Innovation in HE curriculum design

- International trends and the case of CBS

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CBS · COPENHAGEN BUSINESS SCHOOL · HANDELSHØJSKOLEN

EFMD EQUIS ACCREDITED · AACSB ACCREDITED · ASSOCIATION AMBA ACCREDITED · CEMS · PIM Partnership in International Management

Content:

1. Experiences from my own time as student

2. Trends in curriculum design

3. The CBS case of innovation in curriculum

CBS COPENHAGEN BUSINESS SCHOOL
HANDELSHØJSKOLEN

| Topics	No. of Weeks	Contact Hours
A. Information Systems : The Big Picture - The Information Systems Definitions - The Information Technology revolution - The dual Nature of Information Systems - The future of the IS function with the firm - Cases 1 & 2	Week 1-2	8 hours
B. Information Systems for Competitive Advantage - Why use Information Systems - Information Systems for competitive advantage - Making the Business case for a system - Presenting the Business Case - Competitive Advantage in Being the Cutting edge - Cases 1 & 2	Week 3-4	8 hours
C. Database Management - Database Management for Strategic Advantage - Key Database activities - How organizations Get the most from their Data - Cases 1 & 2	Week 5-6	8 hours
D. Telecommunications and the Internet - The rule of Telecommunications and Networks in Organizations - Evolution of Computer Networking - The Internet - World Wide Web - Cases 1 & 2	Week 7	4 hours
E. Electronic commerce, intranets, and Extranets - Electronic Commerce Defined - Business-to-Business Electronic Commerce - Business-to-Consumer Electronic Commerce - The formula for electronic Commerce Success - Cases 1&2	Week 8-9	8 hours
F. Organization Information Systems - Decision-Making levels of an Organization - General types of Information Systems - Information Systems that span Organizational boundaries - Cases 1&2	Week 9 - 10	8 hours
G. Enterprise-Wide Information Systems - Enterprise Systems - Types of Enterprise Systems - The formula for Enterprise System Success - Cases 1&2	Week 11-12	8 hours
H. Information Systems Development and Acquisition - The need for Structured System Development - Steps in the Systems Development Process - Other approaches to Designing and Building Systems - Need for Alternatives to Building Systems Yourself - Common Alternatives to In-House Systems - Cases 1&2	Week 13-14	8 hours
I. Information Systems Ethics, Computer Crime, and Security - Information Systems Ethics - Computer Crime - Computer Security - Cases 1&2	Week 15	4 hours

"*I have read more than 2000 books about this and then I wrote a little book. If you just read this little book, you will not have to read the other 2000!*"
Professor Erik Johnsen, 1990

Delivery mode
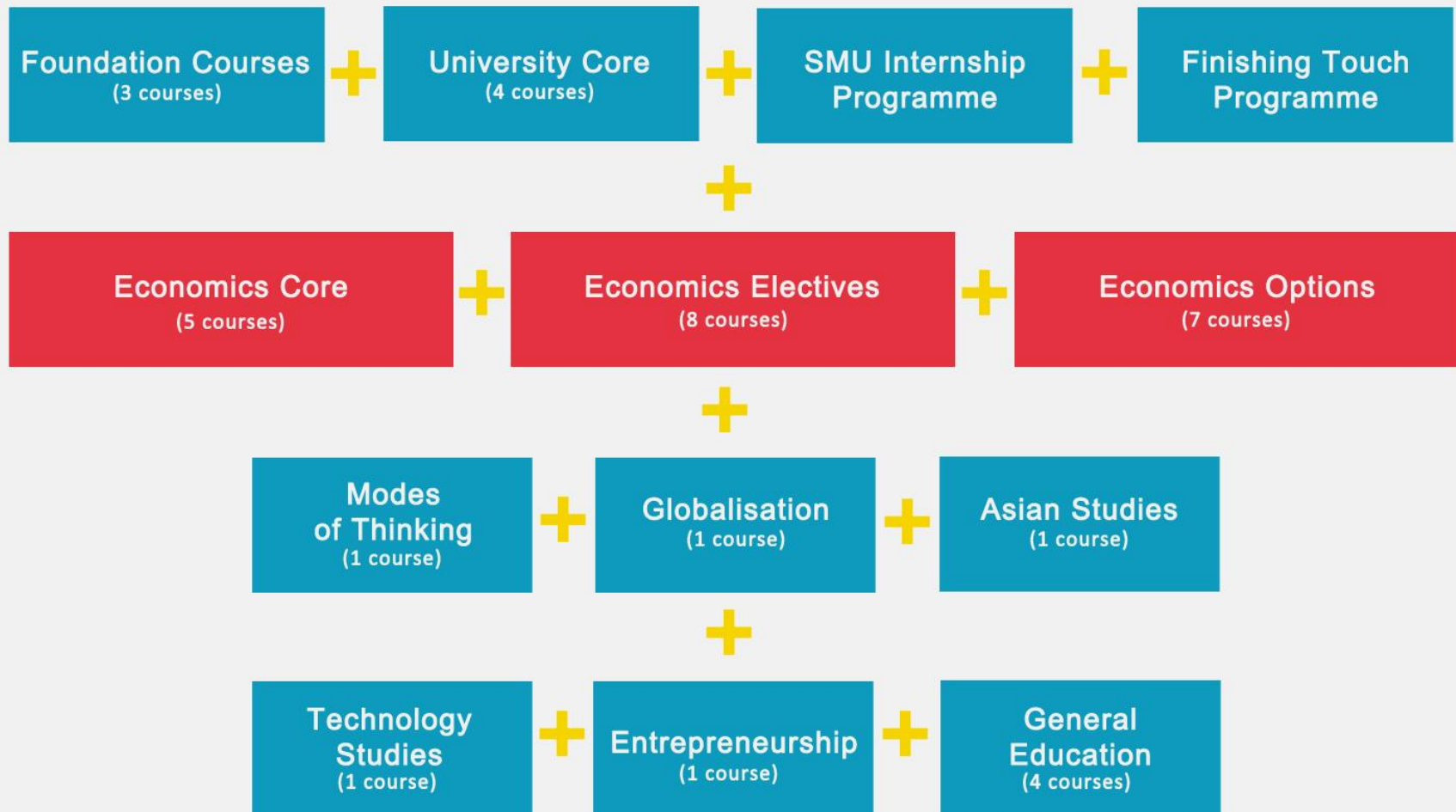
Economics Curriculum structure (SMU, 2017)

Curriculum design

Refers to:
- What we intend for others to learn and how we support the learner.

Originates from the US in the beginning of the 20th century:
- The mechanisms for transmission of a body of knowledge from teacher to student, from one generation to the next

In HE:
- Curriculum is typically not "rationally designed".
- Curriculum is designed by non-educationalists (i.e. not formally educated in curriculum design, pedagogy, teaching and learning).

Innovation in curriculum design – why is it a hot topic?

"A generation ago, teachers could expect that what they taught would last for a lifetime for their students. Today, schools need to prepare students for more rapid economic and social change than ever before, for jobs that have not yet been invented and to solve social problems that we don't yet know will arise"

Andreas Schleicher, Director for Education and Skills, OECD in: Fadel, Charles et al. 2015. Four-Dimensional Education. The competencies Learners need to Succeed. The Center for Curriculum Redesign.

"The pace of innovation for learning and teaching is speeding up in the face of disruptive and constructive forces which are creeping into HE, challenging traditional ways of thinking and doing"

(Salmon, G. 2014. Learning Innovation: A framework for transformation. *European Journal of Open, Distance and e-learning* – vol. 17. 2014)

Trends in curriculum design

Digitalisation & networks

Lifelong learning

Curriculum design

Widening participation (inclusiveness)

Equality
- Gender, culture, values

Keywords:
- 21st century skills
- Employability
- Informal & non-formal learning
- Automatization, AI, Robots

Keywords:
- Unbundling of curriculum
- The flexible curriculum

Keywords:
- Open courses
- Leaving the 20-40-20 model
- The social responsible curriculum

Keywords:
- The Euro-centric curriculum
- The accessible curriculum
- 1st year curriculum

21st century skills
- Atomatization of non-routine tasks

"*The difference today is the pace of the computerisation of non-routine tasks. With access to a large amount of data, often referred to as Big Data, more non-routine tasks can be replaced by computerisation. Computers manage the large dataset better than humans. Also computers are not restricted of human needs as sleep, so the productivity of carrying out tasks is a factor as well. Law firms now use computers to assist them in pre-trial processes, while computers can scan thousands of legal briefs and precedents. Computerisation then invades domains, as finance and law, which typically are based on non-routine tasks".*

Frey & Osborne, 2017

Future work skills - social skills

http://www.futureofwork.nz/changing_importance_of_social_skills

WEF: Skills for future

LinkedIn research on skills provided by 50.000 users. Core, cross-functional skills:

1) Interpersonal skills
2) Basic technology skills

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Jobs are changing. But two skills will always be in demand

https://www.weforum.org/agenda/2017/09/linkedin-job-skills-human-capital-report-2017

OECD 21st century skills

OECD calls for 21st century skills:

- *innovation*
- *creativity*
- *creative problem solving*

Stürmer, Deligiannidi, Révai, Tokuhama-Espinosa, Ansari et al., 2017

Unbundling
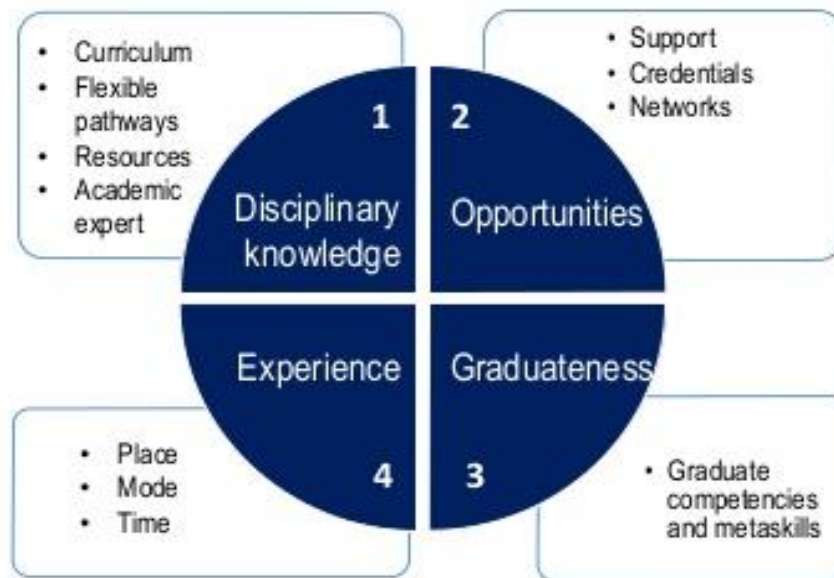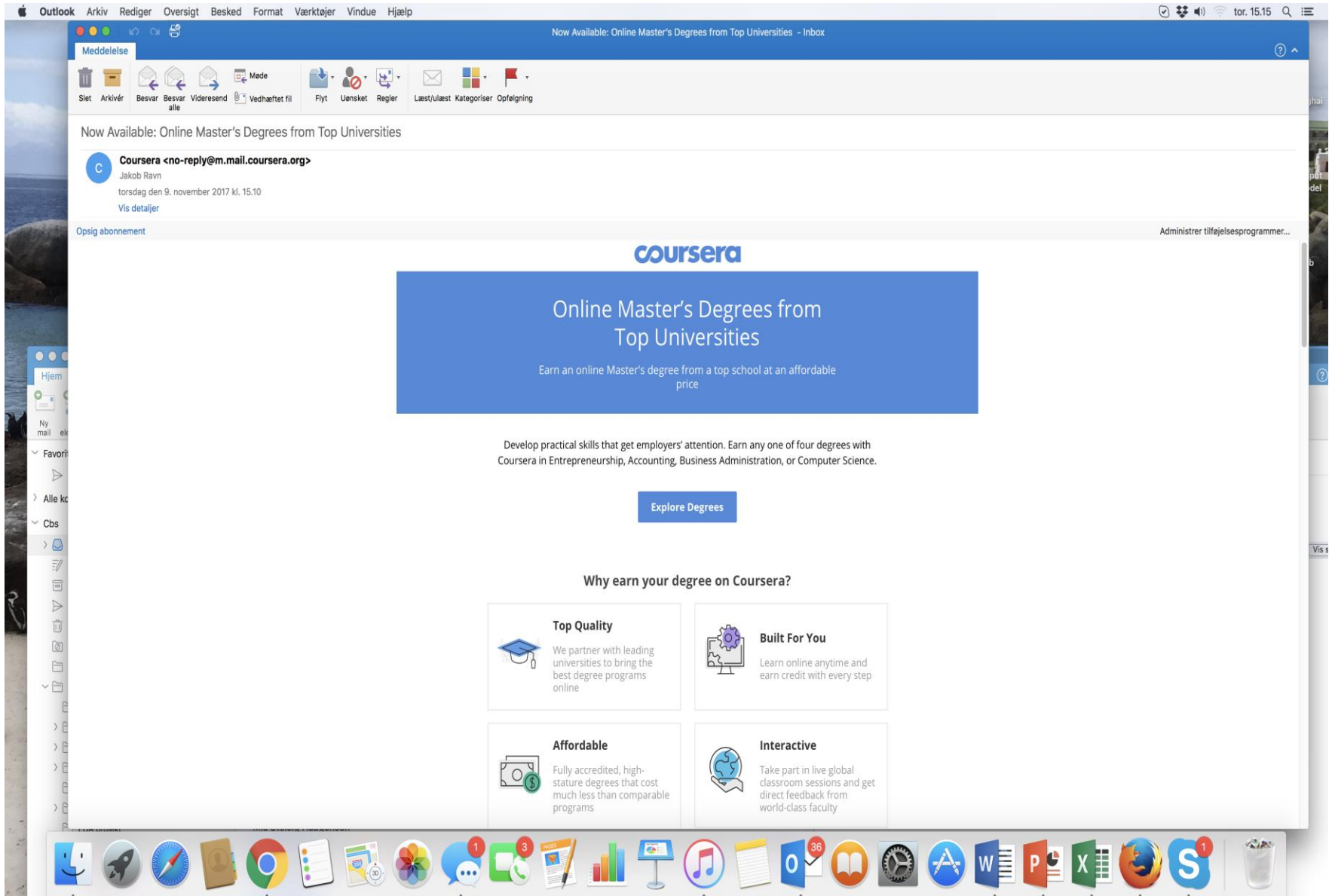
Laura Czerniewicz, 2017

Unbundling

The curriculum landscape

Czerniewicz, L; Deacon, A; Small, J; Walji, S (2014)
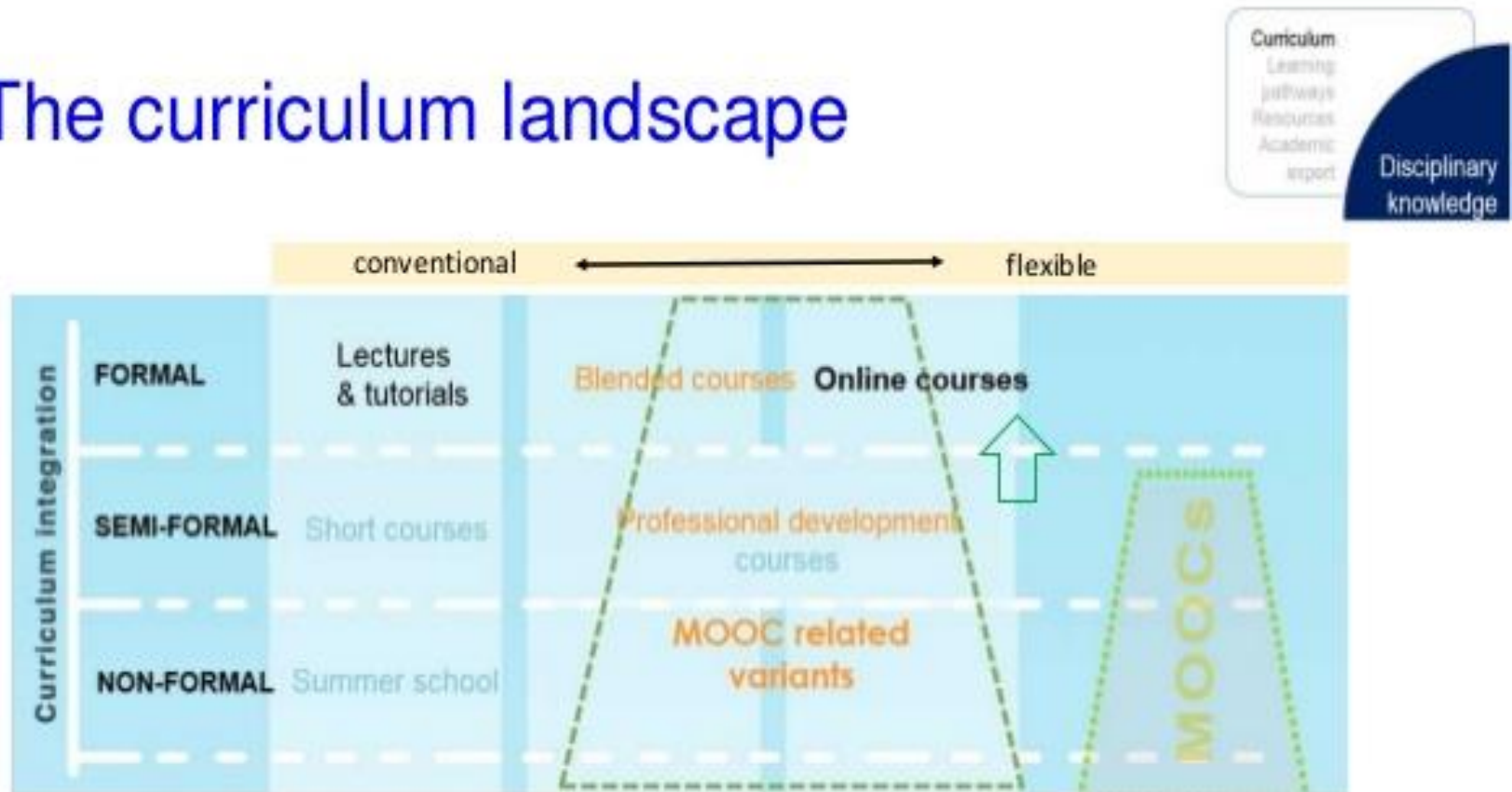
New providers, new delivery modes

De-colonising the curriculum

THE CONVERSATION

Arts · Culture   Business · Economy   Education   Environment · Energy   Health · Medicine   Politics · Society   Science · Technology

What a new university in Africa is doing to decolonise social sciences

Seven commitments
- #1: By 2019, everything we assign our students will be open source
- #2: Language beyond English
- #3: 1:1 Student exchange ratio
- #4: Text is not enough
- #5: We cannot work alone
- #6: Producers, not only consumers
- #7: Ethics above all

Re-think curriculum?

- How can we cope with all these trends (and more) at the same time?
    - My response: we cannot.

- How can curriculum be expanded and 21st century skills be added to the curriculum?
    - My response: they cannot.

My approach: Re-think organisations and make them innovative.

Curriculum design at CBS

Historically, CBS has been quite innovative:

- Since 1995: development of 40+ new programmes
  - Many with unique profiles and curricula
    – BSc in Business & Philosophy,
    – BSc in Business & Psychology,
    – BSc in Business & Politics
    – BSc in Business & Culture
    – BSc in Business & Sociology
    – MSc in Business & Bio-entrepreneurship
    – MSc in Business & Diversity

- Continuous re-design of curricula in existing programmes
  - Social responsibility, Responsible Management and sustainability is an integrated part of curriculum in all programmes
  - Entrepreneurial attitude and innovative mind set is next☺
  - Diversity, inclusiveness and tolerance should be integrated

Where does innovation at CBS stem from

- Bottom up processes, not a well managed top-down process

- Visions and direction from senior management

- Organisational structures that allows and stimulates decentral innovation

The CBS structural conditions for innovation in curriculum

Interdisciplinarity
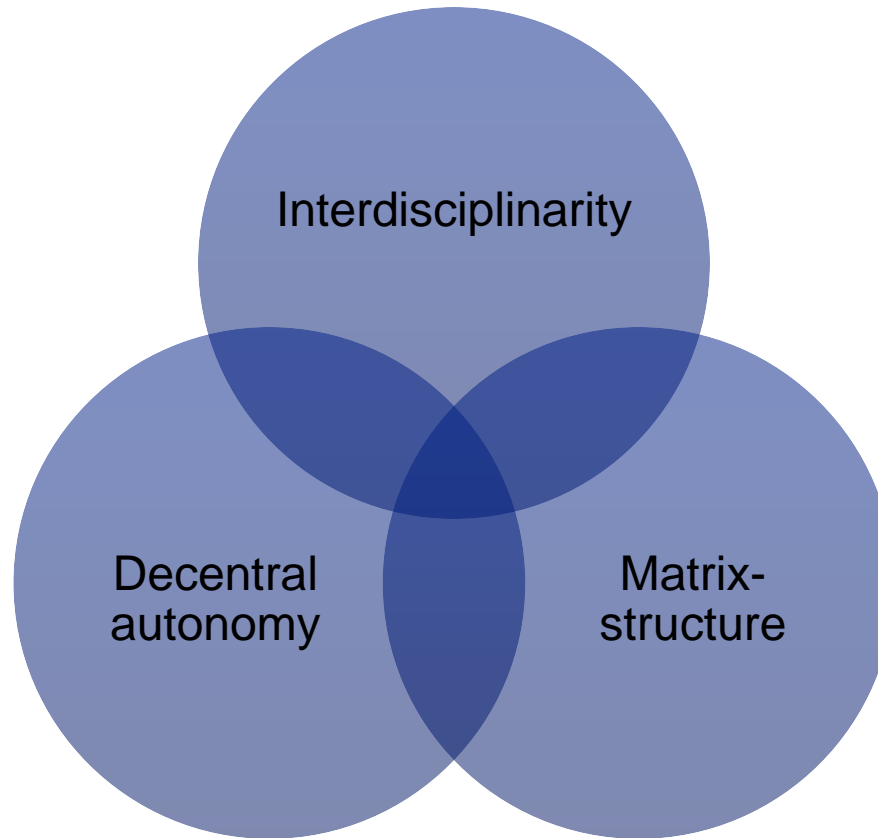
- All programmes at CBS is intended to be interdisciplinary:

  - No single department can offer a programme (at least two departments and usually more).

  - Interdisciplinary programmes combines two or more academic disciplines into one activity (not a double curriculum!)

  - Interdisciplinary programmes demands interdisciplinary research or at least platforms for close cooperation between researchers from different disciplines

Decentral autonomy

Autonomy at program level:

- Every study programme has a study board:
  - 6-10 members, equally divided between students and faculty
  - 6-8 meetings annually

- Study boards with real power and autonomy: ownership of courses and course curriculum

- Decentralised administration

- Flexible allocation of teaching hours – a detailed teaching activity catalogue

A Matrix structure

DEPARTMENTS

CBS matrix
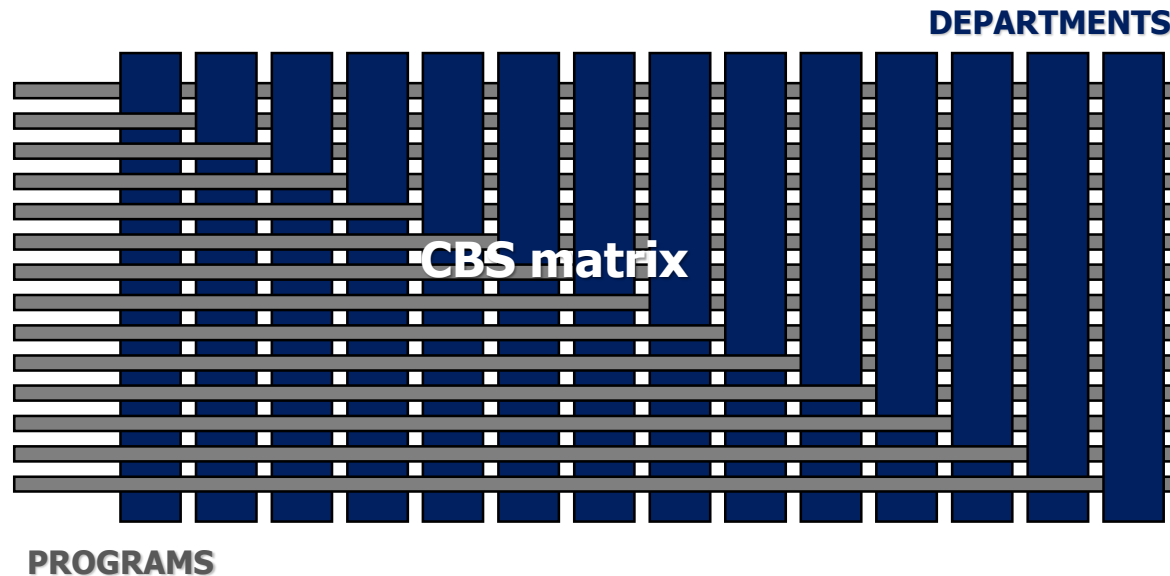
PROGRAMS

In total: 14 departments and 63 study programs

Conclusions

- Curriculum design is a process, not an end.

- The process is driven by innovative faculty who are allowed to innovate (decentral autonomy) - not driven by curriculum designers or curriculum design models.

- Organisational structures are important for innovation in curriculum

- New demands and trends are not to be treated as add-ons to existing curriculum, they have to be integrated into "combined activities" (like an interdisciplinary curriculum is not "two curricula in one programme").

- New demands and trends can be coped with only by the key actors (faculty and students) who know the subject and how it is learned.
  - Expose them to the trends and demands.
  - Institutional visions and strategies needs to be focused.

- Innovative curriculum is doing something new – not copying what other does.

Question for discussion

How can VLOR as Education Council support the Flemish HE institutions the best in being innovative in curriculum design?

Main references

Fadel, C., Bialik, M. & Trilling, B. 2015. *Four-Dimensional Education. The competencies Learners need to Succeed.* The Center for Curriculum Redesign. A non-profit research organisation.

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Stürmer,K., Deligiannidi,K., Révai, N., Tokuhama-Espinosa, T., Ansari et al. (2017): *Pedagogical Knowledge and the Changing Nature of the Teaching Profession*. OECD 2017.