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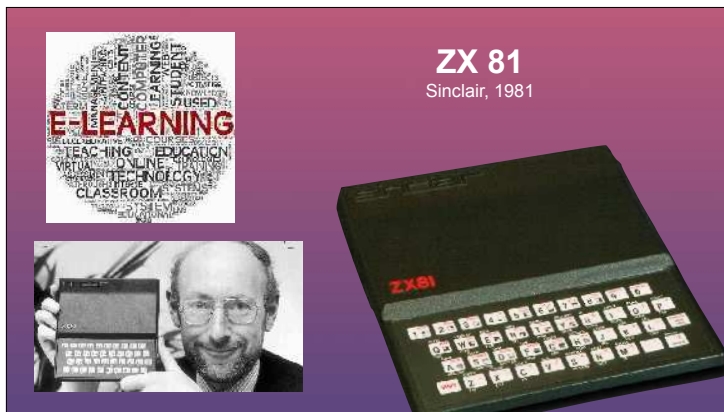
Lecture notes:

Educating Clinicians Online: Success, failure and lessons learned

- Teaching, Learning and engineering a learning environment offline and online
- Teaching online, learner's profiles and behaviour
- The Covid impact
- Major emerging post-covid trends

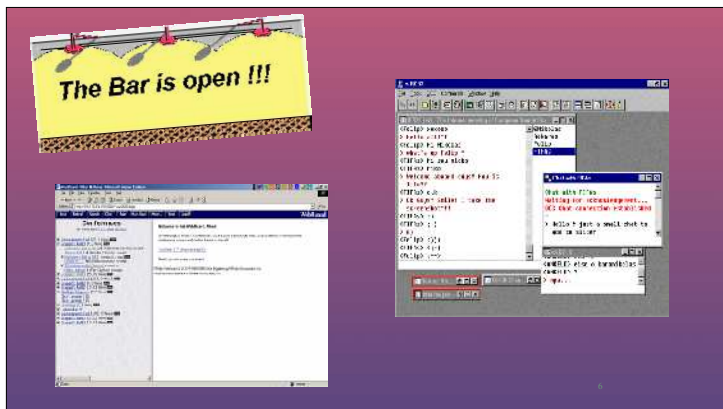
Based on the presentations in Singapore, Unicoc and UNational in Bogota, in November 2022. The content of these notes is not self-explanatory and is not intended as an independent learning resource but rather a supplement to attending the seminars.







The Virtual Classroom in Periodontology EDSA, 1998 - 1999




The EDSA
Yearbook
Classrooms

Success story ?

Mattheos et al 2001, Eur J Dent Educ 5: 139-147

What was the most important thing you learned during the EDSA Virtual Classroom?

Category	Count (Approximate)
Computer Literacy	10
PBL	4
Other	1
No response	3



Online is inherently student directed

e-learning
Problem Based Learning
Computer Assisted Learning
Face to face learning
Distance Learning
Life-long Learning
Blended Learning
Case based learning
Distributed Learning
Adult Learning
in classroom learning
Deep Learning
Team based Learning
Asynchronous Learning
Didactic Learning
collaborative Learning



PubMed
www.pubmed.gov

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and the National Institutes of Health

Rosenberg BH, Landsittel D, Averch TD.

Can Video Games be used to predict or improve laparoscopic skills?

J Endourol 2005 : 19: 372-376.

"Video game attitude predict the laparoscopic skill in the novice surgeon."



PubMed
www.pubmed.gov

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Gupta et al

Can video games enhance surgical skills acquisition for medical students? A systematic review

Surgery 2021 Apr;169(4):821-829.

16 studies - 575 participants

"History of gaming improved metrics in robotic surgery and laparoscopy."

"Using the Wii U and Underground significantly improved overall laparoscopic performance."



Learning is a biological process of transformation

where new facts and ideas are constantly viewed through previous experience

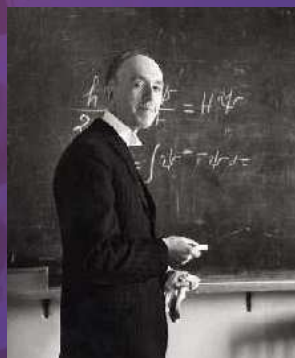
processed and synthesized

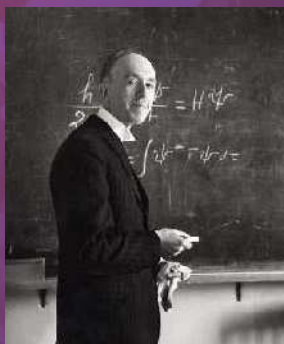
resulting in **change** of

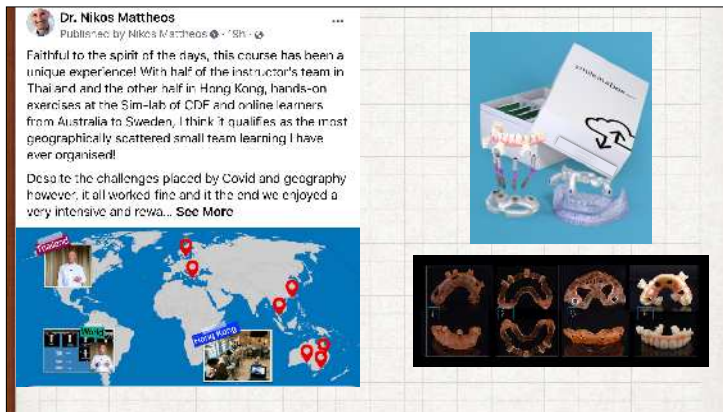
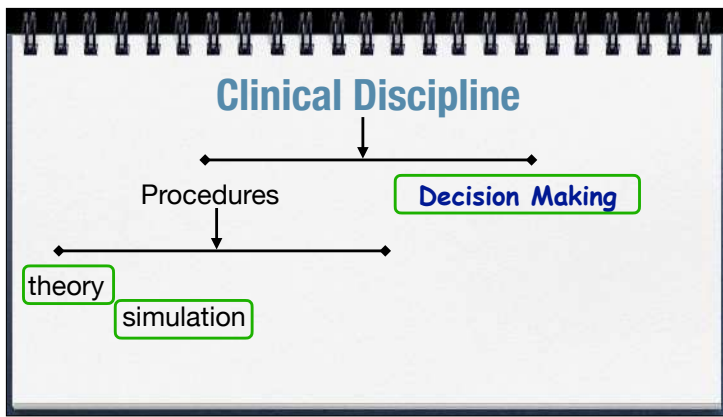
- ☒ mindset
- ☒ actions
- ☒ competences
- ☒ perceptions
- ☒ decision making

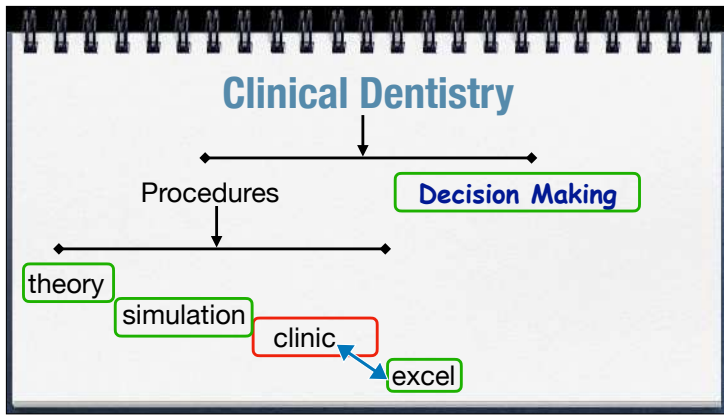


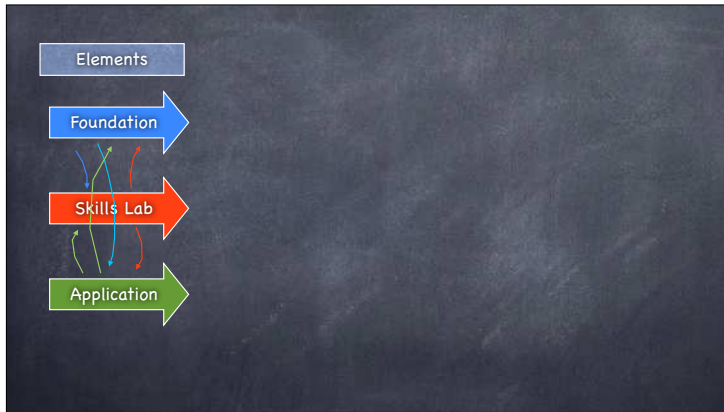
~~e-learning~~ Teaching
Problem Based ~~Learning~~ Teaching
Computer Assited ~~Learning-Teaching~~
Face to face ~~learning~~ Teaching
Distance ~~learning~~ Teaching
Life-long ~~learning~~ Teaching
Blended ~~Learning~~ Teaching
Case based ~~learning~~ Teaching
Distributed ~~Learning~~ Teaching
Adult ~~Learning~~ Teaching
in classroom ~~learning~~ Teaching
Deep ~~Learning~~ Teaching
Team based ~~Learning~~ Teaching
Asynchronous ~~Learning~~ Teaching
Didactic ~~Learning-Teaching~~
collaborative ~~Learning~~ Teaching











A diagram on a chalkboard background shows three horizontal arrows pointing to the right, labeled "Foundation" (blue), "Skills Lab" (grey), and "Application" (grey). To the right of these arrows is a list of curriculum details.

Foundation knowledge

- evidence base
- basic science
- clinical science
- technology

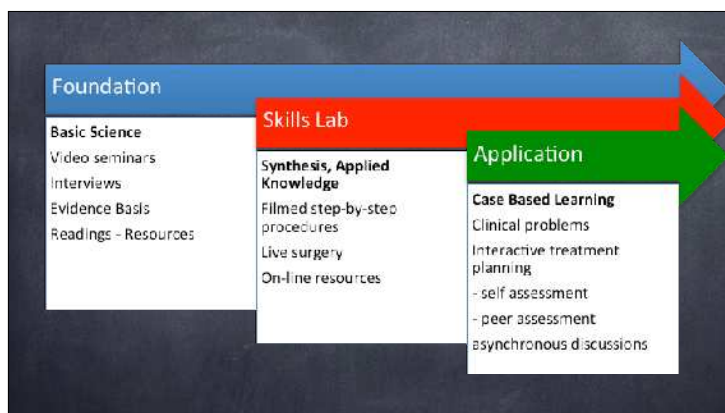
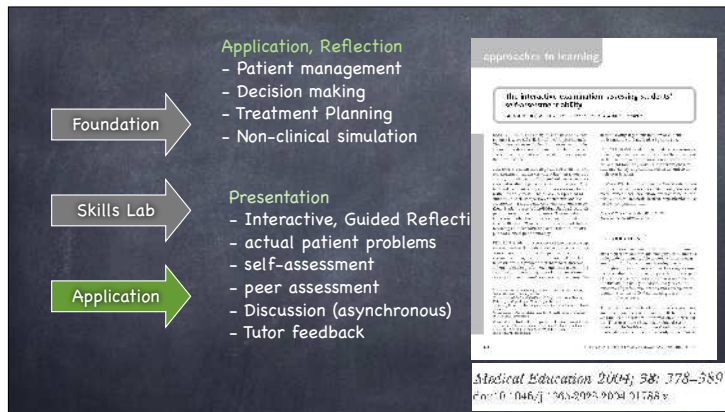
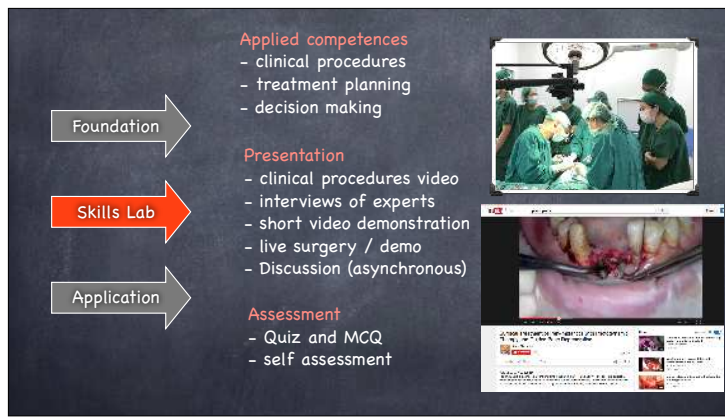
Delivery:

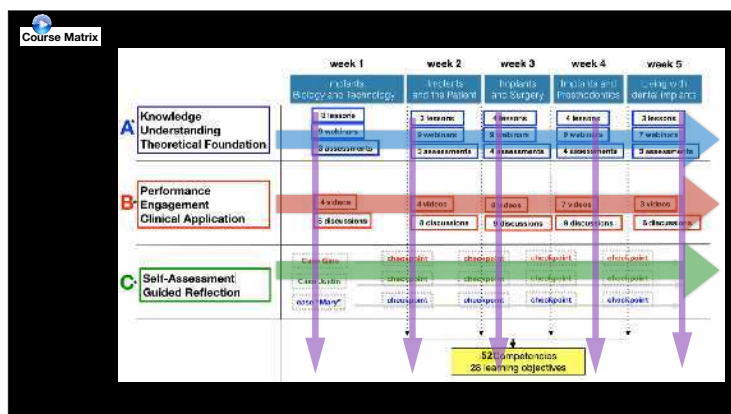
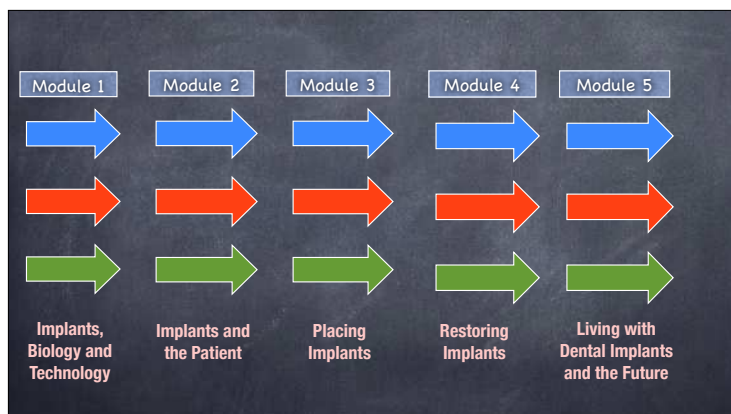
- short videos / seminars
- interviews of experts
- debate
- animations
- Discussion (asynchronous)


Assessment:

- Quiz and MCQ
- self assessment

A small inset photograph shows a classroom setting with a projector screen displaying a diagram, and several students seated at desks in the foreground.








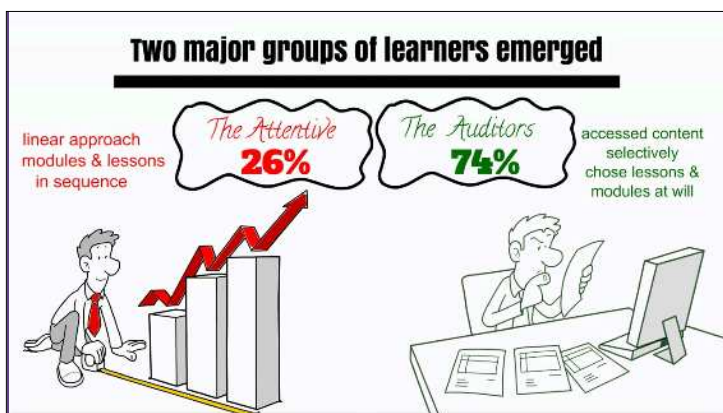
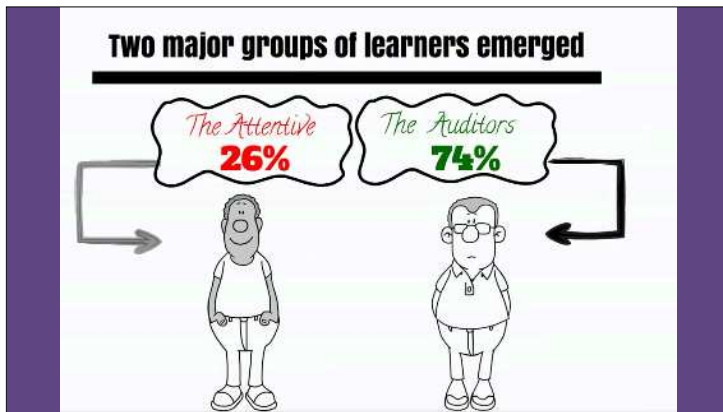
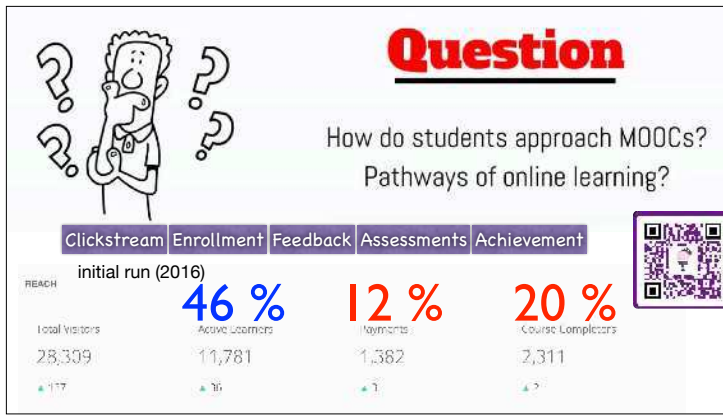
Question

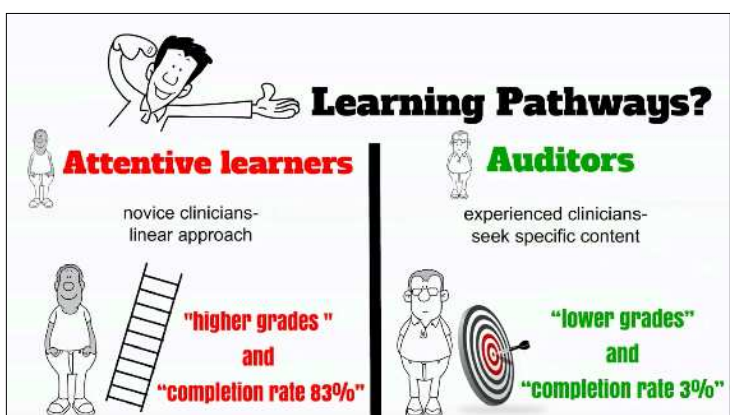
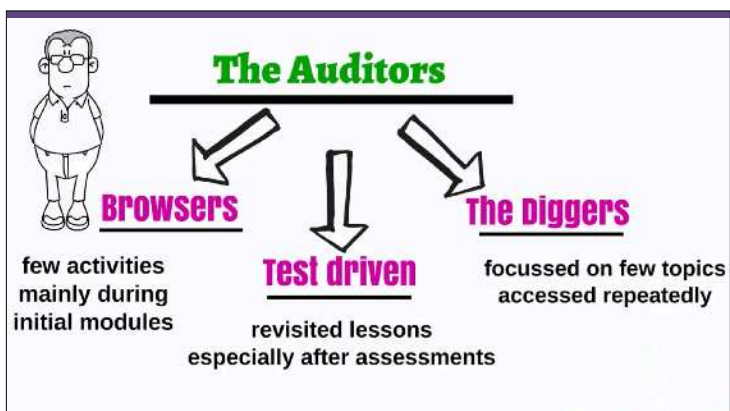
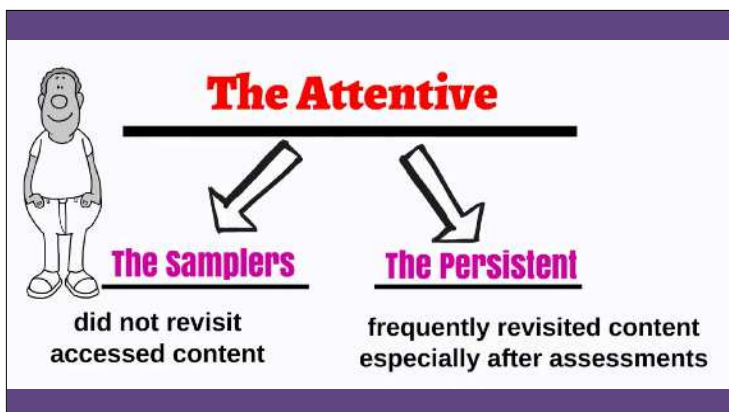
How do students approach MOOCs?
Pathways of online learning?

Self-regulated learning strategies
in world's first MOOC in implant dentistry

European Journal of Dental Education
Min Lan, Xiangyu Hou, Xinyu Qi, Nikos Mattheos

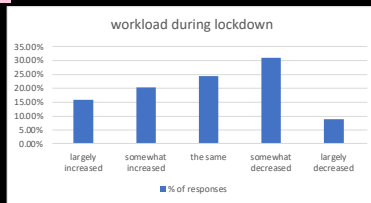








- diverse perception of workload



- diverse satisfaction

31%
unsatisfied
very unsatisfied.





Educating Clinicians Online: Macrotrends

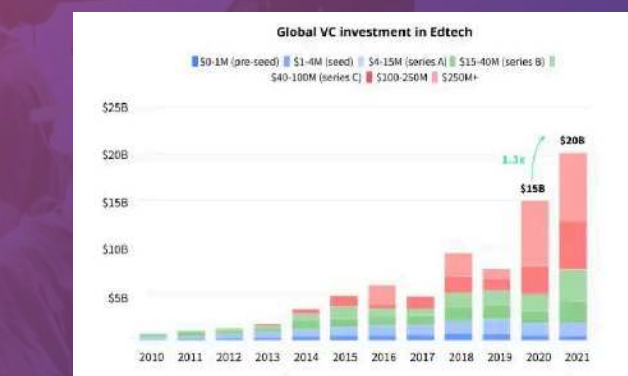
Where are we now?

Online learning is established

The audience is aware but difficult

EdTech is surging

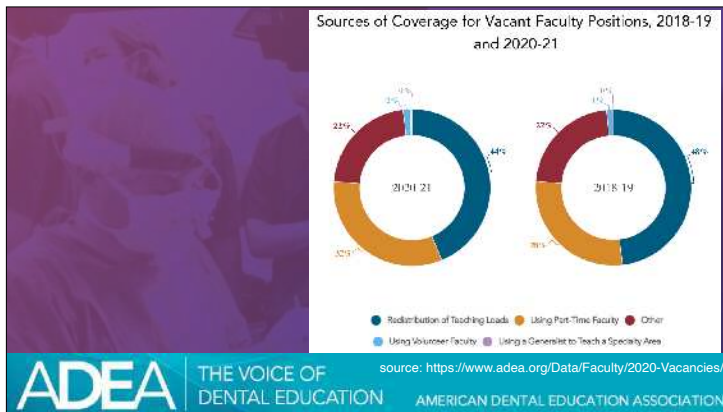
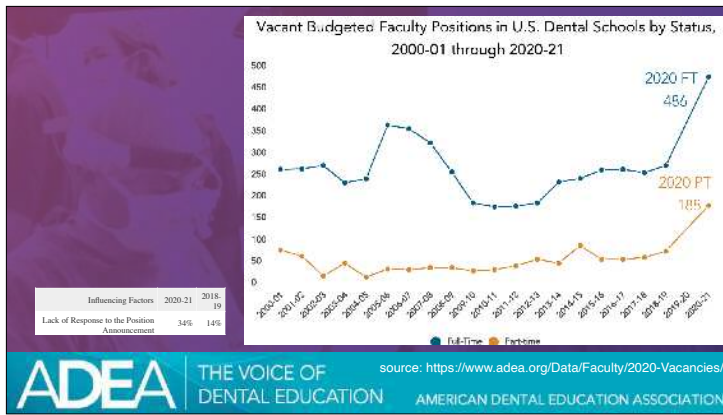
Macro trends in 2023



EdTech has seen 38 Unicorns so far, with 17 joining in 2021 alone, 5 IPOs in the last 12 months and one acquisition in 2015. The remaining 32 have raised \$27.4B at a collective \$97B valuation.

Global EdTech Startups reaching a \$1B+ Valuation via a Venture Fundraising Round, aligned to the year they became a Unicorn, noting their current valuation.





Educating Clinicians Online:

Where are we now?

Online learning is established

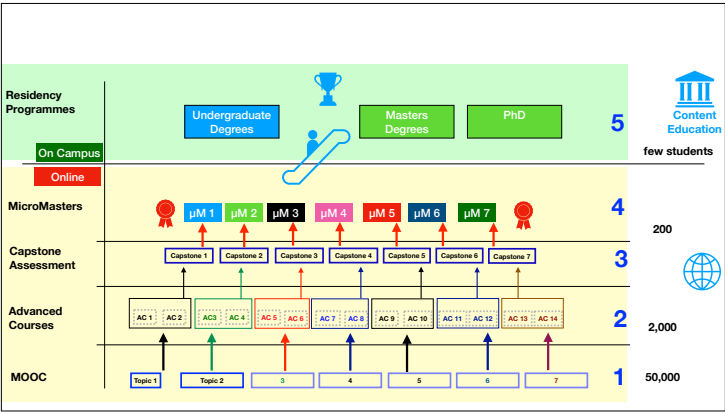
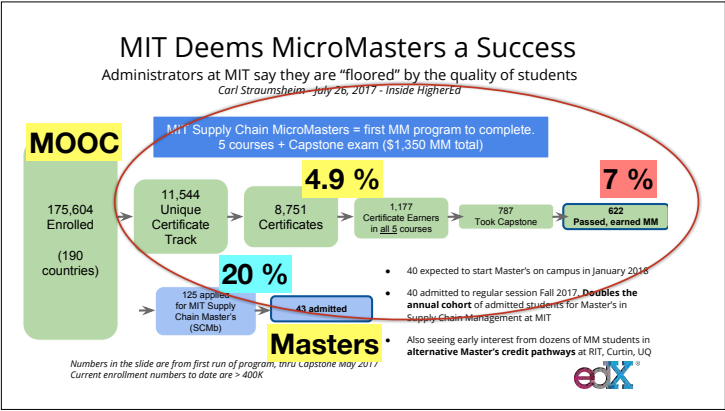
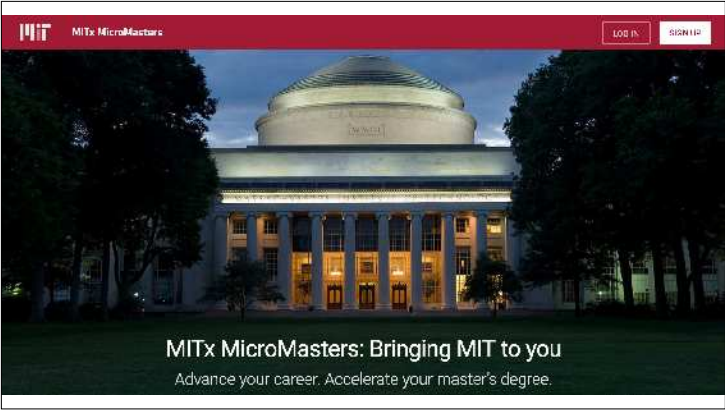
The audience is aware but critical

EdTech is surging

The academic teacher is stronger

Engineer Online Learning in your education structure

Macro trends in 2023





Gracias !

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www.mattheos.net

