



UNIVERSITEIT
iYUNIVESITHI
STELLENBOSCH
UNIVERSITY

100
1918 · 2018

forward together · saam vorentoe · masiye phambili

Designing your teaching online

Dr Maricel Krügel

Department of Food Science

Auxin - 28 April 2020

© The content of this presentation is confidential.

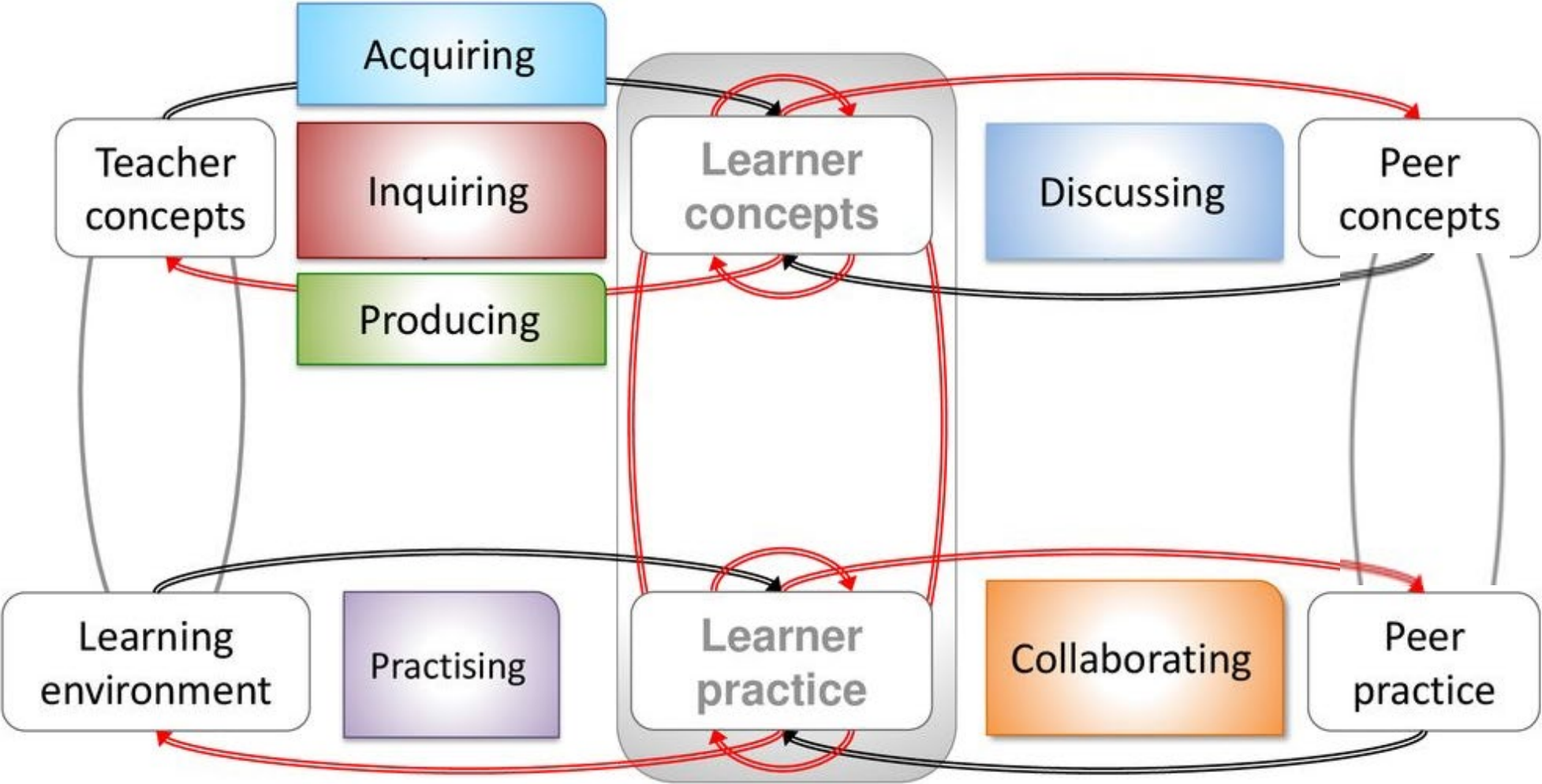


Technology vs Teacher?



- Learning technology
 - widely available
 - contribute to the reach of learning
- Learning design
 - digital technologies improving the quality of learning
- What is the role of the lecturer?
 - Key to innovation to improve T&L with the goal to enable every learner to achieve their learning potential

Conversational framework for learning



What are the six learning types?

With
Professor Diana Laurillard



https://www.youtube.com/watch?time_continue=25&v=wnERkQBqSGM&feature=emb_title

Online Teaching: Baking cookies 101

Class 1

Outcome:

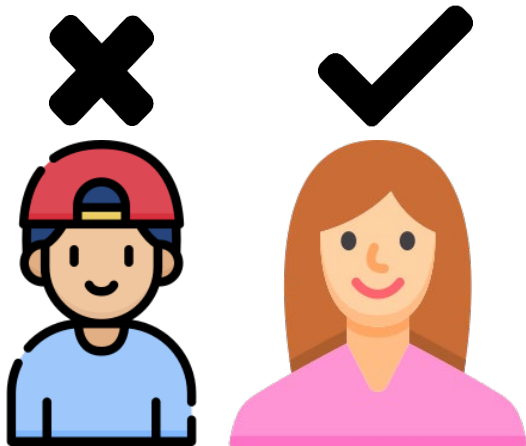
The student will be able to apply the principles in formulating sugar biscuits

Online activity:

Three research articles to read



Students engaged with this learning activity?



Class 2

Outcome:

The student will be able to apply the principles in formulating sugar biscuits

Online activity:

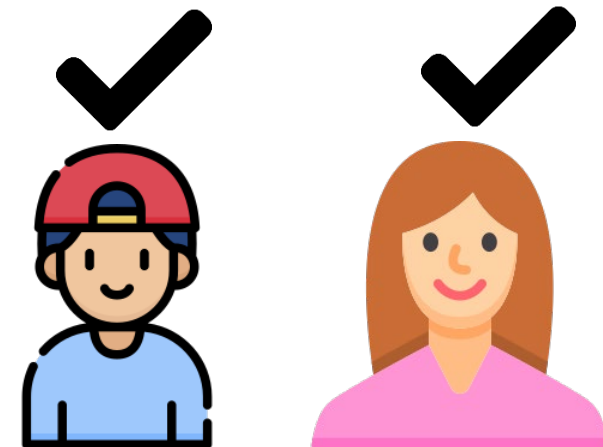
One review research articles to read



Working together on a recipe in a shared online document



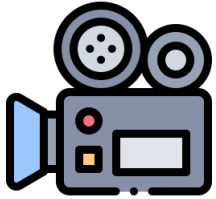
Students engaged with these learning activities?



Read, write, listen / Acquisition



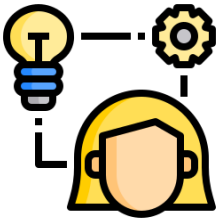
Production



Collaboration



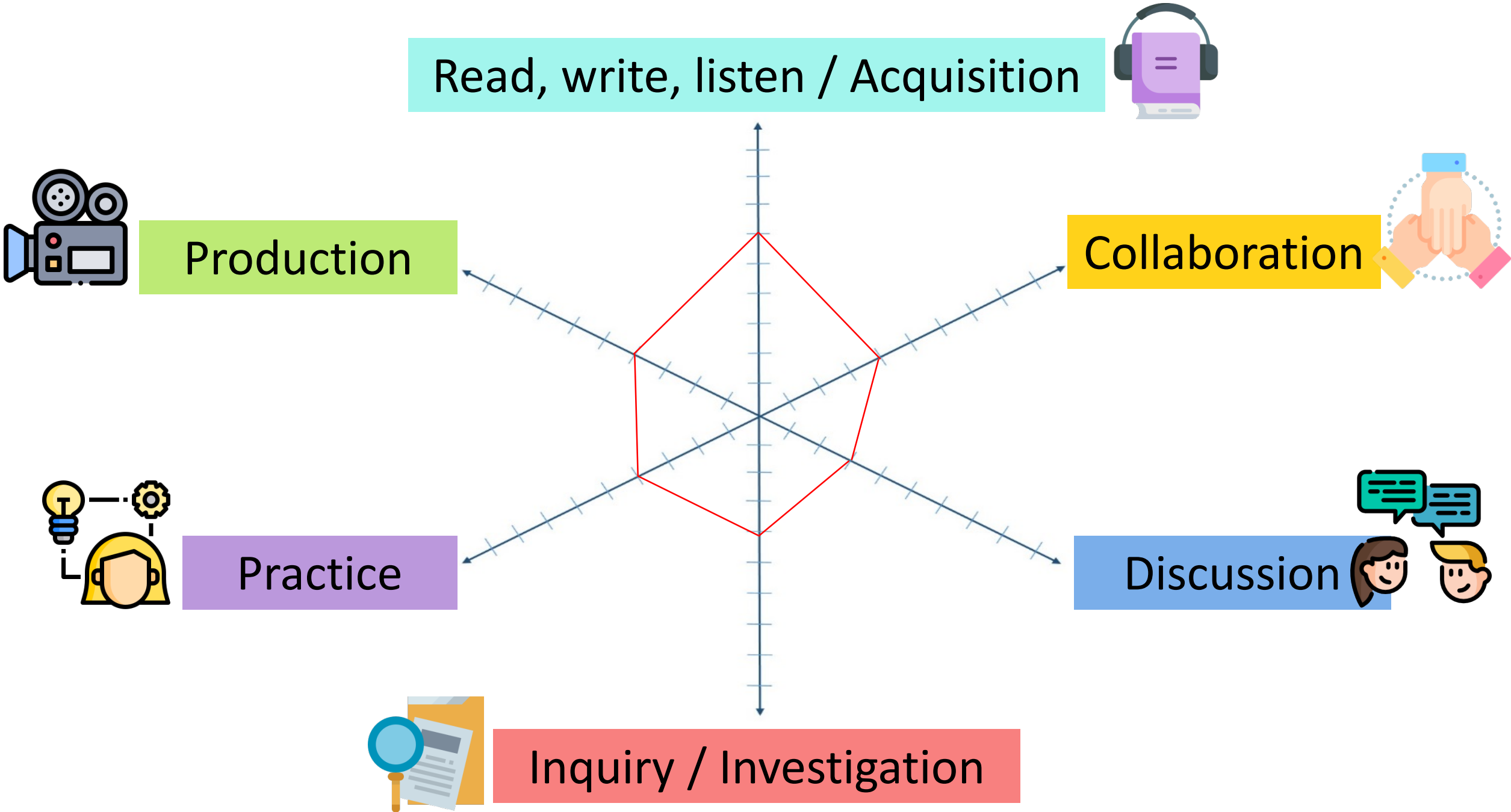
Practice



Discussion



Inquiry / Investigation



Tool 1: Learning types cards

Learning type: Acquisition

Learning through acquisition is what learners are doing when they are listening to a lecture or podcast, reading from books or websites, and watching demos or videos



Learning type: Collaboration

Learning through collaboration embraces mainly discussion, practice, and production. Building on investigations and acquisition it is about taking part in the process of knowledge building itself



Learning type: Discussion

Learning through discussion requires the learner to articulate their ideas and questions, and to challenge and respond to the ideas and questions from the teacher, and/or from their peers



Learning type: Investigation

Learning through investigation guides the learner to explore, compare and critique the texts, documents and resources that reflect the concepts and ideas being taught



Learning type: Practice

Learning through practice enables the learner to adapt their actions to the task goal, and use the feedback to improve their next action. Feedback may come from self-reflection, from peers, from the teacher, or from the activity itself, if it shows them how to improve the result of their action in relation to the goal



Learning type: Production

Learning through production is the way the teacher motivates the learner to consolidate what they have learned by articulating their current conceptual understanding and how they used it in practice



ABC (Arena Blended Connected) curriculum design



Programme: *UCL embedding facilitators* Learning outcomes: *Develop up to date new module / module series*

Module: *Develop up to date new module / module series*

Activities:

Placing of different learning type postcard-size cards - storyboard

<p>Learned timeline (programme or module perspective)</p> <p>E.g. geometry or induction</p> <p>Week 1</p>	<p>Learning type: Acquisition</p> <p>Learning type: Collaboration</p> <p>Learning through collaboration embraces mainly discussion, practice, and production. Building on investigations and acquisition it is about taking part in the process of knowledge building itself</p>	<p>Learning type: Discussion</p> <p>Learning type: Production</p> <p>Learning type: Investigation</p> <p>Learning through investigation guides the learner to explore, compare and critique the texts, documents and resources that reflect the concepts and ideas being taught</p>	<p>Learning type: Practice</p> <p>Learning through practice enables the learner to adapt their actions to the task goal, and use the feedback to improve their next action. Feedback may come from self-reflection, from peers, from the teacher, or from the activity itself, if it shows them how to improve the result of their action in relation to the goal</p>	<p>Learning type: Discussion</p> <p>Learning through discussion requires the learner to articulate their ideas and questions, and to challenge and respond to the ideas and questions from the teacher, and/or from their peers</p>	<p>Learning type: Investigation</p> <p>Learning through investigation guides the learner to explore, compare and critique the texts, documents and resources that reflect the concepts and ideas being taught</p>
<p>E.g. 2nd year or first few weeks</p> <p>Week 2</p>					
<p>E.g. 2nd year or mid semester</p> <p>Week 3</p>	<p>Learning type: Acquisition</p> <p>Learning through acquisition is what learners are doing when they are listening to a lecture or podcast, reading from books or websites, and watching demos or videos</p>	<p>Learning type: Investigation</p> <p>Learning through investigation guides the learner to explore, compare and critique the texts, documents and resources that reflect the concepts and ideas being taught</p>	<p>Learning type: Discussion</p> <p>Learning through discussion requires the learner to articulate their ideas and questions, and to challenge and respond to the ideas and questions from the teacher, and/or from their peers</p>	<p>Learning type: Production</p> <p>Learning through production is the way the teacher motivates the learner to consolidate what they have learned by articulating their current conceptual understanding and how they used it in practice</p>	
<p>E.g. 3rd year or final phase</p> <p>Week 4</p>	<p>Learning type: Collaboration</p> <p>Learning through collaboration embraces mainly discussion, practice, and production. Building on investigations and acquisition it is about taking part in the process of knowledge building itself</p>	<p>Learning type: Production</p> <p>Learning through production is the way the teacher motivates the learner to consolidate what they have learned by articulating their current conceptual understanding and how they used it in practice</p>			

Connected curriculum dimensions and comments, action plan

ABC learning design

ABC (Arena Blended Connected) curriculum design



Programme: EEE workshop facilitators Learning, skills courses
 Module: W set up of data room module / essential review
 Activities:

Learning timeline (programme or module perspective)

<p>E.g. gateway or induction</p> <p>Week 1</p>	<p>Learning type: Production</p> <p>Construction - design and make artefacts</p> <p>Performative - present for an audience</p> <p>Reflective - reflect on activities</p> <p>Discussion - review previous steps</p> <p>Assessing - learn by receiving constructive feedback (Peer review step)</p> <p>producing and storing digital documents, resources, photos, videos, animations, blogs, e-portfolios</p> <p>representations of designs</p> <p>performances, artefacts</p> <p>models</p> <p>Add assignment review</p> <p>Add assignment reflection</p> <p>Description _____</p> <p>Post step discussion point _____</p> <p>Learning time _____</p>	<p>Learning type: Acquisition</p> <p>Delivered - presented with information</p> <p>article reading digital documents, websites and resources</p> <p>watching video/animation</p> <p>listening to podcast, webcast</p> <p>Description _____</p> <p>Post step discussion point _____</p> <p>Learning time _____</p>	<p>Learning type: Practice</p> <p>Simulation - interact with a simulated world</p> <p>Cross-context - learn across physical or social settings</p> <p>Game-based - engage with game environments</p> <p>using models</p> <p>simulations</p> <p>virtual labs and field trips</p> <p>online role play activities</p> <p>quit</p> <p>Description _____</p> <p>Post step discussion point _____</p> <p>Learning time _____</p>	<p>Learning type: Discussion</p> <p>Reflective - reflect on activities.</p> <p>Discussion to review previous steps</p> <p>sharing experience, applying concepts to experience or examples, interacting with others</p> <p>synchronous and asynchronous</p> <p>seminars</p> <p>discussion forums and groups</p> <p>web-conferencing tools</p> <p>online tutorials</p> <p>Description _____</p> <p>Post step discussion point _____</p> <p>Learning time _____</p>	<p>Learning type: Investigation</p> <p>Browsing - seek and collate information</p> <p>Inquiry-driven - investigate authentic situations</p> <p>Problem-solving - solve problems or answer big questions</p> <p>Case-based - investigate individual cases</p> <p>using online advice and guidance</p> <p>comparing and analysing the ideas and information in a range of digital resources</p> <p>using digital tools to collect and analyse data and searching and evaluating information and ideas</p> <p>Description _____</p> <p>Post step discussion point _____</p> <p>Learning time _____</p>
<p>E.g. 1st year or first few weeks</p> <p>Week 2</p>	<p>Learning type: Acquisition</p> <p>Delivered - presented with information</p> <p>article reading digital documents, websites and resources</p> <p>watching video/animation</p> <p>listening to podcast, webcast</p> <p>Description _____</p> <p>Post step discussion point _____</p> <p>Learning time _____</p>	<p>Learning type: Discussion</p> <p>Reflective - reflect on activities.</p> <p>Discussion to review previous steps</p> <p>sharing experience, applying concepts to experience or examples, interacting with others</p> <p>synchronous and asynchronous</p> <p>seminars</p> <p>discussion forums and groups</p> <p>web-conferencing tools</p> <p>online tutorials</p> <p>Description _____</p> <p>Post step discussion point _____</p> <p>Learning time _____</p>	<p>Learning type: Collaboration</p> <p>Networked - interact with networks of peers 'like' comments and 'follow' other learners</p> <p>Conversations - converse with others, comments linked with each step</p> <p>Collaborative - construct shared understanding. Discussion step to explore learners' perspectives and experiences</p> <p>building a joint digital output</p> <p>small group projects using online forums, wikis, chat rooms, etc. for discussing others' outputs</p> <p>Description _____</p> <p>Post step discussion point _____</p> <p>Learning time _____</p>	<p>Learning type: Production</p> <p>Construction - design and make artefacts</p> <p>Performative - present for an audience</p> <p>Reflective - reflect on activities</p> <p>Discussion to review previous steps</p> <p>Assessing - learn by receiving constructive feedback (Peer review step)</p> <p>producing and storing digital documents, resources, photos, videos, animations, blogs, e-portfolios</p> <p>representations of designs</p> <p>performances, artefacts</p> <p>models</p> <p>Add assignment review</p> <p>Add assignment reflection</p> <p>Description _____</p> <p>Post step discussion point _____</p> <p>Learning time _____</p>	

E.g. 2nd year or mid overview

E.g. 3rd year or final phase

Select learning activities

Connected curriculum dimensions and comments, action plan

Learning types cards (front and back)

Learning type: Acquisition

Learning through acquisition is what learners are doing when they are listening to a lecture or podcast, reading from books or websites, and watching demos or videos.



Learning type: Acquisition

Delivered - presented with information

- article reading digital documents, websites and resources [Add article](#)
- watching video/animation [Add video](#)
- listening to podcast, webcast [Add audio](#)
-

Description _____

Post step discussion point _____

Learning time _____

Tool 2: The Learning Designer

- This design tool will help with the now urgent process of moving your teaching online
- Free online tool - <https://www.ucl.ac.uk/learning-designer/>
- An introduction to Learning Designer-<https://www.youtube.com/watch?v=S0edRboC9vI>



Welcome to the Learning Designer

This design tool will help with the now urgent process of moving your teaching online.

The Learning Designer is an online tool to help teachers and lecturers design teaching and learning activities and share their learning designs with each other. It was developed by a team led by Diana Laurillard at the UCL Knowledge Lab, with ESRC funding, and is free for anyone to use.

The tool is based on the six learning types from Diana Laurillard's Conversational Framework – a model of the conditions necessary for learning to take place. The six learning types are: Read/Write/Listen (or Acquisition), Inquiry, Practice, Production, Discussion and Collaboration. In principle, a good learning design will contain a mix of all of these types of learning.

Log in

Username

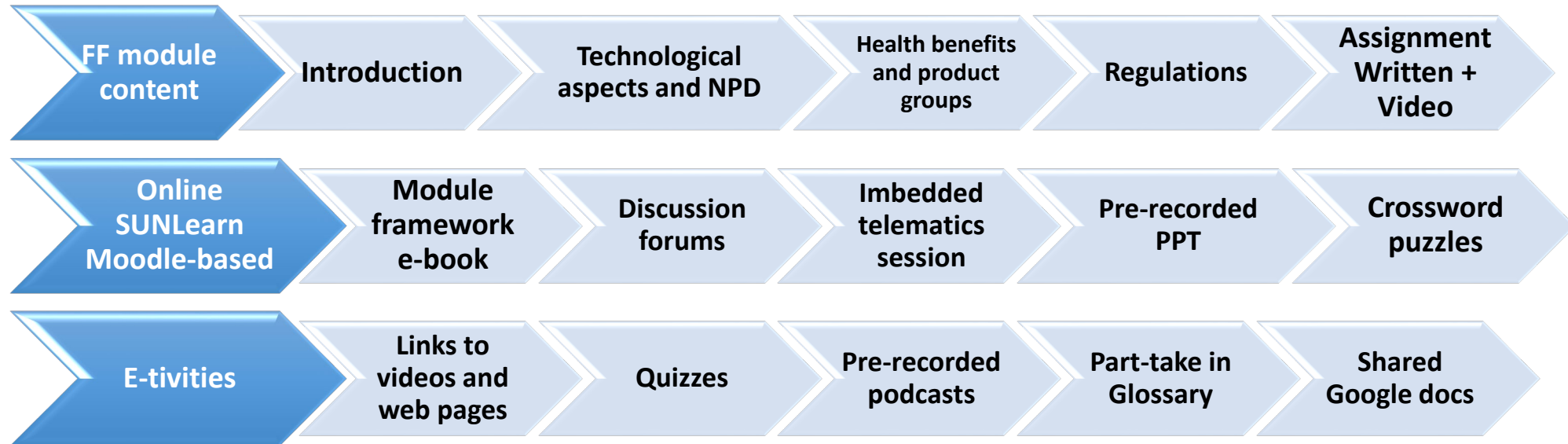
Password

[Forgot your password?](#)

Don't have an account? It is free to [Register](#) »

Bower *et al.* (2011)

Design of the Functional Foods fully online 2 week module using Learning Designer



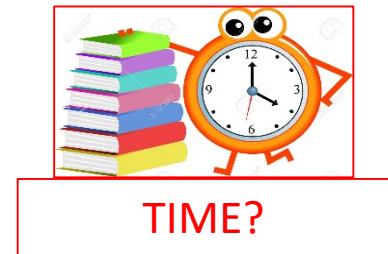
LEARNING
MANAGEMENT
SYSTEM



VEHICLE



THEORETICAL
FRAMEWORK



Welcome to the Learning Designer

This design tool will help with the now urgent process of moving your teaching online.

The Learning Designer is an online tool to help teachers and lecturers design teaching and learning activities and share their learning designs with each other. It was developed by a team led by Diana Laurillard at the UCL Knowledge Lab, with ESRC funding, and is free for anyone to use.

The tool is based on the six learning types from Diana Laurillard's Conversational Framework - a model of the conditions necessary for learning to take place. The six learning types are: Read/Write/Listen (or Acquisition), Inquiry, Practice, Production, Discussion and Collaboration. In principle, a good learning design will contain a mix of all of these types of learning.

There are two screens in the Learning Designer: the Browser screen and the Designer screen. You can search for and adapt other people's learning designs in the Browser screen or design your own from scratch in the Designer screen.

The tool provides feedback on your design by showing you (a) the amount of learning time you have designed, and (b) a pie chart of the proportion of each of the six learning types in your design. You decide what adjustments to make. In principle, a good

Log in

Username

Password

[Forgot your password?](#)

Don't have an account? It is free to [Register »](#)



Learning designer

Name Functional Foods Module

Topic Two week module

Learning time 50 hours 0 minutes

Designed learning ti... 50 hours 5 minutes

Size of class 9

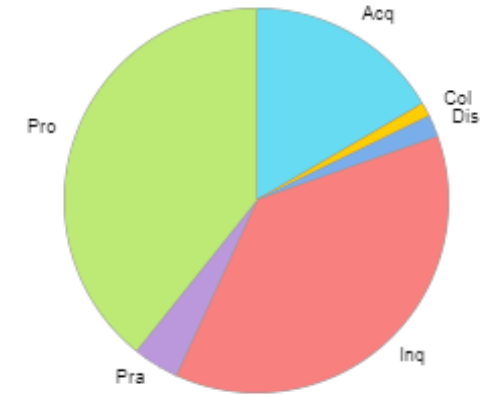
Description This 2 week online Functional Foods module is part of the MSc Food and Nutrition Security.

Mode of delivery Wholly online

Aims scientists, they have to be able to distinguish a real functional food from a "false" product on the market.

Outcomes +

- The learner is able to comprehend food
- Evaluation technological and nutrition
- Application able to evaluate and apply
- Evaluation The learner is able to critically evaluate



5 credits = 50 notional hours (3000 min)

Learning time (notional hours)
=
Learning design time

Production – 39%
Acquisition – 17%
Practice 4%
Discussion 2%
Collaboration 1%
Inquiry 37%



What was the most effective aspect of this module?

7 responses

The podcasts were posted immediately. Enables one to go through the sessions in good time.

The way in which this module was structured (very organized)

The SCORM packages

Structuring encouraged you to learn e.g glossary, quiz

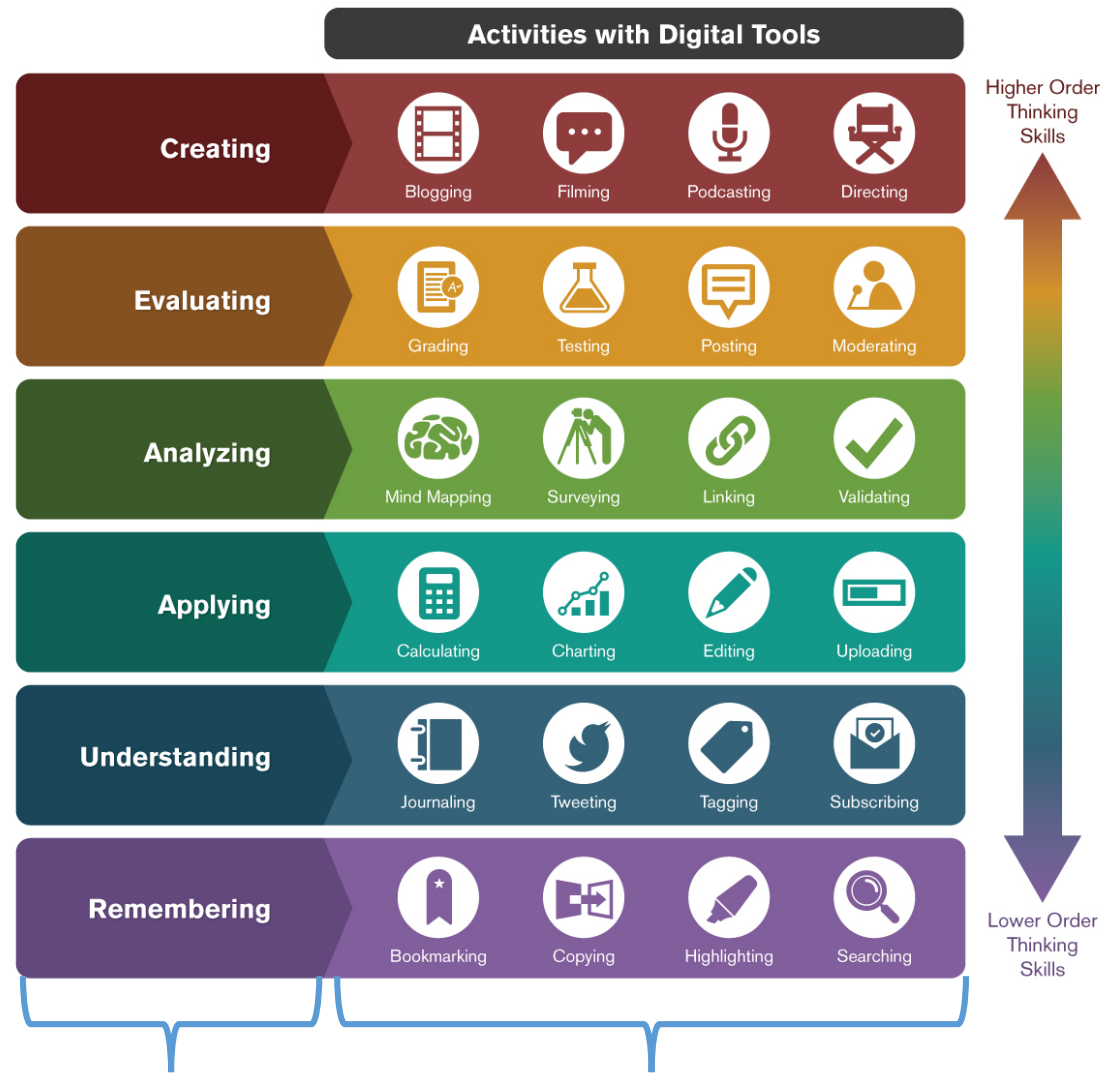
Assistance through the power point presentations

Different activities and ways of instruction

I really enjoyed the assignment, and I felt that working through the legislation myself and applying it to my selected product really walked me through the world of functional foods and their place in the market, as well as how they relate to regulating bodies

You put in so much effort, particularly putting together all the online content. You were so available via e-mail and responded promptly and you really put in a lot of effort to make it personal despite it being an e-module. You embraced far more of the technological aspects of SunLearn than any of the other presenters

<https://teachonline.asu.edu/2016/05/integrating-technology-blooms-taxonomy/>



Bloom's Taxonomy

Laurillard's 6 ways of learning
(Learning Designer)

OUTCOMES: At the end of this module students will be able to:

What activity types should I choose to speak to the different ways students learn?













How many activities should I give?












TIP: Am I assessing the outcomes with this type of activity?

Types of activity matched to learning types

• Delivered	are presented with information	Acquisition
• Collaborative	construct shared understanding	Collaboration
• Conversational	converse with others	
• Networked	interact with networks of peers	
• Reflective	reflect on activities <i>Discussion to review previous steps</i>	Discussion
• Browsing	seek and collate information	Inquiry
• Inquiry-driven	investigate authentic situations	
• Problem-solving	try to solve problems or answer big questions	
• Case-based	investigate individual cases	
• Simulation	interact with a simulated world	Practice
• Cross-context	learn across physical or social settings	
• Game-based	engage with game environments	
• Assessing	learn by receiving constructive feedback (Peer review step)	Production
• Performative	present for an audience	
• Construction	design and make artefacts	
• Reflective	reflect on activities <i>Discussion to review previous step</i>	

ACTIVITY	Acquisition	Inquiry	Production	Practice	Discussion	Collaboration
Adobe connect						
Assignment			X	X		
Chat	X	X	X	X	X	X
Choice						
Clicker						
Database		X	X	X		
Forum		X	X	X	X	X
Glossary			X	X		
Group choice						
HotPot		X	X	X	X	X
Journal						
Lesson			X	X		
Questionnaire		X				
Quiz			X	X		
Survey		X				
Turnitin Assignment 2			X	X		
Wiki			X	X		
Workshop			X	X		








- ACTIVITIES
-  Adobe Connect
 -  Assignment
 -  Attendance
 -  Chat
 -  Choice
 -  Clicker
 -  Database
 -  External tool
 -  Forum
 -  Glossary
 -  Group choice
 -  HotPot

- SUNLearn Moodle-based
-  Journal
 -  Lesson
 -  MHCampus Connect2
 -  Questionnaire
 -  Quiz
 -  Scheduler
 -  SCORM package
 -  Survey
 -  Turnitin Assignment 2
 -  Wiki
 -  Workshop

ACTIVITY	Acquisition	Inquiry	Production	Practice	Discussion	Collaboration
Book	x					
File	X					
Folder	X					
Page	X					
URL (link)	x					

ACTIVITY (OTHER)	Acquisition	Inquiry	Production	Practice	Discussion	Collaboration
Reflect (Blog)	X	x	x	x		x
Reading lists	X					
Shared Google docs						x

RESOURCES

<input type="radio"/>		Book
<input type="radio"/>		File
<input type="radio"/>		Folder
<input type="radio"/>		IMS content package
<input type="radio"/>		Label
<input type="radio"/>		Page
<input type="radio"/>		URL

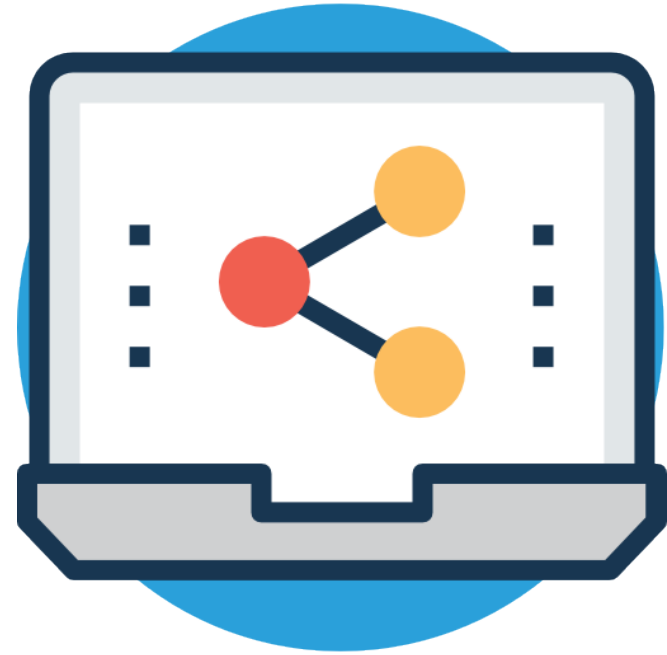
References

- Bower *et al.* (2011). Using the Learning Designer to develop a conceptual framework for linking learning design tools and systems. *International LAMS and Learning Design Conference*, 61-71
- Laurillard, D. (2012). Teaching as a design science: building pedagogical patterns for learning and technology. Routledge: New York
- Neo *et al.* (2013). Designing a web-based multimedia learning environment with Laurillard's Conversational Framework: an investigation on Instructional relationships. *The Turkish Online Journal of Educational Technology*, **12**, 39-50
- Rushby, N. (2012). Editorial: Learning technology – redefining the field. *British Journal of Educational Technology*, **43**, 835-836.

Thank you



Questions?



Please share experiences
of online design and
teaching so far!