USING SCIENCE FICTION TO UNLOCK CREATIVITY IN ENTREPRENEURSHIP AND MARKETING EDUCATION

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Short Abstract:

The aim of this article is to explore the role of creativity in the entrepreneurship and marketing curriculum. The individual's need to project themselves into an uncertain future, and the lack of guidelines for doing so, plunges students into a complex environment typically stifles creativity, and promotes conservative actions in their projects. To address this, and facilitate the student's imagination, an innovative approach to entrepreneurship education using science fiction was trialled. The deviation through imagination and fiction allowed them to generate more radical ideas, and to reflect within that imagined world on the creation of products and services for the future. This innovative learning approach stimulated creativity, helped them out of their caution, and triggered their imagination to think about the needs of a future world.

Keywords: Creative Teaching, Science-Fiction, Sustainability Entrepreneurship

Introduction and Research Aim
Educators play an important role in preparing their students for the future (Martens & Prosser, 1998). However, the many changes the world is currently experiencing make this projection difficult, both for the teacher and for the learners. If this question arises in all business courses – training today for tomorrow's jobs – it is particularly important for entrepreneurship and marketing courses, which must lead students to anticipate what the world will need tomorrow.

When students try to predict the future needs for various products and services markets, they face the challenge of thinking outside their own world view and life experience. This often results in them creating bars, trendy restaurants, software applications for connecting people or sharing budgets, or applications for funding projects. They rarely think about the needs of the wider community, or the future requirements of consumers in 10- or 20-years' time. The blinkers of the present prevent our brains from imagining the new (Cope & Watts, 2000). Learners need to break their mindsets and habits, to question what they take for granted, and imagine the future products and services that will enhance living standards and sustainability (Bureau, 2013).

The aim of this study was to test a creative teaching method in a teaching sequence on foresight intended for students of a master's degree in entrepreneurship. We address two research questions in line with this aim:
> **RQ1 – Knowing that creativity allows think out of the box, can we use creative methods of teaching to help students to think out of their everyday life routines?**
> **RQ2 – Could science fiction short novels writing help to visualise the remote future in a more empathetic way?**

Background and/or Conceptual Model:
Habits and routines (the so-called 'ruts') are built up by gradual adjustment at the beginning of stable phases of sociotechnical changes, transitions from one stable phase to another are characterised by an acceleration of innovations in all areas (Freeman & Perez, 1988). To cope with mundane, everyday uncertainty, we set up routines. However, in conditions of major uncertainty, we are ill-equipped to analyse the changes underway and to identify ways out of the crisis Sobhaninia and Buckman (2022), Being able to propose innovative solutions is therefore becoming critical and must be on the training agenda of current and future decision-makers (Malekpour, Brown, de Haan, & Wong, 2017). We are therefore witnessing attempts at pedagogical innovations to help learners develop these skills and to help them enter the complexity of the surrounding world and the founding principles of society (Cederquist & Golüke, 2016).

Finding ideas that do not yet exist, building innovative solutions with others, imagining a different context of action, getting out of the frame of reference... all these objectives can be addressed by creativity (Basadur, Pringle, Speranzini, & Bacot, 2000). Creativity has been developing in companies for several years and there is increasing discussion about how to organise it (Amabile, 1998). Teaching entrepreneurship, strategy or marketing is often done using the formulation of prospective scenarios based on key variables (Oliveira, de Barros, de Carvalho Pereira, Gomes, & da Costa, 2018). This method, sometimes called the "strategic prospective approach", teaches project managers not to suffer the future but to build it by anticipation (Rodríguez-Rivero, Ortiz-Marcos, Díaz-Barcos, & Lozano, 2020).

Methodology
Drawing upon all these foundations, a teaching task was developed for a class of about thirty students specialising in entrepreneurship and SME management in a business school in France. The learning task was focus on creative fiction (Michaelson, 2016), and specifically science fiction, which *"(offers) the possibility of temporarily standing outside of this world, looking up to the stars and imagining anywhere but the here and now"* (Smith, Higgins, Parker, & Lightfoot, 2001). The complete learning process comprised 6 steps over two sessions. The aim of the first session was to identify potential technological, economic, environmental, or social disruptions across several areas. The students then choose as a team a scenario on which they wanted to reflect in more detail. All of this led to the vision of a future 2040 that would serve as a context for writing a science fiction short story. The writing of the short story, which was a collaborative exercise, was guided with some practical advice. The second part of the sequence allowed a return to "come back to reality", after this diversion, by asking the students to imagine what product or service might be needed at this time to increase the sustainability of human activities and propose a business model. Student feedback was collected through diaries in which, throughout the semester, they looked back at each session, identifying what they had learned, what they had understood and what had surprised them. The analysis of their comments on this sequence was done using classical qualitative analysis methods: thematic segmentation in two steps, the first one linked to the literature review and the second one to identify the finer concepts within each first order theme (Miles, Huberman, & Saldana, 2014). The coding process involved the research team to ensure a good understanding of students' wording (Elliott, 2018)

Results and/or Discussion and Contributions
The main objective was to give the students the opportunity to imagine a product or service contributing to sustainability that was realistic and possibly adapted to a prudently imagined future. It seems that this was achieved. The students, on the one hand, understood that they were able to create activities now that would allow them to act for sustainability, and on the other hand, proposed, for each of their projects, the concrete criteria to justify this contribution (via the courts of existence). This suggests that the answer to our first research question is: *yes, creativity may help students to think out of their day-to-day routine*. Their feedback showed an awareness of the need for a creative diversion from the habits of the past and present. Almost all of them wrote about it. The creative diversion forced them to think differently, and free themselves from mindset limitations. As for the second research question, our students mentioned how their writing of a short story had the consequence of putting emotion into this project. Not only did this emotion allow them *to empathise with the "clients of the future", but it also allowed them to be more involved in the activities proposed*, and they were proud of the works produced.

Implications for Theory and Practice
Our results suggest that, beyond what Seifert and Clayton (2021) state about reading fiction**,** – that it *"can foster empathy, stimulate individual action, heighten feelings of social responsibility, and inspire leadership"* – fiction writing does help entrepreneurship students to see themselves as capable of facing their future and even acting to change it. This pedagogical experience has also managerial implications, as this type of approach would be appropriate if applied as part of an innovation and change programme within a company, or as part of strategic thinking, where managers, seeking to address the key challenges of the future (e.g., political, economic, social, technological, legal, and environmental), could use this technique (with appropriate facilitation) to identify new ideas and solutions for their organisation.

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