

Back to the future: 15 years of quality enhancement in teaching digital photography

Innovating Higher Education, EADTU Conference
Athens, 19-21 Oct 2022

Jon Rosewell & Stephen Peake
The Open University, UK

Abstract

‘Digital photography: creating and sharing better images’ has been presented at the Open University UK since 2007. Over the years nearly 15,000 students have registered, and students who complete the course find it a transformative experience. However, completion rates remain frustratingly low, despite continual quality enhancement changes.

I apply the lens of ‘E-xcellence quality in e-learning’ (<https://e-xcellencelabel.eadtu.eu/>) to this short course to see whether lessons can be learned, particularly the main headings of strategic management, curriculum design, course design, course delivery, staff support and student support. I draw on quantitative and qualitative data from course records, student surveys and forum comments.

‘Digital Photography’ is an excellent test case to probe the challenges of quality enhancement in e-learning since it is a long-running course that has been presented during a period where the pedagogical landscape around it has changed considerably. The nature of the subject itself has also changed, as digital photography has displaced film. That has meant that the motivations and demographics of our audience has changed. The course is an uneasy fit to the university’s strategic management since the subject has never been part of a core curriculum. Photography is traditionally

taught as a craft subject using a studio approach. 'Digital Photography' seeks to emulate studio practice online using OpenStudio, an online environment for image sharing and peer comment. The strong element of peer comment has remained an important part of the pedagogical design of the course. However, other e-learning tools at our disposal have changed as the university's course delivery platform has changed. The course is able to capitalise on the university's standard processes for course production, staff support and student support. However, because it remains something of an outlier compared to the university's core offering, this introduces stresses where normal practice clashes with the aims of this particular course.

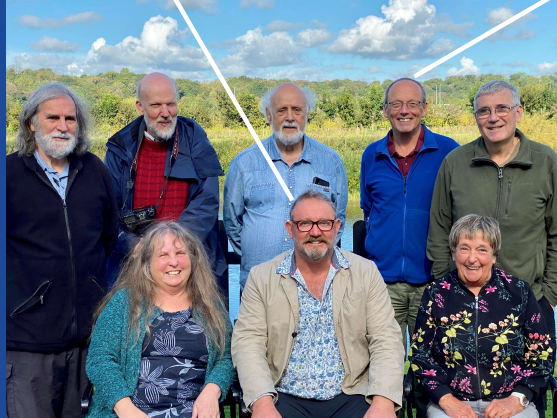
The course will continue to be presented over the next few years. What enhancements can still be made?

Stephen Peake
Professor of Climate
Change and Energy

THE RPS
ROYAL
PHOTOGRAPHIC
SOCIETY



Jon Rosewell
Senior Lecturer in
Information & Comms
Technologies



TG089 Course team and
Study advisors
...plus a long list of present and
past academic and production
staff

Course leaders are Stephen Peake & Jon Rosewell – it is not the ‘day job’ for either.

But we are backed up by team of

- study advisors and assessors who are professional/semi-professional photographers
- production staff: editor, graphic artist, interactive developer, project managers etc
- generic university student support: information, advice and guidance

TG089-22J Home Assessment Forums Resources News ?

TG089 22J | Digital photography: creating and sharing better images

0%

Current weeks All weeks EXPAND ALL

You last viewed: TG089 OpenStudio: a user's guide in Welcome and preparation

Welcome and preparation 0 of 4 completed

WEEK 1 What makes an interesting image? 0 of 2 completed
15-21 October

Week 1: What makes an interesting image?

TG089 OpenStudio: a user's guide

OpenStudio (TG089-22J OpenStudio) Last upload: 19 October 22, 18:07

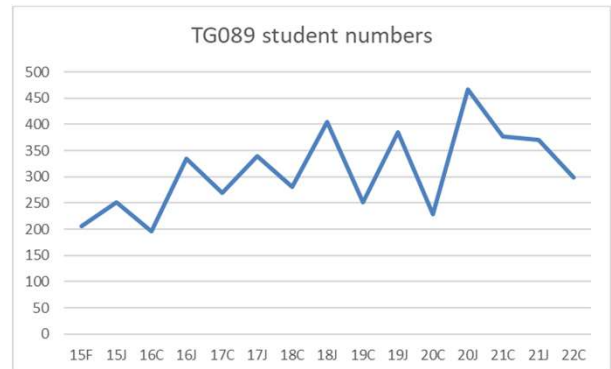
The Open University

3

Title: Digital photography: creating and sharing better images
'Creating' and 'sharing' are key to pedagogy of the course

TG089 Digital photography

- First presentation 2007
- 100 hours, 10 weeks
- T189 (to 2013): 10 pts (5 ECTS)
- TG089 (from 2015): not accredited
- Online
- Updated several times



T189	14650
TG089	4658
Grand total	19308

The course has a long history – presented for 15 years

Shape, size and pedagogy hasn't changed, but content has been updated

Initially very high number of students – max 1500

Now typically ~300 per presentation (twice a year)

Initially was for credit but no longer; assessment hasn't changed so still pass/fail result awarded, but no credit

Course model



- One of 'Relevant Knowledge' technology short courses (2003–2012)
 - Digitalisation: internet, robotics, photography, video, energy...
 - Online
 - Activity based
 - Authentic assessment
 - Rich media: video, audio, interactives, social learning...
 - Scalable pedagogy
- MOOCs? (before they were invented!)
- Microcredentials? (before they were invented!)

5

Pedagogical and delivery model originally developed for a set of short courses on a variety of subjects

All based around student activity with a project assessment – for photography, students take and share photos through out the course and submit their 10 best images for final assessment

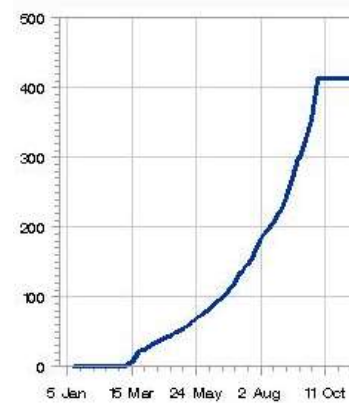
These courses could be considered MOOCs – scalable pedagogy, able to cater for large numbers of students with relatively modest staff resource (but cost ~£200, not free)

And also microcredentials – 100 hours, 5 ECTS credits, upskilling/lifelong learning (but first year university, UK Level 4)

How do you 'teach' photography at a distance?



- Visual awareness
- Technical aspects
- Digital darkroom skills
- Practice
- Assessment



6

Traditional approaches to teaching photography:

- as an apprenticeship, sitting at feet of expert
- in a studio surrounded by other photographers and their work

Visual awareness – developing your photographic 'eye', 'seeing'

Challenges to give quality at distance, online, especially with:

- large numbers
- unpredictable numbers because students register in the last minute

How do you 'teach' photography at a distance?



- Visual awareness
 - OpenStudio – photo sharing, peer review
- Technical aspects
 - Web pages – images, video, audio, interactive activities, social widgets
- Digital darkroom skills
 - Video tutorials
- Practice
 - Taking photos to a brief
- Assessment
 - Panel of photos, expert markers, personalised feedback

7

Meeting the challenges:

Technical aspects – eg exposure, focus, digital storage

-- trad distance teaching but online with high degree of interactivity

Digital darkroom skills – editing images

-- video tutorials (a novelty in 2007 when YouTube had just launched)

Visual awareness

-- OpenStudio to replicate studio experience

-- allows students to see images, to critique images, to learn to articulate visual aspects

Assessment

-- weekly (non-assessed) photo briefs

-- final assessment: set of images for judging (60%), plus written work (40%) which reinforces ability to talk about images

Developing your visual awareness



- Taking photographs
- Looking at your own and others' images
- Commenting on or critiquing images

- You will learn
 - To discuss images knowledgably
 - Articulate aspects of visual awareness (composition, colour...)
 - Articulate aspects of technical quality (exposure, focus...)
- Develop your own judgement of 'good' photographs

8

How do you (student) develop your 'seeing', 'photographic eye'?

Extract from course guide:

The website will teach you some of the theory of photography, which you can put into practice in the weekly photo assignments, and the video tutorials will introduce you to the skills of the 'digital darkroom'. You may be wondering how we can teach you to develop your 'seeing' or 'photographic eye' – the essence of photographic skill.

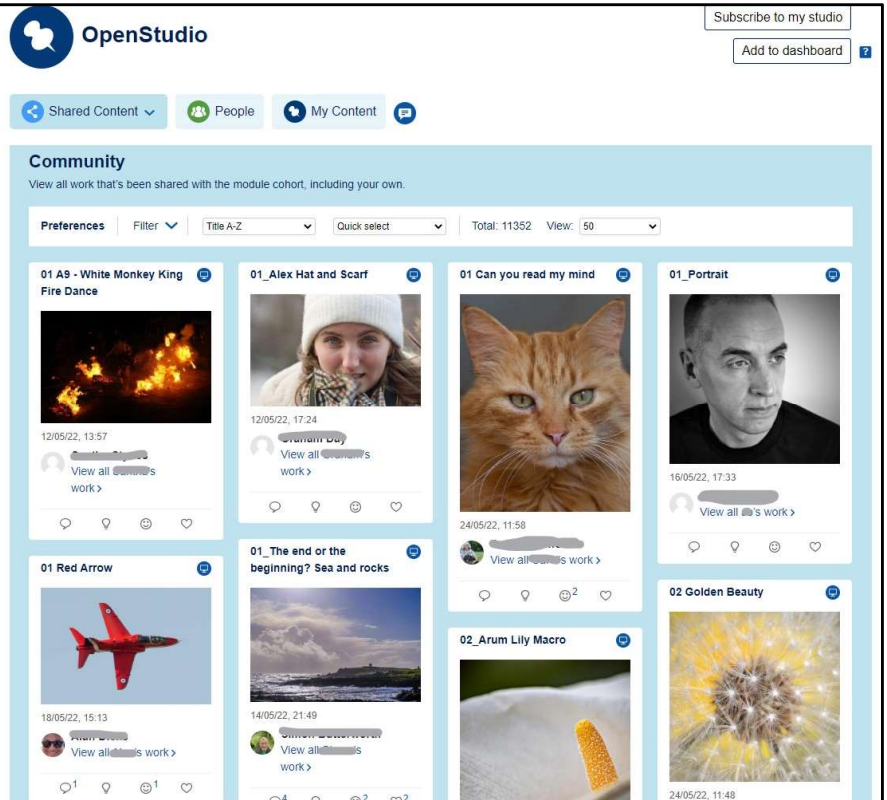
In this course, you will develop as a photographer by creating and sharing images. Developing your 'seeing' is done by a combination of things: taking photographs (particularly to a brief), looking at your own and other people's images, and commenting on or 'critiquing' images. The weekly photo assignments are the starting point for this: each week you are asked to take some photos on a theme, share them in OpenStudio and comment on others' images.

Although as a beginner you may feel you don't know enough to comment

on others' images, we will help you to gain that confidence. As you study the course, you will learn how to discuss images knowledgeably, being able to talk about aspects of visual awareness (such as composition and use of colour) and aspects of technical quality (such as exposure and focus). By sharing your own images, you will also find out what others see in your own work, and receive constructive comment on how you might improve them. By making comments on images, you will develop your own judgement of what makes a 'good' photograph. Towards the end of the course, you will be able to listen to an expert assessor judging sets of photos, and have the opportunity to do the same yourself. Developing your abilities in this way will help you to create good images.

OpenStudio

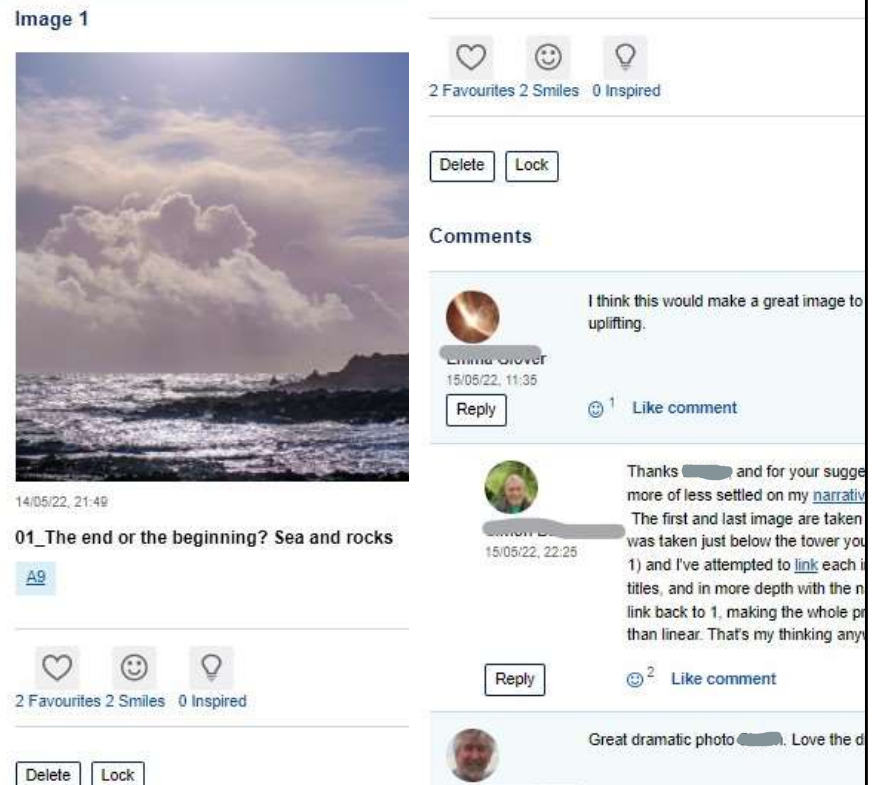
- Studio learning
 - social
 - peer review / critique
 - small groups
 - likes, comments
- Students are given structure for comments



OpenStudio – photo sharing, closed environment
Students upload images, can like and comment on others' images

OpenStudio

- Studio learning
 - social
 - peer review / critique
 - small groups
 - likes, comments
- Students are given structure for comments



Thumbnails on main page, click through for full image and discussion
Students assigned to small groups (20-25) but can also see full community

OpenStudio activity



Presentation	Students at start	Active users	Images ...per user	Comments & likes ...per user		
15F	206	187	11918	64	21864	117
15J	252	226	15030	67	26005	115
16C	196	183	11528	63	19400	106
16J	334	288	17024	59	17456	61
17C	269	245	14708	60	17024	69
17J	340	296	15561	53	13658	46
18C	281	248	14029	57	12829	52
18J	404	349	17647	51	22733	65
19C	252	221	11812	53	9910	45

11

High number of postings

Also commenting and liking – but decreasing over time?

Votelets

Can you vary the focal length on your camera?

- Yes, it has a zoom lens 52%
- Yes, I can change lens 38%
- No, but it has digital zoom
- No

You have voted.

The total number of participants so far is 275.

I'm doing this course because I would most like to:

- Understand how to use my camera 24%
- Learn how to manipulate images 8%
- Improve my photography 68%

You have voted.

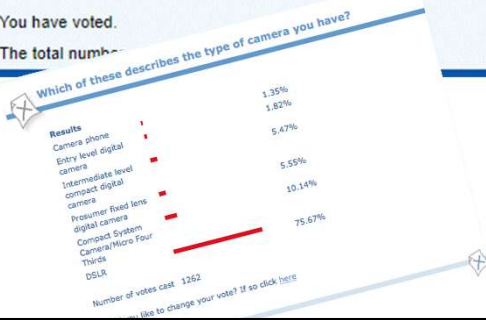
The total number of participants so far is 275.

How might you apply your skills and knowledge?

- Taking better images of my family 7%
- As part of another hobby (e.g. birdwatching, walking etc) 43%
- In my current job 5%
- To help me retrain to get promotion or a new job 13%
- In other study 4%
- Other 28%

You have voted.

The total number of participants so far is 277.



12

Main text has been written to encourage social sense, eg using 'votelets'
These are embedded interactive polls
Students must vote to see what other students have thought
Some basic eg about your camera, some more reflective
All help give sense of students studying with others
Have featured since original version of course, but move to generic VLE has needed reimplementaion

TG089-20J Digital photography



Lots of votelets on TG089 Photography

Some decline in activity as the course progresses; some are less effort to answer

One asks students to come back after 4 weeks to vote – quite a few still do that

Embedded discussions

Presentation	21J	22C
Number of students	370	299
Total std forum posts	2409	1885
posts per student	6.5	6.3
Embedded discussions	–	5072
posts per student	–	17.0

Activity 3: Using your smartphone

Estimated study time: 10 minutes

Now use the discussion area below to share your experiences with your smartphones.

Have you found that your smartphone has some limitations or, do you find it easy to use?

Using your smartphone
Share your responses below.

3 of 66 [Expand all posts](#)

Monday, 16 May 2022, 16:56

Depending on what I'm taking an image of, the DSLR is sharper as a rule but as in my other comments, I have some nice images over the years taken on my...

Reply Delete Report 0 Replies

Monday, 23 May 2022, 21:53

I recently upgraded to a top-end iPhone and have been really impressed with the ease of use and image quality, particularly when shooting in Raw mode. The...

Reply Delete Report 0 Replies

Tuesday, 24 May 2022, 11:16

i use an iphone and the camera is incredible!

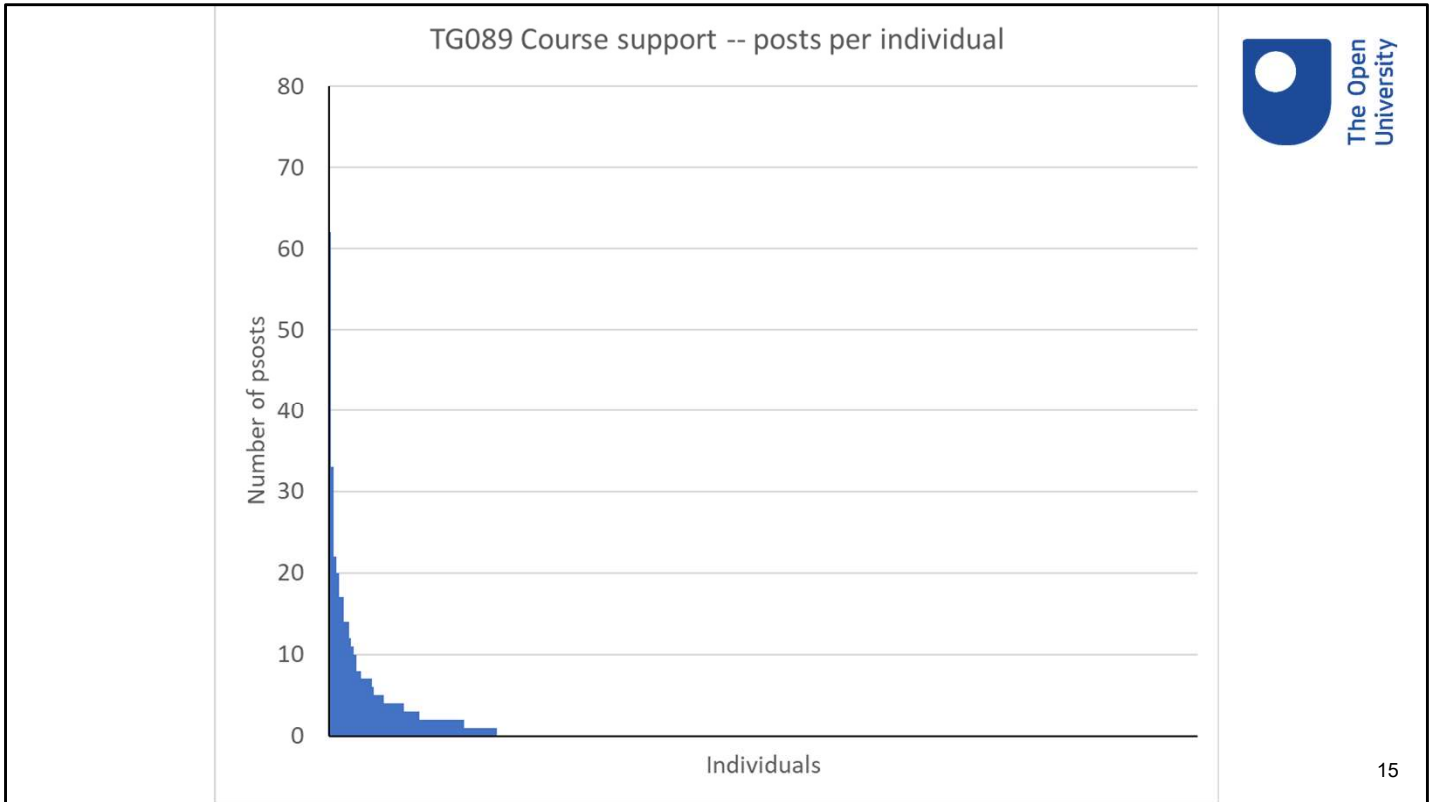
Reply Delete Report 0 Replies

Embedded discussion ('chatlets') featured on original versions of the course,

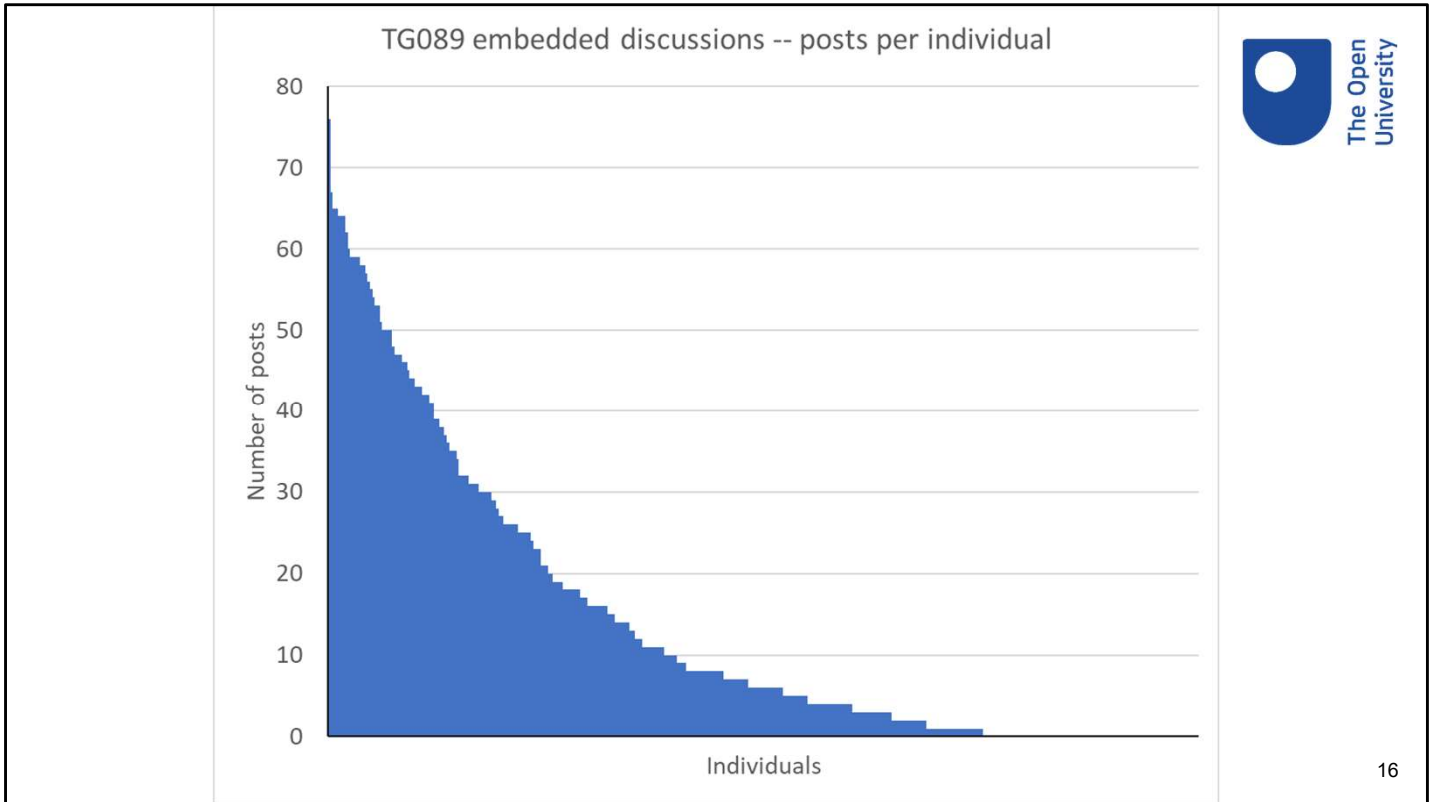
Students must post a comment so see what other students are saying
Were lost when course was moved to generic VLE

Recently been able to reintroduce

Data shows embedded discussions have generated much greater level of engagement, without too much impact on normal forums



Typical pattern of forum presentation.
One student has posted 63 times, then a few with tens, more with one or two, very many who have not posted at all

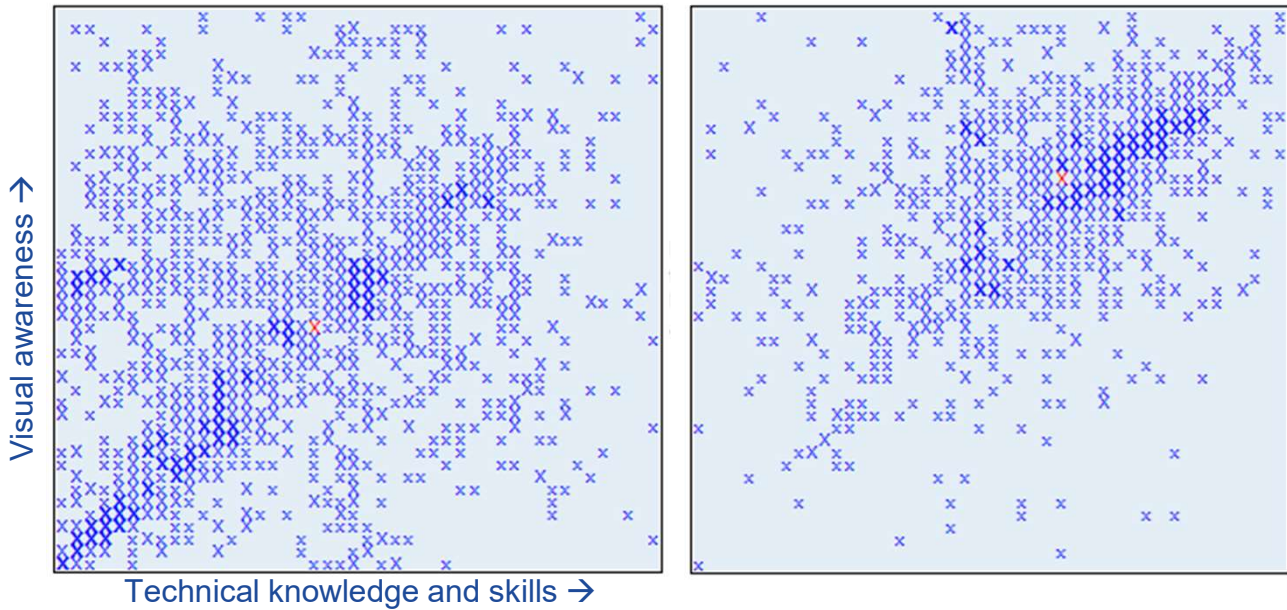


But embedded forums are very different – a much larger number of students have posted at least a few messages, many are posting heavily

Do students learn?

Start of course

End of course



17

Two axes – technical knowledge, visual awareness – self assessment
 Students must position themselves to see what other students have done
 Asked at start and end of the course
 Students shift from bottom left to top right, so must feel they are learning!

Quality

- **Input** measures
 - instructional design, content, assessment, components, staff, support
- **Output** measures
 - completion, pass rate, satisfaction



Ingredient photo by [Katie Smith](#) on [Unsplash](#)

Quality in education is difficult to pin down
Two approaches with different focus
-- get the ingredients and cooking right
-- review the resulting meal

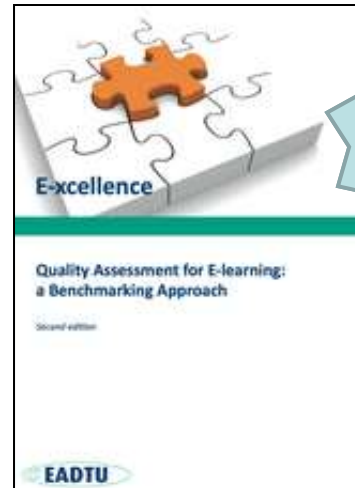
E-xcellence label



The European quality benchmark for online, open and flexible education



Manual



<http://e-xcellencelabel.eadtu.eu/>



E-xcellence is a project about quality in e-learning in Higher Education that has been around for over 10 years. Provides a well-tested framework for thinking about quality in e-learning. Revised several times

There are resources on the website, freely available. There is set of benchmarks which set out what good e-learning looks like. These are captured in a manual which has a lot of useful background.

E-xcellence benchmarks



35 benchmarks, grouped into 6 topic areas:

Strategic Management	a high level view of how the institution plans its e-learning
Curriculum Design	how e-learning is used across a whole programme of study
Course Design	how e-learning is used in the design of individual courses
Course Delivery	the technical and practical aspects of e-learning delivery
Staff Support	the support and training provided to staff
Student Support	the support, information and guidance provided to students

There are six chapters which reflect broad areas of concern

Holistic view: process, environment, people, not just looking at materials

MOOCs: OpenupEd Quality Label

- Derived from E-xcellence
 - Lightweight process
- Self-assessment
- Formal label
 - External review

www.openuped.eu/quality-label



OpenupEd quality label is derived from E-xcellence so it provides a framework for thinking about quality of MOOCs in an organised way. More appropriate for looking at quality of a single course rather than programme or institution

The materials are freely available for use in self-assessment

OpenupEd benchmarks

- Institutional level – 21 benchmarks
 - Topic areas: Strategic management, Curriculum design, Course design, Course delivery, Staff support, Student support
 - Checked every 3-5 years
- Course level – 11 benchmarks
 - Checked for every course

MOOC benchmarks split into two groups
-- institutional which ensure that processes are good
-- course level to check that product conforms

	Course level	Achieved?
22	A clear statement of learning outcomes for both knowledge and skills is provided.	*****
23	There is reasoned coherence between learning outcomes, course content, teaching and learning strategy (including use of media), and assessment methods.	*****
24	Course activities aid participants to construct their own learning and to communicate it to others.	*****
25	The course content is relevant, accurate, and current .	*****
26	Staff who write and deliver the course have the skills and experience to do so successfully.	*****
27	Course materials have an open licence and are correctly attributed . Reuse of material is supported by the appropriate choice of formats and standards.	*****
28	The course conforms to guidelines for layout, presentation and accessibility .	*****
29	The course contains sufficient interactivity (learner-to-content, learner-to-learner or learner-to-teacher) to encourage active engagement. The course provides learners with regular feedback through self-assessment activities, tests or peer feedback.	*****
30	Learning outcomes are assessed using a balance of formative and summative assessment appropriate to the level of certification.	*****
31	Assessment is explicit, fair, valid and reliable . Measures appropriate to the level of certification are in place to counter impersonation and plagiarism.	*****
32	Course materials are reviewed, updated and improved using feedback from stakeholders	*****

OU should be institutionally excellent, so just need to check the course level benchmarks

This is self evaluation of TG089 – everything excellent!

But the course has been carefully designed by experienced staff supported by professionals – it ought to be excellent

High quality – but sometimes painful



- The University and the world has changed over 15 years
 - strategy
 - curriculum
- Students have changed
 - time poor
 - expectations
 - current students are more 'leisure' learners

24

But getting things right can be hard work – lots of pain along the way
TG089 no longer fits into current strategy or curriculum, but runs because still popular

-- makes it harder to fit into OU systems, change is more difficult

Students have changed

-- seem less well prepared to study (in the past a good proportion were already OU students)

-- don't understand the time commitment (but fortunately larger number are in retirement)

-- have assumptions about learning – passive recipients, expect to be told what to do by expert

A pain point: improving accessibility of virtual camera



25

Small example of pain. We provide an interactive camera: choose aperture and shutter speed and see how if image correctly exposed
Initial virtual camera doesn't meet new accessibility standards – test reports that text is too small, lacks contrast
So designer produces revised version with larger more contrasty text – but to do this, has made the image smaller and less readable
That means all students suffer a worse experience
After considerable effort, new version produced which both meets accessibility and improves core function of image display (and looks smarter)
Hard work...

What was new in March 2022

- Revised & updated throughout, slight change of tone
- New topic on smartphone photography
- More images, higher (slightly) resolution
- New videos, higher resolution
- New embedded discussions

...was it a success?

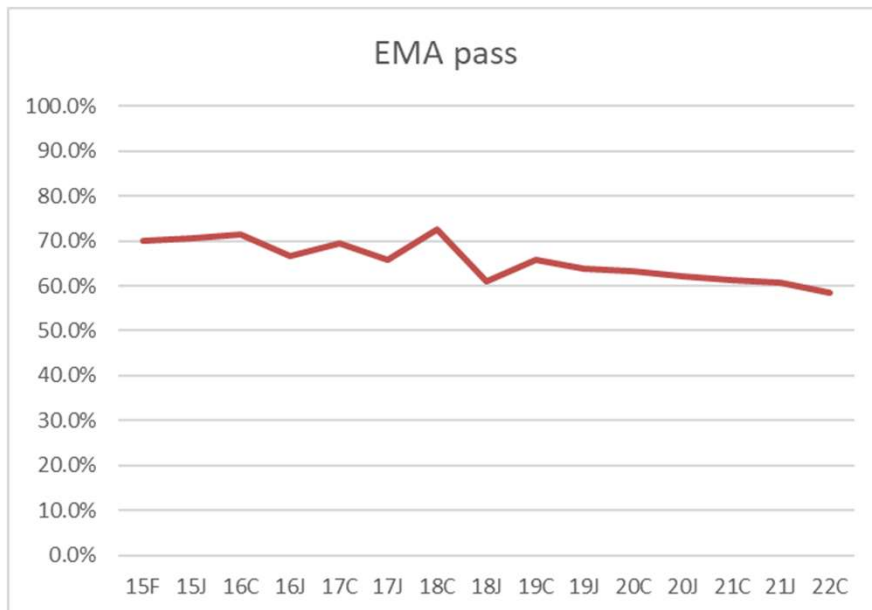
- Completion / pass rate
- End-of-course survey (n=70, 27%)

26

Recent overhaul and update – which was a lot of work, much more than anticipated

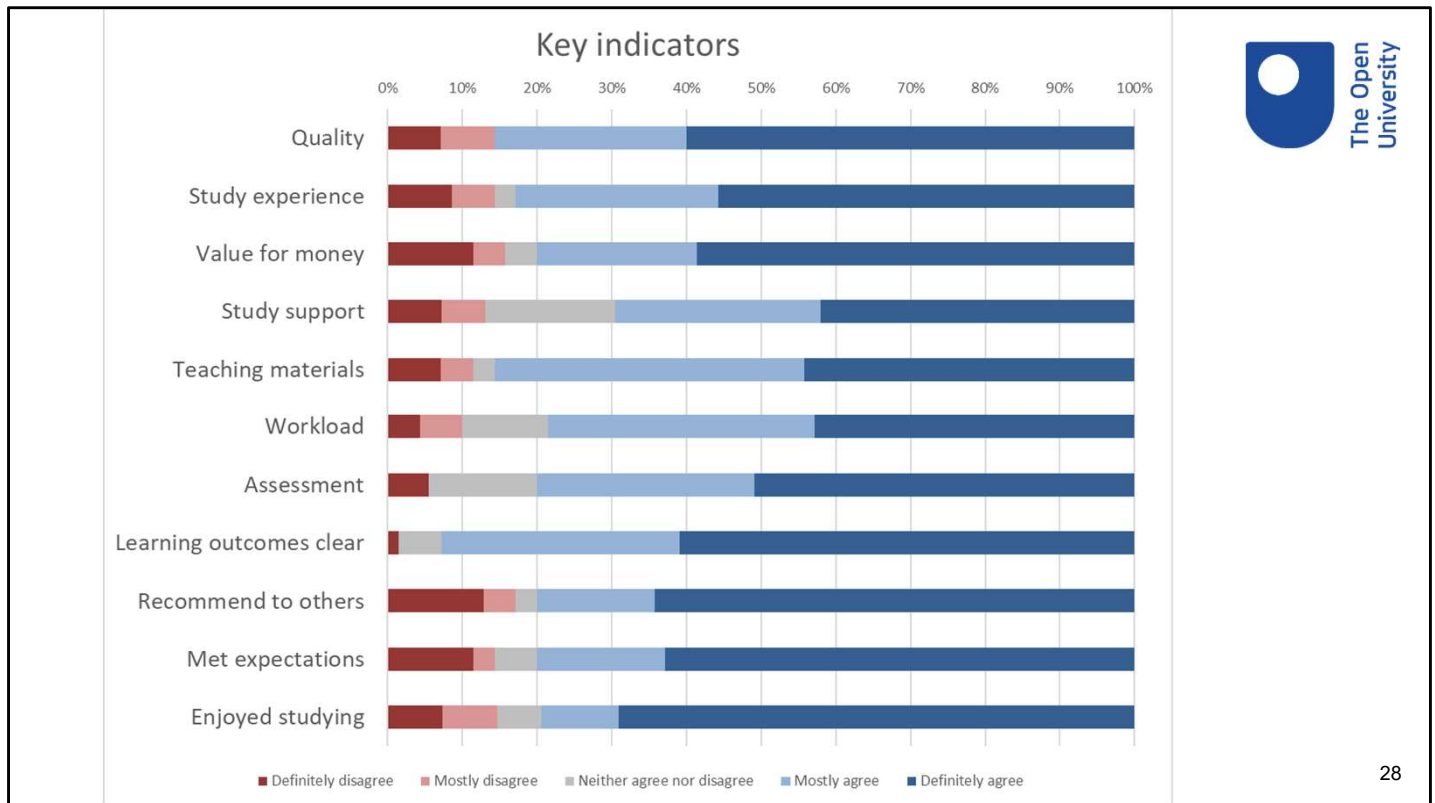
Output measures from completion/pass and survey

Completion/pass rate



27

Pass rate is \approx completion rate. Students don't pass because they don't submit, very rare for students to submit and fail
Gradual decline over time, no uptick after revision and update 😞
Suggests that completion can't be improved by continual enhancement
Gradual decline suggests that students are changing



Red bad, blue good

Overall impressions

Most over 80% good

Study support judged low, probably a reflection of dislike of peer learning

– and that probably also affects others indicators (expectations, recommend, enjoy)

12.1. Overall, I am satisfied with the quality of this course

12.2. Overall, I am satisfied with my study experience

12.3. The course provided good value for money

12.4. Overall, I was satisfied with the study support provided on this course

12.5. Overall, I was satisfied with the teaching materials provided on this course

12.6. Overall, I was able to keep up with the workload on this course

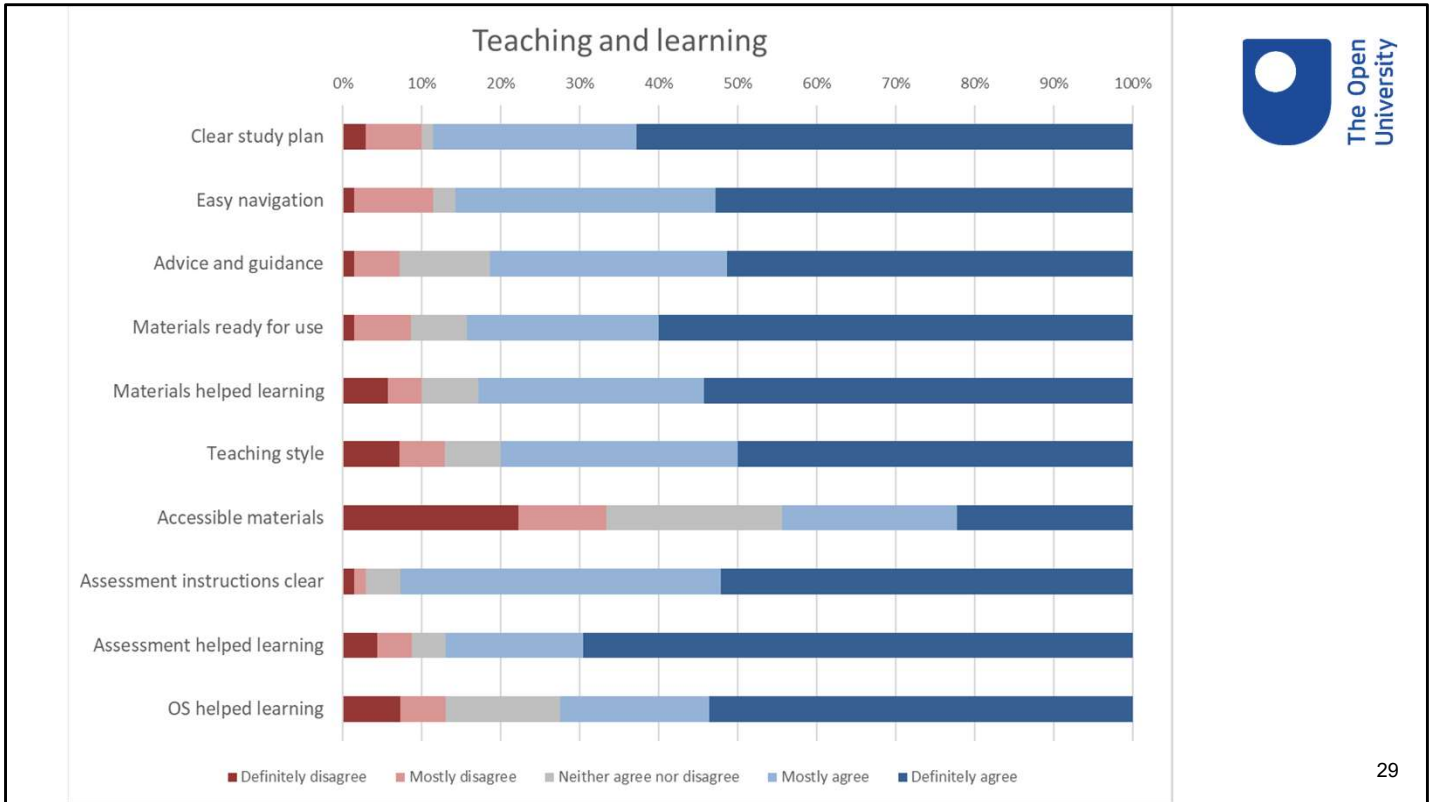
12.7. Overall, I was satisfied with the assessment on this course

12.8. The learning outcomes of the course were clearly stated

12.9. I would recommend this course to other students

12.10. The course met my expectations

12.11. I enjoyed studying this course

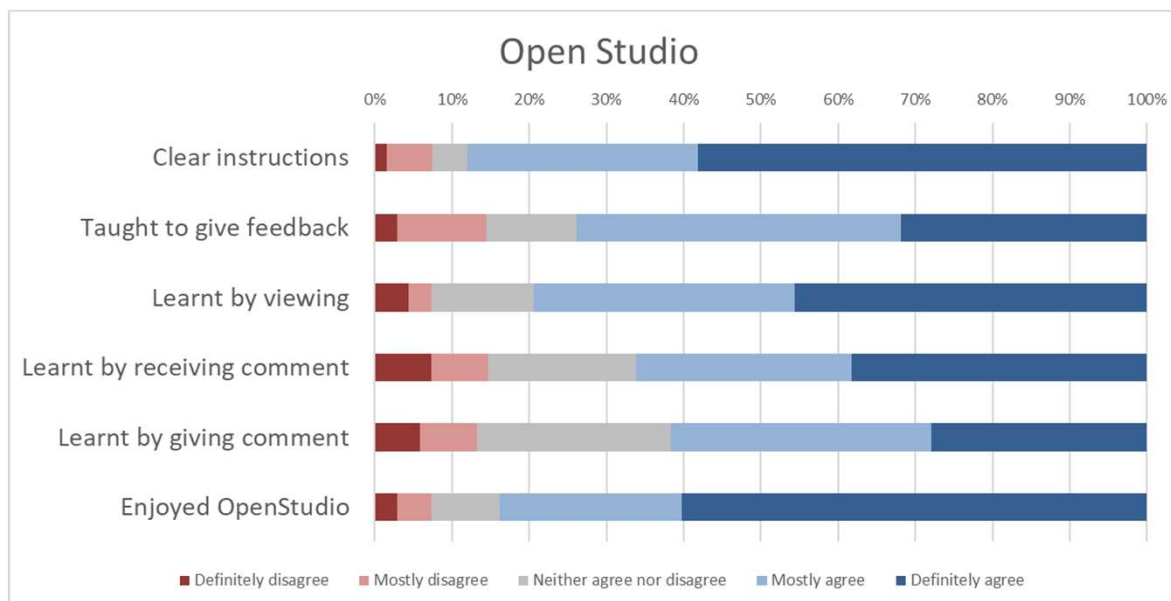


Detail of teaching and learning

All pretty good but only 73% agreement OpenStudio helped learning, probably also impacts teaching style and advice and guidance

Accessible materials poor – but very few students answered (main problem is system can't respond quickly to student requests since designed for degree students, not 10 wk course)

- 2.1. I was able to find clear information about what to study and when.
- 2.2. It was easy to navigate my way around the course website to access the online teaching materials and related learning activities.
- 2.3. I was satisfied with the advice and guidance provided for my studies on this course.
- 2.4. I was able to work with the different teaching materials and learning activities at the times I was required to.
- 2.5. The teaching materials and learning activities were well integrated and helped me to learn.
- 2.6. I was satisfied with the method of delivery of the different teaching materials and learning activities on this course.
- 2.7. I have declared a disability and was able to work with the teaching materials and learning activities on this course.
- 2.8. The instructions on how to complete the assignments were clear.
- 2.9. Completing assignments on this course consolidated my learning.
- 2.10. Taking part in OpenStudio activities with other students helped me to learn.



More about OpenStudio

Most enjoyed OS and they learnt by viewing other students' work

Less sure about value of others' comments

Lowest about value of actively giving comment – which is very important to pedagogy

5.1. The instructions about using OpenStudio were clear

5.2. I felt I was adequately prepared to give feedback on other students' work

5.3. My photographic skills improved as a result of looking at other students' images

5.4. My photographic skills improved as a result of receiving comments from other students

5.5. My photographic skills improved as a result of commenting on other students' images

5.6. I enjoyed using OpenStudio

Student comments

“I found the whole course was very informative and instructive. I loved the interactive elements [...] The videos too were really good [...] OpenStudio was an integral part of the course – and absolutely necessary to the learning process. The [study advisors] were then very good at answering queries, and providing advice. I also like the fact that this course wasn't just about the exposure triangle as many are, but explored colour, photographic genres and so much more. I found the whole experience very inspiring.”

“The course was badly structured and progression was unclear. [...] Video information was dated and of very poor quality. I found OpenStudio and the discussion sections to be essentially useless as they mainly consisted of comments that provided no learning opportunity.”

“This course has stunted my love of photography. It has put me off”. [from a student who responded negatively to every item]

Some very positive comments, especially where student comment reflects staff view of the course – they ‘get it’
But some very negative comments.
Can be completely at odds with positive comments – did the students experience the same course?
Usual caveat: a student with a bad experience will slam every aspect of the course – perhaps not objective.

Student comments



“OpenStudio was a massive part of my learning, having others message with advice and comments from each weeks worth of learning was a massive help and encouragement.”

“Seeing other students different methods and perspectives which I may not have even thought about”

“Not having any personal tutor feedback during the course was a bit disappointing, as I feel professional guidance would have helped.”

“As a beginner I didn’t feel qualified to assess other people’s work.”

32

Specifically re OpenStudio, some students ‘buy in’ to the pedagogy of peer/social learning, and for them it is successful.

Others feel they will only learn from an expert and therefore feel they have not gained value from studio experience. Since they feel they have nothing to contribute, they don’t engage, and won’t therefore learn.

Actions from survey

	Action	Success?
1	The extended course description should be linked from the course description page.	Failed
2	Text about peer comments should be reviewed and greater emphasis placed on actively commenting rather than receiving feedback.	Not done
3	No action with regard to live tutorial events.	No action required
4	Review text to remove material above level 0/1	Done
5	Reduce the number of OpenStudio upload slots from 10 to 7 each week.	Done
6	Maintain the existing group size.	No action required
7	Request (again) MILLS messaging for TG089 students.	Failed

33

A number of issues raised by open comments in survey

Some were acted on.

Others were not

- sometimes because ‘teacher knows best’ – change would work against pedagogical model
- sometimes because not possible within constraints of resource/staffing
- sometimes because unable to break through systemic barriers

Concluding thoughts

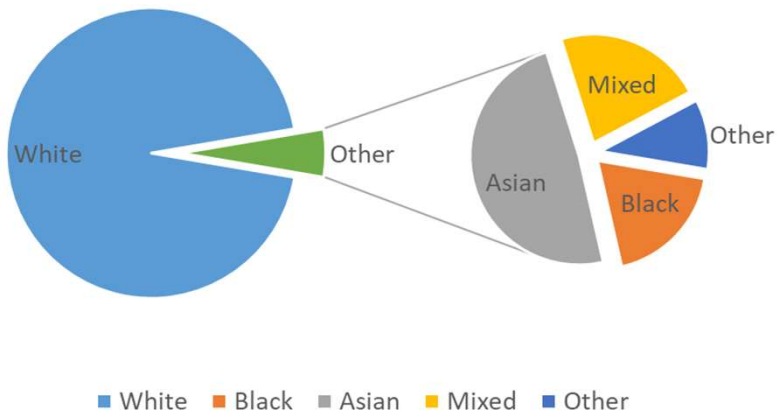
- Getting ingredients (almost) right doesn't guarantee satisfaction
- We don't meet student expectations
 - but are their expectations misguided?
- 'Managing expectations' or scaffolding to change?
 - how do we shift perception of learning from transactional to constructive personal learning?

Thanks for your attention

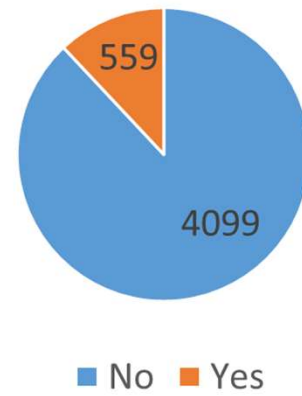
Jon.Rosewell@open.ac.uk

Stephen.Peake@open.ac.uk

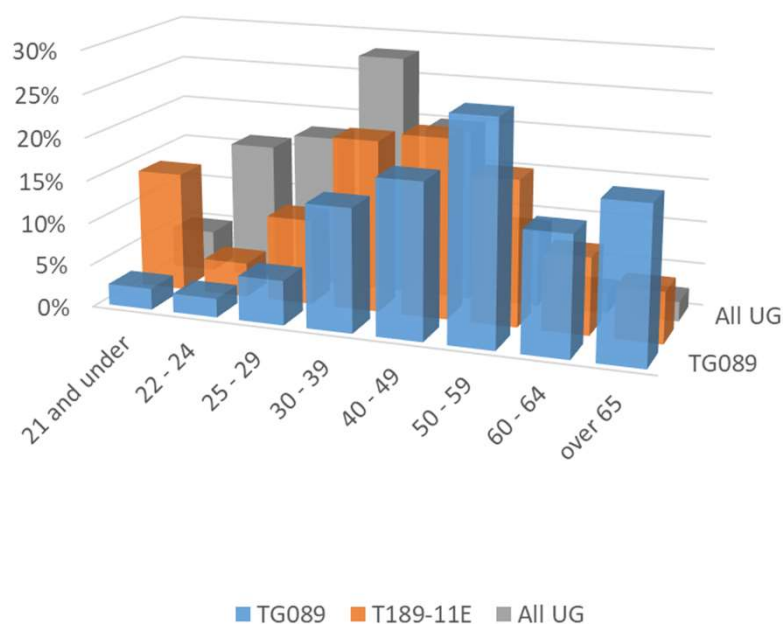
TG089: Ethnic origin



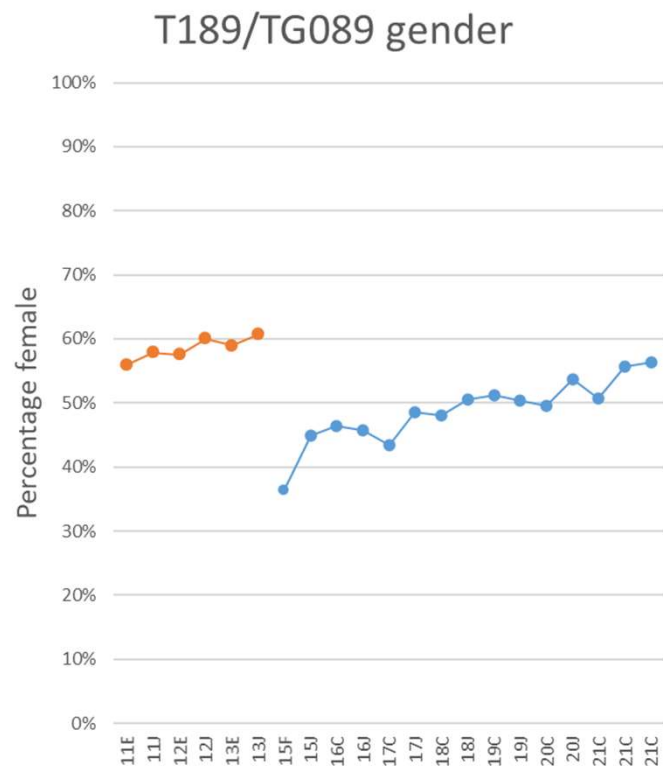
TG089: Disability flag



By age



Current TG089 students include high proportion of older and retired, very different from OU undergraduates who are increasingly young
 Earlier (2011 as an example) T189 was popular as bridge course between school and university – a government scheme allowed school students to study courses like this for free with support from own teachers.
 That source of funding has now been withdrawn.



Gender balance is ~50:50

Original T189 attracted mainly existing OU students, so maybe reflects gender of whole student body

Revised TG089 from 2015 was in partnership with Royal Photographic Society and initially publicity was only to their members (largely male)

Groups

» OpenStudio Home » T189 Home

OpenStudio



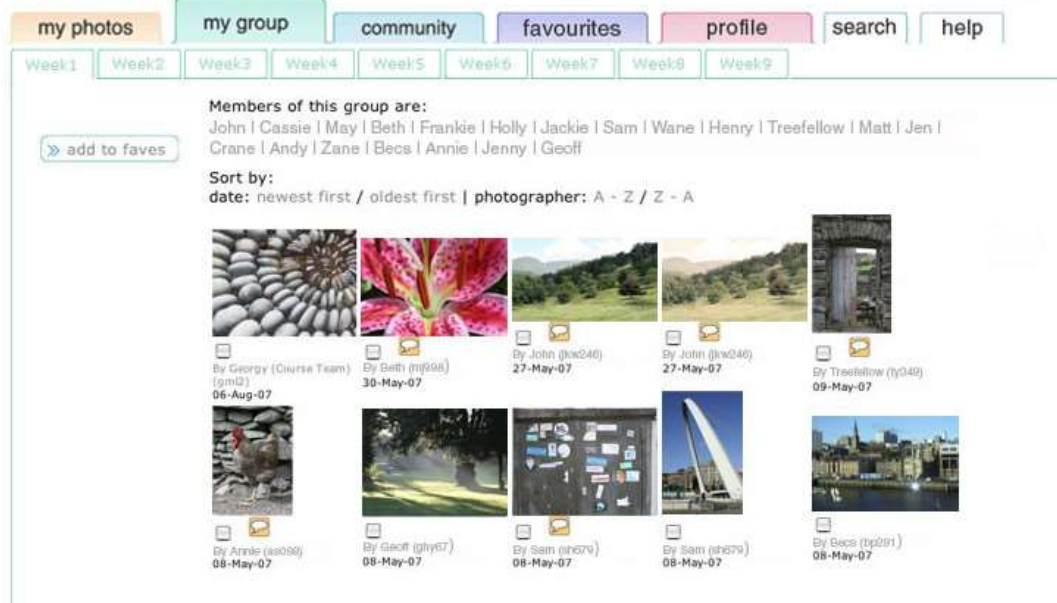
my photos my group community favourites profile search help

Week1 Week2 Week3 Week4 Week5 Week6 Week7 Week8 Week9

Members of this group are:
John | Cassie | May | Beth | Frankie | Holly | Jackie | Sam | Wane | Henry | Treefellow | Matt | Jen | Crane | Andy | Zane | Becs | Annie | Jenny | Geoff

» add to faves

Sort by:
date: newest first / oldest first | photographer: A - Z / Z - A



Photographer	Date
By Georgy (Course Team) (gm2)	06-Aug-07
By Beth (mj998)	30-May-07
By John (jka246)	27-May-07
By John (jka246)	27-May-07
By Treefellow (ty048)	09-May-07
By Annie (as086)	08-May-07
By Geoff (ghy67)	08-May-07
By Sam (sh079)	08-May-07
By Sam (sh079)	08-May-07
By Becs (tp081)	08-May-07

Original 2007 version of OpenStudio, before conversion to Moodle VLE:

Groups:

- small – 10 students
- dynamic, changed each week
- formed from those who recently uploaded, so active

Also able to see all images via Community tab.

Comments

» OpenStudio Home » T189 Home


OpenStudio

my photos | my group | community | favourites | profile | search | help

Week0 | Week1 | Week2 | Week3 | Week4 | Week5 | Week6 | Week7 | Week8 | Week9 | All

<<< Back to thumbnails

Lazing Around - [redacted]



View larger version (opens in a new window)

some of the Seals i captured pictures of last week at Blakeney Point in Norfolk. Was on a small boat at the time that was taking on a trip around the point to look at the seals

Taken on a DMC-G5 (Panasonic)

ADD THIS

edit details | report image | add to faves

Comments | Exif info | Tag info

new comment

>> [redacted] says:
The background in this photo is the same sort of colours as the seals- I like the similarity.
Posted: 23-Apr-13
Reply |

>> [redacted] says:
I like the colours, similar and yet different, and the size of the group of seals in this picture.
Posted: 23-Apr-13
Reply |

>> [redacted] says:
It's a lovely composition but mostly I just love the hilarious poses of the

2007 version of OpenStudio:

Core functionality: Image, description, discussion, EXIF, tags, 'fave'=like