

Promote Active Learning With ABC Learning Design

AULTC presentation: Mary Jacob

adapted from Clive Young and Nataša Perović, UCL Digital Education
Welsh (Cymraeg) translation by Dewi Parry, Cardiff University

The 2018 ABC LD Toolkit part-supported by HEFCE



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ABC Learning Design workshop by Clive Young and Nataša Perović, UCL. Learning types, Laurillard, D. (2012).
Resources available from <https://blogs.ucl.ac.uk/abc-ld/>

Introduction – 15 mins

Active learning

Video

ABC Learning Design overview

Consider doing things beyond your usual ‘go-to’ options

Active Learning 1

Chickering, A. W., Gamson, Z. F., Poulsen, S. J., & Johnson Foundation (Racine, Wis.). (1987). *Seven principles for good practice in undergraduate education*. Racine, WI: Johnson Foundation.

3. Uses Active Learning Techniques

Learning is not a spectator sport. Students do not learn much just by sitting in classes listening to teachers, memorizing pre-packaged assignments, and spitting out answers. They must **talk** about what they are learning, **write** about it, relate it to past experiences, **apply** it to their daily lives. They must **make what they learn part of themselves.**

Active Learning 2

Bonwell, C. C., & Eison, J. A. (1991). *Active learning: Creating excitement in the classroom*. Washington, D.C: School of Education and Human Development, George Washington University.

Students must do more than just listen: They must **read, write, discuss, or be engaged in solving problems...**

Students must engage in such **higher-order thinking tasks as analysis, synthesis, and evaluation**. Within this context, it is proposed that strategies promoting active learning be defined as instructional activities involving students in doing things and thinking about what they are doing.

Active Learning 3

Chi, M. T. H. (January 01, 2009). Active-Constructive-Interactive: A Conceptual Framework for Differentiating Learning Activities. *Topics in Cognitive Science*, 1, 1, 73-105.

Interactive activities are most likely to be better than **constructive** activities, which in turn might be better than **active** activities, which are better than being **passive**.

Active Learning 4

Wiggins, B. L., Eddy, S. L., Grunspan, D. Z., & Crowe, A. J. (2017). *The ICAP Active Learning Framework Predicts the Learning Gains Observed in Intensely Active Classroom Experiences.* (AERA open.)

STEM classrooms (science, technology, engineering, and mathematics) in postsecondary education are **rapidly improved by the proper use of active learning techniques.**

ABC Learning Design video

- Video

ABC learning design

Hands-on, card-based approach to curriculum design:

- Built on research from JISC Viewpoints and UCL Institute of Education, adapted for UCL
- Include students in design teams for a Students as Partners ethos
- Used across UK, Erasmus-funded project across Europe
- Welsh materials available

[Viewpoints project \(2008-2013\)](#),

Laurillard, D. (2012). *Teaching as a Design Science: Building Pedagogical Patterns for Learning and Technology*. New York and London: Routledge.

Classic 90-minute session

Module information and graphs

- Tweet your module
- Graph learning activity types
- Graph online/face-to-face blend

Storyboard

- Storyboard the activities
- Align activities and assessment

Revise graphs

- What has changed? Why?

Actions

- What next?

Arena Blended Connected (ABC) curriculum design workshop

Programme
Module name
new module / module review
Academics
ELE workshop facilitators
Workshop date

Module summary (tweet size description of your module):

Action points:

Learning types activities graph
How do you envisage your module will look on the graph above? (in red - at the beginning of the workshop)
Your module activity graph at the end of the workshop (in blue)

online |-----| face to face

blended graph
Where do you want to be on the scale (in red)
What is your position at the end of the workshop (in blue)

Pre-workshop
 Post-workshop
 Formative assessment
 Summative assessment

Learning types, Diana Laughey, 06/2012 | Connected Curriculum, Dilly Paine, GALT, 2014 | ABC curriculum design workshop and resources, Clive Yung and Megan Perovic, ELE, 2015 | UCL

ABC curriculum design

ABC (Arena Blended Connected) curriculum design

Your module may look like this

ABC curriculum design Workshop action plan




Objectives	
E.g. pre entry or induction	

Arena Blended Connected (ABC) learning design workshop

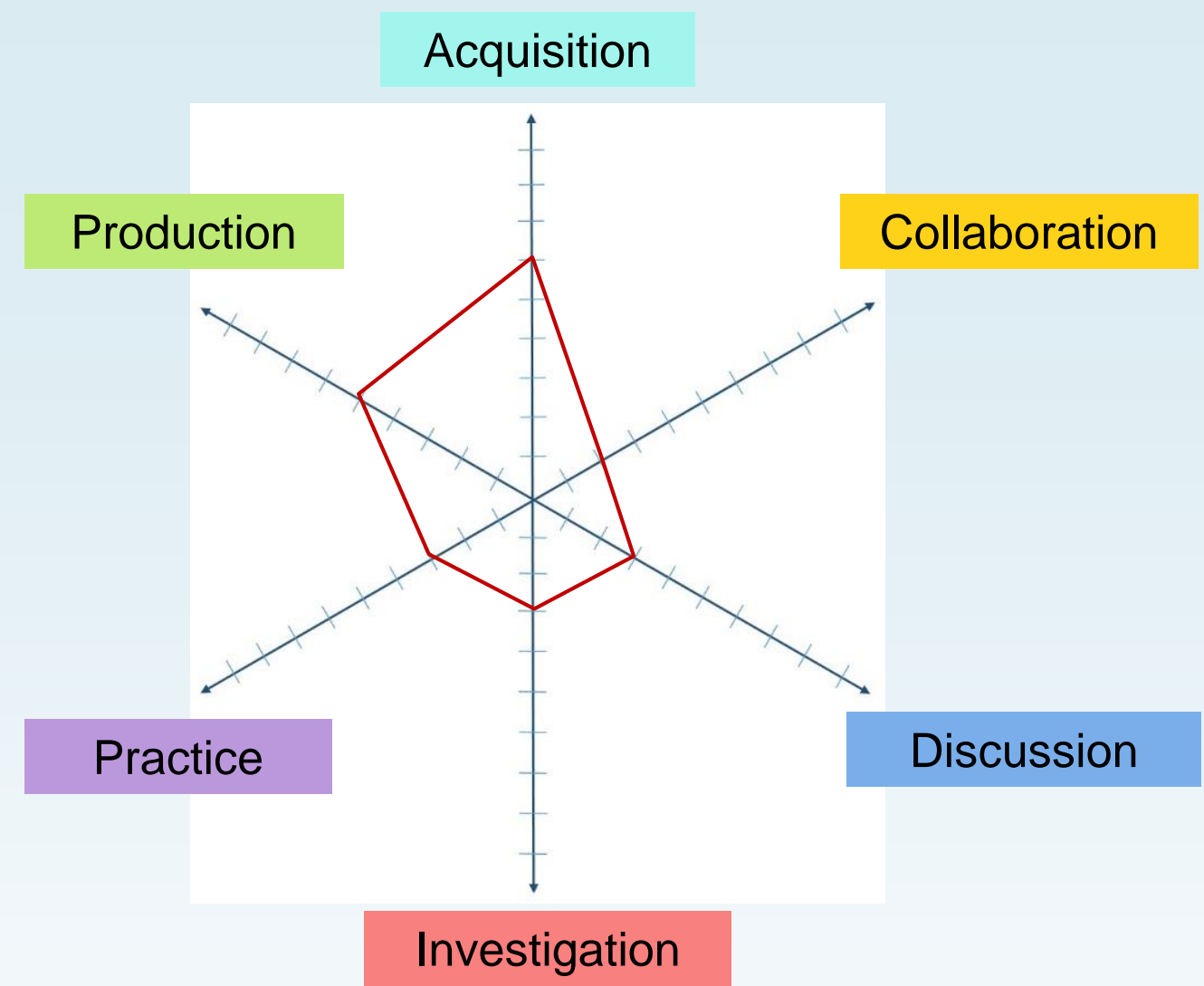
Programme **Arena digital**
Module name **Use of videos in teaching**
new module / module review
Academics **Anna Moore, Jon Grabol**
ELE workshop facilitators **CY, NP**
Workshop date **5th June 2015**

Module summary (tweet size description of your module):

All you need to know about use of videos in 21st century teaching

 Follow

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Learning types activities graph

How do you envisage your module will look on the graph above? (in red - at the beginning of the workshop)
Your module activity graph at the end of the workshop (in blue)



Blended graph

Where do you want to be on the scale (in red)
What is your position at the end of the workshop (in blue)



ABC learning design

ABC (Arena Blended Connected) curriculum design



Programme: **11-12 knowledge facilitation** Learning outcomes:
 Module: **15 build up of sub-areas: modules / modules review**
 Session 15

Learning timeline (using sessions or modules perspective)

E.g. priority or indication

Week 1-6

Learning type: Production		Learning type: Acquisition		Learning type: Practice		Learning type: Discussion		Learning type: Investigation	
Conventional method	Digital technology	Conventional method	Digital technology	Conventional method	Digital technology	Conventional method	Digital technology	Conventional method	Digital technology
producing articulations using:		reading books, papers		practising exercises		tutorials		using text-based study guides	
<ul style="list-style-type: none"> <input type="checkbox"/> statements <input type="checkbox"/> essays <input type="checkbox"/> reports <input type="checkbox"/> accounts <input type="checkbox"/> designs <input type="checkbox"/> performances <input type="checkbox"/> artefacts <input type="checkbox"/> animations <input type="checkbox"/> models <input type="checkbox"/> videos 	<ul style="list-style-type: none"> <input type="checkbox"/> producing and storing digital documents <input type="checkbox"/> representations of designs <input type="checkbox"/> performances, artefacts <input type="checkbox"/> animations <input type="checkbox"/> models <input type="checkbox"/> resources <input type="checkbox"/> slideshows <input type="checkbox"/> photos <input type="checkbox"/> videos <input type="checkbox"/> blogs <input type="checkbox"/> e-portfolios 	<ul style="list-style-type: none"> <input type="checkbox"/> listening to teacher presentations face-to-face, lectures <input type="checkbox"/> watching demonstrations, master classes 	<ul style="list-style-type: none"> <input type="checkbox"/> reading multimedia, websites, digital documents and resources <input type="checkbox"/> listening to podcasts, webcasts <input type="checkbox"/> watching animations, videos 	<ul style="list-style-type: none"> <input type="checkbox"/> doing practice-based projects <input type="checkbox"/> labs <input type="checkbox"/> field trips <input type="checkbox"/> face-to-face role-play activities 	<ul style="list-style-type: none"> <input type="checkbox"/> using models <input type="checkbox"/> simulations <input type="checkbox"/> microworlds <input type="checkbox"/> virtual labs and field trips <input type="checkbox"/> online role play activities 	<ul style="list-style-type: none"> <input type="checkbox"/> seminars <input type="checkbox"/> discussion groups <input type="checkbox"/> class discussions 	<ul style="list-style-type: none"> <input type="checkbox"/> online tutorials <input type="checkbox"/> seminars <input type="checkbox"/> email discussions <input type="checkbox"/> discussion groups <input type="checkbox"/> discussion forums <input type="checkbox"/> web-conferencing tools synchronous and asynchronous 	<ul style="list-style-type: none"> <input type="checkbox"/> analysing the ideas and information in a range of materials and resources <input type="checkbox"/> using conventional methods to collect and analyse data <input type="checkbox"/> comparing texts <input type="checkbox"/> searching and evaluating information and ideas 	<ul style="list-style-type: none"> <input type="checkbox"/> using online advice and guidance <input type="checkbox"/> analysing the ideas and information in a range of digital resources <input type="checkbox"/> using digital tools to collect and analyse data <input type="checkbox"/> comparing digital texts <input type="checkbox"/> using digital tools for searching and evaluating information and ideas

E.g. 2nd year or first few weeks

Week 6-10

Learning type: Acquisition		Learning type: Discussion		Learning type: Collaboration		Learning type: Production	
Conventional method	Digital technology	Conventional method	Digital technology	Conventional method	Digital technology	Conventional method	Digital technology
reading books, papers		tutorials		small group project		producing articulations using:	
<ul style="list-style-type: none"> <input type="checkbox"/> listening to teacher presentations face-to-face, lectures <input type="checkbox"/> watching demonstrations, master classes 	<ul style="list-style-type: none"> <input type="checkbox"/> reading multimedia, websites, digital documents and resources <input type="checkbox"/> listening to podcasts, webcasts <input type="checkbox"/> watching animations, videos 	<ul style="list-style-type: none"> <input type="checkbox"/> seminars <input type="checkbox"/> discussion groups <input type="checkbox"/> class discussions 	<ul style="list-style-type: none"> <input type="checkbox"/> online tutorials <input type="checkbox"/> seminars <input type="checkbox"/> email discussions <input type="checkbox"/> discussion groups <input type="checkbox"/> discussion forums <input type="checkbox"/> web-conferencing tools synchronous and asynchronous 	<ul style="list-style-type: none"> <input type="checkbox"/> discussing others' outputs <input type="checkbox"/> building joint output 	<ul style="list-style-type: none"> <input type="checkbox"/> small group projects using online forums, wikis, chat rooms, etc. for discussing others' outputs <input type="checkbox"/> building a joint digital output 	<ul style="list-style-type: none"> <input type="checkbox"/> statements <input type="checkbox"/> essays <input type="checkbox"/> reports <input type="checkbox"/> accounts <input type="checkbox"/> designs <input type="checkbox"/> performances <input type="checkbox"/> artefacts <input type="checkbox"/> animations <input type="checkbox"/> models <input type="checkbox"/> videos 	<ul style="list-style-type: none"> <input type="checkbox"/> producing and storing digital documents <input type="checkbox"/> representations of designs <input type="checkbox"/> performances, artefacts <input type="checkbox"/> animations <input type="checkbox"/> models <input type="checkbox"/> resources <input type="checkbox"/> slideshows <input type="checkbox"/> photos <input type="checkbox"/> videos <input type="checkbox"/> blogs <input type="checkbox"/> e-portfolios

E.g. 2nd year or mid semester

Once happy with your module design, turn the cards to the other side and select learning activities

E.g. 2nd year or final phase

✓ Select learning activities

Connected curriculum dimensions and comments, action plan

ABC learning design

Align activities and assessment

Learning type: Practice	
Conventional method	Digital technology
<input type="checkbox"/> practising exercises	<input type="checkbox"/> using models
<input type="checkbox"/> doing practice-based projects	<input type="checkbox"/> simulations
<input checked="" type="checkbox"/> labs ★	<input type="checkbox"/> <u>microworlds</u>
<input type="checkbox"/> field trips	<input checked="" type="checkbox"/> virtual labs and field trips ★
<input type="checkbox"/> face-to-face role-play activities	<input type="checkbox"/> online role play activities
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

Select formative (★) and summative assessment (★)

ABC learning design

Align activities and assessment

Learning type: Production	
Conventional method	Digital technology
<input type="checkbox"/> producing articulations using statements	<input type="checkbox"/> producing and storing digital documents
<input type="checkbox"/> essays	<input type="checkbox"/> representations of designs
<input type="checkbox"/> reports	<input type="checkbox"/> performances, artefacts
<input type="checkbox"/> accounts	<input type="checkbox"/> animations
<input type="checkbox"/> designs	<input type="checkbox"/> models
<input type="checkbox"/> performances	<input type="checkbox"/> resources
<input type="checkbox"/> artefacts	<input type="checkbox"/> slideshows
<input type="checkbox"/> animations	<input type="checkbox"/> photos
<input type="checkbox"/> models	<input type="checkbox"/> videos
<input type="checkbox"/> videos	<input type="checkbox"/> blogs
<input type="checkbox"/> conference presentation	<input type="checkbox"/> e-portfolios.
<input type="checkbox"/> + non-academic audience - video?	

Handwritten notes:


- Project report in journal paper format
- conference presentation + non-academic audience - video?

Arena Blended Connected (ABC) learning design workshop

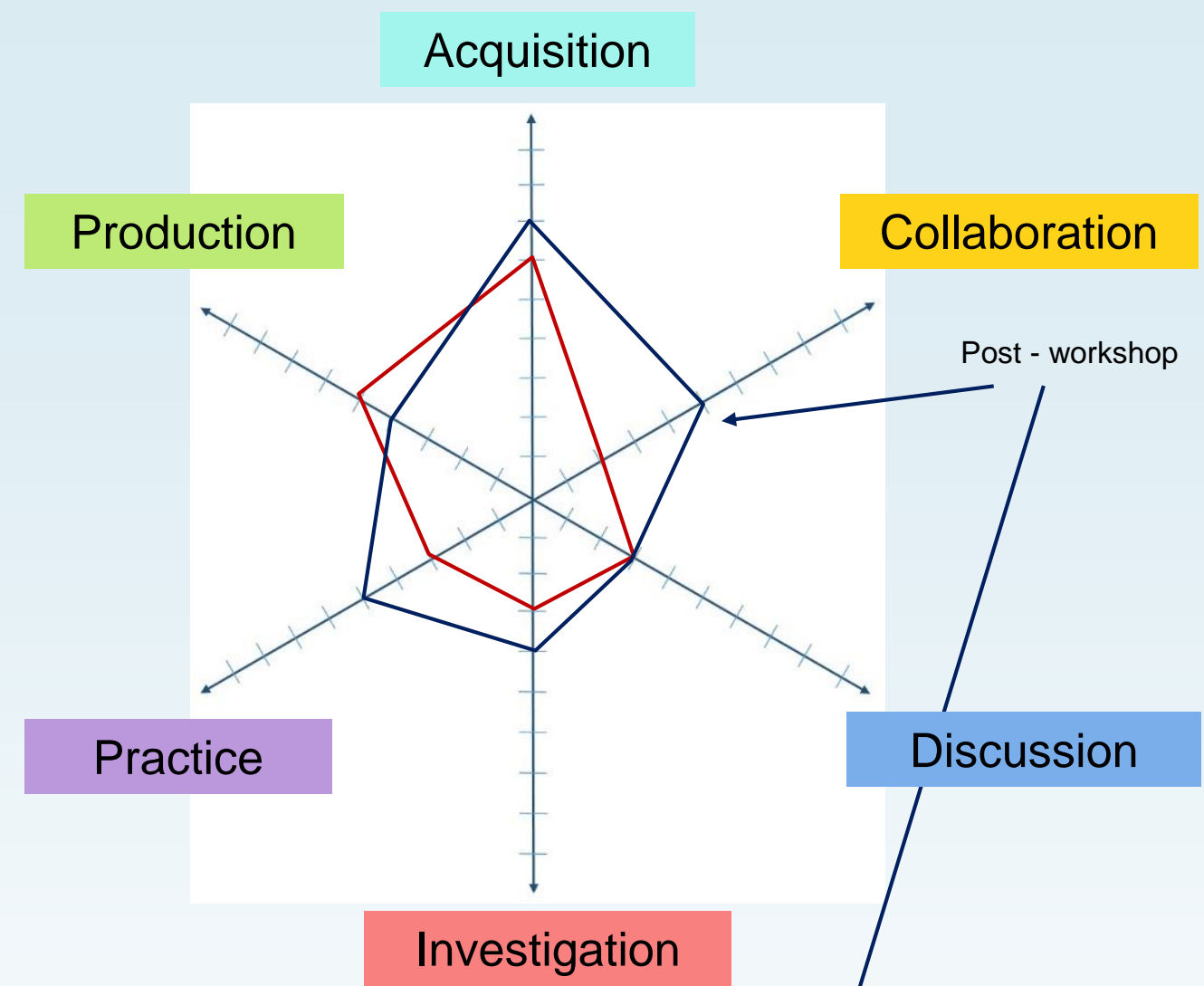
Programme **Arena digital**
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 new module / module review
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 Workshop date **5th June 2015**

Module summary (tweet size description of your module):

All you need to know about use of videos in 21st century teaching



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Learning types activities graph

How do you envisage your module will look on the graph above? (in red - at the beginning of the workshop)
 Your module activity graph at the end of the workshop (in blue)



Blended graph

Where do you want to be on the scale (in red)
 What is your position at the end of the workshop (in blue)



Arena Blended Connected (ABC) curriculum design workshop

Programme *Neurovascular*
 Module name *Peripheral nerve*

new module / module review

Academics

ELE workshop facilitators

Workshop date

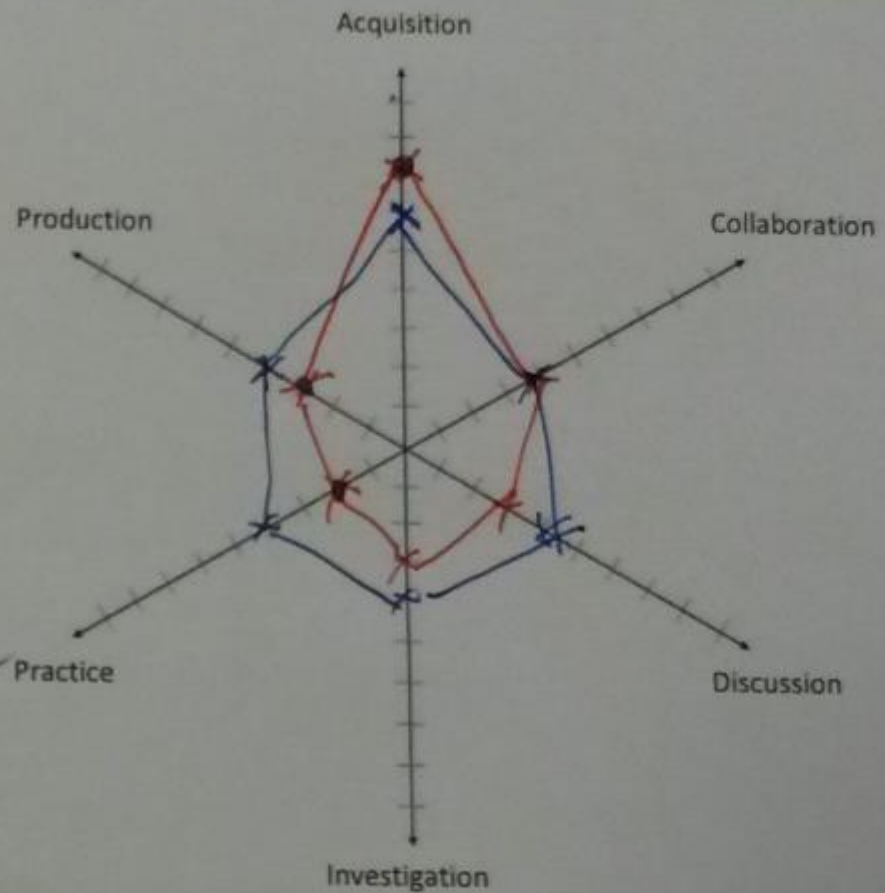
Module summary:

Frame biology through physiology to diseases affecting peripheral nerves: a comprehensive integrated learning experience

Learning outcomes:

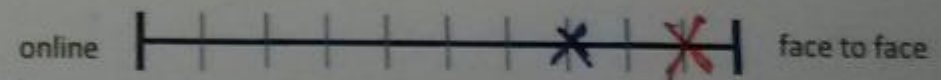
- *biology, development of periph. nerves*
- *Physiological properties of periph. nerves*
- *pathomechanism of periph. nerve disease*
- *clinical features*
- *diagnosis*

Action points:



Learning types activities graph

How do you envisage your module will look on the graph above? (in red - at the beginning of the workshop)
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Blended graph

Where do you want to be on the scale (in red)
 What is your position at the end of the workshop (in blue)

— X Pre - workshop
 — X Post - workshop

★ Formative assessment
 ★ Summative assessment

ABC learning design

Learning activity cards

Acquisition

Conventional method

- reading books, papers
- listening to teacher presentations face-to-face, lectures
- watching demonstrations, master classes
-
-
-

Digital technology

- reading multimedia, websites, digital documents and resources
- listening to podcasts, webcasts
- watching animations, videos
-
-
-

ABC learning design

Learning activity cards

Investigation

Conventional method

- using text-based study guides
- analysing the ideas and information in a range of materials and resources
- using conventional methods to collect and analyse data
- comparing texts
- searching and evaluating information and ideas
-
-
-

Digital technology

- using online advice and guidance
- analysing the ideas and information in a range of digital resources
- using digital tools to collect and analyse data
- comparing digital texts
- using digital tools for searching and evaluating information and ideas
-
-
-

ABC learning design

Learning activity cards

Discussion	
Conventional method	Digital technology
<input type="checkbox"/> tutorials	<input type="checkbox"/> online tutorials
<input type="checkbox"/> seminars	<input type="checkbox"/> seminars
<input type="checkbox"/> discussion groups	<input type="checkbox"/> email discussions
<input type="checkbox"/> class discussions	<input type="checkbox"/> discussion groups
<input type="checkbox"/>	<input type="checkbox"/> discussion forums
<input type="checkbox"/>	<input type="checkbox"/> web-conferencing tools
<input type="checkbox"/>	synchronous and asynchronous
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>

ABC learning design

Learning activity cards

Collaboration

Conventional method

- small group project
- discussing others' outputs
- building joint output
-
-
-

Digital technology

- small group projects using online forums, wikis, chat rooms, etc. for discussing others' outputs
- building a joint digital output
-
-
-

ABC learning design

Learning activity cards

Practice	
Conventional method	Digital technology
<input type="checkbox"/> practising exercises	<input type="checkbox"/> using models
<input type="checkbox"/> doing practice-based projects	<input type="checkbox"/> simulations
<input type="checkbox"/> labs	<input type="checkbox"/> microworlds
<input type="checkbox"/> field trips	<input type="checkbox"/> virtual labs and field trips
<input type="checkbox"/> face-to-face role-play activities	<input type="checkbox"/> online role play activities
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

ABC learning design

Learning activity cards

Production

Conventional method

producing articulations using:

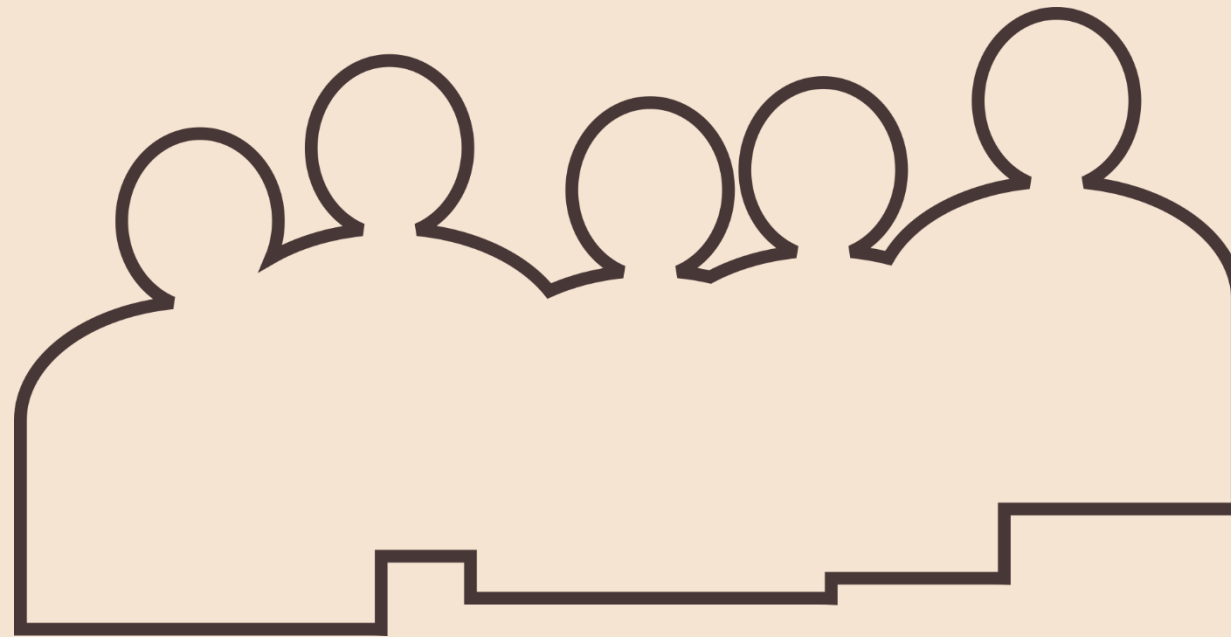
- statements
- essays
- reports
- accounts
- designs
- performances
- artefacts
- animations
- models
- videos
-
-

Digital technology

- producing and storing digital documents
- representations of designs
- performances, artefacts
- animations
- models
- resources
- slideshows
- photos
- videos
- blogs
- e-portfolios.
-
-



Group Activity – 25 mins



Split each row into two groups (3-4 people)

Choose a scenario and draft tweet – 5 mins

Create a learning activity graph and blend graph – 5 mins

Select useful cards, talk about activities – 10 mins

Redraw graphs – 5 mins



Sharing – 10 mins

Look at charts on other tables
What new ideas did you gain?

What we can offer

Learning and Teaching Enhancement Unit

Consultation and training

Facilitated design session

Contact thestaff@aber.ac.uk