

THE UNIVERSITY AND THE DIGITAL TRANSFORMATION OF SOCIETY

A RETURN TO THE ROOTS, BY MARIA DA GRAÇA CARVALHO

NEGOTIATING THE SEA OF INFORMATION TO ATTAIN INSIGHT, BY JOÃO GABRIEL SILVA

TOWARDS EDUCATION WITHOUT WALLS AND WITHOUT BORDERS, BY SEBASTIÃO FEYO DE AZEVEDO

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Towards Education without Walls and without Borders (I)

- ☞ It has always been a major duty of academics to (try to) think ahead.
I take, **not 2030, but Tomorrow...** as an adequate horizon for us to anticipate the dimension and the challenges of the transformations on our way of life that are under progress..
- ☞ **The Learning Process** - the main face of the polyhedron of HE, indeed the main subject at stake when we speak of the need for urgent reforms in HE.
- ☞ **The Digital Transformation of society** brings in the need for a **deep pedagogical innovation attitude**, requiring and calling for institutional vision and investment and for individual participation and commitment
- ☞ **COVID-19** is dramatically making it crystal clear that **the Digital Transformation** embraces tremendous opportunities for development

Towards Education without Walls and without Borders (II)

Such transformation requires and includes several interrelated initiatives, namely

- i. strengthening the concept of *Education without walls and without borders*, by consolidating a new concept of *classroom* and of *lecture*, indeed a *don't lecture* concept;
 - ii. promoting a dual academic offer, *on-campus* and *online*, making wide use of digital platforms in a framework of continuous education;
- and
- iii. teaching in an era where information, valid and invalid, is abundant and within immediate reach.

IMPACT OF THE DIGITAL DISRUPTION IN ACADEMIA THE CHALLENGE OF "DON'T LECTURE" (JM FERREIRA, USN, 2019)

- ✎ What is a 'lecture'?
- ✎ What is a classroom? Any **physical or digital space** where we promote the discussion and transfer of knowledge and where (or through which) competences and skills are developed?
- ✎ Where is the Classroom? **On Campus; Online**; everywhere?
- ✎ New requirements of **competences and skills of professors** in this age of AI?
- ✎ Professors without classrooms? Classrooms without professor?

IMPACT OF THE DIGITAL DISRUPTION IN ACADEMIA
AS I SEE IT... TODAY... (I)

- ✎ promote a dual academic offer, *on-campus and online*, making wide use of digital platforms in a framework of continuous education;
- ✎ adopt the existing (and those to come) collaborative tools (e.g. Google Apps and MOOCs), in a process of promoting student emancipation and student centred learning, particularly in terms of self-learning between peers;
- ✎ adopt (and adapt to) existing (and those to come) tools such as the *digital assistants* or the *chatbots*;
- ✎ Adapt (as possible!) the physical space of the Campi to meet the needs of this new learning process.

IMPACT OF THE DIGITAL DISRUPTION IN ACADEMIA
AS I SEE IT... TODAY... (II)

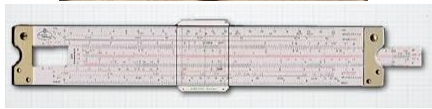
- ✎ Irrespective of the degree structure, skills, competences and attitudes, further to those more directly associated to the discipline, that are recognized today as absolutely relevant for the student global education:
 - a multidisciplinary sense and vision of the phenomena;
 - critical thinking for both academic and social issues;
 - a social sense of multiculturalism;
 - a vision of sustainability;
 - ethical judgement;
 - team versus independent work;
 - self-study capacity;
 - communications ability.

INSTRUMENTS FROM THE DAYS OF THE 'PALAEOLOGIC' LOGARITHM TABLES AND SLIDE RULES

☞ These are Logarithm Tables

☞ These are 'Slide Rules'

**Fundamental instruments for
Engineering Design
... till the decade of 1970!!!
1970!!!**



INSTRUMENTS FROM THE DAYS OF THE 'PALAEOLOGIC' THE 'REVOLUTIONARY' MECHANICAL CALCULATOR FACIT (- 1960 -)

☞ What is (was) a FACIT? ... that I used widely in the University in 1969, 1970...,



FROM THE 'PALAEOLOGIC' TILL THE FUTURE... ??? 2050... ???
FICTION? OR, IS IT NOT? !!!



Photograph: Tetra Images, LLC/Alamy Stock Photo, Guardian, 6 September 2019

THE ABSTRACT OF OUR PRESENTATION WAS SUBMITTED TO THE EDUCON2020
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- ☞ **Mind... this was well before this dramatic COVID-19 Pandemic we are in, with all its very rough consequences in our patterns of life, namely with the need for confinement**
- ☞ **BUT, as always throughout History - from Human drama and tragedy, opportunities and positive changes are born and flourish**
- ☞ **This surge of pedagogical innovation, that we anticipate and promote in our Abstract, is now invading all institutions all over the World, in an accelerated way**
 - **It would have taken very long to come into practice, were it not for this urgent need of survival...**



That's It!
Many Thanks for your attention!