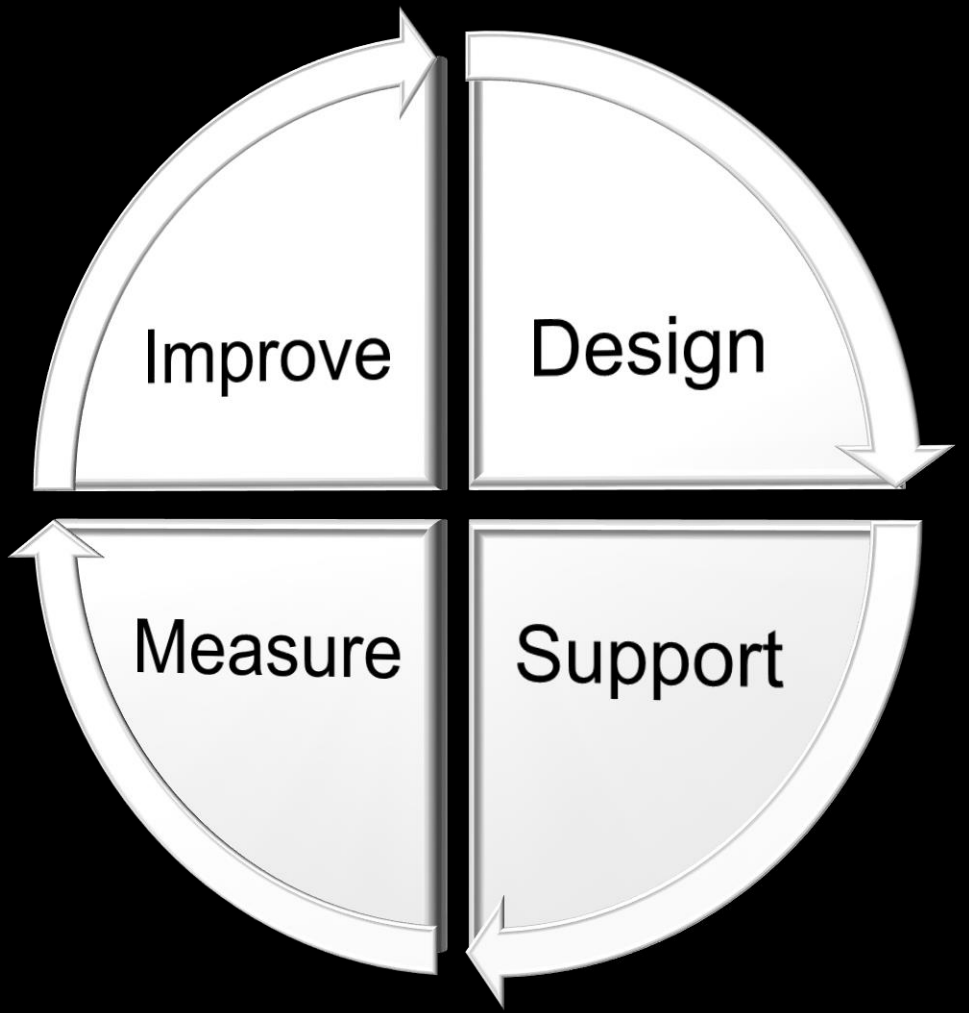
Evidence for learning

Patrick McAndrew
Professor of Open Education
Institute of Educational Technology
The Open University

Except where noted


Improve
Design
Measure
Support

The Open University is open to people, places, methods and ideas.

The Open University

OVER 200,000 REGISTERED STUDENTS

The OU

43%

of part time undergraduate students in the UK

35,000

Academic Awards Annually

146 Postgraduate

and

473 Undergraduate Courses

With almost **7,000** lecturers

350

study locations

The UK's largest university

OU 50 TIMELINE

1969

Following years of planning by Harold Wilson and Jennie Lee, The Open University (OU) was granted a Royal Charter on 23 April 1969.

1970

Over 42,000 applications were made for the 25,000 available

1971

1973

ceremony was broadcast
Alexandra Palace.

1979

in Milton Keynes.

19[illegible]0

Over 6,000 OU television and radio programmes had been

[illegible]

2006

OpenLearn, the University's major new content

2003

OU academic Professor Colin Pillinger. While the overall
and The Open University.

2000

and staff with access to online

[illegible]

The 25th Anniversary of
ceremony and the

1995

KMi Knowledge Media Institute

The OU's Knowledge Media
technologies.

1992

validate the degrees of other

1990

The OU celebrates its
more than 20,000 tons of

[illegible]

[illegible]

project, which had over 1m illion downloads in only 4 months.

2009

media site for identifying

2010

reached 20 million downloads, and Open Research Online, the OU's research repository marked its 1millionth visitor.

2012

Future Learn

now the largest social online
with almost 9 million people

2014

OU space scientists
Rosetta comet landing
on 12 November after

2015

[illegible]

by the OU, reached over 14m people per episode, and
teaching and learning.

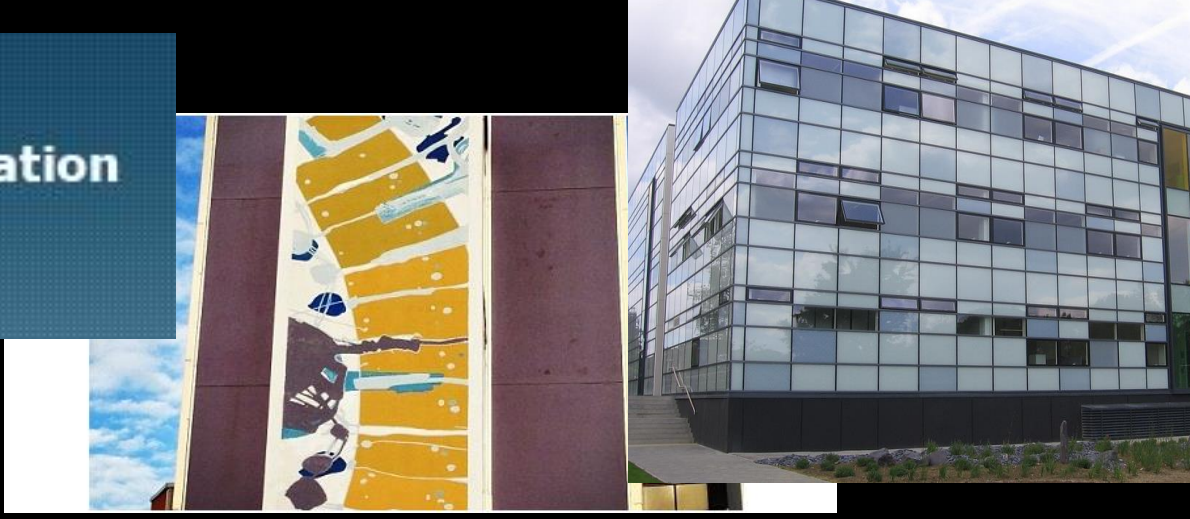
2019

The Open University 50 YEARS

The Open University celebrates its 50th anniversary as the largest
reach across the world.

Institute of Educational Technology
iet.open.ac.uk

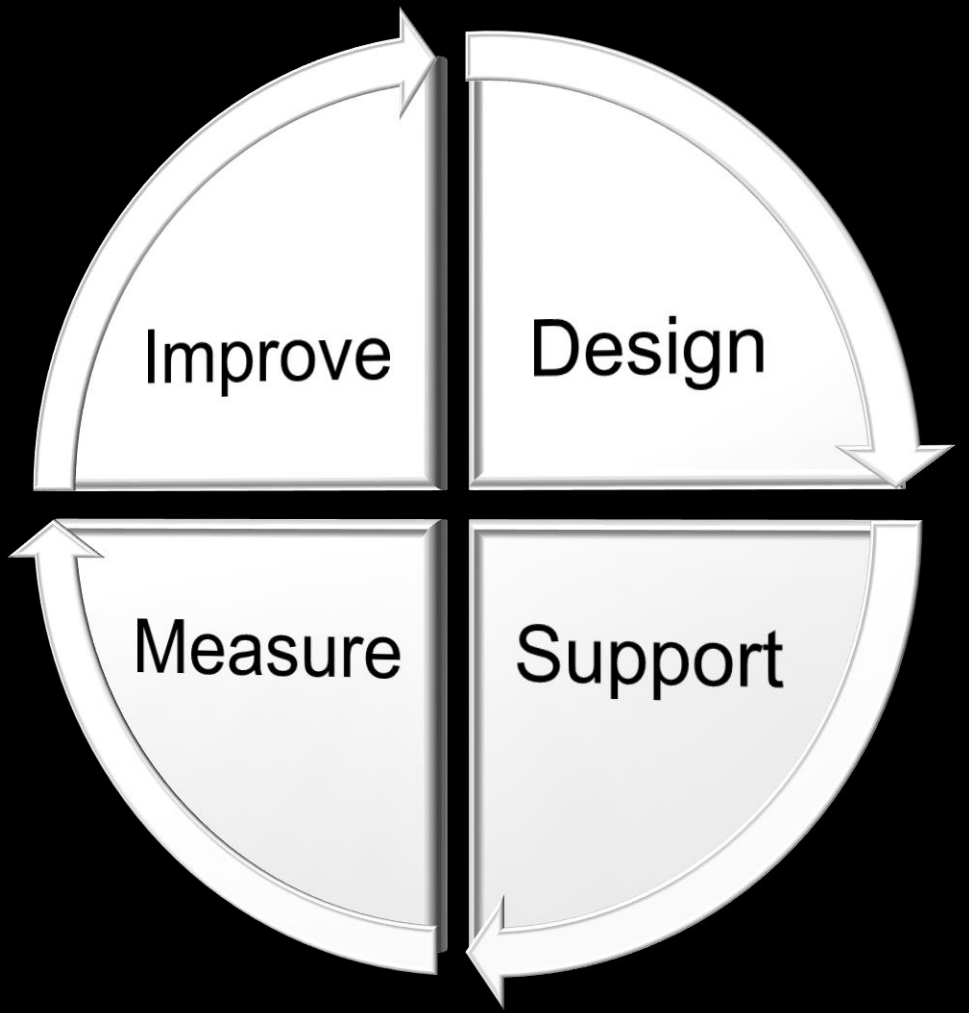
CREET The Centre for Research in Education and Educational Technology

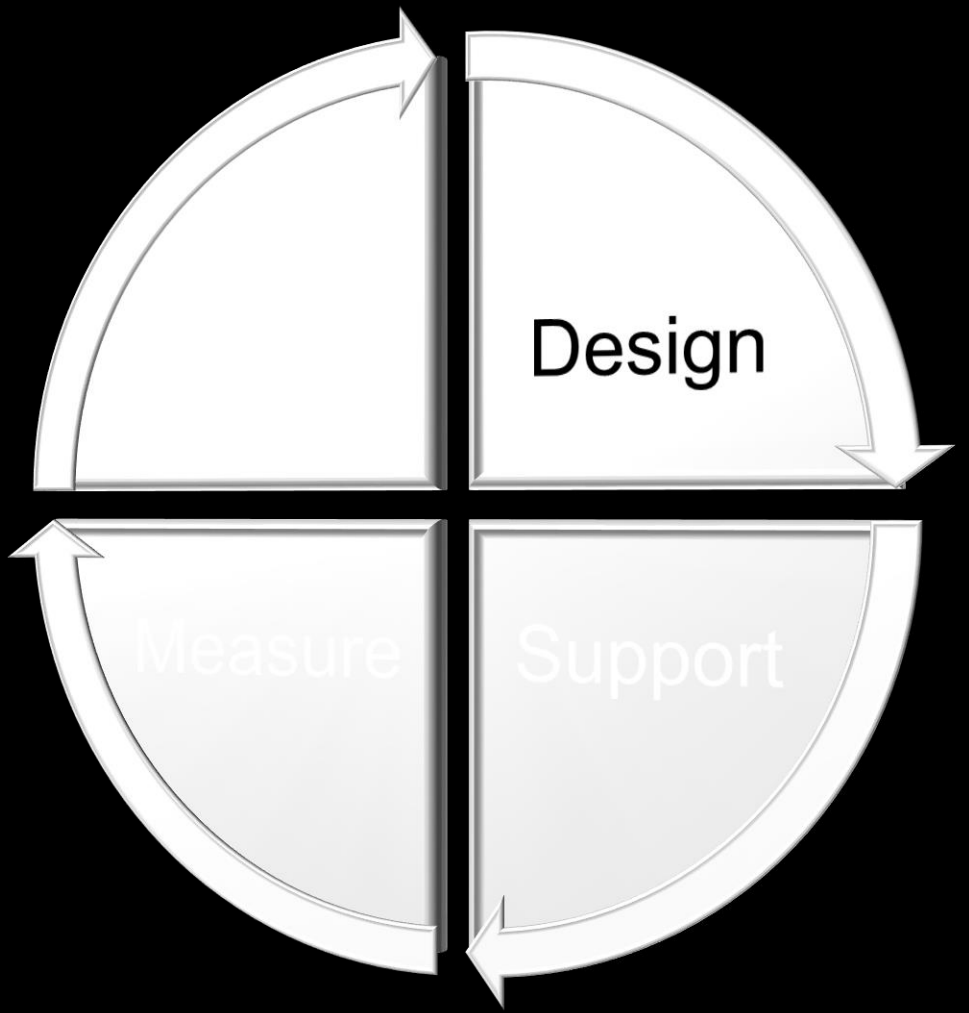


REF 2014

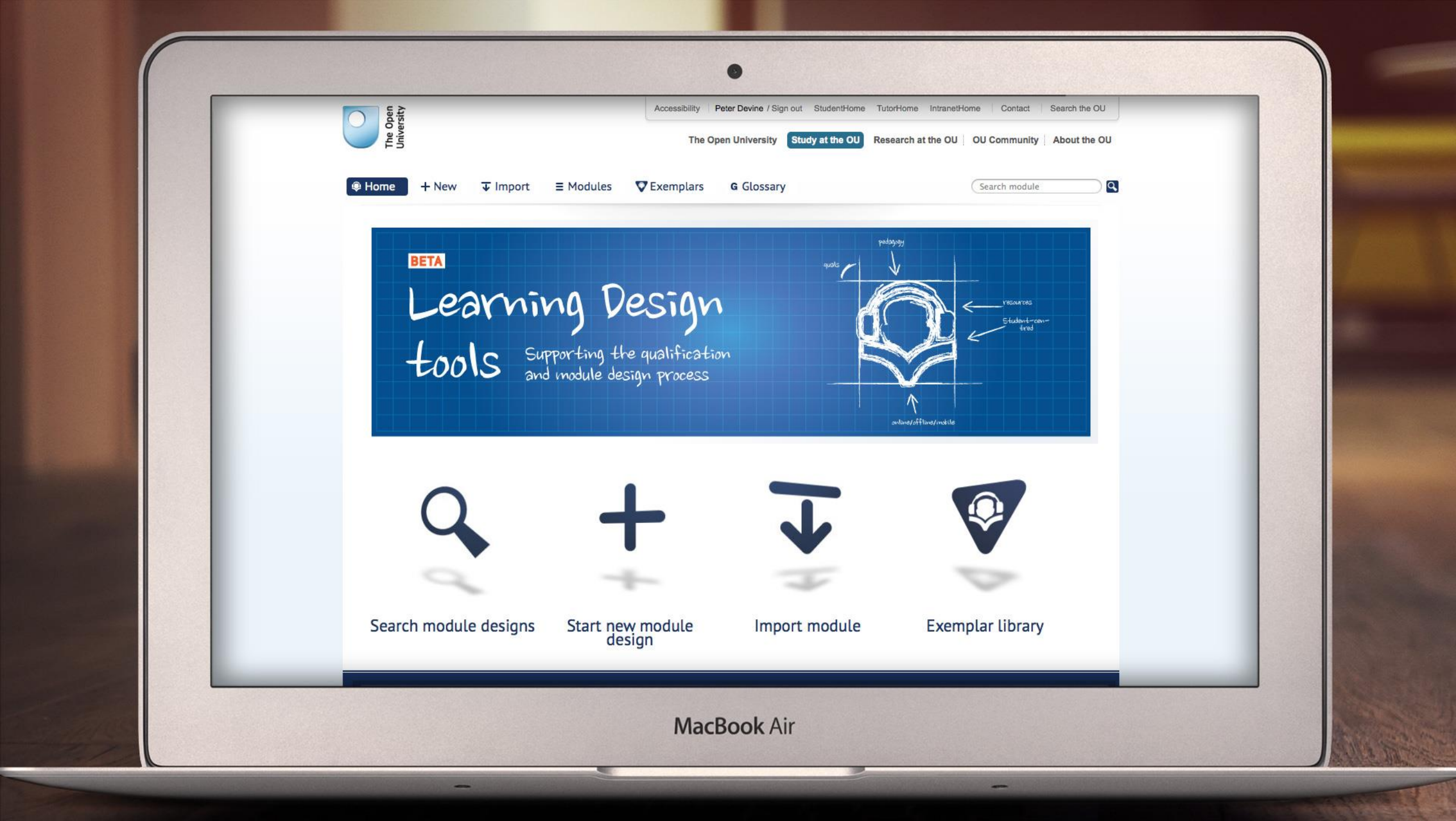
- ✓ 38% 4* World-Class research
- ✓ 100% 4* Research Environment
- ✓ 80% International Impact

Number 2 in UK for Education Research on Breadth and Quality
Top 100 QS World University Ranking for Education
Number 1 in UK QS Citation Ranking


Improve
Design
Measure
Support


Design
Measure
Support

Design to
help learners to learn


Accessibility | Peter Devine / Sign out StudentHome TutorHome IntranetHome Contact Search the OU
The Open University
The Open University Study at the OU Research at the OU OU Community About the OU
Home + New Import Modules Exemplars G Glossary
Search module
BETA
Learning Design tools
Supporting the qualification and module design process
pedagogy
quals
resources
Student-centred
online/offline/mobile
Search module designs
Start new module design
Import module
Exemplar library
MacBook Air

Learning Design @ OU

Learning Design is interested in d**esigning for student engagement with activities, learning tools, materials and communities**.

Two key purposes:
1. Module / Qualification design
2. Quality enhancement

learning design

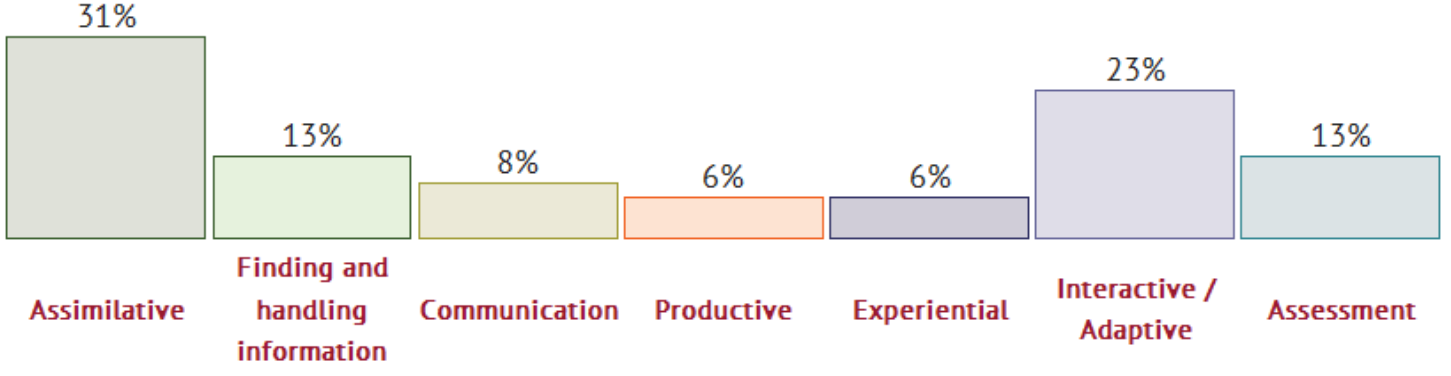
learning-design.open.ac.uk

Visualising the design

...supports the development, analysis and sharing of these plans

(Diego et al., 2008)

A set of design templates is used to capture and share the structures and approaches of a unit of learning (rather than unstructured text descriptions). These make the designs more visible and explicit, and can be used to share ‘good practice’.



H818: The networked practitioner

Print | Copy | Export as Word

Module Summary | Learning Outcomes | Activity Planner | Workload Tool | Module Map | Design Log | Evaluation

Hours spent undertaking each type of activity

Design stages

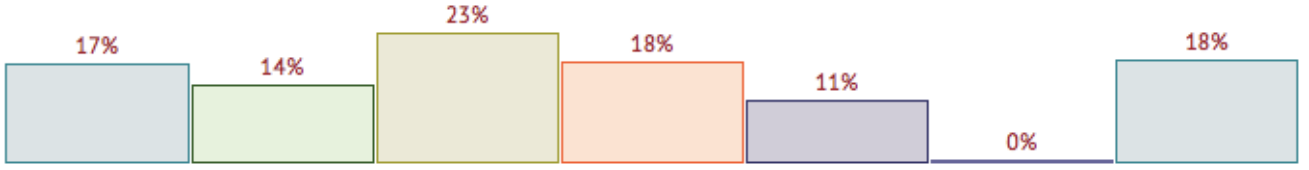
Initial | Specification (REP03) | Draft (D2) | Final

Copy and replace:

Initial → Specification | Specification → Draft | Draft → Final | Workload tool → Initial

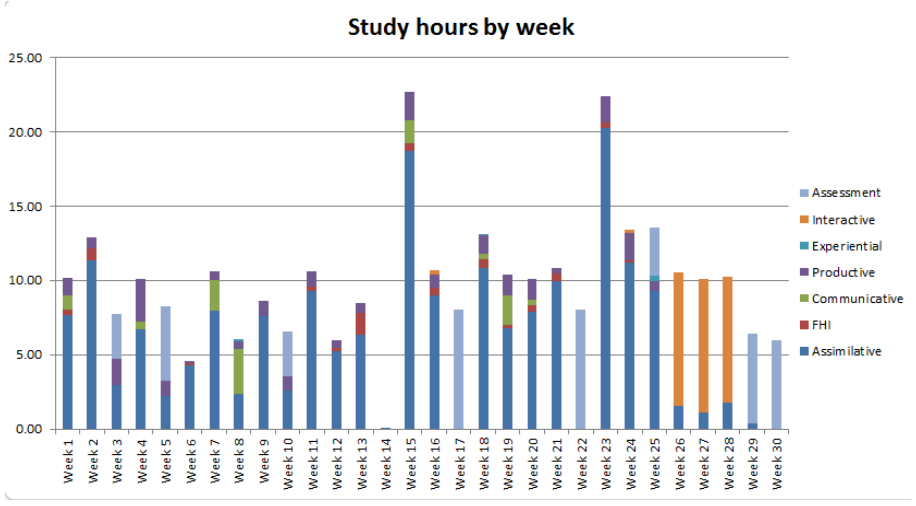
Workload tool → Specification | Workload tool → Draft | Workload tool → Final

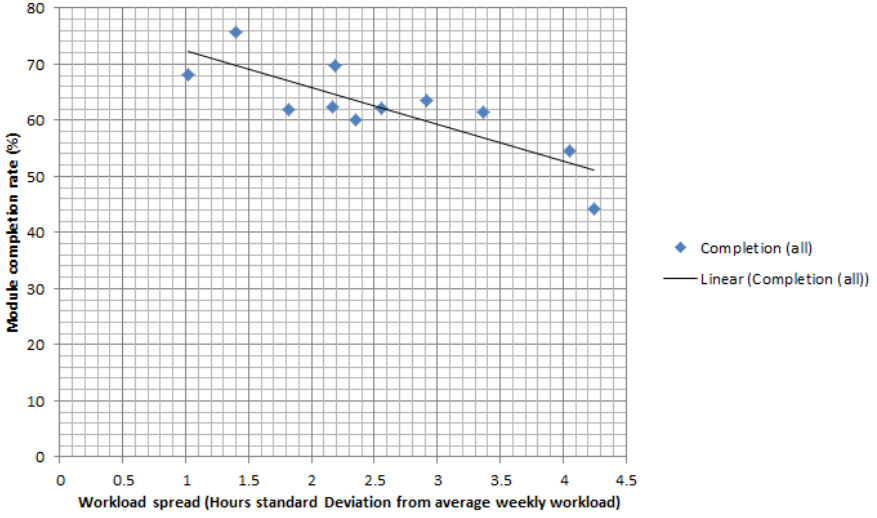
Week	Assimilative	Finding and handling information	Communication	Productive	Experiential	Interactive / Adaptive	Assessment	Total hours (Avg: 36.17, StDv: 42.09 — Hide guides)
1 (wks 1-12: mair	20.5	5	16	7.5	0.5	0	24	73.50
2 (wks 13-16: pro	2	0	1	0.5	2	0	6	11.50
3 (wks 17-20: H8:	0	0	2	0	9	0	9	20
4 (wk 21: all self-								0
Project (through t	15	25	30	30	12			112
Label								0
Total hours	37.50	30.00	49.00	38.00	23.50	0.00	39.00	217.00

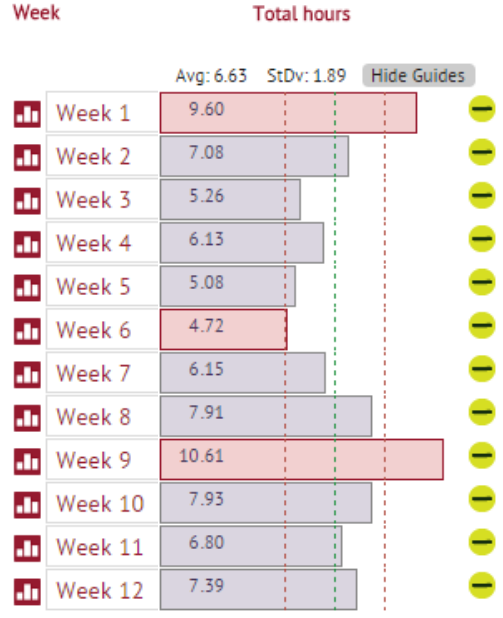


Example: workload

Module	average weekly workload	Workload spread	Q35 - ability to keep up	Completion (all)	Pass (all)
AA100	6.93	2.19	90.1	69.8	67.4



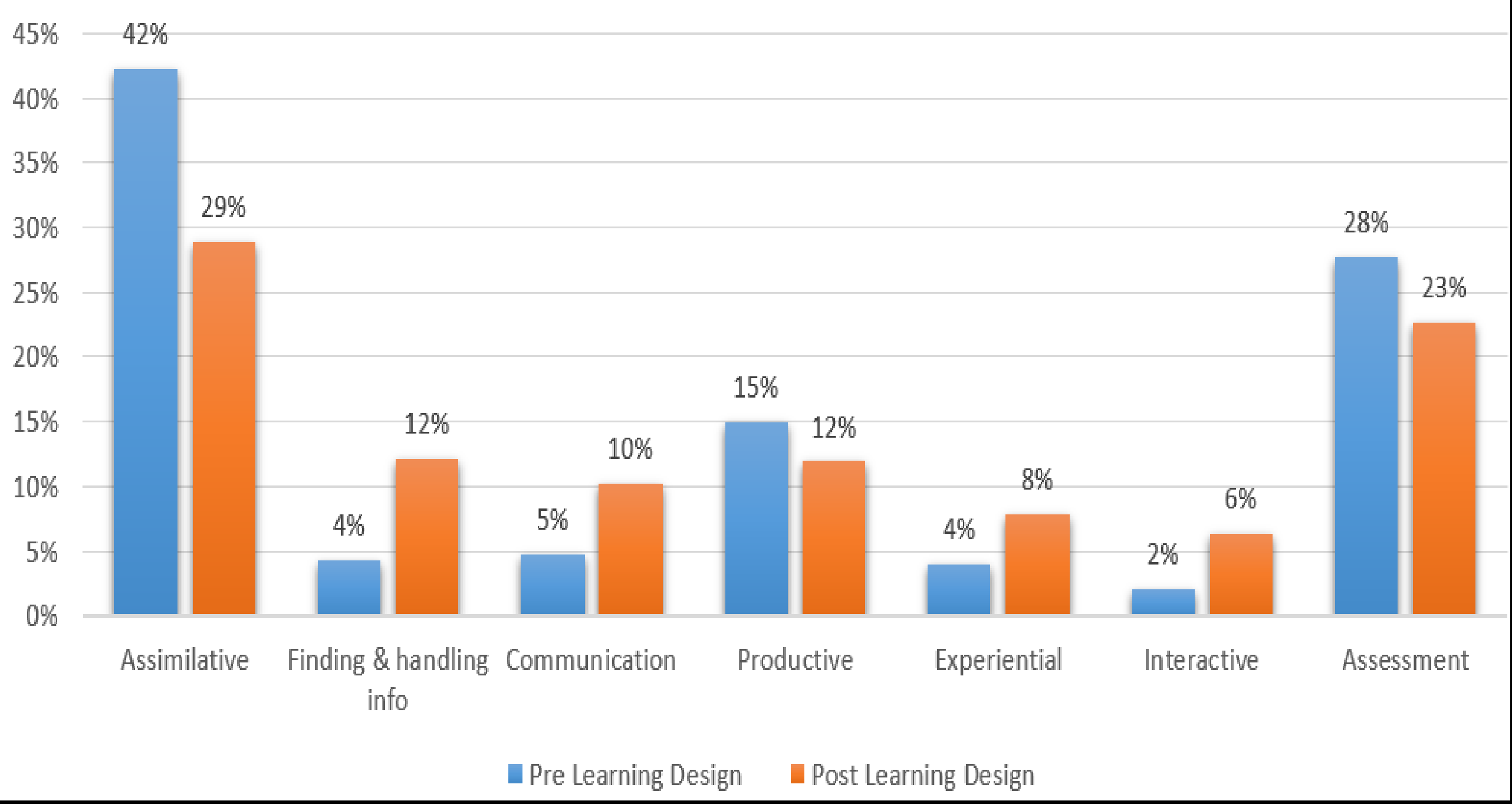




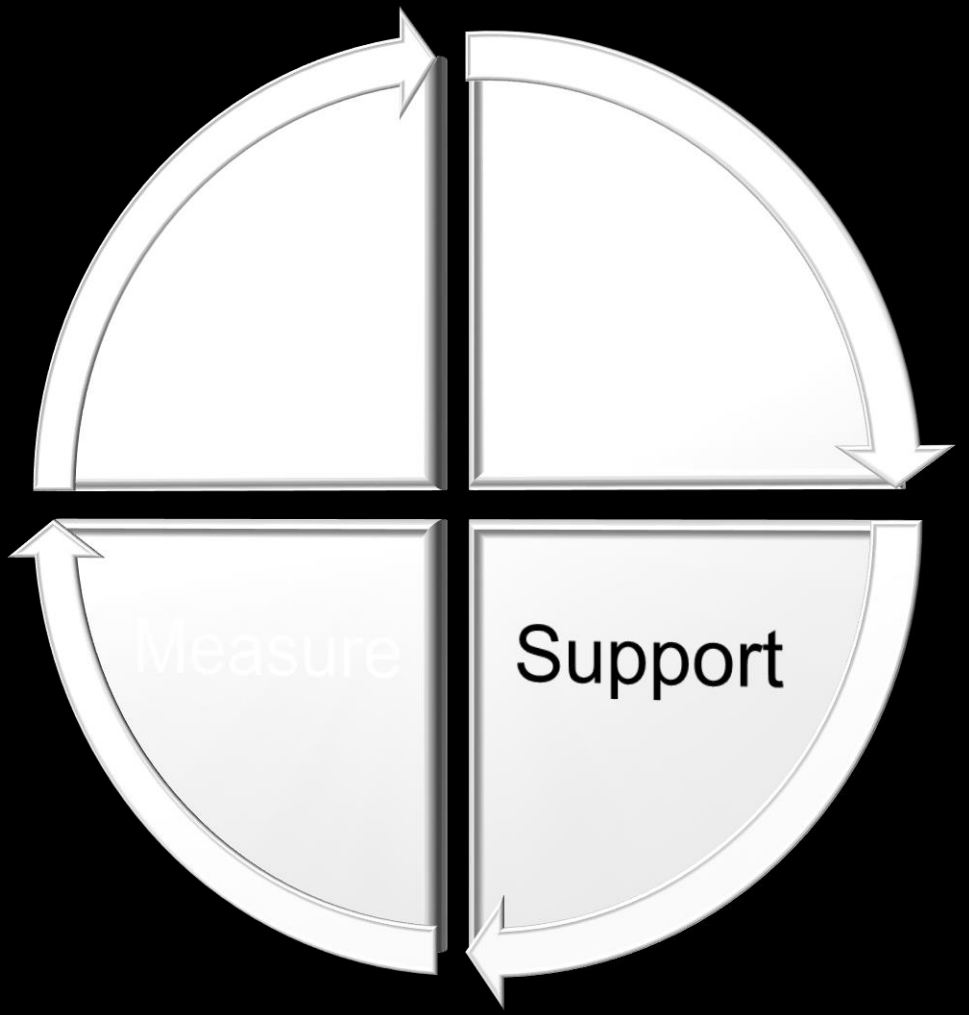
Impact on pedagogy:

1. Review workload throughout design
2. Build tools to do this

learning design



Toetenel, L. and Rienties, B. (2016) Learning Design – creative design to visualise learning activities. *Open Learning*.


Measure
Support

H818 - The networked pract…

www.open.ac.uk/postgraduate/modules/h818

h818 open university

Most Visited Getting Started

The learning outcomes for this module are available here.

Teaching and assessment

Support from your tutor

You will have a tutor who will guide you on many aspects of the module, who will mark and comment on your written work, and whom you can ask for advice and guidance. You will be taught and assessed through a combination of media, including email, online forums and the internet.

Contact us if you want to know more about study with The Open University before you register.

Assessment

The assessment details can be found in the facts box above.

You must use the online eTMA system to submit your tutor-marked assignments (TMAs).

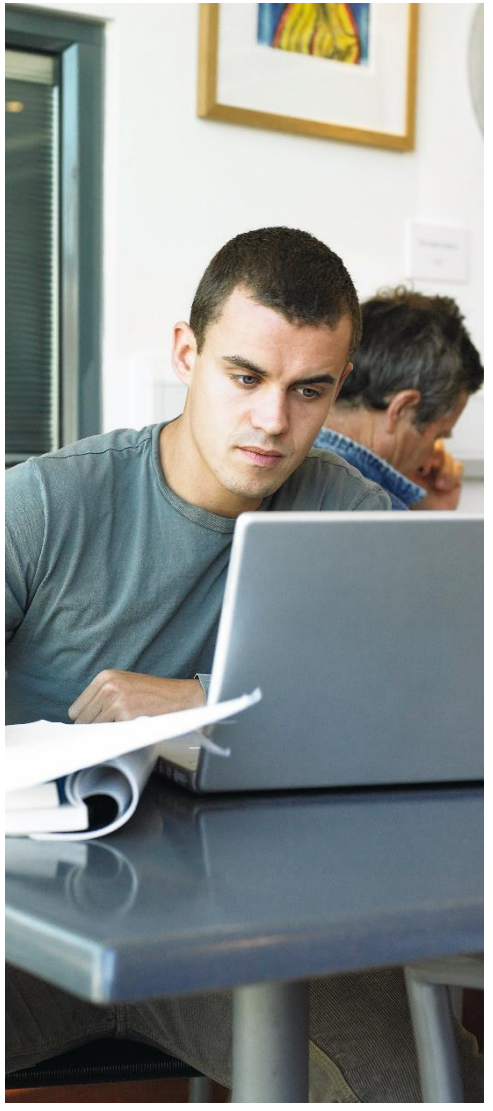
TYPICAL OU MODULE

- Runs for **6 or 9 months** (30 or 60 UK credits)
- 300 or 600 hours of study (**8-16 'directed' hours per week**)
- Students study **part-time** from home (or work, bus, train, prison, submarine…)
- Increasing numbers starting to chose **full-time study intensity** for all or part of their studies
- Students in **groups of around 15-20** with an assigned tutor

- Learning activities delivered primarily through the module website using:
  - A weekly **study planner**
  - Face-to-face or online **tutorials**
  - Sometimes augmented with **books** and other learning resources

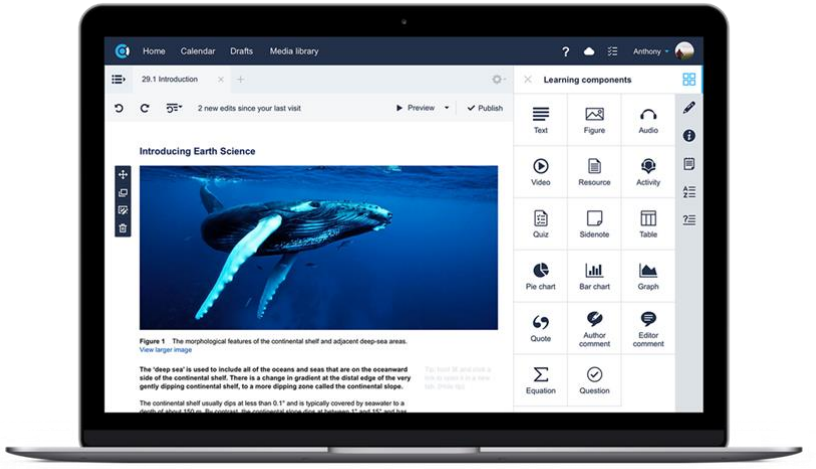
OU LEARNING SYSTEMS IN NUMBERS

- **180k** active users (students/staff) of the VLE every year
- Around **450** live module websites, and **5000+** historical sites
- Over **1 million transactions per day**, forum views per day averages **170,000**, unique users per day averages **35,000** peaks at **50,000**
- **700,000 quiz** attempts per year, **6 million quiz questions** answered per year



USER CENTRED DESIGN PRINCIPLES

- Strong evidence base built from academic and user research
- Across design of platforms, tools and curriculum design
- Using ‘Universal Design’ principles of Accessibility
- Focus on activity-led rather than content-driven design
- Leveraging cross-University technical, pedagogical, and content knowledge expertise to enhance and transform student outcomes



PLATFORM DESIGN: SUPPORTING SEVEN STUDY BEHAVIOURS

Goal-setting

Digital-preferred

Time

Help-seeking

Focus

Elaboration

Note-making

Study Habits Research

SUBJECT WEBSITE

Study Home | Connect | Discover | Skills | Plan | Succeed | Help ? | Search Law Study Home

Your modules

In this area students will see information about the modules they are currently studying. Each open module will have its own box with key dates, and collaborative tools with unread indicators.

Examples of what the student will see in all the boxes on this website are available in the OLS-Guide.

Past and future modules

In this area, students will see a list of forthcoming modules that they are registered on, the start dates and a link to their study record. They will also see links to previously completed modules in read-only mode.

Your subjects

Subjects and qualifications

You are not currently registered for any qualifications.

Browse all

Free learning

OpenLearn

News

Forum: 'Making the most of your Law degree'

Posted: 21 Jun 2018

This forum, hosted by OU Careers and Employability Services, will run from **Monday 2nd July to ...**

Having withdrawal symptoms?

Posted: 19 Jun 2018

If you're missing your studies – and we are not saying you have to – there is a universe of free ...

View all news and events >

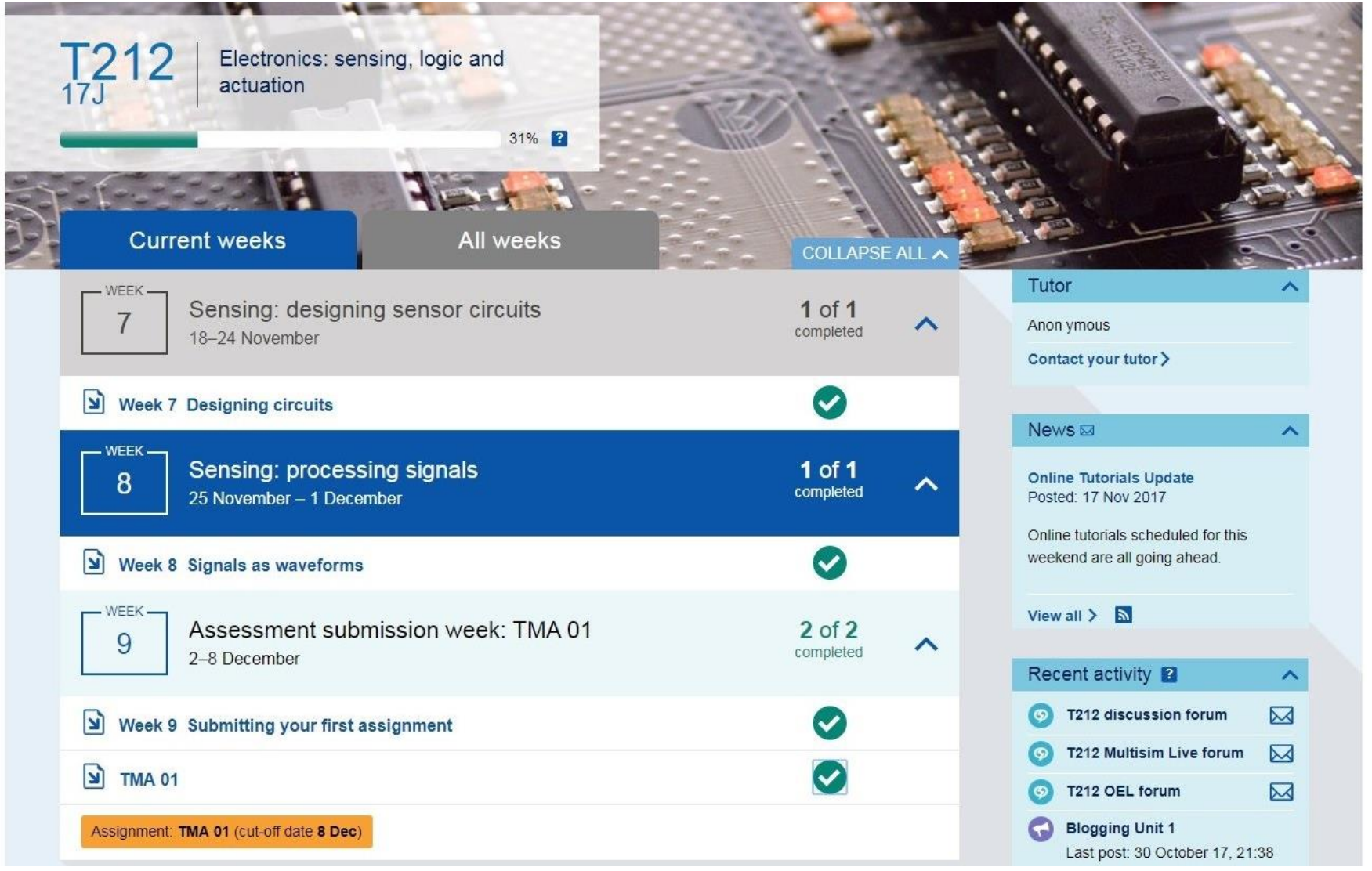
Upcoming events

JUN 22 — **OU Students Association Conference**
Friday, 22 Jun 2018, 10:00 to Sunday, 24 Jun 2018, 16:00
Walton Hall, Milton Keynes campus

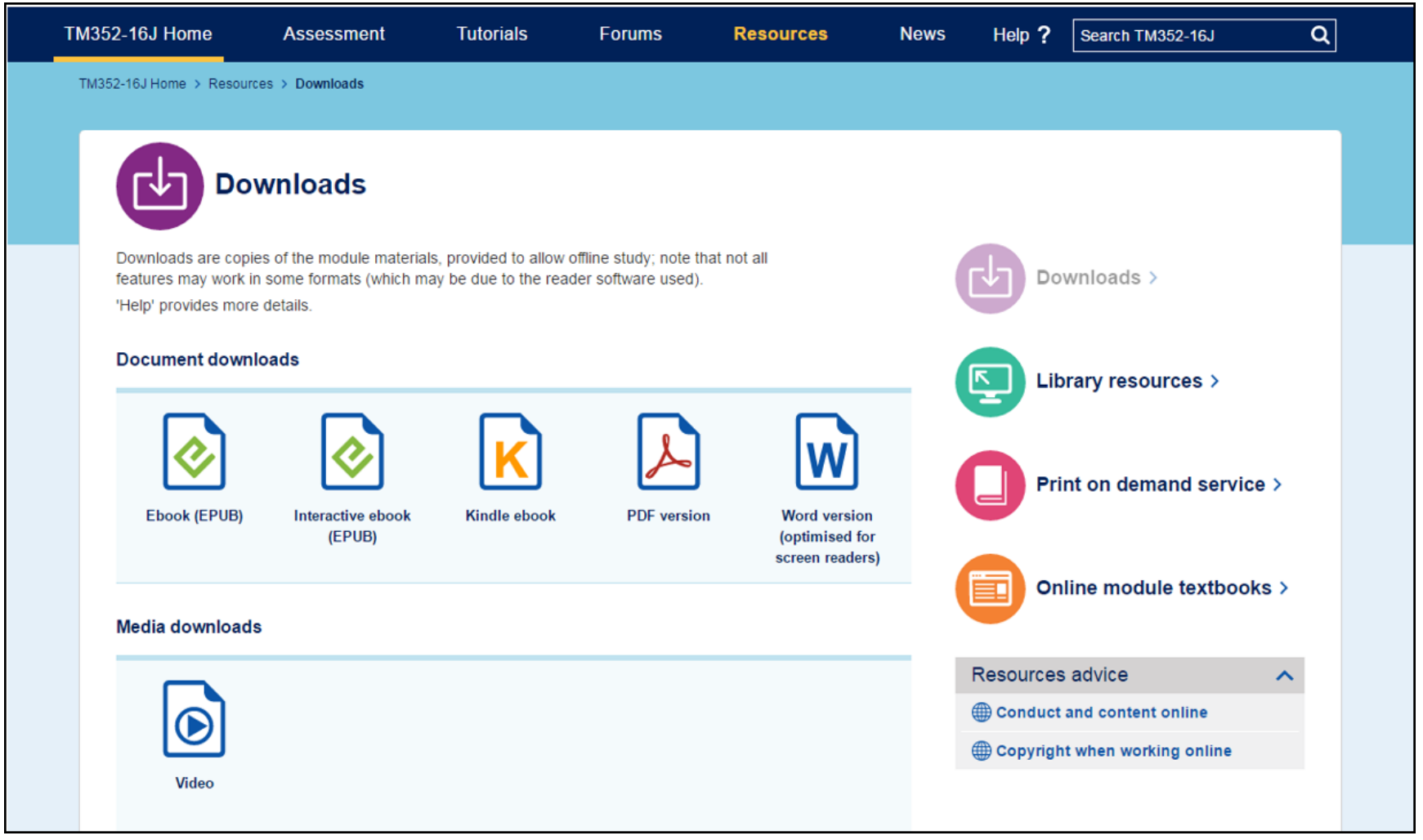
JUN 27 — **LGBT*? AuthentiCity is designed for you!**
Wednesday, 27 Jun 2018
London

Social media

MODULE WEBSITE: STUDY PLANNER



MODULE WEBSITE: OFFLINE FORMATS DOWNLOADS PAGE



MODULE WEBSITE: ACTIVITY PAGE

Unit 4 Current debates in sports nutrition: the case for high-carbohydrate diets

Introduction

4.1 The issue of sugar: what is it and what does it do?

4.2 Why are high-carbohydrate diets recommended for performance?

4.3 Key authors and the history of high-carbohydrate diets

4.4 The case for carbohydrate loading

4.5 The current carbohydrate recommendations

4.6 Carbohydrate mouth rinsing

4.7 Independent research

4.8 Unit summary

Acknowledgements

View as single page

Video quality

High quality

Standard quality

Descriptions

Some items on this page include descriptions for visually-impaired students. Hide description links

4.1 The issue of sugar: what is it and what does it do?

The first subject that we focus on in this unit is the contentious subject of sugar. Sugar seems to have taken over from fat as a demonised nutrient. However, what is actually meant by 'sugar' is a matter of some confusion. 'Sugar' refers to several things as it is the term used to

Activity 4.1 What is sugar?

Reveal comment

< Previous

Next >

M

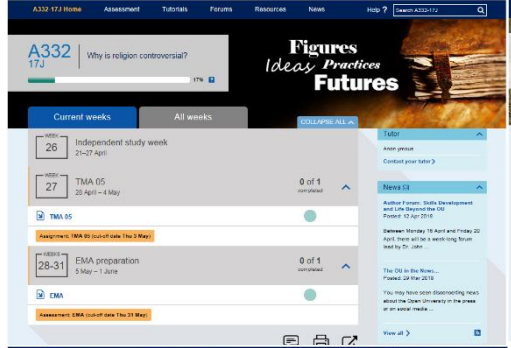
ACCESSIBLE INTERACTIVE MEDIA PLAYER

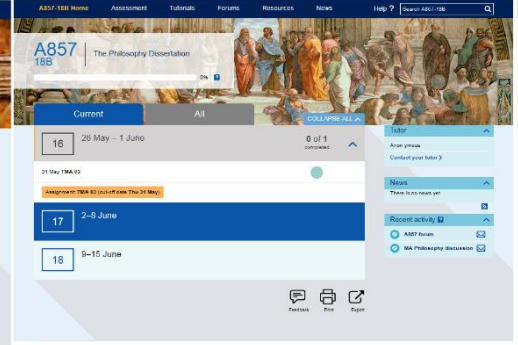
Maximising student success at The Open University by creating inclusive, immersive multimedia learning experiences

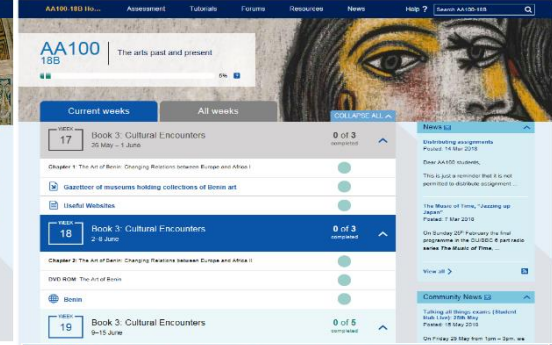
The Guardian University Awards 2018
Winner

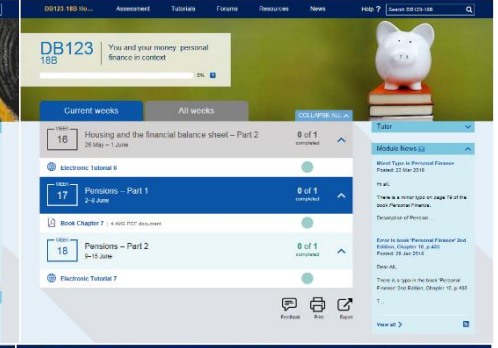
ACCESSIBLE, INTERACTIVE, MEDIA DELIVERY

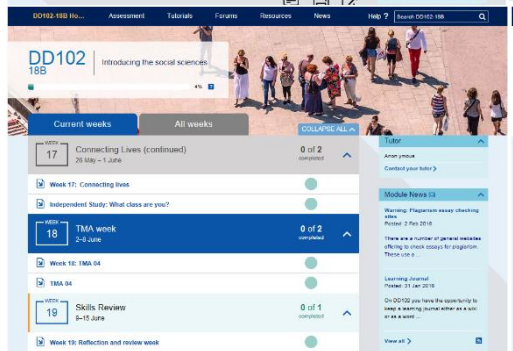
- Works in all modern browsers and most devices
- Allows people with impaired sight, hearing, manual dexterity and other problems to consume video and audio with ease.
- Transforms learning with video from a passive exercise in consumption to a critical and exploratory activity.
- Features designed to help disabled people turn out to have major benefits for all users. Winning all round.

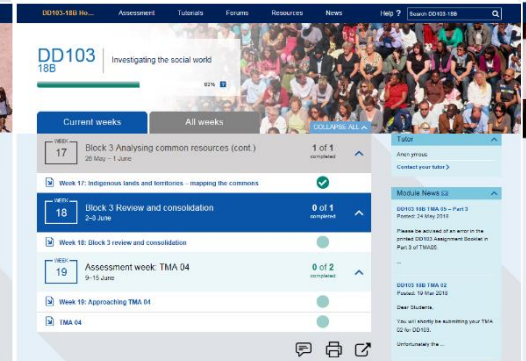

A332
17J
Why is religion controversial?
Figures
Ideas Practices
Futures
Current weeks
All weeks
Independent study week
TMA 05
EMA preparation
EMA

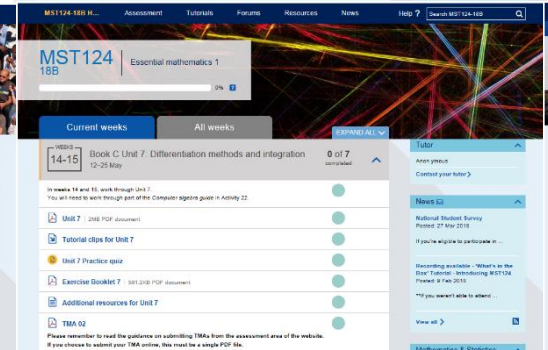

A857
18B
The Philosophy Dissertation
Current
All
26 May – 1 June
2–8 June
9–15 June

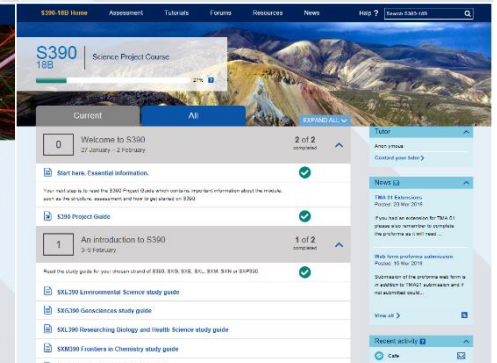

AA100
18B
The arts past and present
Current weeks
All weeks
Book 3: Cultural Encounters
Book 3: Cultural Encounters
Book 3: Cultural Encounters

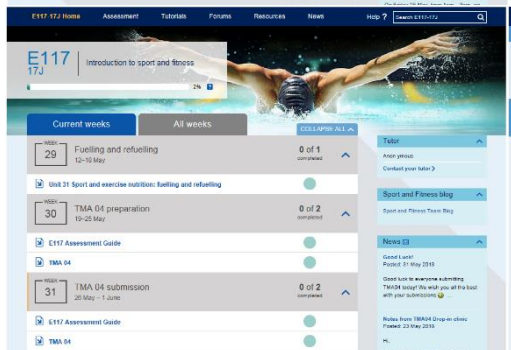

DB123
18B
You and your money: personal finance in context
Current weeks
All weeks
Housing and the financial balance sheet – Part 2
Pensions – Part 1
Pensions – Part 2

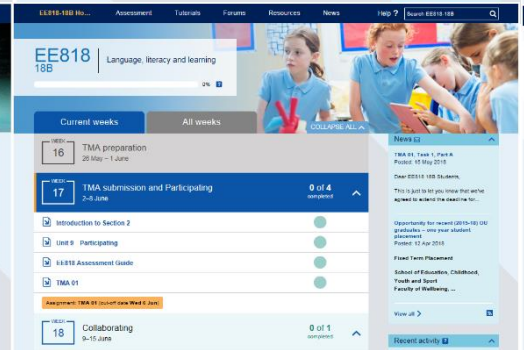

DD102
18B
Introducing the social sciences
Current weeks
All weeks
Connecting Lives (continued)
TMA week
Skills Review

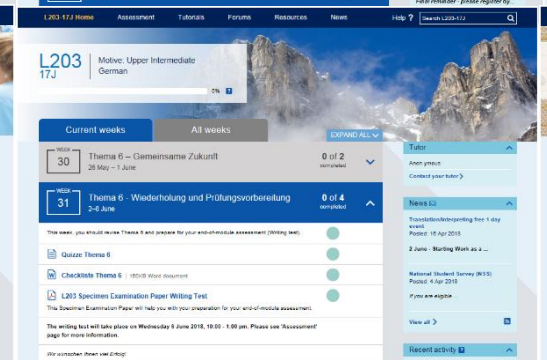

DD103
18B
Investigating the social world
Current weeks
All weeks
Block 3 Analysing common resources (cont.)
Block 3 Review and consolidation
Assessment week: TMA 04

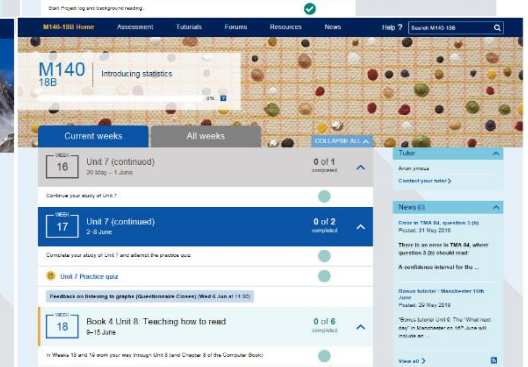

MST124
18B
Essential mathematics 1
Current weeks
All weeks
Book C Unit 7: Differentiation methods and integration
Book C Unit 8: Integration methods

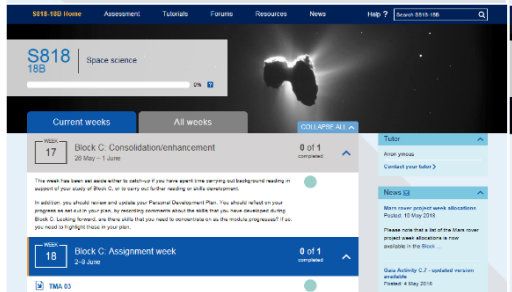

S390
18B
Science Project Course
Current
All
Welcome to S390
An introduction to S390

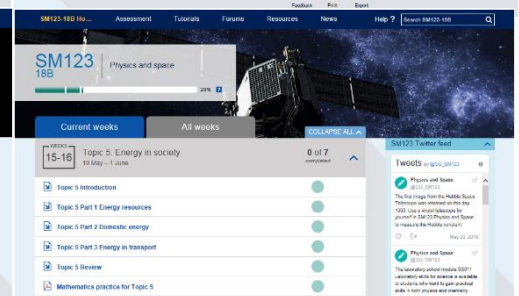

E117
17J
Introduction to sport and fitness
Current weeks
All weeks
Fuelling and refuelling
TMA 04 preparation
TMA 04 submission

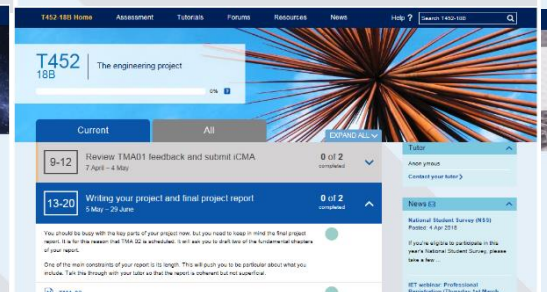

EE818
18B
Language, literacy and learning
Current weeks
All weeks
TMA preparation
TMA submission and Participating
Collaborating

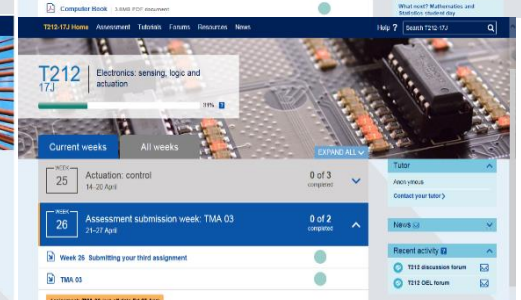

L203
17J
Motive: Upper Intermediate German
Current weeks
All weeks
Thema 6 – Gemeinsame Zukunft
Thema 6 - Wiederholung und Prüfungsvorbereitung


M140
18B
Introducing statistics
Current weeks
All weeks
Unit 7 (continued)
Unit 7 (continued)
Book 4 Unit 8: Teaching how to read


S818
18B
Space science
Current weeks
All weeks
Block C: Consolidation/enhancement
Block C: Assignment week
TMA 03


SM123
18B
Physics and space
Current weeks
All weeks
Topic 5: Energy in society
Topic 5 Introduction
Topic 5 Part 1 Energy resources
Topic 5 Part 2 Domestic energy
Topic 5 Part 3 Energy in transport
Topic 5 Review
Mathematics practice for Topic 5

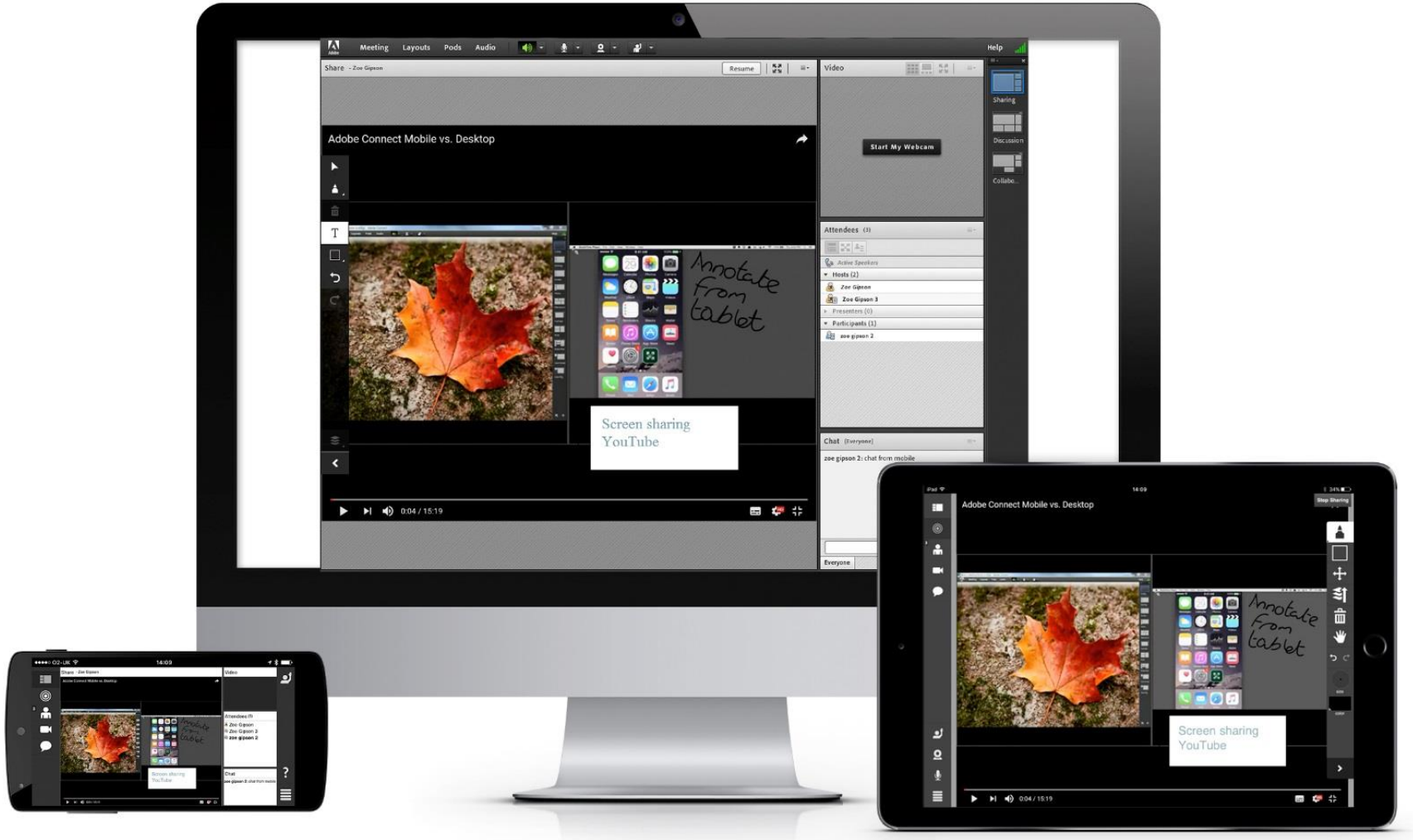

T452
18B
The engineering project
Current
All
Review TMA01 feedback and submit iCMA
Writing your project and final project report


T212
17J
Electronics: sensing, logic and actuation
Current weeks
All weeks
Actuation: control
Assessment submission week: TMA 03
Week 26: Submitting your third assignment
TMA 03

ADOBE CONNECT

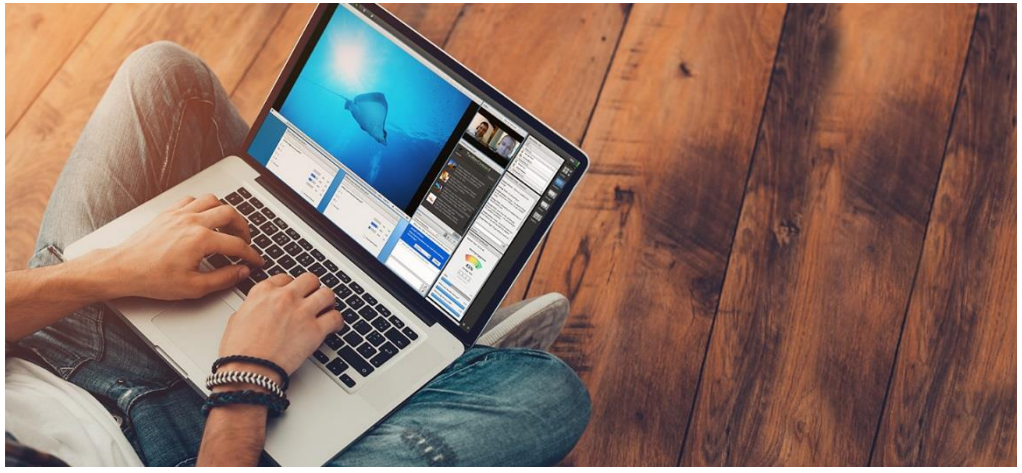
Adobe® Connect™

Basic layout for students on different devices



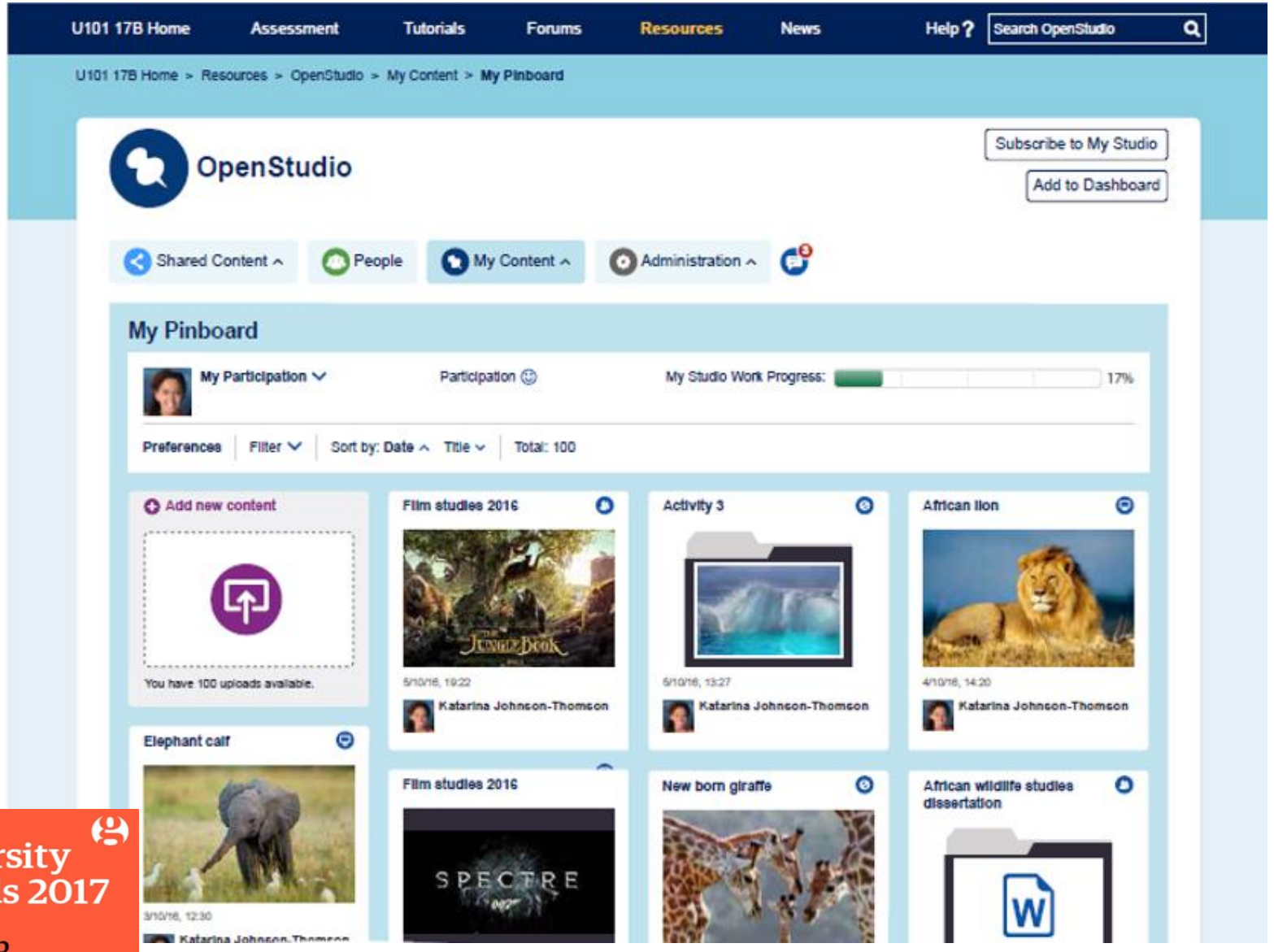
ONLINE TUTORIALS AND CONFERENCING

- Real-time communication using presentations, text chat, audio and video. Also includes polling and micro-quiz options.
- Mainly a tutor–student conferencing facility for tutorials, group work, lectures and seminars. Can also be used as a student–student peer support environment.



- Students can collaborate in breakout rooms and edit preloaded content on the ‘whiteboard’ (e.g. an article or diagram).
- Other features such as sharing software applications and internet tours.

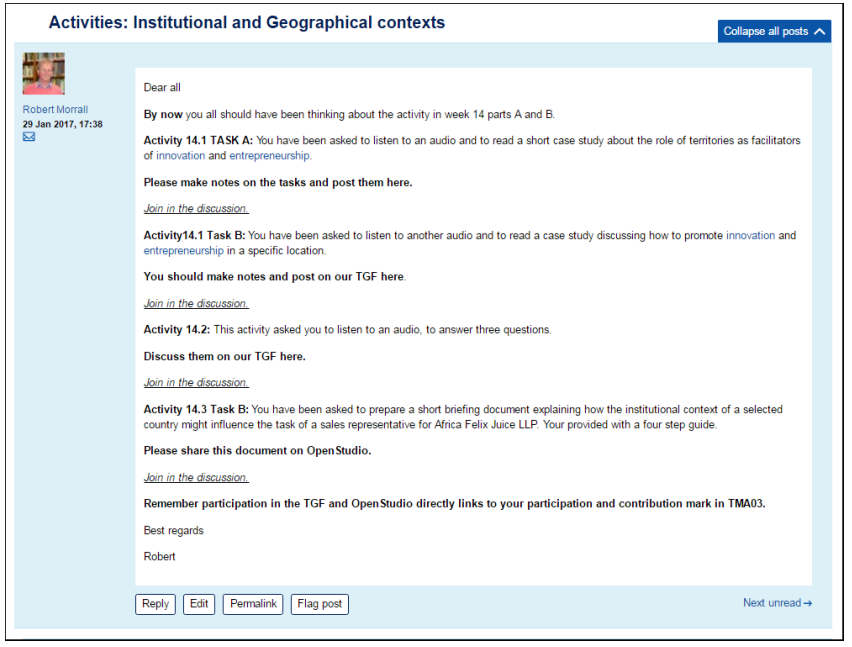
OPENSTUDIO



University Awards 2017

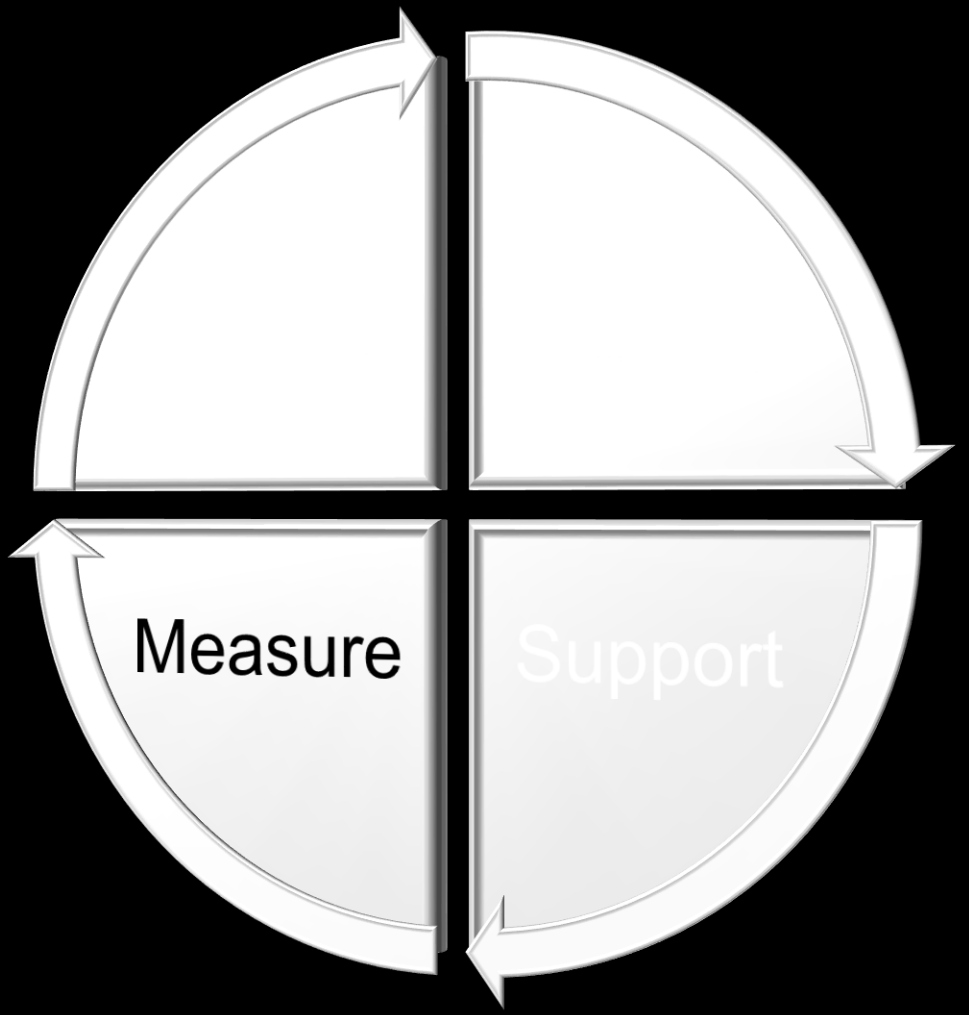
Runner up

FORUMS



- Easy to use: utilises well-known web technology
- Ideal for in-module multi-directional communication (student–student, staff–student, student–staff)
- Asynchronous: time to think and reflect
- Students can collaborate and create content together
- Participation reports can be accessed by tutors
- Supportive environment: active moderation, seeded icebreakers and activities

RESPONDING TO CHANGING STUDENT EXPECTATIONS

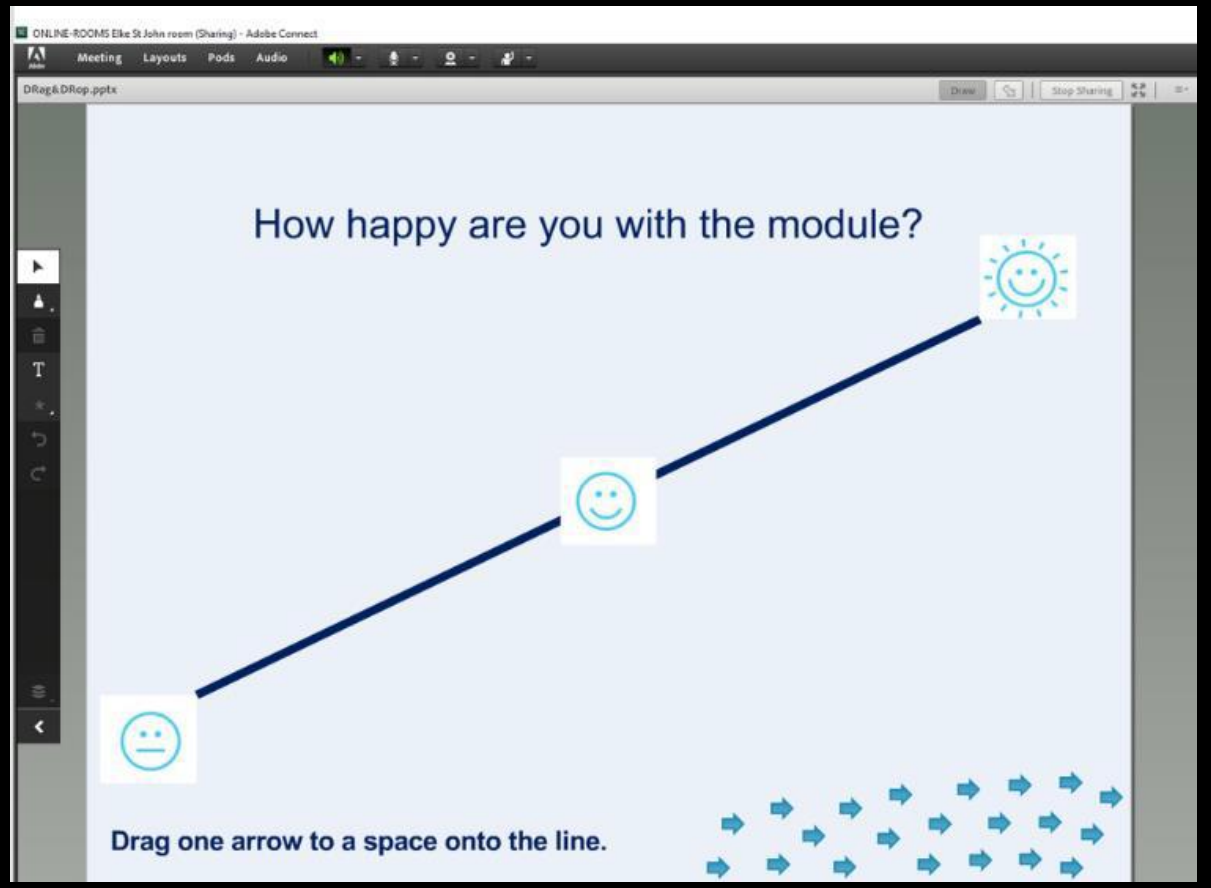

Measure
Support

Measure what matters

What you measure changes what you do

MOMENTARY
AVERAGE
39.2 mpg
0
30
60
90
37.4 mpg

AVERAGE
DISTANCE
36 mph
14 miles



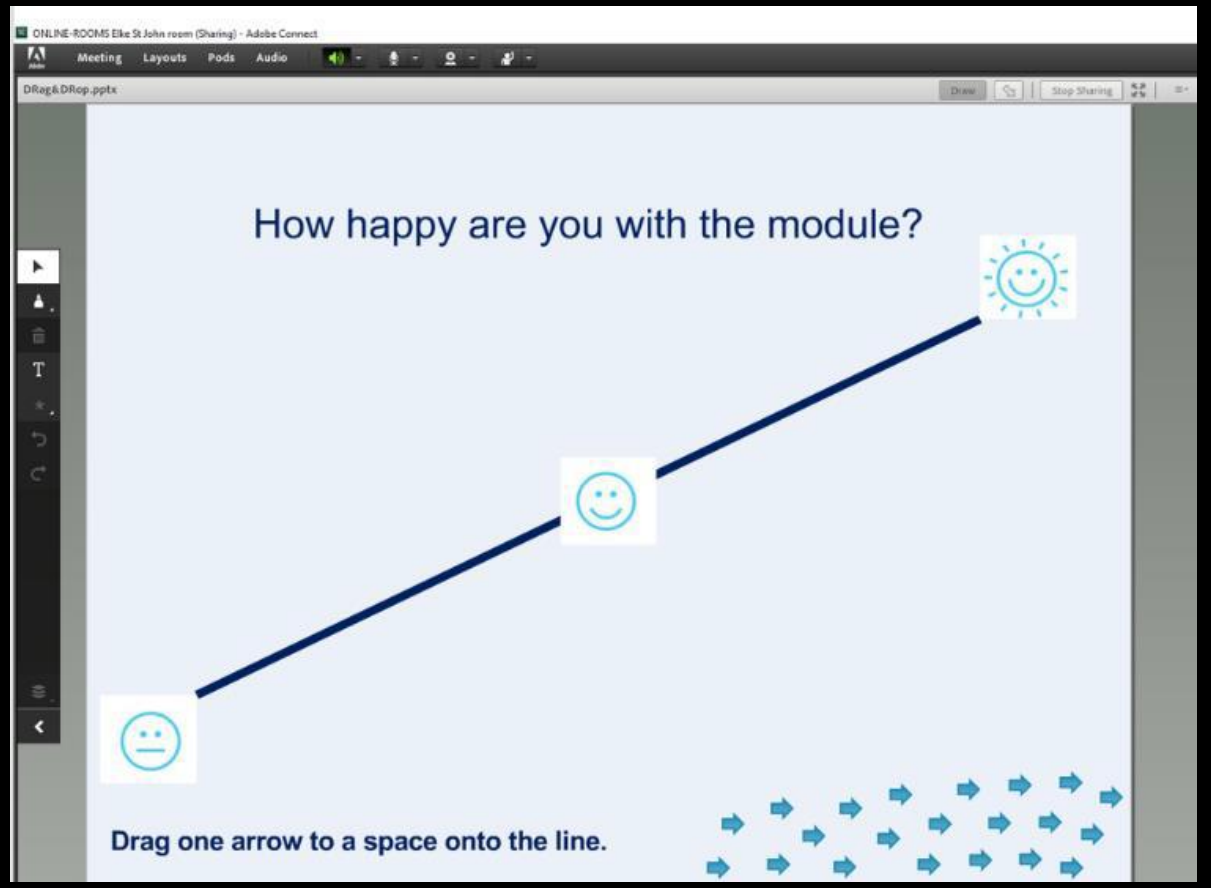
Certificate

This is to certify that

Patrick McAndrew

has successfully completed *Circuits and Electronics 6.002x*

A course of study offered by ***MITx***, an online learning initiative of
MASSACHUSETTS INSTITUTE OF TECHNOLOGY, through ***edX***,
the online learning initiative of Harvard University and MIT



Certificate

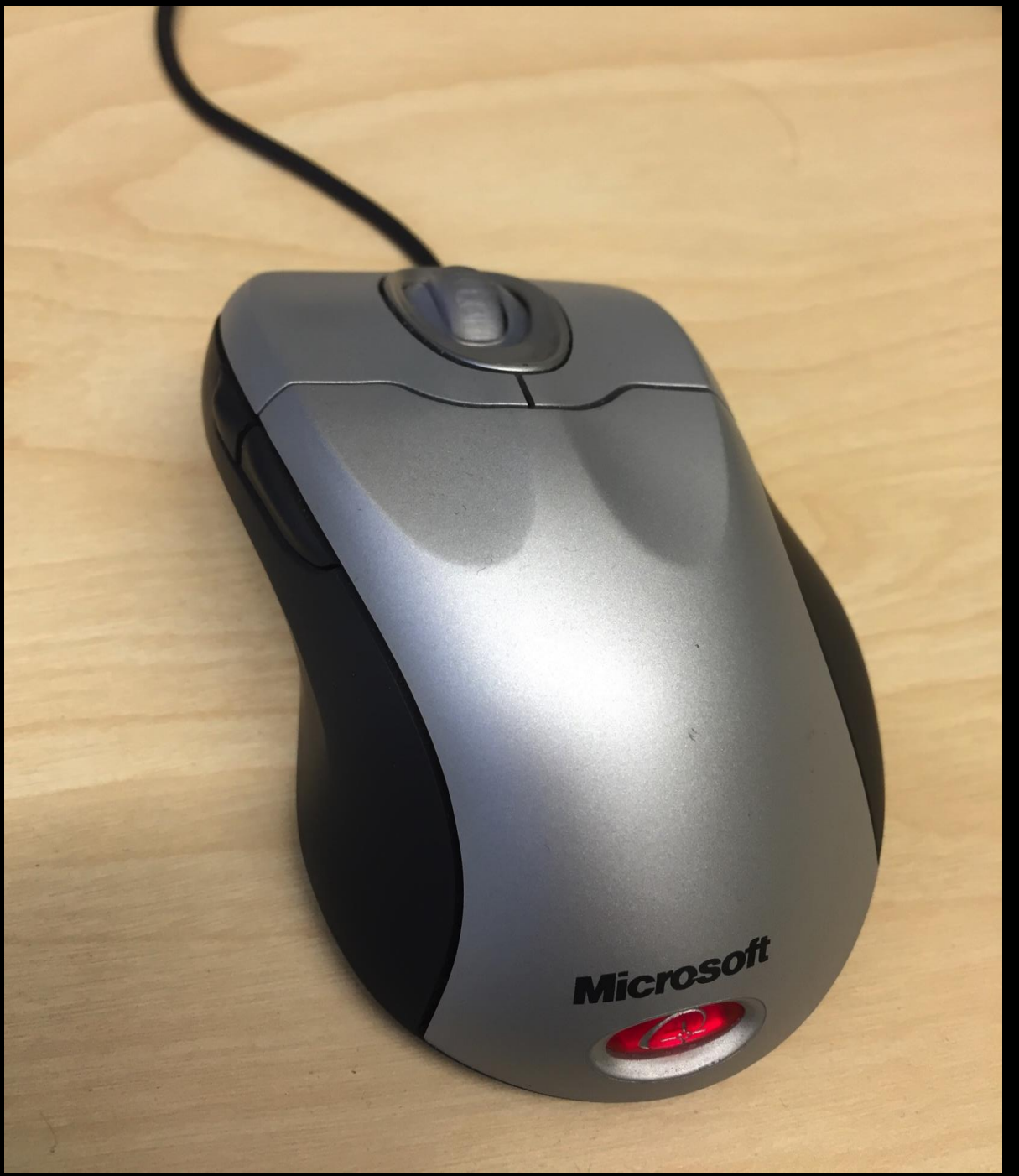
This is to certify that

Patrick McAndrew

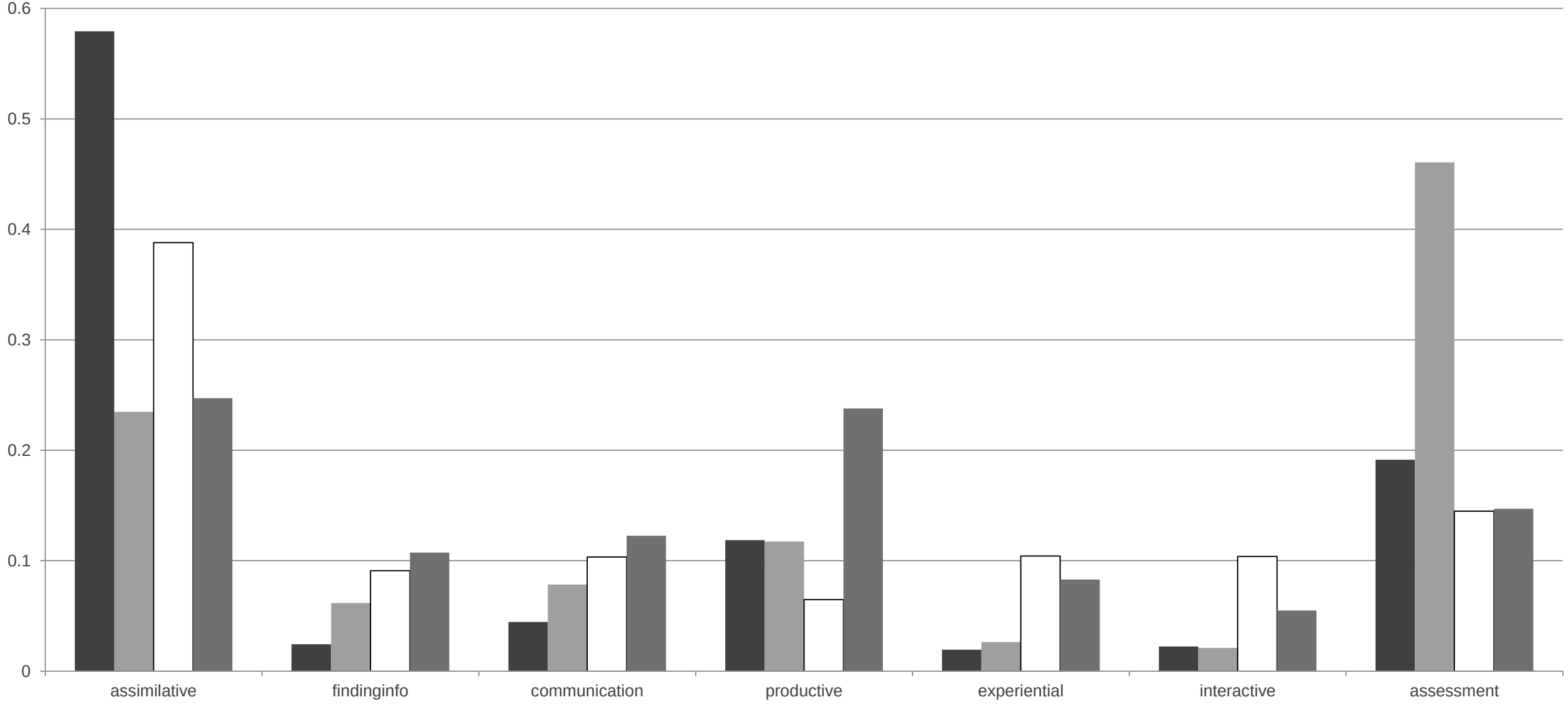
has successfully completed *Circuits and Electronics 6.002x*

A course of study offered by ***MITx***, an online learning initiative of
MASSACHUSETTS INSTITUTE OF TECHNOLOGY, through ***edX***,
the online learning initiative of Harvard University and MIT

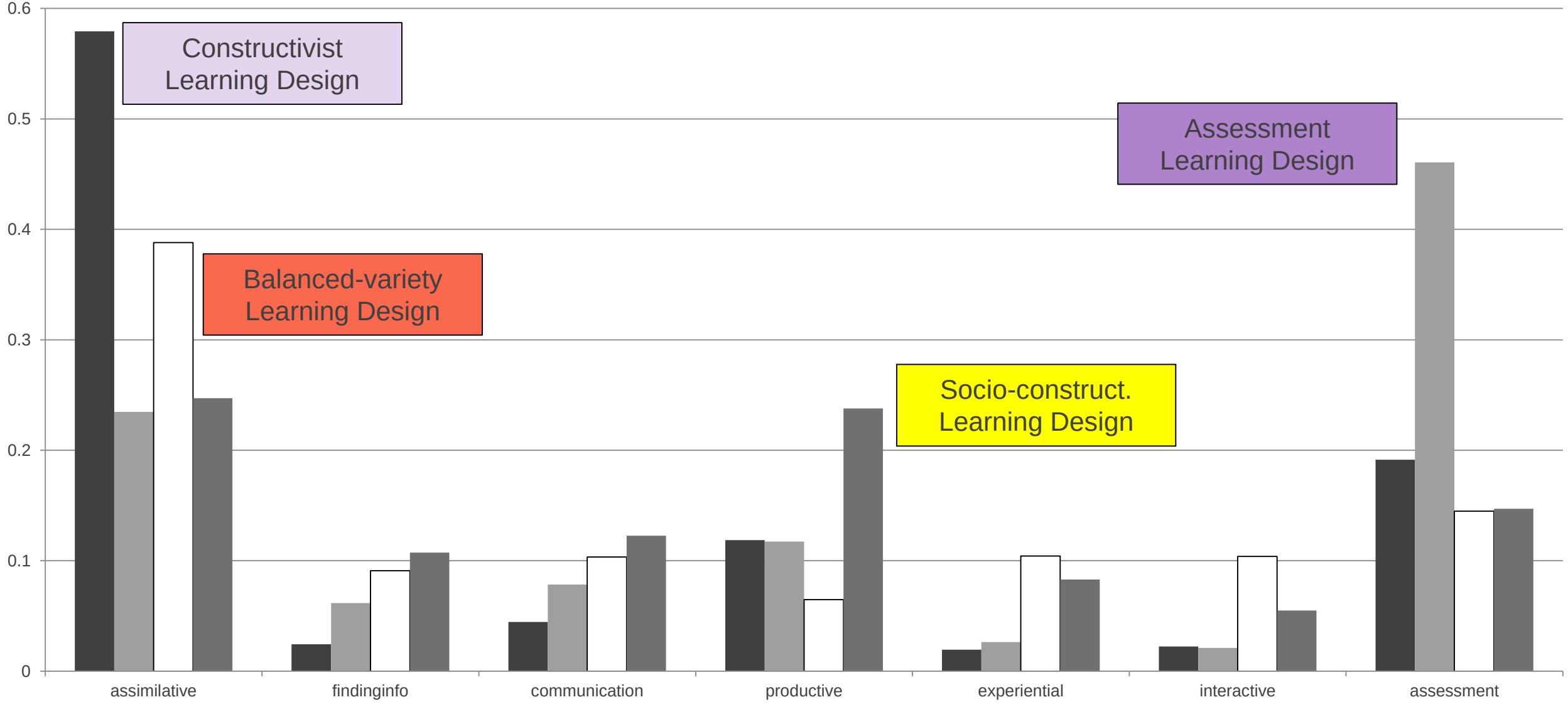
	FAKTOR POLITIK				
1	Seberapa besar pengaruh				
2	Dipengaruhi terhadap				
3	Seberapa besar peng				
4	Seberapa besar				
5	Seberapa besar pengaruh				
6	Seberapa besar				
7	Seberapa besar				
8	Seberapa besar				
	FAKTOR EKONOMI				
1	Seberapa besar biaya bisnis				
2	Seberapa besar pengaruh				
3	Seberapa besar pengaruh				
4	Seberapa besar pengaruh				
5	Seberapa besar pengaruh				
6	Seberapa besar pengaruh				
7	Seberapa besar pengaruh				
8	Seberapa besar pengaruh				
9	Seberapa besar pengaruh				
	FAKTOR SOSIAL				
3	Seberapa besar budaya				
4	Seberapa besar sifat				
5	Seberapa besar sportifitas				
	Seberapa besar sifat				
	Seberapa besar sifat				
	Seberapa besar dukungan				
	Seberapa besar				
	Seberapa besar				



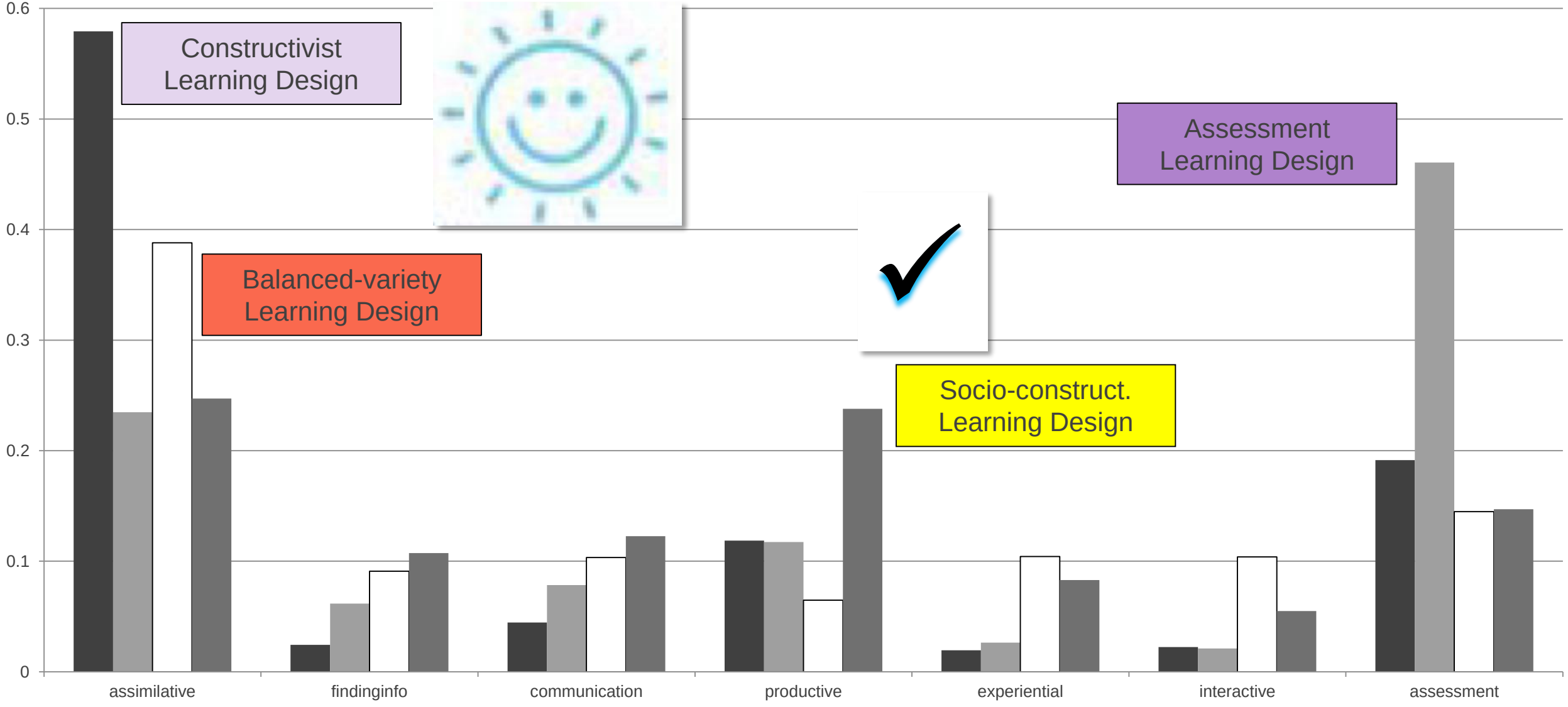
Findings: Patterns in Learning Design



Findings: Patterns in Learning Design



Findings: Patterns in Learning Design



Students on assimilative constructivist modules are most satisfied

Students on assimilative constructivist modules are most satisfied

Students on communicative socio-constructivist modules are most engaged

Students on assimilative constructivist modules are most satisfied

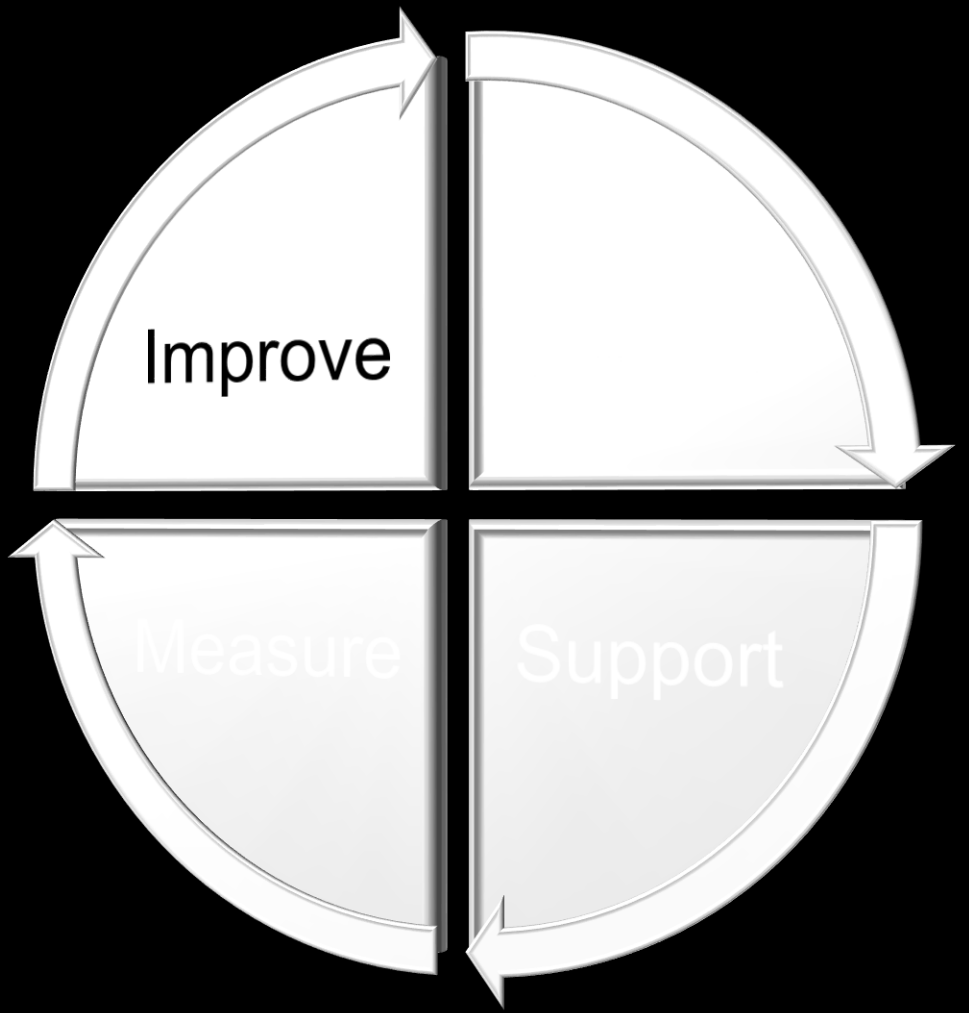
Students on communicative socio-constructivist modules are most engaged

Students on assimilative constructivist modules are least likely to be retained

“learning design strongly influences behaviour, experience and performance”

Bart Rienties

Rienties, B., Toetenel, L., Bryan, A. (2015). “Scaling up” learning design: impact of learning design activities on LMS behavior and performance. Learning Analytics Knowledge conference.


Improve
Measure
Support

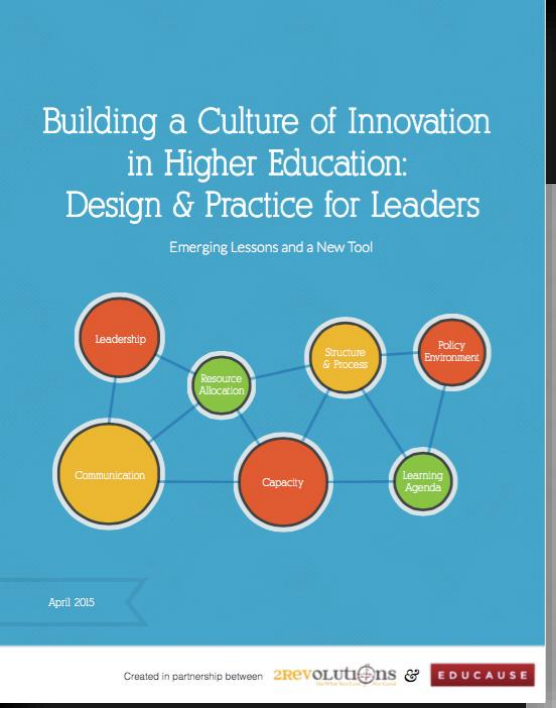
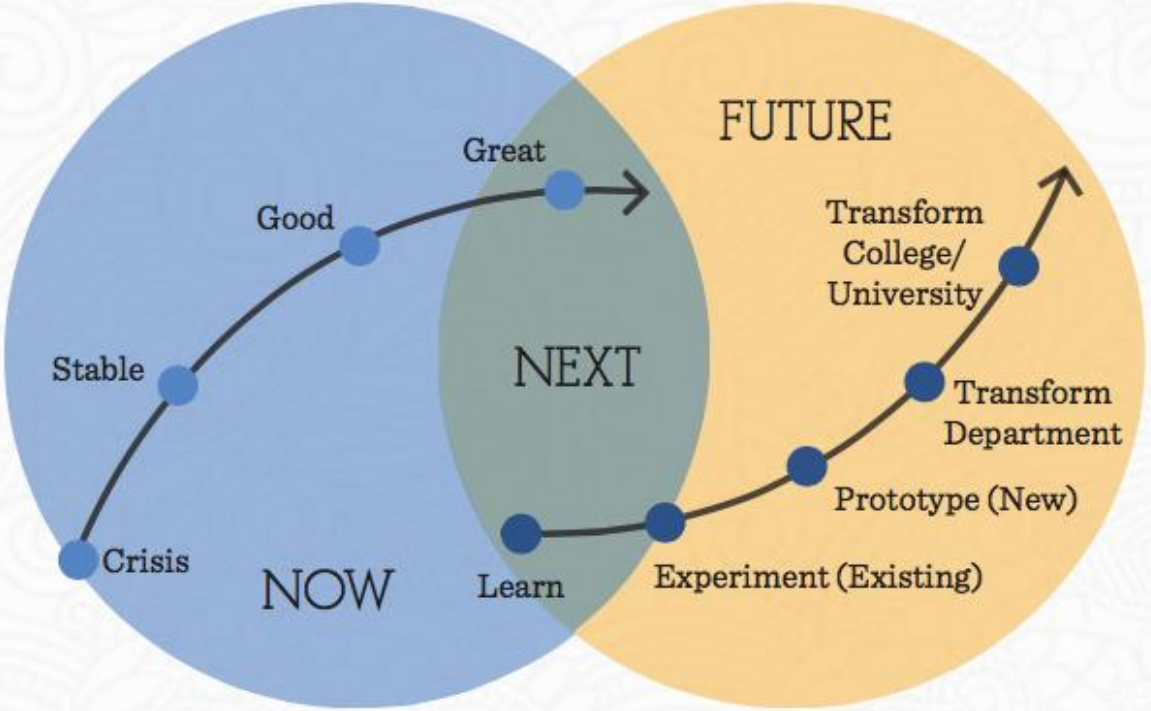


Figure III: Shifting from Improvement to Innovation

IMPROVE the System We Have

(Incremental = Diminishing Returns)



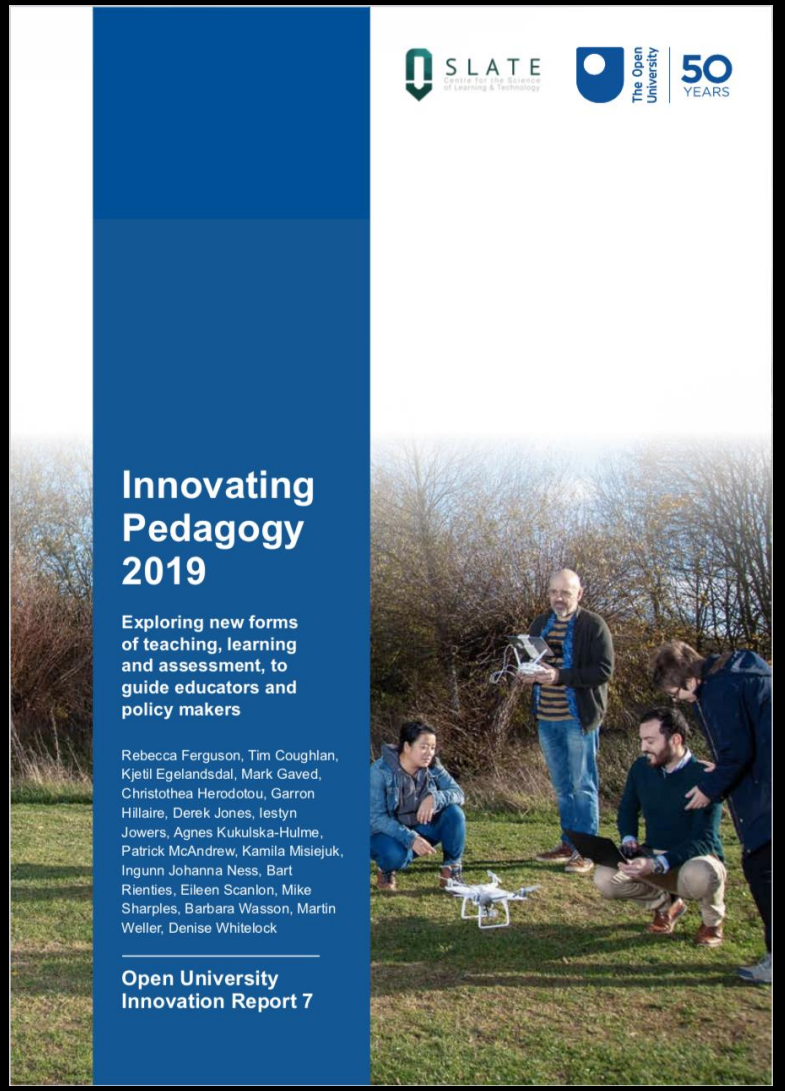
INNOVATE the System We Need

(Cross the Chasm = Difficult, but Promising)

Copyright © 2015 2Revolutions

Integrated
Collaborative
Engaging
Balanced
Economical
Reflective
Gradual

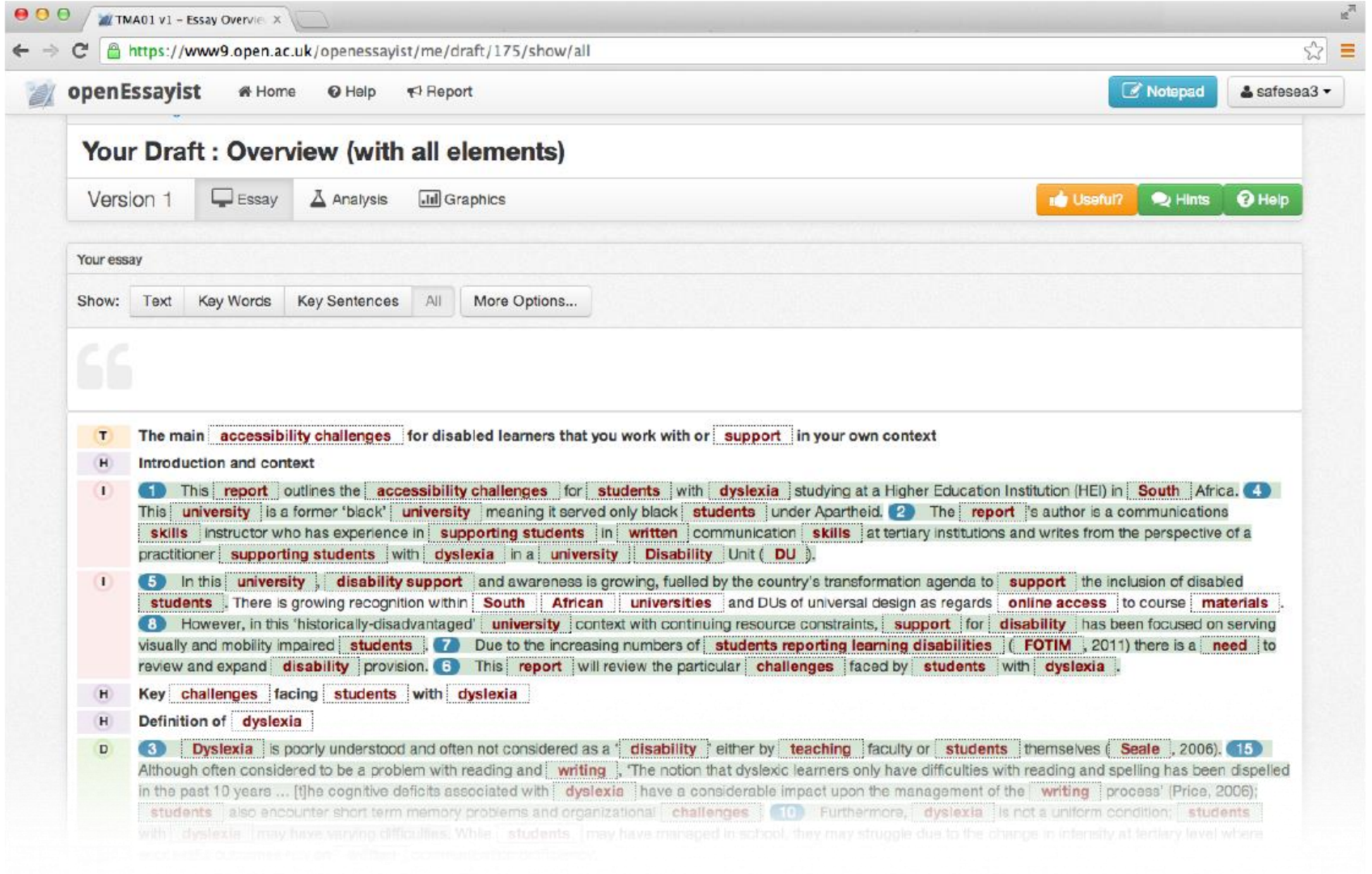
Southern Ocean Iceberg by D-Stanley (2014) https://www.flickr.com/photos/davidstanleytravel/15784345808/
Attribution (http://creativecommons.org/licenses/by/2.0/)
Photo Attribution by PhotosForClass.com



- ✓ Playful learning
- ✓ Learning with robots
- ✓ Decolonising learning
- ✓ Drone-based learning
- ✓ Learning through wonder
- ✓ Action learning
- ✓ Place-based learning
- ✓ Making thinking visible
- ✓ Roots of empathy

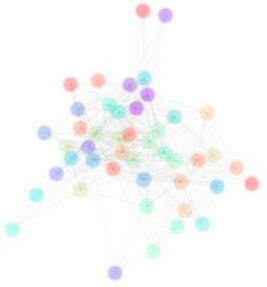
Is this essay any good?

Feeding back to learners: OpenEssayist



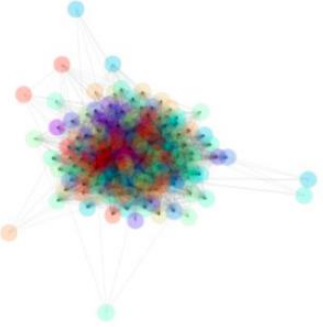
Denise Whitelock

Visual feedback
on essays



Low mark

High mark



Prize winning

Innovation

Informal to formal learning

Honest and reliable Open Access Journals in Open and Distance Education

OER World Map Project Interim Report

OCTOBER 22, 2015 ROB FARROW

The Challenge of OER Sustainability

OCTOBER 13, 2015 ROB FARROW

Originally posted on Open World:

Open Research 2015 Panel Session: 8 October 2015

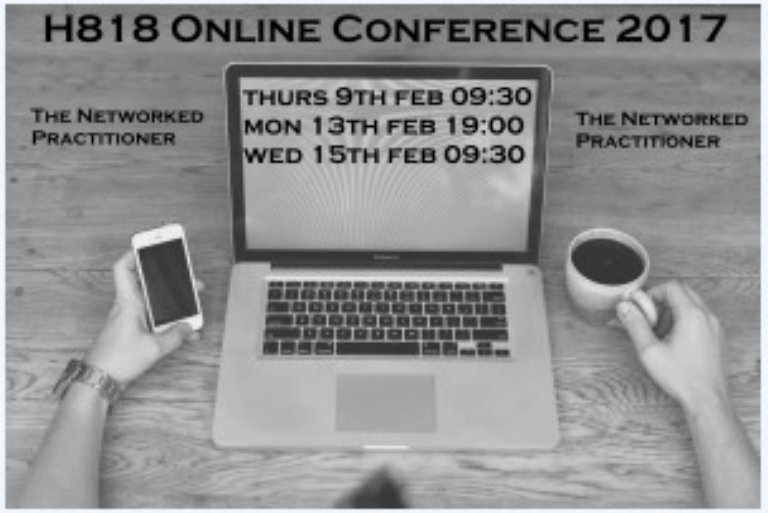
SEPTEMBER 29, 2015 BECK PITT

OU H818 'The Networked Practitioner' Online Conference 2017

409 views **4 favourites**

9 February 2017 - 15 February 2017
Online

'The Networked Practitioner' is module H818 of the OU Masters in Online and Distance Education (MA ODE)



Content Cloudstream Clouds

Image by PEXELS

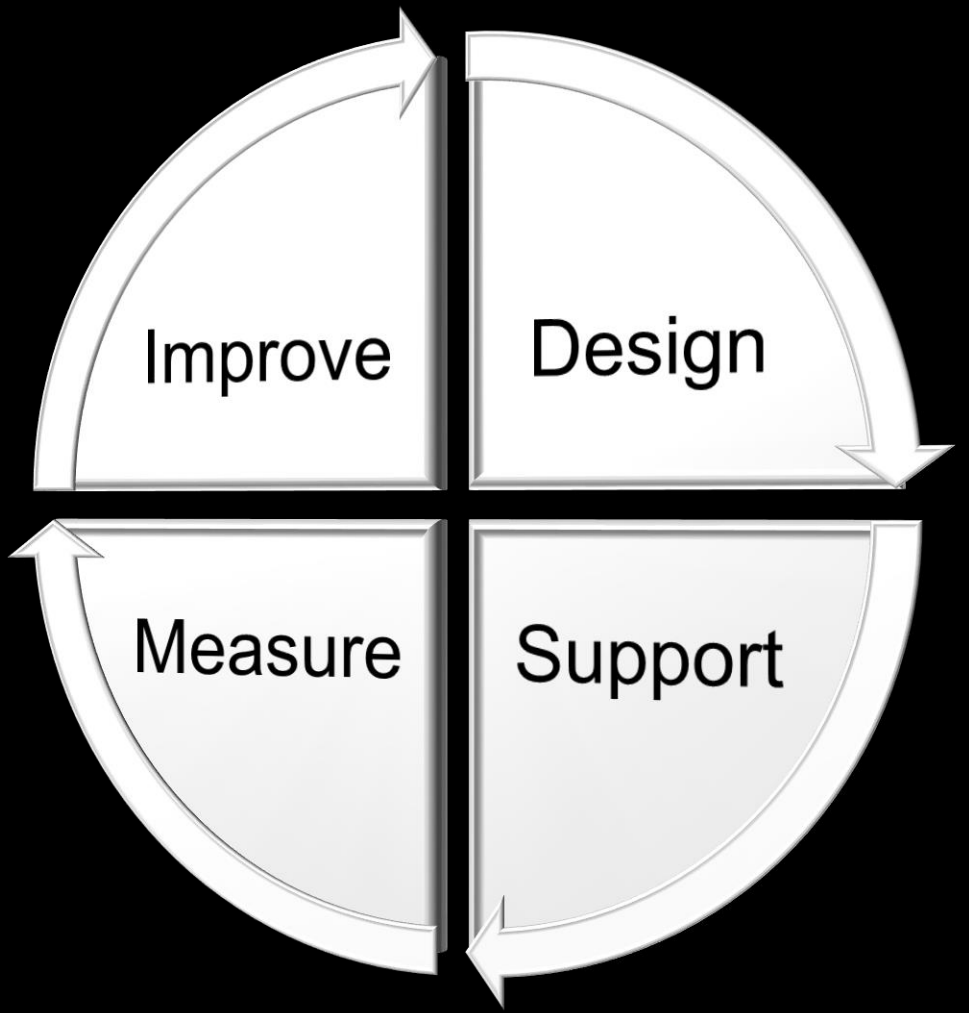
The H818 'The Networked Practitioner' online module is part of the MA Online and DIstance Education programme run by the Institute of Educational Technology (IET) at the Open University UK. This online conference is presented using OULive (the OU synchronous discussion platform - a bespoke version of Blackboard Collaborate).

Cloudscape created by:

Dr Simon Ball
28 November 2016

Search

Log in Sign up


Improve
Design
Measure
Support

The Open University
50
YEARS

Issues

How much design do we need to capture?

How can we make support suit the individual?

How do we bring together all we need to measure?

How do make improvements during activities?