

Oh, nice! Artifact aesthetics and student engagement in (online) learning

Anna Morgan-Thomas, Adina Dudau and Georgios Kominis



Introduction

- Cheap Moodle tricks for escalating student satisfaction
- Context: PG (MRes/PhD) research methods training
- Problem: diversity, complexity & perishability
- Solution: SPOCs (Small Private Online Courses) with high production value <http://moodle2.gla.ac.uk/course/view.php?id=9533>
- Outcome:
 - High attainment (A1-C1)
 - 100% course satisfaction

*“I think that there were things that ... were just so **incredible**, like going through those articles that I’ve just never seen, for me (the course) is just **amazing**”*

*“...watching those videos or going through those articles and books is really very, very **helpful**. So, it is helpful, something very new and something **innovative**. I think its **perfect**.”*

*“The videos were **good** and also the fact that we had many links to different resources that we can use ... So, that was, again, very **useful**. The way the Moodle page was divided also was quite **interesting**, interactive and colourful and (laughs) **it was a pleasure** to go to check it out.”*

*“I think the materials have been very very detailed, very very **rich**, very clear, very well-prepared obviously, and for me it really has been **excellent**, so I’ve **enjoyed** managing my own time and I access whatever I need to...”*

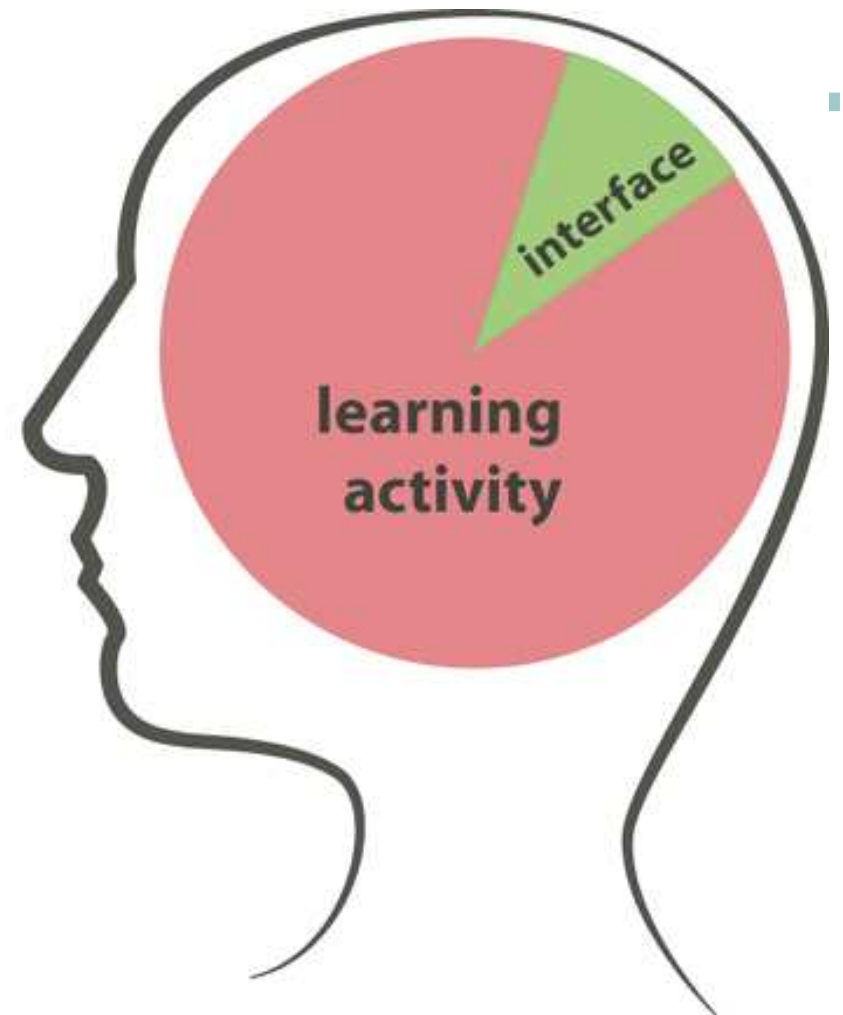
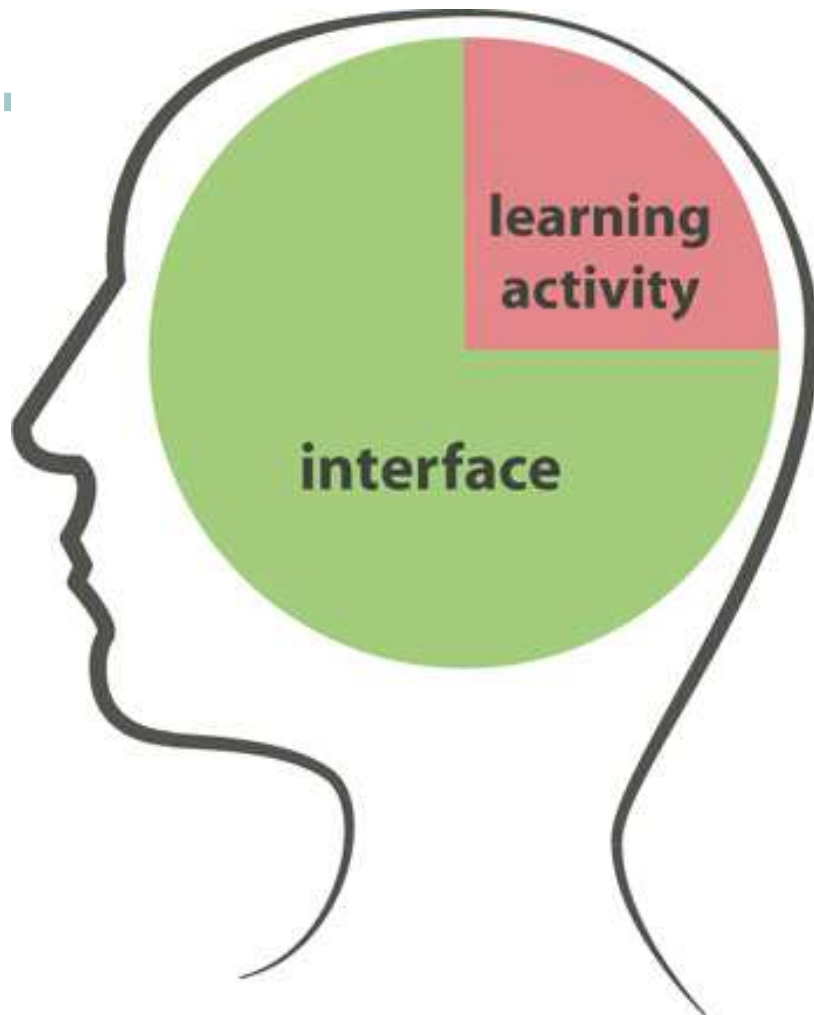
“I couldn’t really think of something to improve (the course). I’m sure its not perfect 100%, but its just that there’s nothing that comes to mind really”.

Engagement

- Engagement: how students feel, think and act in and around a course (Fredricks et al., 2004)
- Dimensions of engagement: emotional, cognitive and behavioral
- Drivers of engagement:
 - Focus on affordances of particular technology: what does it let you do and how well does it do it?
 - In e-learning, emphasis on behavioral engagement opportunities and interaction

Aesthetics

- In addition to cognitive utility (learning), digital artifacts such as online courses foster experiential encounters with emotional and sensory outcomes
- Two dimensions of aesthetics experiences: sensation (including emotional sensation) and judgment about meaning (oh, nice!)
- There is an interplay between course aesthetics, emotions, cognitive load and student engagement



Study Context

- ASBS Management and MRes/PhD training
- Two Moodle-based SPOCs including 60+ participants over two years
- Results based on quantitative data (learner analytics) and exploratory interviews (24 participants)
- Focus on qualitative evidence

<https://youtu.be/wjJ8dCjteA8>

Moodle Affordance 1: Structured Abundance

- facilitates accessing rich and diverse learning resources and the visual structure can enhance cognition and positive emotions in learning

“I really enjoyed the fact that ... the whole bag of resources is there ... online ... it felt quite engaging...you can see all the resources ...and they are categorized... If you are looking at a specific thing, you can go at a specific area of the course and find the resource there, just great.”

“The fact that they (videos) covered all the information quite briefly and they covered all the points in ten minutes or less. So, if you really want to go back and have a look at them, you know, in ten minutes, you can always go back and check everything for that particular section. And as I said before, it’s just that it’s a different way of learning. So, for me, that works really well.”

Moodle Affordance 2: Perpetuity

- addresses perishability of learning

“I think about online modules is that it can help you to go back from time to time if you want to review the whole content. So, that is, I think, the biggest advantage of the online course, because, for example, I, at my second year, I haven’t collected my data yet. However, after I have collected my data, I need to watch the SEM model again, online, to consolidate my view of how to use it. So, I can go back from time to time and just learn from it at different stages”

“Actually, it has lots of positive points. One of them is, I mean, that it’s flexible for us. I mean, I can access it at any time. And also, one more point, I can, I mean, go back to it in the future to get some information, to find some sources, which we are missing there (in the future). So, I mean, in my point of view, it’s more useful than face-to-face.”

Moodle Affordance 3: Empowerment

- Flexibility, access and abundance allow learners to self-regulate and manage their learning and this empowers, increases confidence and gratitude towards instructors

'[The course] made me really much more confident –it's now I feel relatively confident when it comes to interpreting other people's research, and when I read a paper that is quantitative I actually have an idea of what they are trying to say, which is for the first time in my life.' (F2-050417)

'I think it was just enough information [in the videos] and you could go further and look for additional sources. But you had a skeleton, you know' (F3-121126)

'But you know, I was encouraged to participate, because someone ... they [under]took the effort to design those things, maybe also taking into consideration part-time PhD students and you know, ... this is what I really appreciated about this' (M3-300317)

Driving engagement: aesthetics

“so before the actual course started, Anna sent out an email and said: ‘hey, I’ve uploaded this Moodle page, have a look at it’. And so you know I was just looking at the Moodle page and thought: **‘aha, another Moodle page where you don’t know what to do’**, so I had a look at it and I saw the nice icons, and this was the first time someone really put an effort into this. And then I thought: **‘oh nice**, interesting, different modules’, and I was clicking and stuff and I thought: ‘oh there are videos attached, **oh great!**’. And then I watched a video where she was explaining I think the difference between inductive and deductive research, and I was just like, ah it’s just 3 minutes – alright, let’s watch the next one. So I think I watched 3 or 4 videos... yes so **I was playing** with the Moodle website actually a bit because it was so **attractive** and it gave me a good overview of what a course will look like”...

Implication 1: Aesthetic design matters because it affects cognitive loads and sends strong reputational signals

Driving engagement: structuring

“if you look at it there are 4, 8, 12 different icons, or chapters, so and I think one of them is only for the assignment, okay there are more, and those are only for the assignment, but well it’s illustrated in the way you now that you don’t need to read through a Saunders book, oryou don’t have to look up the stuff yourself to get an impression of what a research design for instance is, or what a research orientation is. You ... know where you have to go and then you can look I up yourself....”

“I was really looking for you know, it’s kind of a reusable artefact that I can always go back to and look at it when I’m a bit lost or when I don’ know what to do, or when I have problems with something”

“I come across certain words ... and all of a sudden the puzzle so to speak builds itself up and I can see the broader picture ... Or actually the broader picture was given to me during the videos, but then if you compare it to a puzzle then you know the little – the edges of the puzzleand (the whole puzzle) will really bevisible to me, and I can ...continue then with my research, with my methods chapter or whatever I’m busy with.”

Implication 2: Key advantage of Moodle is its ability to structure the content of learning and empower learners

Driving engagement: fostering autonomy

*“...when I was interested in the topic, I just went to the section, and I watched the video, and I was looking for more information about [the topic]...I **made my own research methods course** so to speak –agenda, **my own agenda.**”*

“I went through it once ... actually there are some parts that I went through more than once. I was able to go through it again and again. I kept on repeating the videos ... some videos –I played them only once. The ones that were interesting for my research –I played them more than once. And ... I did everything as explained. ...”

“I really liked the approach where you can just – if you didn’t understand the point, you just go back to the video and re-listen and you know press ‘pause the video’ for a minute and think about what it was just said”

Implication 3: Learners appreciate autonomy in learning and design should foster learner autonomy

Leveraging Moodle for Engagement

- Rich and highly structured learning content does not denote teacher-centeredness, steering and transmission mode. Instead of fostering learner passivity and dependence, structure empowers and facilitates independence, free-enquiry and self-sufficiency in learners.
- Aesthetics ties closely with positive emotions and engagement. Rather than downplay aesthetic as aspect of course design, we may embrace it to drive satisfaction through positive sensory experiences.
- Moodle is good for some things (organizing, signaling and sharing resources) and not so good for other things (collaborative, learner-driven learning). Instead of perverting the platform and using it for purposes it does not serve, we may focus on exploiting its key affordances.

Back to the script

- How have we supported learners?
 - We drove student engagement by exposing them to high production value courses that embraced learners diversity and autonomy and delivered rich, aesthetically pleasing opportunities for personalized learning
- How has the institution supported us?
 - We felt empowered and resourced (technology, time, control, Moodle, resources, expertise at hand)

Back to the script

- What were the issues?
 - **Control:** multiple issues within course design/development where conventional governance structures and off-line policies stymied progress (e.g. PIP approval, GTA recruitment, course evaluation)
 - **Support:** arms-length support (at college) somewhat misaligned with (frequently) immediate and acute needs
 - **Power:** still dealing with the consequences of distributed authority and lack of accountability (BOLD, subject, school, college) e.g. GS debacle over the MRM course
- Where do we go now?
 - Leverage capabilities and scale up uptake by creating interchangeable learning objects including Moodle templates for courses
 - Drive transformation by investing in localized hands-on support (administrative and technology) for online learning

Two final issues

- Getting it right
- Branding versus teaching



Thank you. Questions?