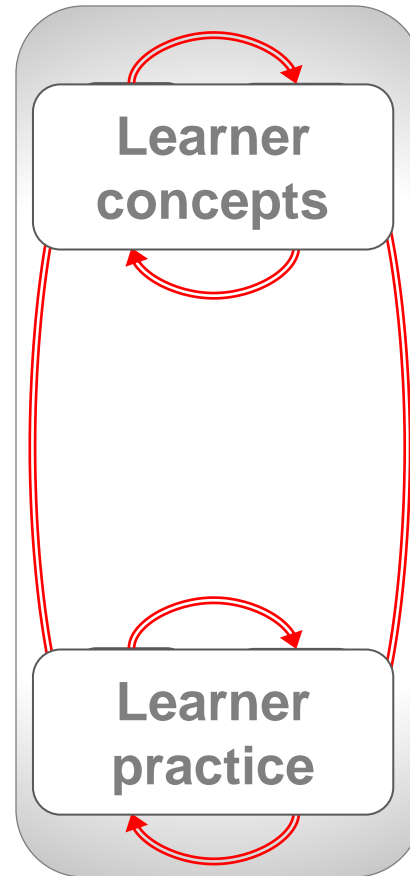
To represent the teaching-learning process as

- a series of iterative exchanges
- between the learner and a 'teacher' and
- between a learner and their peers
- at two levels of concepts and practices

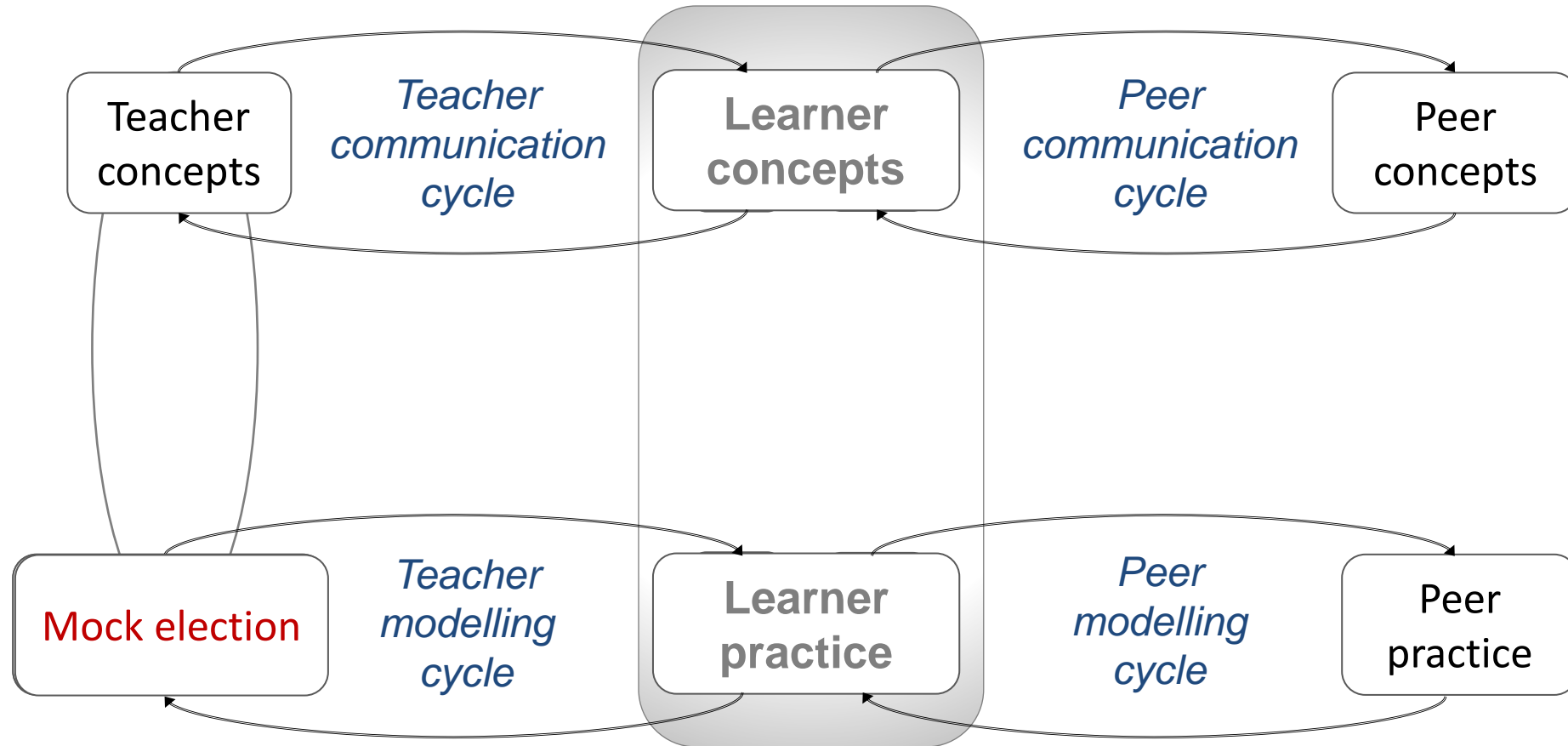




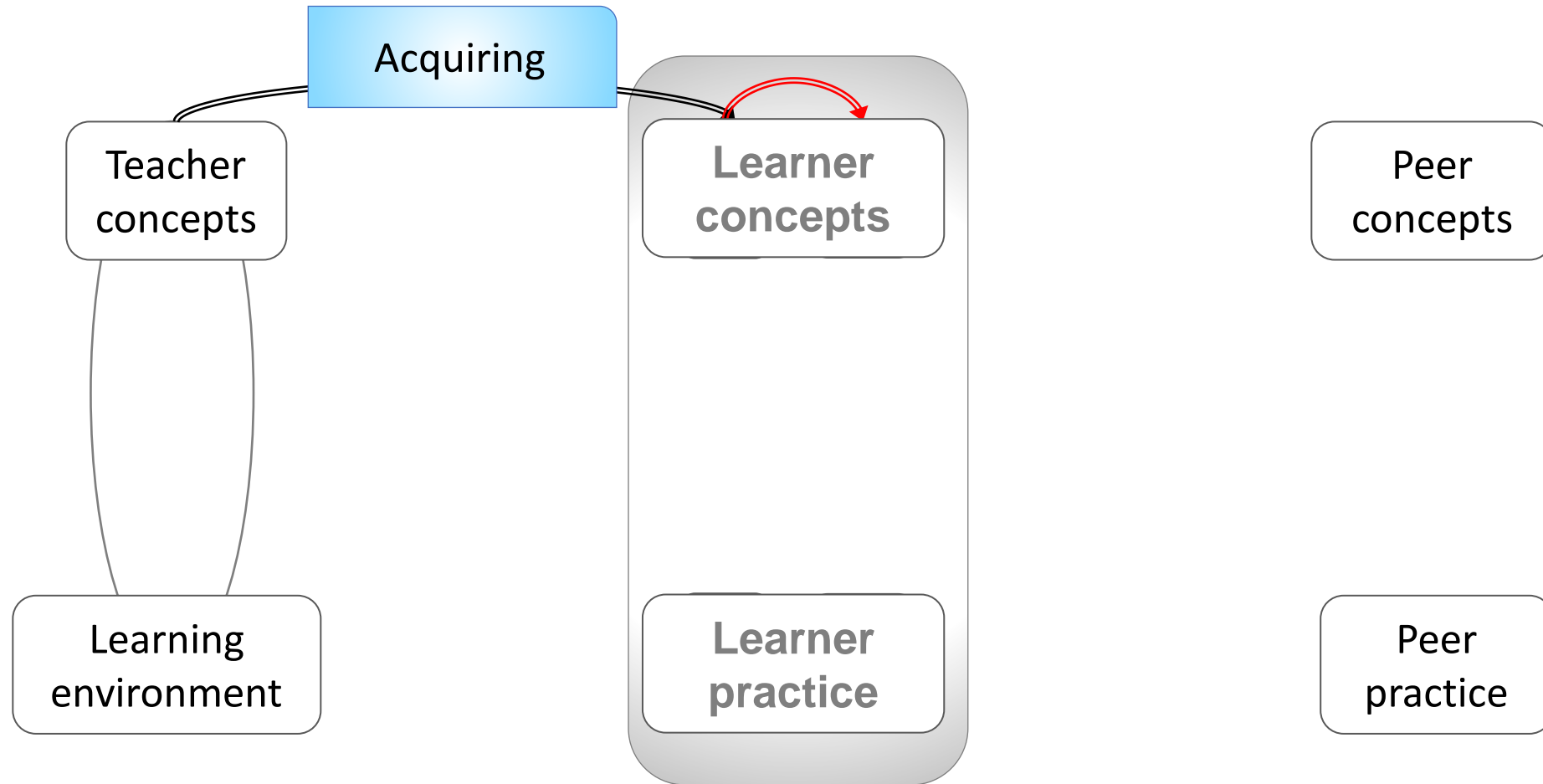
# What does it take to learn in formal education?



# What does it take to learn in formal education?

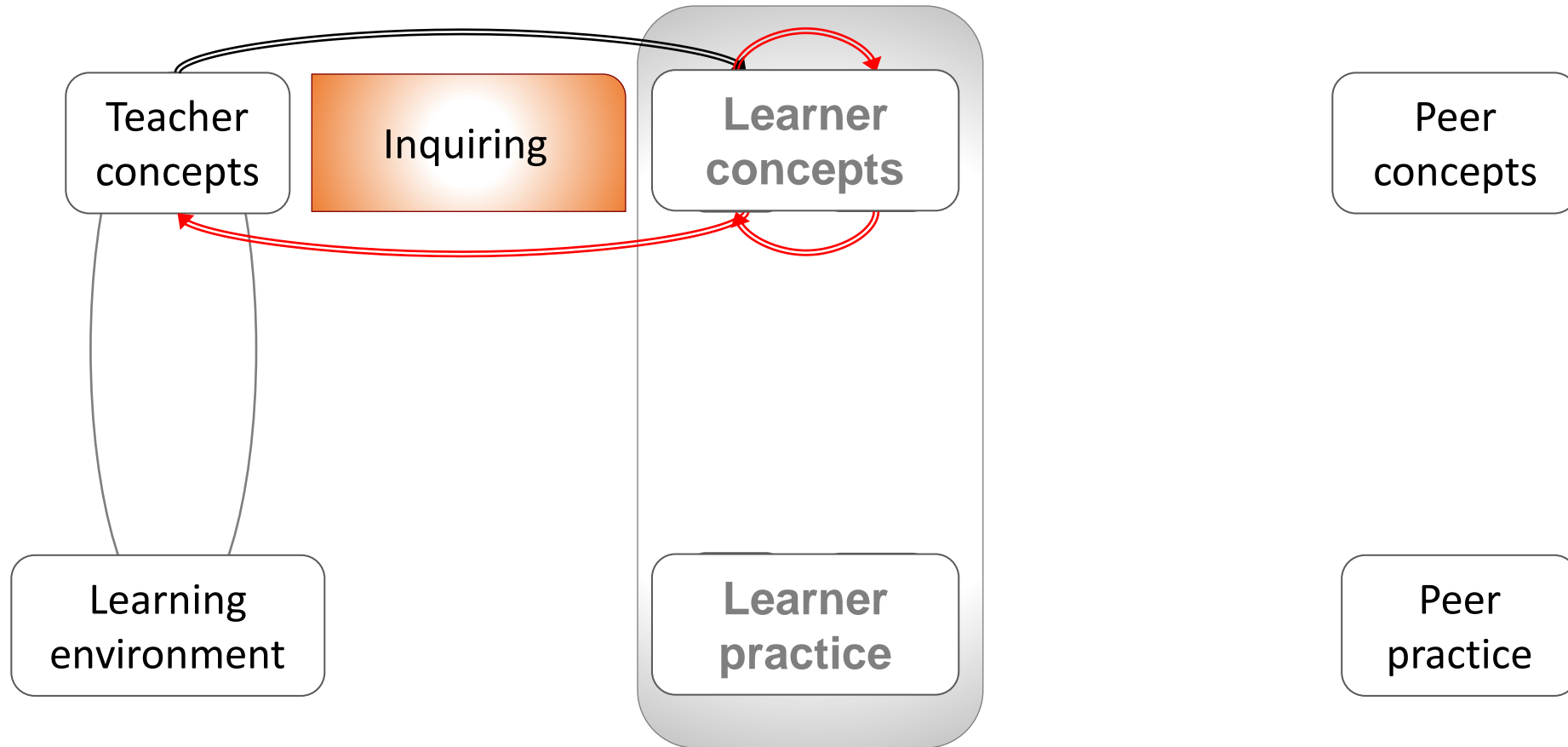


# Types of learning mapped to the framework



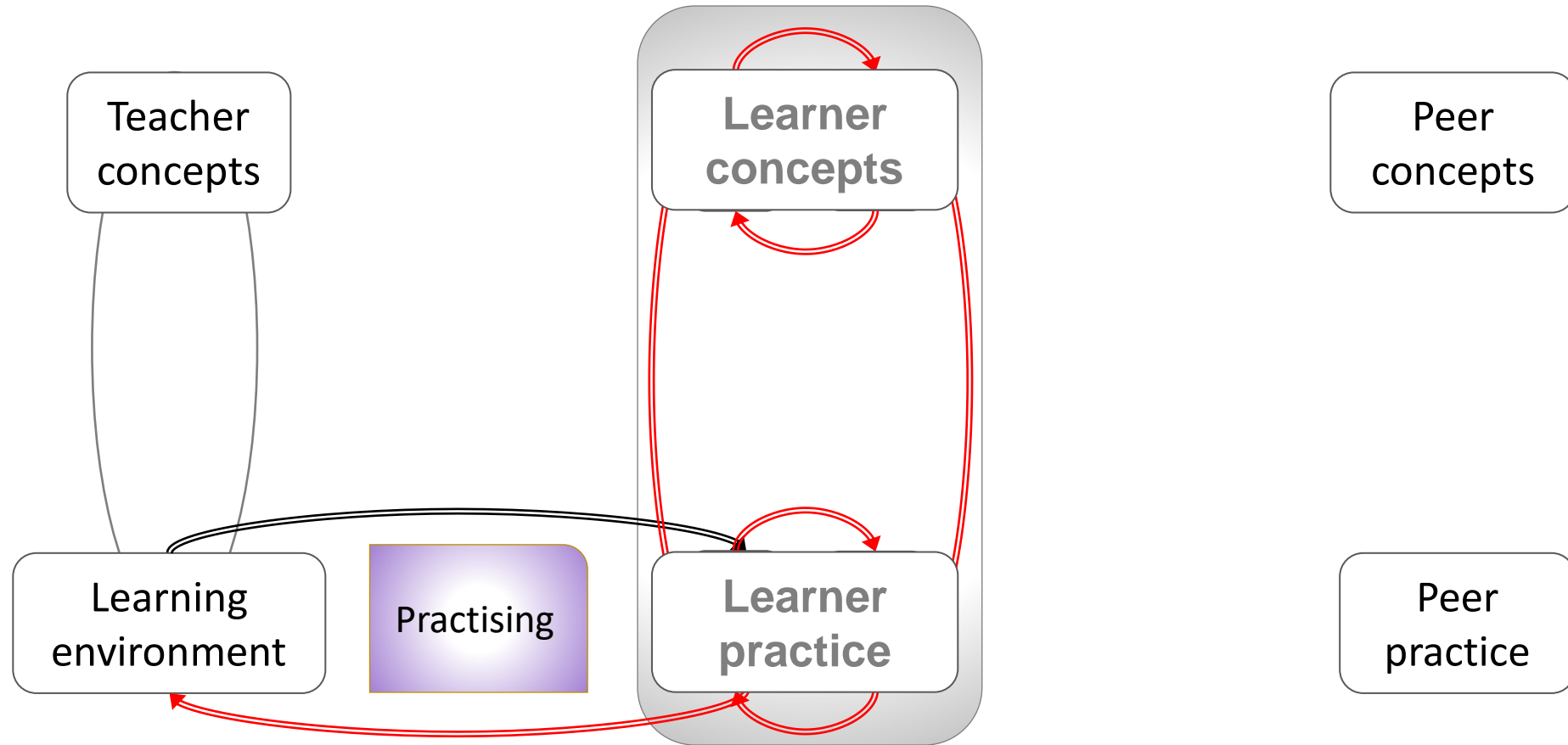
Learning through 'acquisition'

# Types of learning mapped to the framework



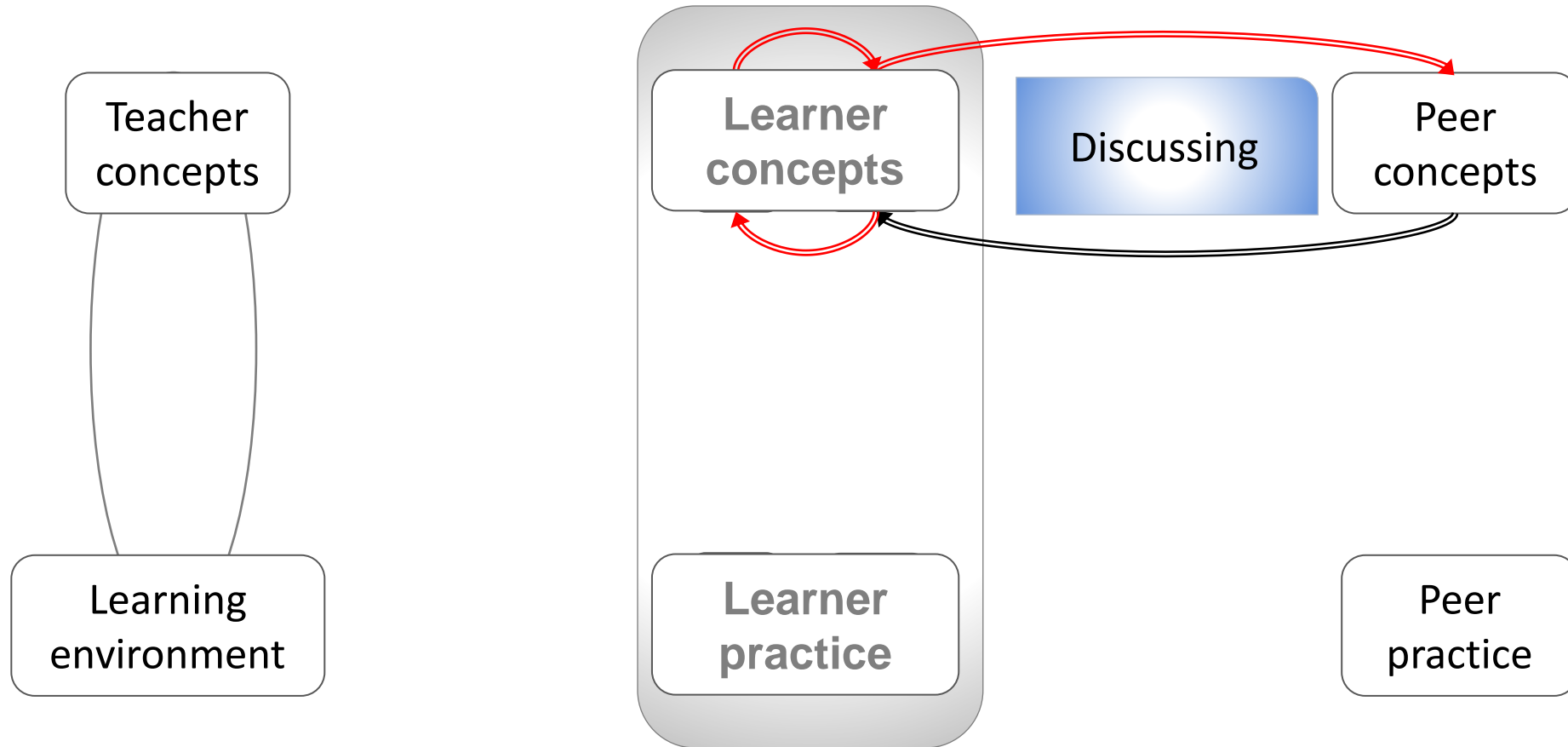
Learning through 'inquiry'

# Types of learning mapped to the framework



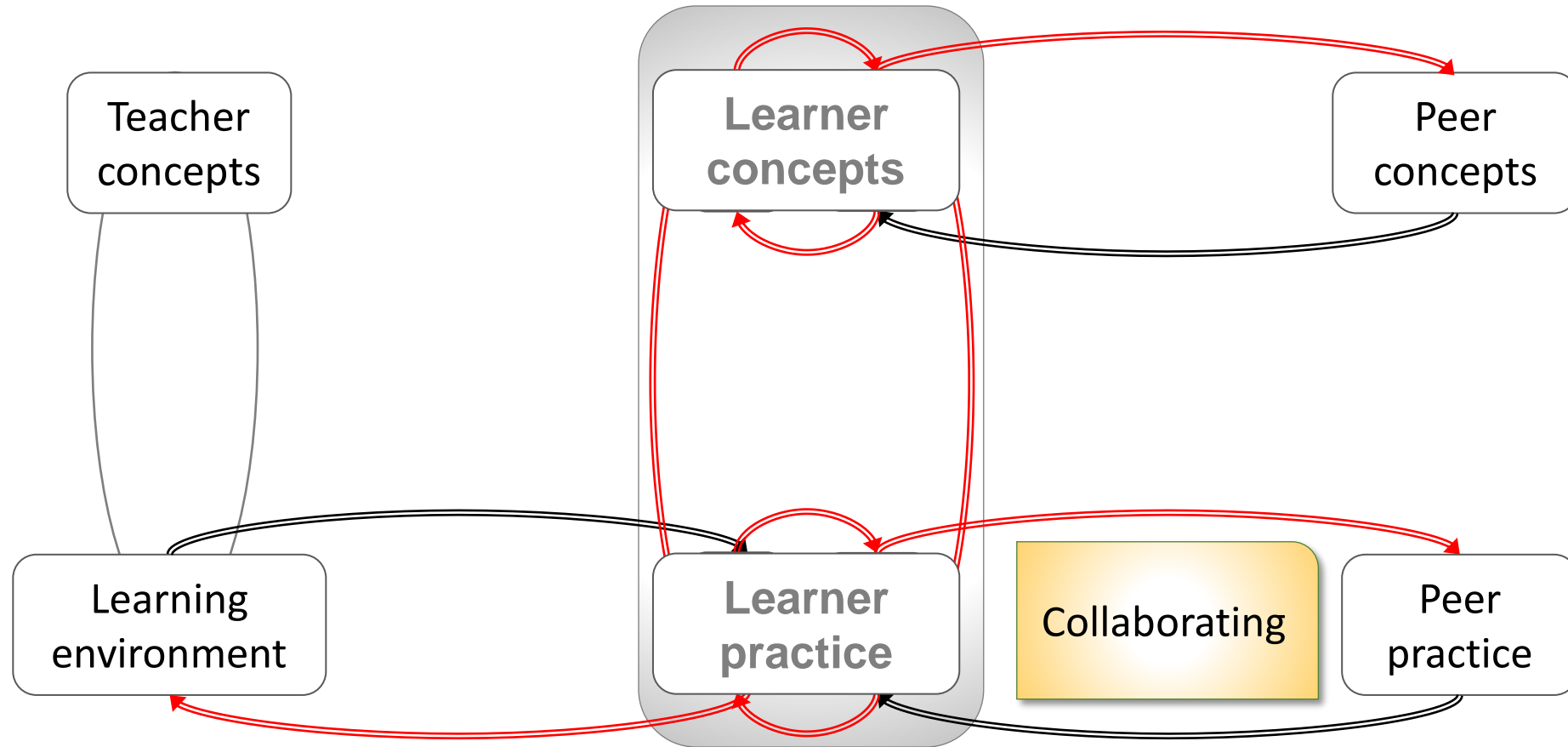
Learning through 'practice'

# Types of learning mapped to the framework



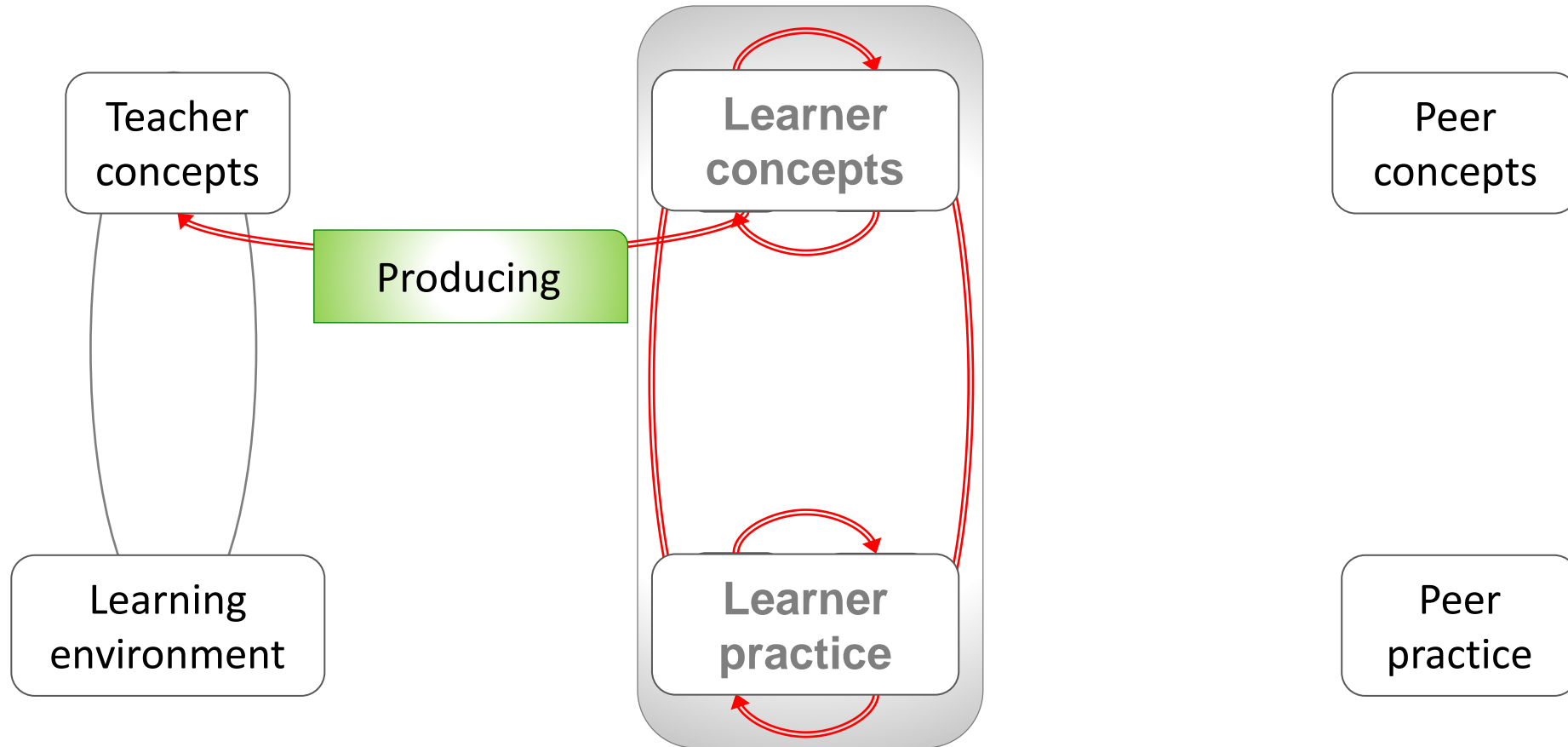
Learning through 'discussion'

# Types of learning mapped to the framework



Learning through 'collaboration'

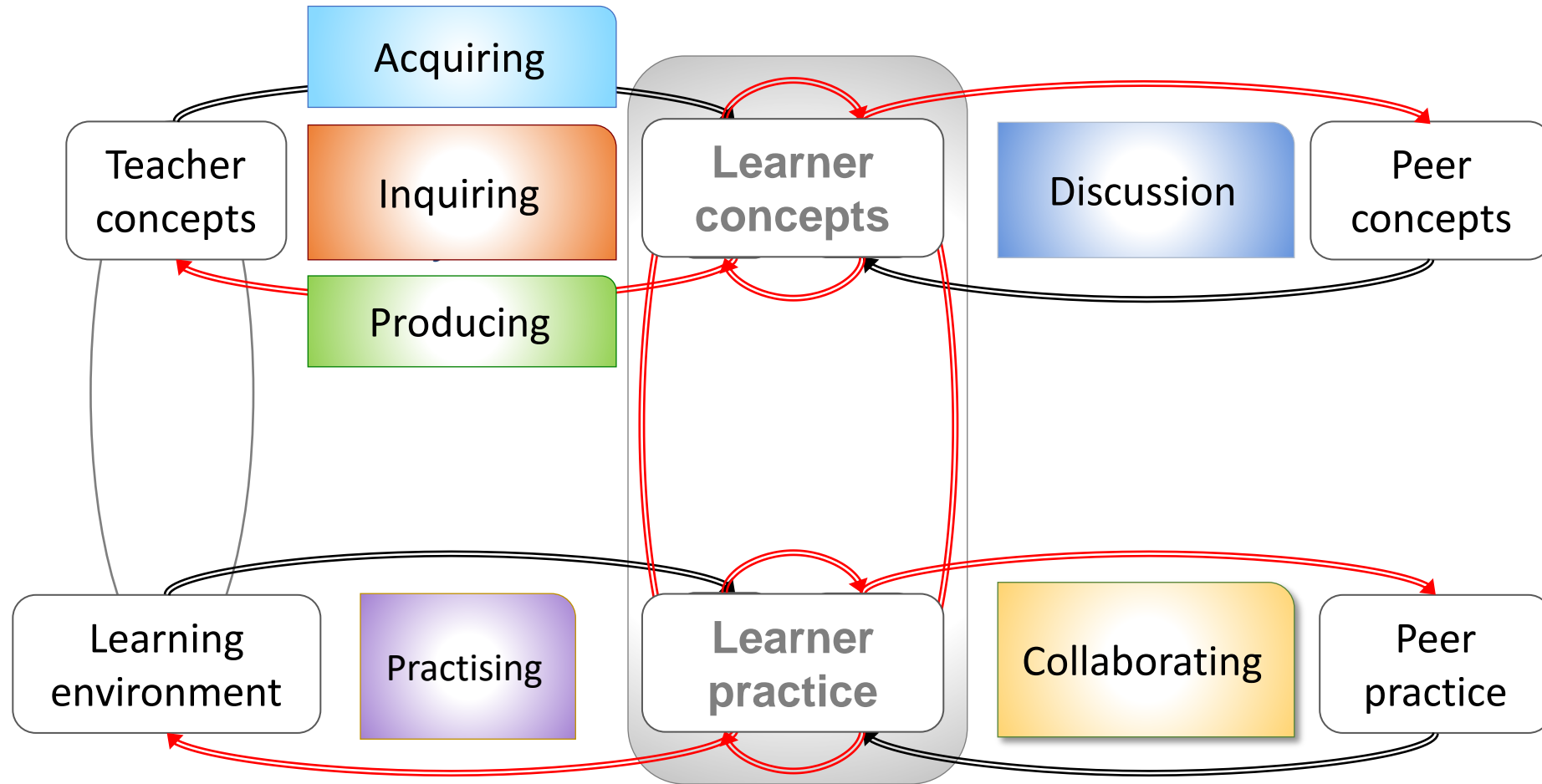
# Types of learning mapped to the framework



Learning through 'production'

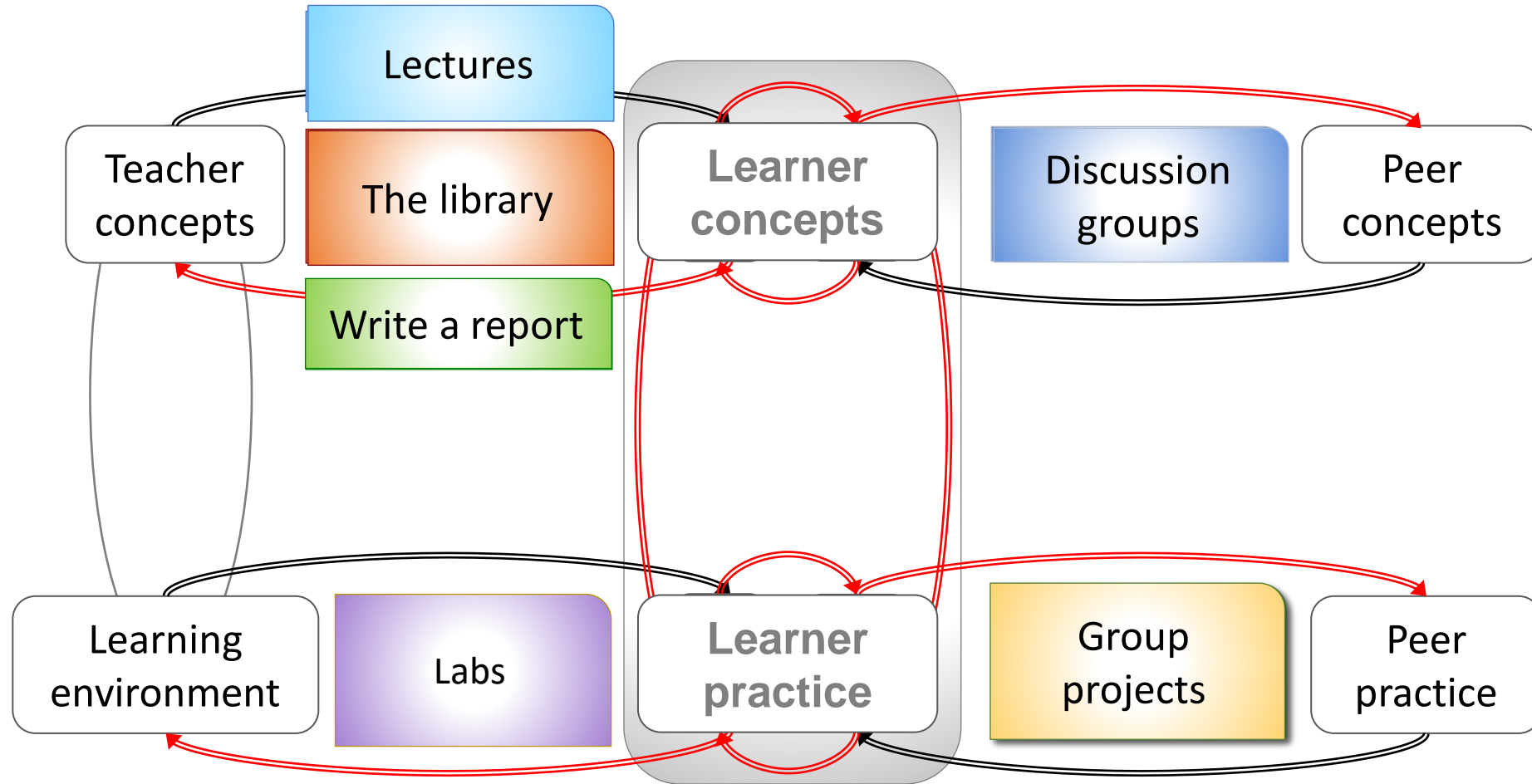


# How does technology help? *Conventional methods*



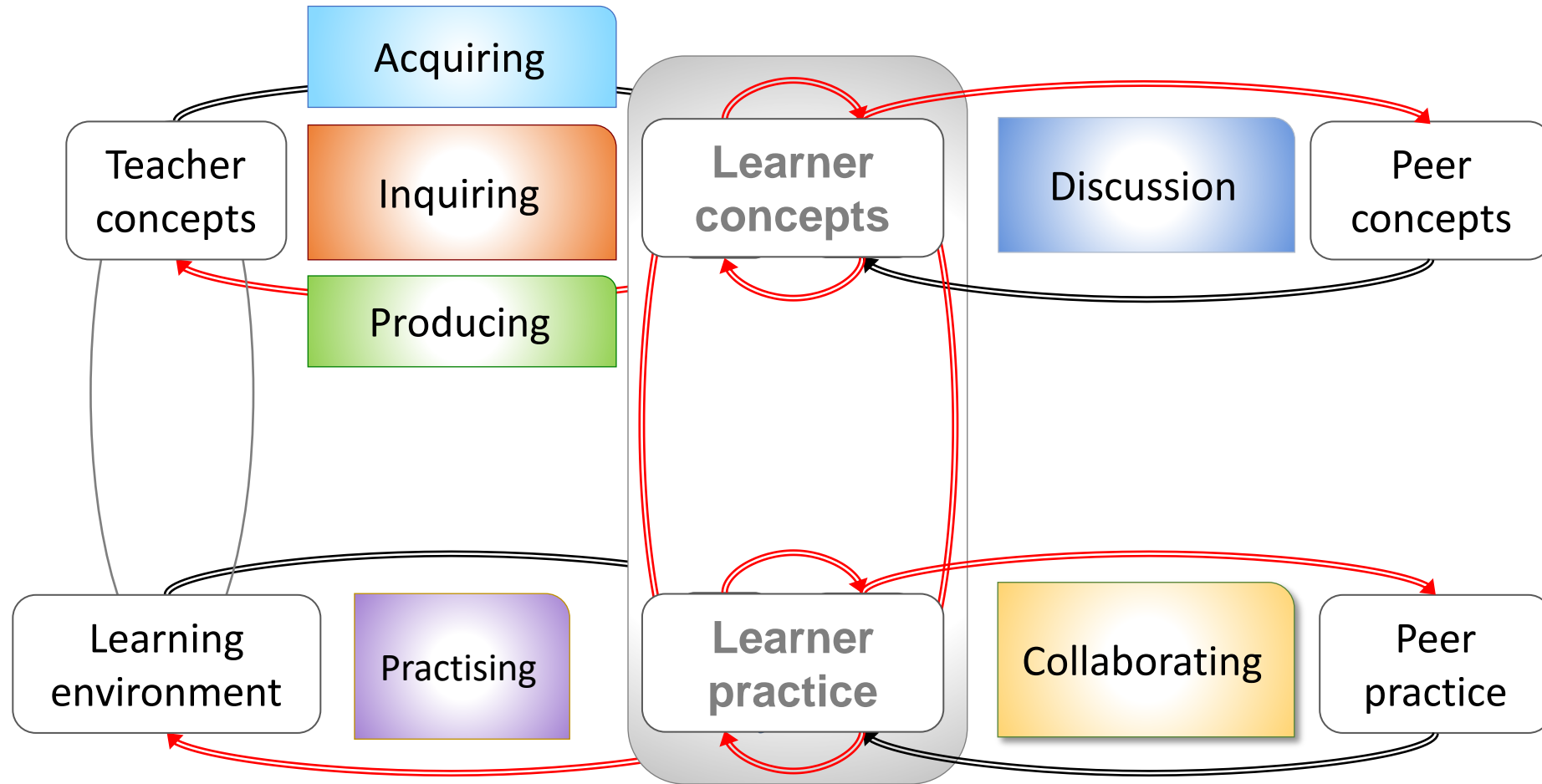
*These learning types are encouraged through a variety of conventional methods*

# How does technology help? *Conventional methods*



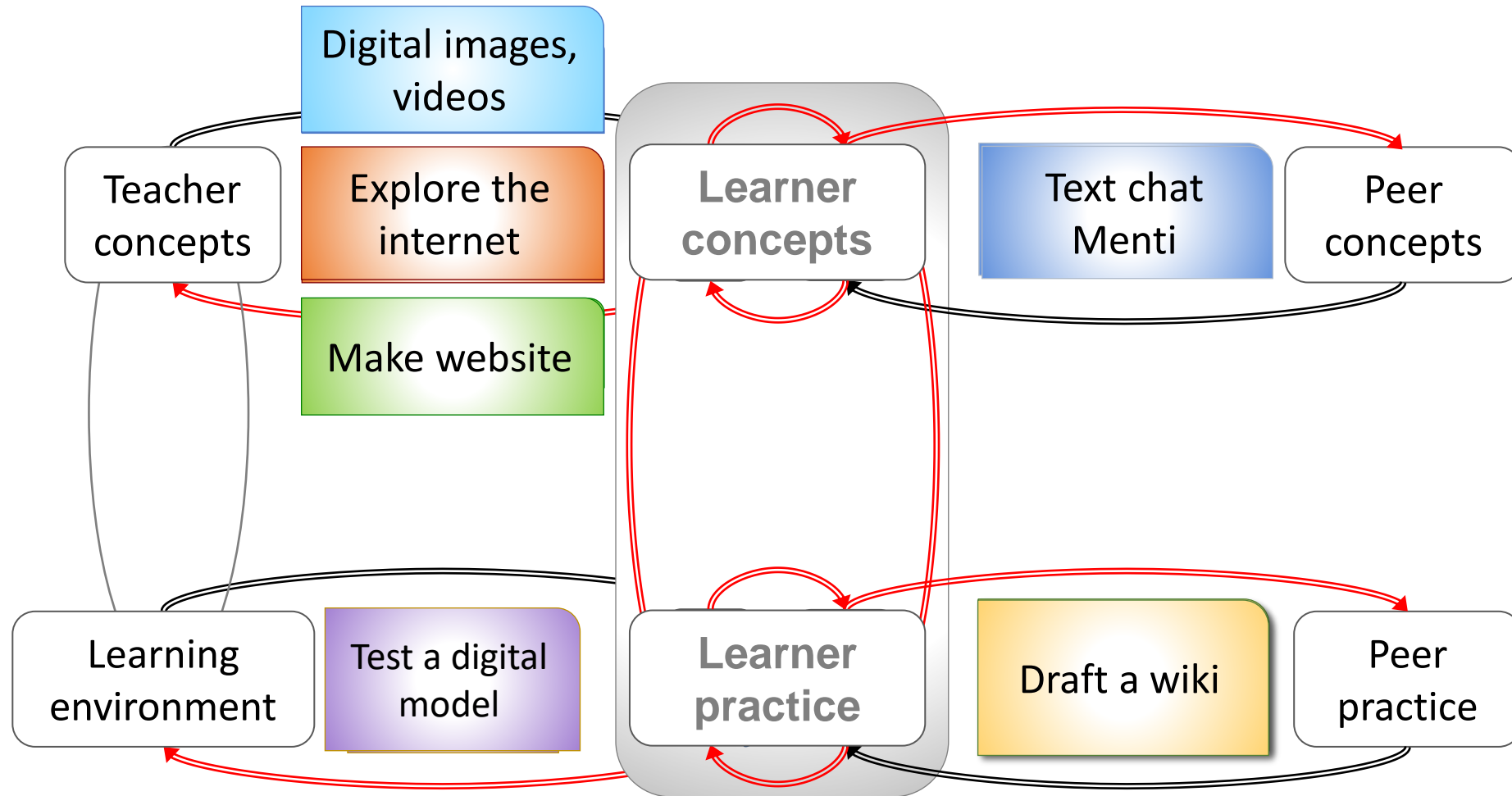
*These learning types are encouraged through a variety of conventional methods*

# How does technology help CPD? Digital methods



*The same learning types are encouraged also through a variety of digital methods*

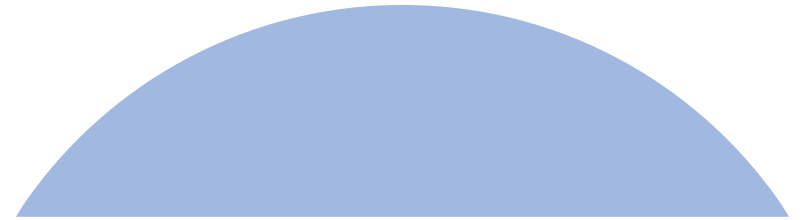
# How does technology help CPD? Digital methods



*The same learning types are encouraged also through a variety of digital methods*



What makes a good online learning design?



# What makes a good online learning design?

## The Learning Designer

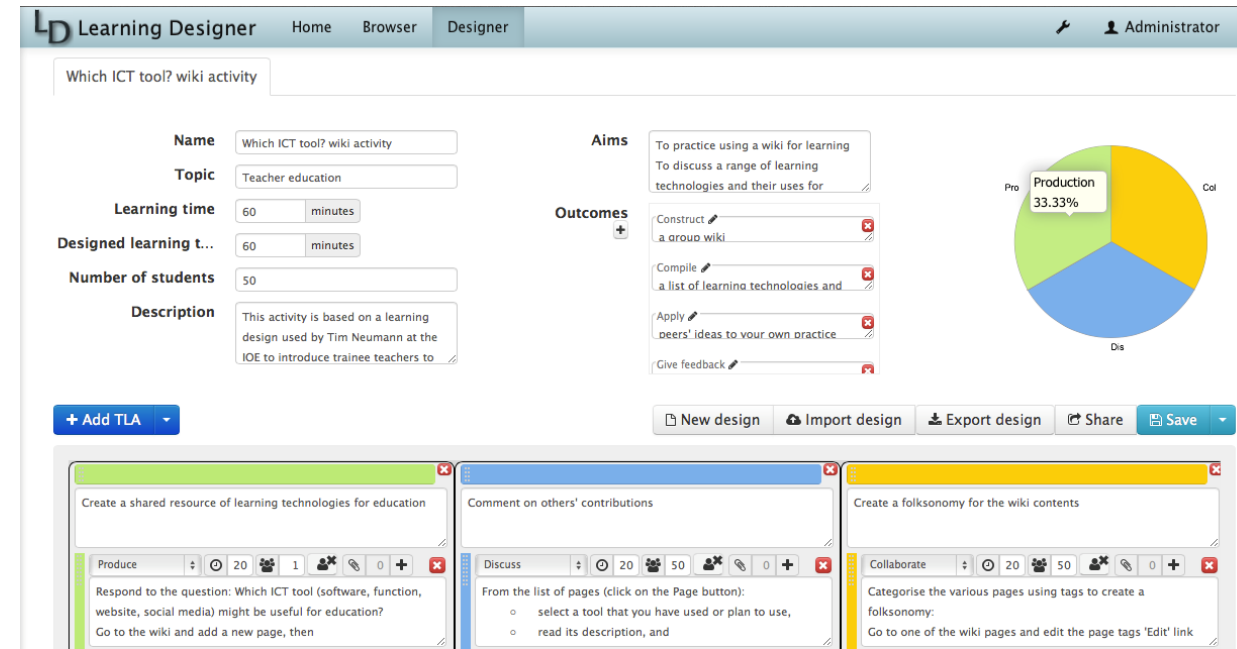
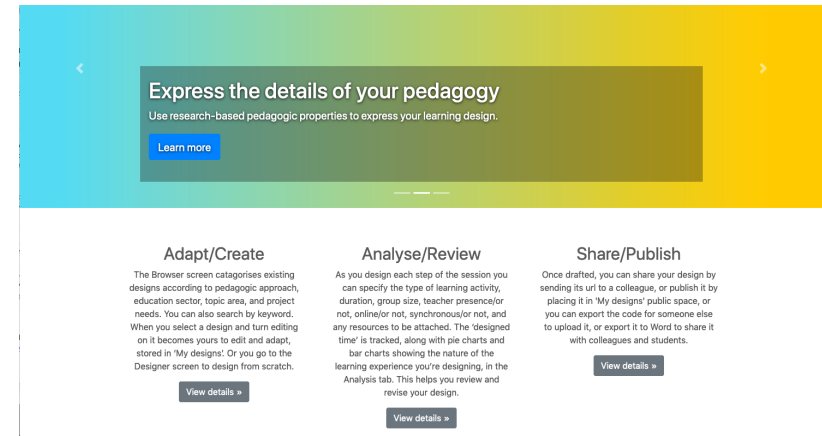
A free open online design tool to help with moving your teaching online.

Based on the six learning types from the Conversational Framework – a model of what it takes to learn.

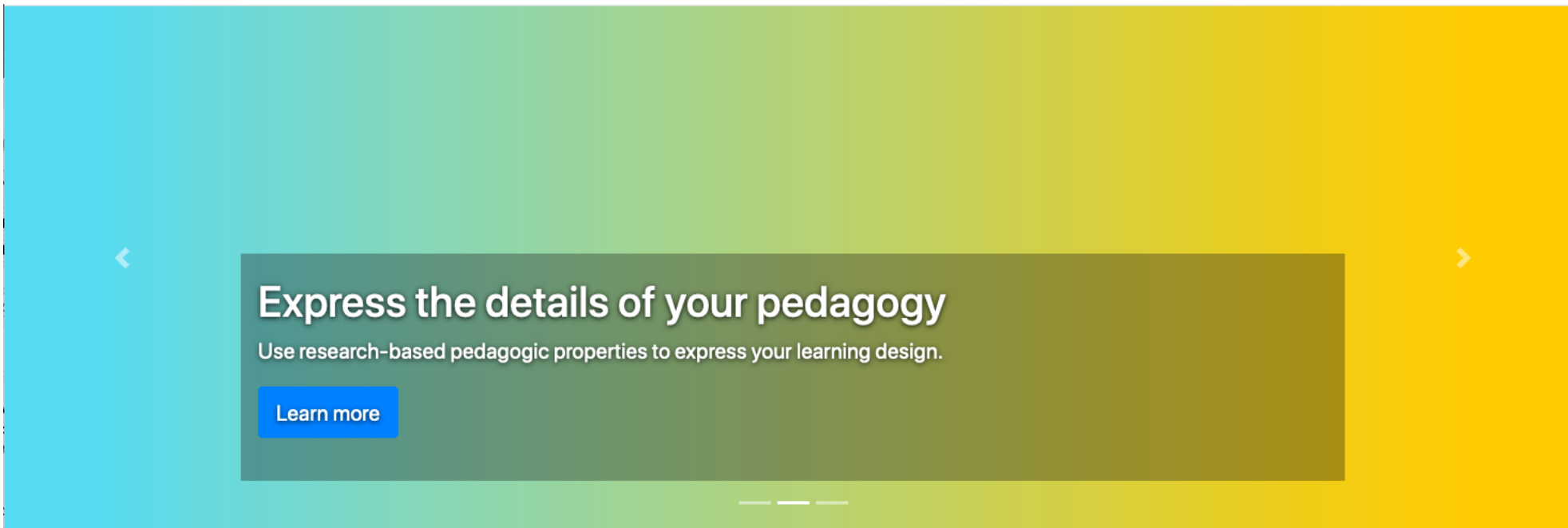
Supports teachers and educators to

- design a sequence of blended and online teaching and learning activities
- analyse their pedagogic design
- share their learning designs with each other

<https://www.ucl.ac.uk/learning-designer>



# Adapting a learning design



## Express the details of your pedagogy

Use research-based pedagogic properties to express your learning design.

[Learn more](#)

### Adapt/Create

The Browser screen categorises existing designs according to pedagogic approach, education sector, topic area, and project needs. You can also search by keyword. When you select a design and turn editing on it becomes yours to edit and adapt, stored in 'My designs'. Or you go to the Designer screen to design from scratch.

[View details »](#)

### Analyse/Review

As you design each step of the session you can specify the type of learning activity, duration, group size, teacher presence/or not, online/or not, synchronous/or not, and any resources to be attached. The 'designed time' is tracked, along with pie charts and bar charts showing the nature of the learning experience you're designing, in the Analysis tab. This helps you review and revise your design.

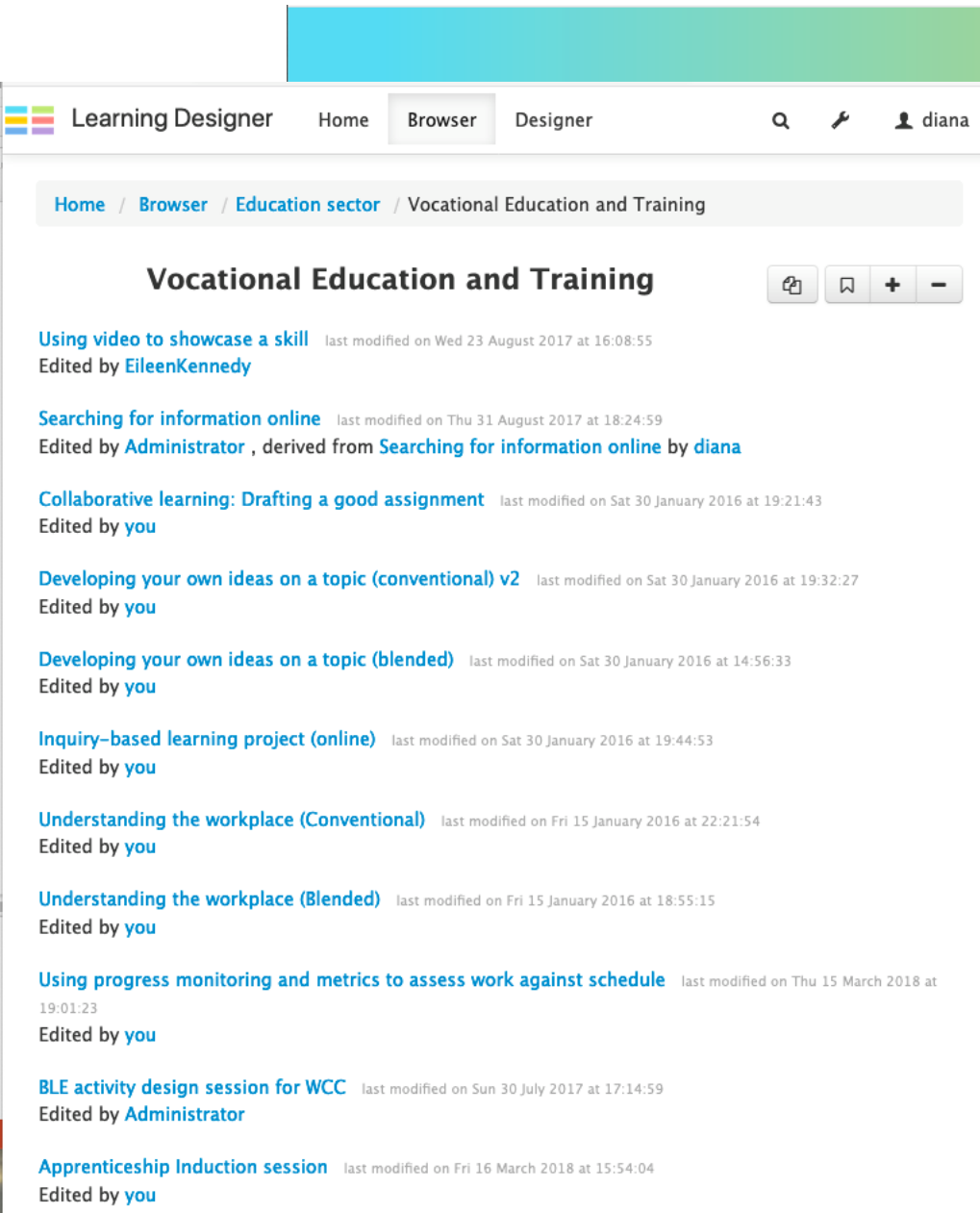
[View details »](#)

### Share/Publish

Once drafted, you can share your design by sending its url to a colleague, or publish it by placing it in 'My designs' public space, or you can export the code for someone else to upload it, or export it to Word to share it with colleagues and students.

[View details »](#)

# Adapting a learning design



Learning Designer Home **Browser** Designer 🔍 ✎ 👤 diana

Home / Browser / Education sector / Vocational Education and Training

## Vocational Education and Training

Using video to showcase a skill last modified on Wed 23 August 2017 at 16:08:55  
Edited by EileenKennedy

Searching for information online last modified on Thu 31 August 2017 at 18:24:59  
Edited by Administrator , derived from Searching for information online by diana

Collaborative learning: Drafting a good assignment last modified on Sat 30 January 2016 at 19:21:43  
Edited by you

Developing your own ideas on a topic (conventional) v2 last modified on Sat 30 January 2016 at 19:32:27  
Edited by you

Developing your own ideas on a topic (blended) last modified on Sat 30 January 2016 at 14:56:33  
Edited by you

Inquiry-based learning project (online) last modified on Sat 30 January 2016 at 19:44:53  
Edited by you

Understanding the workplace (Conventional) last modified on Fri 15 January 2016 at 22:21:54  
Edited by you

Understanding the workplace (Blended) last modified on Fri 15 January 2016 at 18:55:15  
Edited by you

Using progress monitoring and metrics to assess work against schedule last modified on Thu 15 March 2018 at 19:01:23  
Edited by you

BLE activity design session for WCC last modified on Sun 30 July 2017 at 17:14:59  
Edited by Administrator

Apprenticeship Induction session last modified on Fri 16 March 2018 at 15:54:04  
Edited by you



## Analyse/Review

As you design each step of the session you can specify the type of learning activity, duration, group size, teacher presence/or not, online/or not, synchronous/or not, and any resources to be attached. The 'designed time' is tracked, along with pie charts and bar charts showing the nature of the learning experience you're designing, in the Analysis tab. This helps you review and revise your design.

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## Share/Publish

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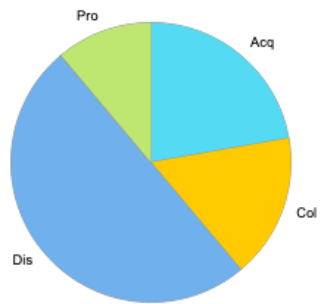
# Adapting a learning design

Learning Designer Home Browser Designer 🔧 👤 diana

Home / Browser / Moving Online / Understanding [the Topic] Online

**Timeline** Analysis

<b>Name</b>	Understanding [the Topic] Online	<b>Mode of delivery</b>	Wholly online
<b>Topic</b>	The Topic	<b>Aims</b>	This session introduces [the Topic] and invites students to ...
<b>Learning time</b>	1 hour and 30 minutes	<b>Outcomes</b>	<input checked="" type="checkbox"/> Knowledge, Application, Analysis
<b>Designed learning ti...</b>	1 hour and 30 minutes	<b>Editor</b>	diana
<b>Size of class</b>	25		
<b>Description</b>	This is a design for a class using wholly online methods. It... <input checked="" type="checkbox"/>		



Turn editing on

Activity	Duration	Icon 1	Icon 2	Icon 3	Icon 4	Icon 5
<b>Introduction to [the Topic]</b>						
Read Watch Listen	10	👤 1	🚫	🗑️	🔒	1
Watch the presentation about [the Topic]. It explains why... how... what... Does [the Topic] make sense to you? Please pause the video to note any questions you have.						
Discuss	10	👤 1	🚫	🗑️	🔒	1
Please post your questions to [the Discussion site] by [date, time]. Click 'Like' for any other questions you would like to know the answers to. Check the site on [date, time] when the teacher will show the answers to your questions.						
<b>Applying [the Topic]</b>						
Produce	10	👤 1	🚫	🗑️	🔒	0
Think of an example of a situation that is relevant to [the Topic] and how you could make use of it. Make notes to share with your group. Arrange a time when you will meet with your group online.						
Discuss	15	👤 3	🚫	🗑️	🔒	1
In your group, take turns to share your ideas of how you would use [the Topic] in each of the 3 situations.						
Collaborate	15	👤 3	🚫	🗑️	🔒	1
In your group, decide on your best example, and what you will post to the class site. Post a brief description of how you would use [the Topic] in which situation.						
<b>Analysing how [the Topic] could guide futu</b>						
Read Watch Listen	10	👤 1	🚫	🗑️	🔒	1
Read through the other groups' posts to and make notes on what you will contribute to discussion.						
Discuss	20	👤 25	🚫	🗑️	🔒	1
The class discussion of [the Topic] is or Discuss with the teacher, using the audio examples the groups have posted to and how you might change your actions applying [the Topic].						

# Adapting a learning design

Learning Designer Home Browser Designer diana

Learning Design

Home / Browser / Ed

## Vocatio

Using video to showcase Edited by EileenKennedy

Searching for information Edited by Administrator ,

Collaborative learning: D Edited by you

Developing your own ide Edited by you

Developing your own ide Edited by you

Inquiry-based learning p Edited by you

Understanding the work Edited by you

Understanding the work Edited by you

Using progress monitor Edited by you

19-01-23 Edited by you

BLE activity design sessio Edited by Administrator

Apprenticeship Induction Edited by you

**Timeline Analysis**

**Name** Understanding Risk Assessment Onlir

**Topic** Risk Assessment

**Learning time** 1 hours 30 minutes

**Designed learning ti...** 1 hours 30 minutes

**Size of class** 25

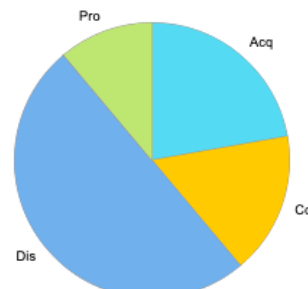
**Description** This is a design for a class using wholly online methods.

**Mode of delivery** Wholly online

**Aims** This session introduces Risk Assessment, and invites students to apply it to a context they are familiar

**Outcomes**

- Knowledge Be able to explain Risk Assessment,
- Application Be able to apply Risk Assessment to a
- Analysis Be able to analyse a specific context in



+ Add TLA Expand notes

New design Import design Export design Share Save

**Introduction to Risk Assessment**

Read Watch Listen 10 1

Watch the presentation about Risk Assessment. It explains why... how... what... Does Risk Assessment make sense to you? Please pause the video to note any questions you have.

Discuss 10 1

Post your questions to [the Discussion site] by [date, time]. Click 'Like' for any other questions you would like to know the answers to. Check the site on [date, time] when the trainer will show the answers to your questions.

**Applying Risk Assessment**

Produce 10 1

Think of an example of a situation that is relevant to Risk Assessment in your context, and how you could make use of it. Make notes to share with your group. Arrange a time when you will meet with your group online.

Discuss 15 3

In your group, take turns to share your ideas of how you would use Risk Assessment in each of the 3 situations.

Collaborate 15 3

In your group, decide on your best example, and what you will post to the class site.

**Analysing how Risk Assessment could guide your future**

Read Watch Listen 10 1

Read through the other groups' posts to the class site, notes on what you will contribute to the discussion.

Discuss 20 25

The class discussion of Risk Assessment is on [date, ti Discuss with the trainer, using the audio and the chat, the groups have posted to the class site, and how you your actions in future by applying Risk Assessment.

# Adapting a learning design

Learning Designer Home Browser Designer diana

Timeline Analysis

Applying Risk Assessment

Produce 10 1

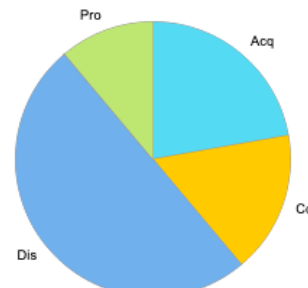
Think of an example of a situation that is relevant to Risk Assessment in your context, and how you could make use of it. Make notes to share with your group. Arrange a time when you will meet with your group online.

Discuss 15 3

In your group, take turns to share your ideas of how you would use Risk Assessment in each of the 3 situations.

Collaborate 15 3

In your group, decide on your best example, and what you will post to the class site. Post a brief description of how you would use Risk Assessment in which situation.



Export design Share Save

Analysing how Risk Assessment could guide your future

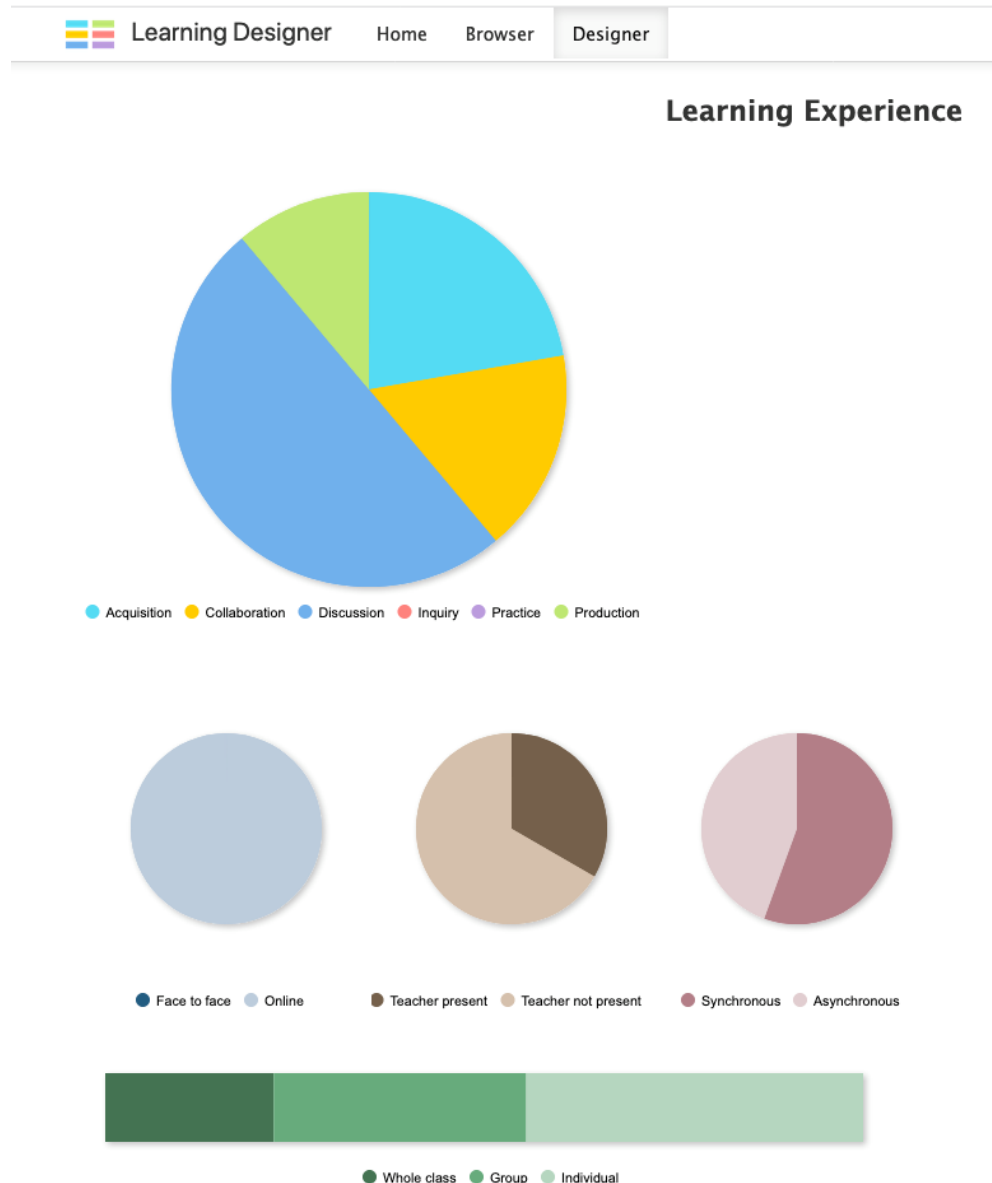
Read Watch Listen 10 1

Read through the other groups' posts to the class site, notes on what you will contribute to the discussion.

Discuss 20 25

The class discussion of Risk Assessment is on [date, ti Discuss with the trainer, using the audio and the chat, the groups have posted to the class site, and how you your actions in future by applying Risk Assessment.

# Analysing a learning design



The pie-chart analyses the distribution of types of learning in the design, in this case, acquisition, collaboration and production, but mostly discussion. There are no rules about what it should be, but now you have the opportunity to consider if that looks appropriate

It is entirely online (pale blue), no f2f

There is some trainer presence (dark brown) to respond to questions, and conduct the plenary discussion

More than half is synchronous (dark pink) - with a group and with the trainer

There is mostly individual work (pale green), then groups, then whole class

# Sharing a learning design

## Learning Design for: Understanding Risk Assessment Online

### Context

Topic: Risk Assessment

Total learning time: 1 hour and 30 minutes

Designed learning time: 1 hour and 30 minutes

Size of class: 25

Description: This is a design for a class using wholly online methods.

Mode of delivery: Wholly online

### Aims

This session introduces Risk Assessment, and invites students to apply it to a context they are familiar with.

### Outcomes

Knowledge: Be able to explain Risk Assessment,

Application: Be able to apply Risk Assessment to a specific context

Analysis: Be able to analyse a specific context in the light of [the Topic] and identify how it might change future actions

### Teaching-Learning activities

<b>+ Introduction to Risk Assessment</b>				
Read Watch Listen	10 minutes	1 student	Tutor is not available	Online
Watch the presentation about Risk Assessment. It explains why... how... what... Does Risk Assessment make sense to you? Please pause the video to note any questions you have.				
<i>Linked resources</i> Screencast or video				
Discuss	10 minutes	1 student	Tutor is available	Online
Post your questions to [the Discussion site] by [date, time]. Click 'Like' for any other questions you would like to know the answers to. Check the site on [date, time] when the trainer will show the answers to your questions.				
<i>Linked resources</i> Q&A with the teacher				

On the Designer screen you can Export your design to Moodle (upcoming version)

Or Export to Word, to send to learners, or discuss with others

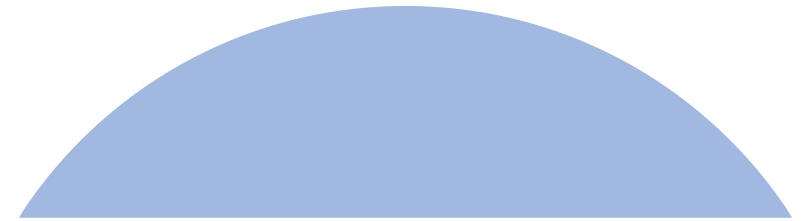
You can also Share it by creating a url to send to colleagues



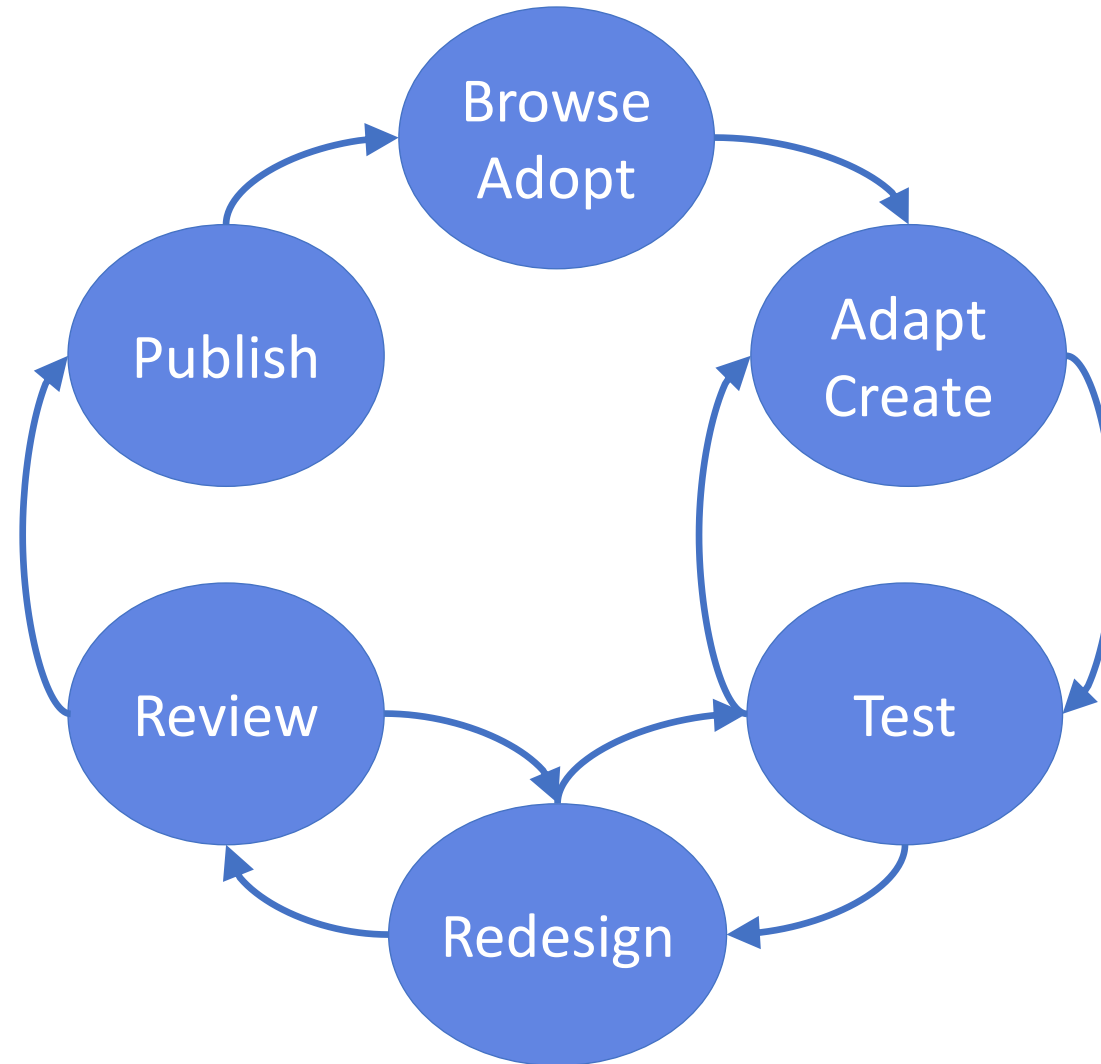
<https://www.ucl.ac.uk/learning-designer>



How can we build  
knowledge about high  
quality online learning?

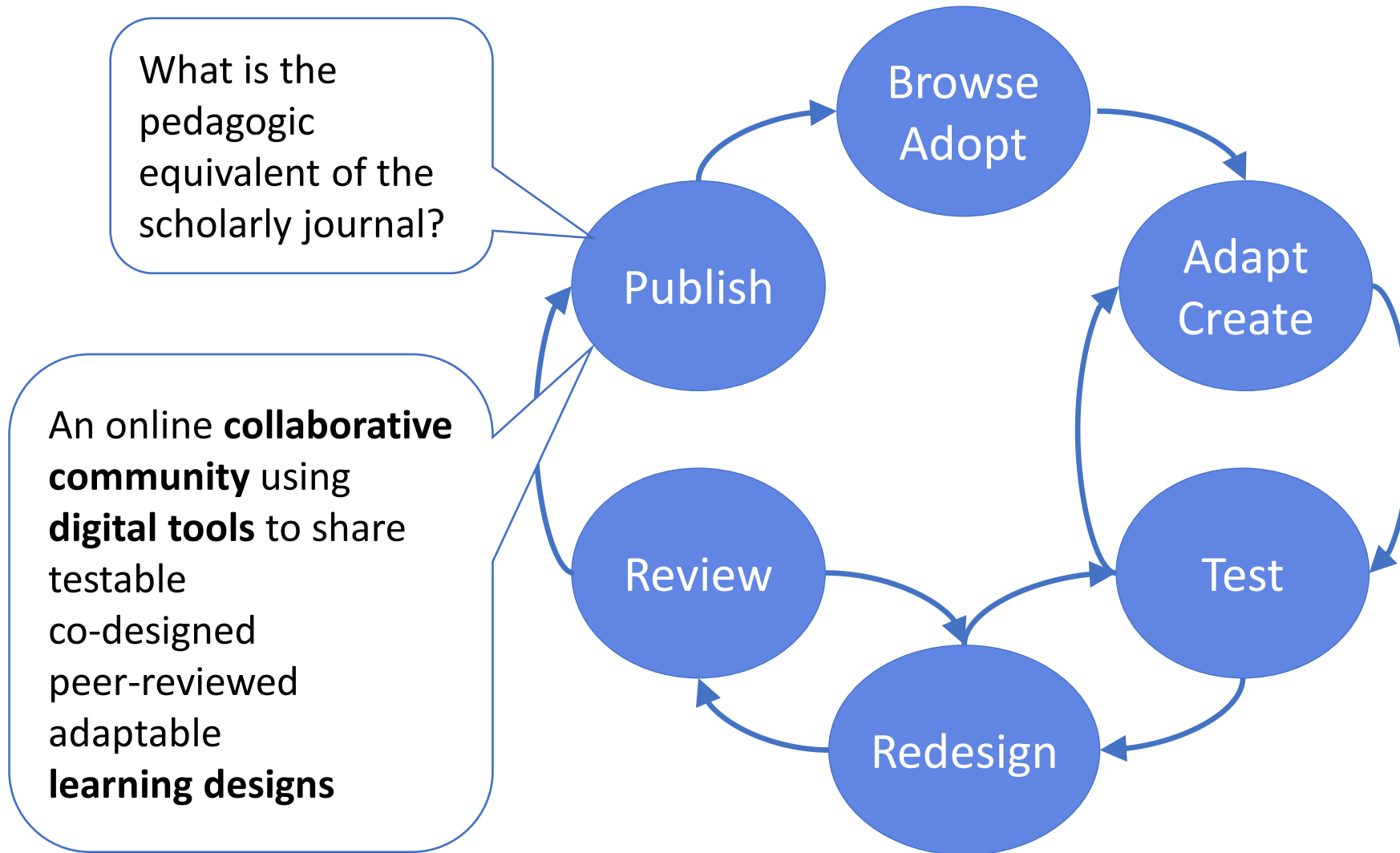


# A community of practice: innovating, testing, and sharing new ideas for effective design



*Building knowledge for science and scholarship*

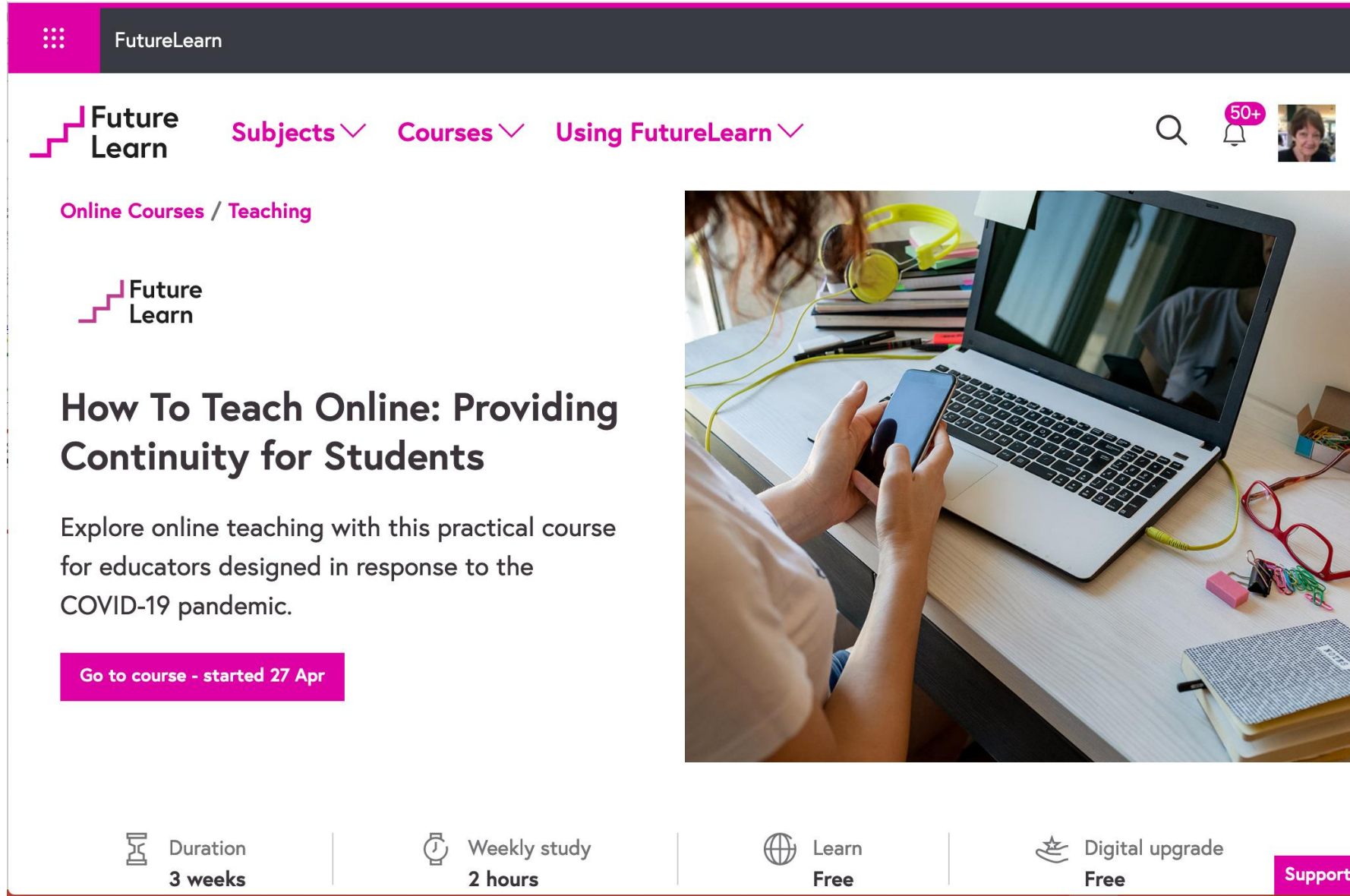
# A community of practice: innovating, testing, and sharing new ideas for effective *online learning* design



*Building knowledge of online learning design*



# Large-scale online courses to orchestrate collaborative knowledge development by education professionals



The image shows a screenshot of a FutureLearn course page. At the top, there is a dark blue header with the FutureLearn logo and navigation links for 'Subjects', 'Courses', and 'Using FutureLearn'. A search icon, a notification bell with a '50+' badge, and a user profile picture are also visible. Below the header, the course title 'How To Teach Online: Providing Continuity for Students' is displayed in a large, bold font. A description below the title reads: 'Explore online teaching with this practical course for educators designed in response to the COVID-19 pandemic.' A pink button labeled 'Go to course - started 27 Apr' is positioned below the description. To the right of the text is a photograph of a person's hands holding a smartphone in front of a laptop on a desk. The desk is cluttered with various items, including headphones, a notebook, and a pair of glasses. At the bottom of the page, there are four icons representing course details: 'Duration 3 weeks', 'Weekly study 2 hours', 'Learn Free', and 'Digital upgrade Free'. A pink 'Support' button is located in the bottom right corner.

FutureLearn

Future Learn Subjects Courses Using FutureLearn

Online Courses / Teaching

Future Learn

## How To Teach Online: Providing Continuity for Students

Explore online teaching with this practical course for educators designed in response to the COVID-19 pandemic.

Go to course - started 27 Apr

Duration 3 weeks

Weekly study 2 hours

Learn Free

Digital upgrade Free

Support

# Large-scale online courses to orchestrate collaborative knowledge development by education professionals

FutureLearn course 'How to Teach Online'

Running since 23 March, >80,000 teachers from all sectors

Thousands of comments in discussions of every step

Sharing ideas and problem solutions

Professionals collaborating to build knowledge

Edraak course (Arabic) on 'Teaching Online'

Running since 26 April, >22,000 teachers across the MENA region

Sharing ideas and problem solutions on Padlet

# Large-scale online courses to orchestrate collaborative knowledge development by education professionals

<p>جيد</p> <p>أضف تعليق</p>	<p>أضف تعليق</p>	<p>ممتاز</p> <p>مجهول 4</p> <p>أضف تعليق</p>	<p>برنامج بوربوينت</p> <p>استفاد طلابي من خلال برنامج powerpoint وكيفية إدراج الصوت مع الشرح الذي كلفتم بعمله خلال البرنامج.</p> <p>0 المفضلة</p> <p>تعليق واحد</p> <p>لجسجول 23 kul</p> <p>أضف تعليق</p>	<p>قام طلابي بصنع صورة او رسم خيالي يوضح التغييرات التي تطرأ على جسم الحيوان في التغيير الكامل وغير الكامل. وقد استخدموا نموذج التقييم لمراجعة متطلبات الرسم التوضيحي.</p> <p>2 مفضل</p> <p>أضف تعليق</p>
<p>مميزه ورائعه</p> <p>0 المفضلة</p> <p>تعليق 2</p> <p>مجهول 26</p> <p>لجسجول 23</p> <p>أضف تعليق</p>	<p>نتيجة التعلم لطلابي هي الإستفادة من البرامج الموجودة والمجانبة على اختلافاتها المتعلقة بتصميم فيديو وذلك من أجل تطبيقها في المحتوى الدراسي وتمثيله بالفيديو اعتمدت على power point لشرح ذلك..لم أقرض على الطلاب أي وسيلة بل اريتهم مختلف الوسائل وهم أحرار...نتيجة التعلم ايجابية</p> <p>1 مفضل</p> <p>أضف تعليق</p>	<p>أفكار جميلة</p> <p>مفضل 2</p> <p>تعليق واحد</p> <p>مجهول 26</p> <p>أضف تعليق</p>	<p>يستغرق تطبيق تكنولوجيا المعلومات والتعلم الكثير من الوقت. ومع ذلك ، أنا حريص على معرفة كيفية استخدامه</p> <p>1 مفضل</p> <p>أضف تعليق</p>	<p>دورة رائعة</p> <p>1 مفضل</p> <p>أضف تعليق</p>
<p>استعمال شرائح العرض والفيديو و تعزيزها بتمارين تفاعلية</p> <p>أعتقد أن شرائح البوربوينت والأشرطة (الفيديو) المعززة بالتمارين التفاعلية لها أثر كبير في العملية التعليمية، تقيد المتعلم ويسهل على الأستاذ ضبطها واستعمالها.</p> <p>1 مفضل</p> <p>أضف تعليق</p>	<p>مقاطع الفيديو تعزز ايصال المعلومه بطريقه جذابه وممتعه</p> <p>لبد من المعلم ان يتعلم فنون التصميم ليبدع بالمقاطع</p> <p>1 مفضل</p> <p>أضف تعليق</p>	<p>حاليا شرائح أو رسوم متحركة</p> <p>أرى أفضل تقديم شرائح بـ Adobe Spark أو رسوم متحركة بـ animaker .</p> <p>أرى أنها عناصر ممتازة. عندما نتمكن من تحصيل المعرفة اللازمة ، سأطلب تصميم موقع ويب.</p> <p>3 مفضل</p> <p>أضف تعليق</p>	<p>ممتاز</p> <p>ممتاز</p> <p>1 مفضل</p> <p>أضف تعليق</p>	<p>استخدام الصور ومقاطع الفيديو التعليمية بالإضافة الى المقاطع او الصور الترفيحية تساهم في زيادة الدافعية لدى الطلبة وتسهل عليهم التعلم والتذكر</p> <p>1 مفضل</p> <p>أضف تعليق</p>
<p>حسن</p> <p>1 مفضل</p> <p>أضف تعليق</p>	<p>مقاطع الفيديو تعزز ايصال المعلومه بطريقه جذابه وممتعه</p> <p>لبد من المعلم ان يتعلم فنون التصميم ليبدع بالمقاطع</p> <p>1 مفضل</p> <p>أضف تعليق</p>	<p>أفكار جميلة</p> <p>مفضل 2</p> <p>تعليق واحد</p> <p>مجهول 26</p> <p>أضف تعليق</p>	<p>س</p> <p>1 مفضل</p> <p>أضف تعليق</p>	<p>عمل جيد</p> <p>1 مفضل</p> <p>أضف تعليق</p>
<p>عرفان</p> <p>2 مفضل</p> <p>أضف تعليق</p>	<p>مقاطع الفيديو تعزز ايصال المعلومه بطريقه جذابه وممتعه</p> <p>لبد من المعلم ان يتعلم فنون التصميم ليبدع بالمقاطع</p> <p>1 مفضل</p> <p>أضف تعليق</p>	<p>أفكار جميلة</p> <p>مفضل 2</p> <p>تعليق واحد</p> <p>مجهول 26</p> <p>أضف تعليق</p>	<p>فريق مايكروسوفت</p> <p>0 المفضلة</p> <p>أضف تعليق</p>	<p>عمل جيد</p> <p>0 المفضلة</p> <p>أضف تعليق</p>
	<p>مقاطع الفيديو تعزز ايصال المعلومه بطريقه جذابه وممتعه</p> <p>لبد من المعلم ان يتعلم فنون التصميم ليبدع بالمقاطع</p> <p>1 مفضل</p> <p>أضف تعليق</p>	<p>أفكار جميلة</p> <p>مفضل 2</p> <p>تعليق واحد</p> <p>مجهول 26</p> <p>أضف تعليق</p>	<p>نصيح ببرنامج ActivePresenter لتسجيل الشاشة صوت وصورة</p> <p>2 مفضل</p> <p>أضف تعليق</p>	<p>عمل جيد</p> <p>0 المفضلة</p> <p>أضف تعليق</p>

# Large-scale online courses to orchestrate collaborative knowledge development by education professionals

padlet

Eileen Kennedy • 8d

## Posts from observation skills padlet on Edraak

Participants applied their observation skills to collect data in their local environments, adding a photo and a note to explain their analysis.

**تجهيزات ال**  
شادي نجيب  
من أكبر المشاكل في محيطي هي عدم تجهيز صفايات الأمطار في الطرق ومنظومة الصرف الصحي أو تجهيز أماكن الانتظار للمواصلات العامة بمظلات الحماية من المطر او الشمس . إضافة لعدم جودة الاسفلت في الطرق السريعة والكباري مما يسبب وجود نقر وحفر وتشوهات في الطرق بفعل عربيات النقل .

**تجهيزات ال**  
One of the biggest problems in my environment is the lack of processing of rain storms in the roads and the sewerage system or the processing of waiting areas for public transport umbrellas protected from rain or sun. In addition to the lack of quality asphalt in highways and bridges, which causes the existence of tapping and digging and distortions in the roads by transport vehicles.

**مهدى الحمصي**  
ان وجود سيارات مركونة على الرصيف مع وجود اصحاب محال يعرضون سلعهم على الرصيف امر يؤدي الى ازدحام الرصيف مع وجود عوائق تؤقر سلباً على ذو الاحتياجات الخاصة

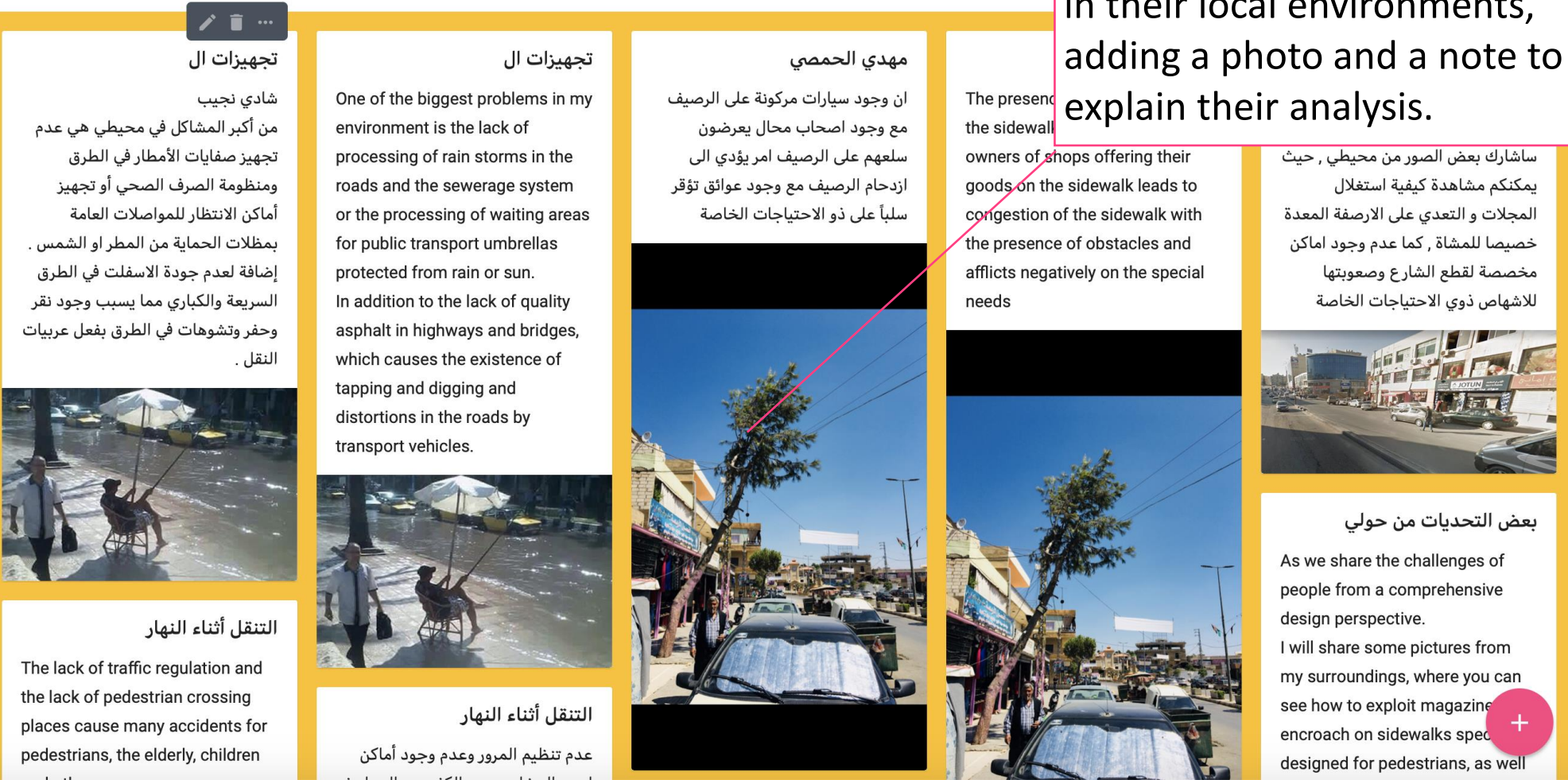
The presence of the sidewalk owners of shops offering their goods on the sidewalk leads to congestion of the sidewalk with the presence of obstacles and afflicts negatively on the special needs

ساشارك بعض الصور من محيطي , حيث يمكنكم مشاهدة كيفية استغلال المجلات و التعدي على الارصفة المعدة خصيصا للمشاة , كما عدم وجود اماكن مخصصة لقطع الشارع وصعوبتها للاشخاص ذوي الاحتياجات الخاصة

**التنقل أثناء النهار**  
The lack of traffic regulation and the lack of pedestrian crossing places cause many accidents for pedestrians, the elderly, children

**التنقل أثناء النهار**  
عدم تنظيم المرور وعدم وجود أماكن

بعض التحديات من حولي  
As we share the challenges of people from a comprehensive design perspective. I will share some pictures from my surroundings, where you can see how to exploit magazine encroach on sidewalks specifically designed for pedestrians, as well



# The UN Sustainable Development Goals





# The future of online learning

We need high quality online learning to reach all who need it, and for sustainability

High quality online learning will focus on making the learner an active participant in learning

A good learning design will sequence a range of types of learning

We now have the technologies to build community knowledge about high quality online learning



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#### About the Secretariat

Carnstone Partners Ltd is an independent management consultancy, specialising in corporate responsibility and sustainability, with a long track record in running industry groups.

