

How to integrate ecological issues into supply chain courses?

Workshop - 16 March 2023

In the context of the project <u>ClimatSup Business - Educating tomorrow's economic actors</u>

Following a presentation by Valentina Carbone (Professor at ESCP Business School)

The workshop gathered professors in supply chain from various business schools and universities. It aimed at creating a space for professors to share their experiences on the integration of ecological issues into supply chain courses.

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I. What prevents you from integrating ecological issues into your courses? What difficulties are you facing?

A participant mentioned that the awareness of how to proceed in order to integrate sustainability into my teaching came through research. First she felt an initial laziness to reshuffle traditional business cases, so she started to work on the topics where she felt more at ease, step by step: it took her 6 years to make the course 100% sustainable.

Another participant started into sustainability 15 years ago having worked before in supply chain management (SCM) and purchasing, but for him as well, there came a point in my teaching where he started losing a little motivation. **Sustainability appeared like a big challenge and opportunity** that he wanted to embrace and learn more about. But how could he integrate it into my teaching? Firstly, he developed a single session or lecture of 2 to 3 hours on supply chain management, and then over time he thought about how to integrate sustainability into that course instead of creating an add-on course.

A third participant who comes from a practice background stated that **the main barrier he sees** is how to include sustainability as a core component of the course before equipping students with an understanding of the foundation of supply chain management (SCM), especially for students coming from a non-management background. Do we need a separate course on sustainable supply chain management? He sees an opportunity for each course to have a sustainability component, whether it be purchasing, or logistics, and believes **professors must integrate it into the topics they teach so that it is not a separate element**.

There is an inertia in the attempt to switch a standard class to a sustainability perspective because of the need for students to master the topics before integrating sustainability, but **it is possible to talk about an issue directly from a sustainability standpoint**, and there is a stronger and stronger demand from the students to address this topic.

II. What are your suggestions or solutions to tackle these difficulties?

1. Adopting a Global South perspective

One of the professors uses case studies that are not necessarily from the global North. A lot has happened in the global South, so for him, bringing practitioners from the global South to address sustainability is important. He wants to integrate these courses from the global South into the curriculum.

At the operational level, one question is whether the global South can appreciate the concepts that stem from the global North, as they have different perspectives, there are many cultural issues. From his previous work experience, he found it difficult to get suppliers to buy into their sustainability goals. According to him, **professors should integrate the cultural and historical context into their teaching**, they cannot only talk about the technical aspects in supply chain management. The answer would be to delve into the core operational issues, asking oneself what are the challenges in making the global South adopt sustainability: there is a need for new knowledge transfer mechanisms.

Yet, another participant highlighted that Global North and Global South are very aggregated concepts, especially when talking about sustainability. Hence, she now prefers talking about specific industries (for example, palm oil in Indonesia...). It is a way to overcome the concepts of global North and South.

2. Raising the interest of students with projects and cases

A participant raises the fact that in his faculty, each teacher can have their own approach on how they integrate sustainability, there is **no global coordination amongst teachers**. What he chose to do is to focus on three aspects. Firstly, he highlights that it is a matter of survivability, not convenience, so we need to look at systemic constraints. Secondly, that we need to prepare ourselves for the decline in energy and oil availability. Finally, that our ultimate goal is to preserve life on earth.

Based on this, he creates activities for students where they work together looking at specific materials. For example, the supply chain of fish, that depend on the precarious situation of the ocean, or the supply chain of refrigerated items. That motivates students a lot, they ask for extra time to work on the reports, and some students have been asked to do formal presentations of their reports (for example, a former student was asked to present his report on how to provide enough corn to feed humanity). He gives the students only the basics of the thinking, and then support them in building the future project with an attention to resilience and sufficiency (sobriété in French).

Another professor agrees upon the **need to rely on students' curiosity, and that the sectoral approach to SCM is in their hands, because professors cannot be experts in all sectors.** During the examination, she also asks students to reply to the examination questions according to the supply chain they studied, so the students become experts on that specific topic through the project and final examination.

Participants mostly agree on the importance of having a sectorial, industrial approach is very important (another example given was the space industry, with a mention of a PhD thesis by Camille Toussaint on space debris).

3. Become familiar with ecological issues

One question was raised: how to integrate sustainability in the courses without having it as an add-on?

One professor mentioned a book on *Purchasing and Supply Chain Management from a sustainable perspective* (by Thomas Johnsen, Mickey Howard, and Joe Miemczyk), which idea was to integrate a sustainability perspective into every aspect of our courses. It is not a suitable textbook for a dedicated supply chain management course, it focuses more on purchasing with some supply chain management aspects.

Another participant recommends to adopt and become familiar with the main new paradigm that includes planetary boundaries and social inequality, in order to move from teaching the basics of supply chain to teaching sustainability. These issues are embedded in the global frameworks she teaches, so that she now uses sustainability topics to pass on the SCM tools. According to her, if you are solid in supply chain and you have knowledge about planetary boundaries, then you feel authorised to talk about sustainability. In order to develop that ease, she did a lot of research on her own, participated in sustainability workshops...

The relation between energy supply and supply management, as well as technology issues, is important to highlight. One participant mentions a Taboo game out of the DHL supply/transport map (which relies on different technologies), where students are asked to think of the social and sustainable limitations of the different technologies that are used, to think critically of the 'technology-fix' mindset.

4. How to integrate social sustainability, especially issues around labour?

One professor says she **integrates social issues** transversally, and gives them a dedicated section when it comes to social sustainability. She suggests to mobilise the knowledge that students themselves have on geopolitical issues that can arise in relation to SCM.

Another professor, working in the health sector, focuses more on disposable objects.

III. Are more and more students demanding the inclusion of sustainability in classes?

For one professor, the answer is yes. Sustainability issus were raised by one of his students, who told him that the school is preparing them to fit into a certain model. Is it really the mission of the university to have us fit in industry demands, should we not rather change it? The professor answered that in order to decipher practices, students need to learn how the system already works.

Another professor is more mitigated in her response: she feels like she is living in a kind of bubble in her sustainability department. She wouldn't say that the majority of students require the shift

towards sustainability, there is a polarisation between students who do business as usual and the 'bifurqueurs'. However, there are networks launched by alumni, professors, students and administrative people, where they can exchange with peers who have already 'shifted'. Some professors will also participate in the Campus de la Transition.

In another institution, the feeling is that international students are generally more aware of sustainability issues.

Among French students, a difference is noticed between the students entering through 'admission parallele' and students entering through the 'classes preparatoires' path: the latter are more attuned to sustainability issues. In one school, workshops are proposed to increase climate literacy and prevent knowledge heterogeneity for international students.

A difference in student awareness was also noticeable pre and post-covid: **students are more aware now**, and female students are also generally more demanding on these issues than male students.

It was mentioned that students doing an 'alternance' go through business as usual.