EDUCATING THE ACTORS OF TOMORROW’S ECONOMY ON ECOLOGICAL ISSUES: AN ESSENTIAL CONDITION FOR THE TRANSITION

The Shift Project offers an operational method to incorporate ecological issues within management studies, developed in partnership with Audencia business school and multiple other higher education institutions.

Managers have a decisive role to play in the transition to a low-carbon and resilient society. They need to mitigate the impacts of their organisations on the environment and participate in adapting society to current disruptions.

Yet, they are very rarely taught about such issues. In 2019, only 6% of management programs addressed ecological issues as part of their mandatory courses.¹

Our economic activity depends on energy and material flows, climatic conditions, and ecosystems. It must respect the planetary boundaries to be sustainable. Tomorrow’s economic actors must fully integrate this reality.

Management sciences and its professionals are at the heart of this revolution of ideas and practices. 94% of management lecturers believe that their institution should train students on ecological issues.²

The urgency is indisputable. This work needs to start as soon as possible.

This report offers:
- A knowledge and skills framework
- A focus on 4 management disciplines: strategy, marketing, management control, purchasing and logistics
- Recommendations for each actor
- A curricula transformation guide for the executives and presidents of higher education institutions
- Feedbacks from higher education institutions

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¹ Mobiliser l’enseignement supérieur pour le climat, The Shift Project, march 2019
² The Shift Project survey of higher education management lecturers (489 respondents)
WHAT DO MANAGEMENT GRADUATES NEED TO KNOW ABOUT ECOLOGICAL ISSUES?

The knowledge and skills framework is a tool for professors and pedagogical managers. It describes the knowledge and the skills to include in mandatory classes in management. It is complemented with resources to go further.

The knowledge framework amounts to about 165 hours of teaching, including 48h (6 ECTS credits) that are dedicated to the physical constraints and their socio-economic implications. Beyond those courses, the whole educational journey also needs to contribute to teaching those knowledge and skills.

The actors of tomorrow’s economy must:

▸ Understand the physical constraints and their implications for society, economic systems, and organisations

▸ Mobilise natural sciences, engineering sciences, and human and social sciences

▸ Know the limits of the models taught in management and economics to take into account the ecological issues

▸ Be able to undertake a scenario analysis with physical constraints

▸ Conceive business plans that are compatible with a minimum 6% decrease in greenhouse gas emissions annually

▸ Know how to lead their management and their teams in a transformation project

Dare to be creative to reinvent current practices

This knowledge and skills framework is completed with:

▸ A focus on marketing, strategy (including consulting), management control, purchasing and logistics studies, that highlight the knowledge and skills evolution required by the ecological transition.

▸ A focus on digital technologies, which defines the fundamentals of digital sufficiency. For example, the knowledge of the impacts of digital technologies on greenhouse gas emissions.
TRAINING THE CITIZEN MANAGER OF THE 21ST CENTURY

SKILLS FOR THE TRANSITION

- Adopting a systemic, interdisciplinary, and ethical approach
- Developing critical thinking to apprehend desirable futures
- Conceiving the transformation of organisations
- Acting individually and collectively in a responsible manner

Societal objectives
- Peace and justice
- Health and wellbeing
- Education
- Inequality reduction

KNOWLEDGE RELATED TO ECOLOGICAL ISSUES

- Physical constraints
  - Climate change
- Institutional, technical and human leverages
  - Political systems
  - Legal and normative systems
  - Economic and financial systems
  - Organisational and governance models
- Cultural systems
- Psychology and sociology of change
- Resources depletion
- Biodiversity collapse
- Energy procurement
HOW EACH ACTOR MUST LEAD THE TRANSITION?

For each recommendation, you will find more details, examples, and resources in the report by looking into the dedicated chapter.

EXECUTIVES AND PRESIDENTS

Driving the institution’s transformation

- Train all staff: at least 10h for management and administrative staff, and 48h for professors, in order to understand the implications of the planetary boundaries on management teaching
- Redefine the university’s strategy to include the ecological issues with ambition and coherence in the teaching, research, campus, practices, and governance
- Mobilise human and financial resources to lead the transformation: 3% of the operating budget for at least 3 years
- Diagnose the starting point of the institution and identify the assets it can rely on (professors, partners, etc.)

PROFESSORS

Training oneself to train others

- Train oneself (48h on planetary boundaries and their consequences on society and the economy) and update course content according to the knowledge and skills common grounds
- Publicly share the courses and teaching materials to accelerate the teachings’ evolution
- Report the expectations from students and professors to the institution administration
- Switch from a posture of knowledge to a posture of facilitator, making students actors of their learnings
- Integrate those issues into their research program

53% of professors declare needing more time to integrate ecological issues into the curriculum. 43% declare needing training. 42% declare needing more discussions with their peers.
THIS REPORT OFFERS:

**Recommendations** per actor

**THE STATE**

**Set up a suitable framework**
- Inject momentum by defining a national higher education and research strategy for climate with the objective of training 100% of students on ecological issues
- Create a framework to incentivise the transition, for example, by valuing interdisciplinarity work and teaching in the career of professors
- Offer a financial support to universities – especially public ones – to aid them in their transition

**STUDENTS & ALUMNI**

**Engage & testify**
- Learn about ecological issues
- Mobilise and raise awareness among peers and students and alumni associations, for example, by organising events
- Alert, and relay expectations to lecturers and institution administration, for example by talking with them or writing open letters
- Testify and manifest the need for skills in the professional world (for alumni)

**COMPANIES**

**Support & testify**
- Become actors in the ecological transition by integrating those issues into their strategy, operations, and recruitment
- Organise continuous training of all staff on ecological issues to be able to lead their transition
- Recruit competent staff with regard to ecological issues
- Finance research on ecological issues

**ACCREDTIATIONS AND RANKINGS**

**Encourage & value**
- Grant ecological issues a higher weight than any other criterion
- Precisely define how ecological issues will be evaluated, by placing planetary boundaries at the centre
- Value the incorporation of ecological issues in all courses
- Evaluate, both quantitatively and qualitatively, the impact of actions undertaken
- Ensure transparency in the procedure, methodology, data, and cross references

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The Shift Project is a think tank working towards a post-carbon economy. As a non-profit organization recognized as being in the public interest and guided by the demands of scientific rigor, our mission is to enlighten and influence the debate on the energy transition in Europe. Our members are large companies that want to make the energy transition their priority.

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