# Workshop: How to Design to Improve Life

## Compass, a problem-solving tool by The Index Project

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The current context derived from the Covid-19 pandemic has abruptly modified what we knew as "the education system" globally. If before education was located mainly in the classroom, today the hybrid modality makes educational dynamics more complex and must focus on the development of critical thinking skills to foster autonomy and problem-solving abilities in teachers and students. Educators more than ever need to prepare students to work and thrive in an unknown future scenario. Professionals in the future will need to lead sustainable innovation by considering the long-term implications of their design solutions in every field. This workshop is an introduction to the Compass® methodology developed by The Index Project®. The Compass is a flexible frame of action to organize, structure, and manage problem-solving processes. The difference between this method and other design thinking models is its focus on maintaining coherence between form, impact, and context in every phase of the design process to evaluate solutions holistically and sustainably to improve people's lives.

Keywords: Design thinking, problem-solving methods, Compass methodology, design to improve life

## Introduction

There is ample literature that suggests–to a higher or lesser extent–that not only design professionals–but everyone–designs in their daily lives (Simon, 1996; Schon, 1987). In the field of education, the "design thinking" process has been used as a structure to guide teachers when exploring educational problems that they face daily (Henriksen et al., 2017, Jordan, 2016). This has happened in part because the skills and mindsets that designers develop throughout their practice such as flexibility, uncertainty management, and the ability to face open problems and ideate possible solutions (Cross, 2001), are also fundamental for educators and young students. They are indeed considered fundamental 21st-century skills for any future professional (The Index Project, 2012). There are also some examples of design thinking models adjusted specifically for education as Design for Change, Henry Ford Learning Institute, and the Design Thinking for Educators guide developed by IDEO.

Nevertheless, complex problems and challenges of today's world, also demand that any future professional approach problem-solving holistically (Andrews, 2015), orienting their thinking and practice towards more sustainable modes of production, and the development of critical innovation. LUTNÆS (2019), explains that critical innovation considers analyzing what situations require to change, the socio-ecological consequences of the intended change, and questioning who will benefit if a situation changes. Design models for sustainability, incorporate sustainable thinking in the resolution of problems, considering local needs, cultures, and ecosystems to produce adequate solutions. This approach leads towards developing ecological literacy (Orr, 1992), which is needed by the global population. This focus represents an "extremely complex sociological dilemma" that can lead to transform the values by which we live in the world (Stegall, 2006).

Although diverse design models have been developed to support designers evolve into a more sustainable practice: "Cradle-to-cradle" (Braungart, M., McDonough, 2002); Eco-design (Brezet, H. Van Hemel, 1997); The Circular Design Guide (Ellen Mc Arthur Foundation (EMF) and IDEO), which has proven to be an effective

hands-on guide (Reigado, Fernandes, Saavedra, Ometto, & Da Costa, 2017), they are complex to use and mainly oriented towards product or service development. The Compass® methodology created by The Index Project®, on the other hand, is an easy-to-follow model of the design process that serves as a structure to organize and manage problem-solving processes oriented to create sustainable solutions that improve people's lives.

## The Index Project® and the Compass® methodology

The Index Project®, formerly INDEX: Design to Improve Life®–born in 2002 in Denmark–is a Danish NPO with a global reach that inspires, educates, and engages people across educational levels, to design sustainable solutions to global and local challenges. The organization promotes the application of design and its processes to create better solutions in vital areas of the lives of people and communities worldwide. The development of their design approach is coherent with the actual globalized and knowledge-based world that demands different skills from those needed in the industrial traditional linear economy. Societies need critical, innovative, and responsible citizens who can ideate solutions for complex challenges using cross-disciplinary, user-centered, and sustainable processes, methods, and techniques applicable by everyone (not only by designers).

Although they agree on the relevance of Design Thinking and the creative methodologies connected to it as a means to provide future generations with the skills needed in the 21st century, they insist that mere design thinking is not enough. The Index Project® suggests that design methodologies must be deeply anchored in what the organization in 2002 coined as Design to Improve Life; a user-based design approach that ensures that the triple bottom line of economic, social, and environmental sustainability is always taken into account.

## The Compass®

The Compass is the backbone of the learning initiatives by The Index Project®. It is a problem-solving tool that integrates the three fundamental competencies of didactics, process facilitation, and 'design to improve life. Whatever the challenge or the educational level in which it is used, the Compass can help you get from A to B with concrete actions, methods, and techniques. It helps you navigate, focus and stay on track while encouraging curiosity, engagement, creativity, and innovative thinking.

It uses the parameters of FORM, IMPACT, and CONTEXT in four phases: prepare, perceive, prototype, and produce. In this way, fundamental aspects of the development of a design solution are covered such as function, potential, level of innovation, propagation, and economic, environmental, and social sustainability of the proposed design. In addition, it examines usability and cultural/geographical factors, specifically in the context where the solution will be implemented. Combined, these parameters assess the real possibilities of a design to improve people's lives.

FORM: evaluates the surface, material, interface, color, coherence, and aesthetics of the design.

IMPACT: is centered on the design's relevance and real potential to improve people's lives and economic and environmental sustainability.

CONTEXT: focuses on the context in which the design will be inserted, the relevance of the challenge, and the solution in the culture and geographical location in which it will be implemented.
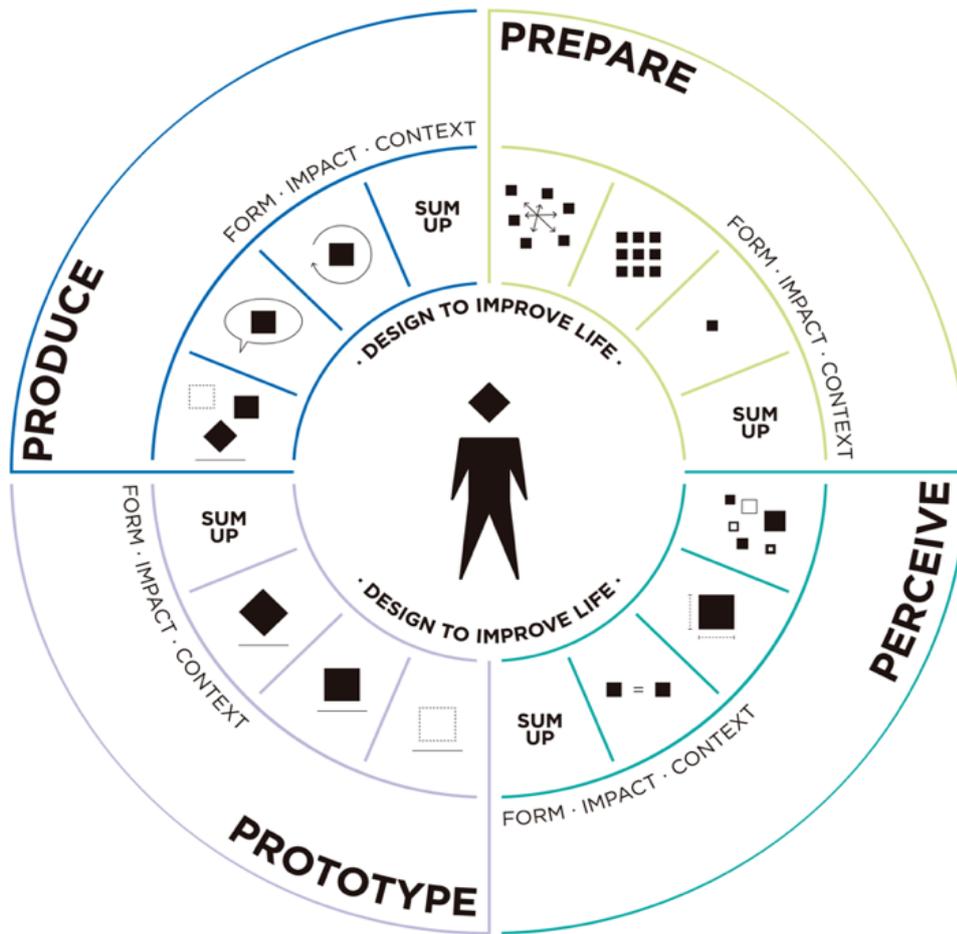
*Figure 1. The Compass® (graphic summary of the four phases: Prepare, Perceive, Prototype, Produce)*

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**Workshop aims:**

- Introduce the Compass as a flexible problem-solving tool.
- Describe the four phases through visual material and discussions.
- Revise a series of cases to assess coherence for sustainability.
- Disseminate the Compass as a frame of action to organize, structure, and manage problem-solving processes.

**Workshop outline** (120 minutes online):

We have conducted Compass workshops physically and online for various audiences: school teachers, university professors, designers, undergraduate design students, graduate master's students, and companies. In the case of this 120 min workshop, the difference between physical or online is mainly the working materials. Physically we would use worksheets, pencils, post-its, and simple prototyping materials. Online we will use Miro to work collaboratively in groups of 5-6 participants.

*Table 1. workshop outline*

| TIME | Activity | Expected outcome |
|---|---|---|
| 0-20 min | **Check-In**<br>Icebreaker warmup greetings<br>Group information | Get to know participants and expectations. |
| 20-45 min | **BRIEF INTRODUCTION TO THE COMPASS**<br>Introductory video<br>Description of actions in each phase | General idea about the methodology and its phases. |
| 45-60 min | **REVISION OF CASES**<br>Assessing coherence for sustainability:<br>The FORM-IMPACT-CONTEXT triad | Review of selected Index Awards winners and assess coherence in group discussions. |
| 60-80 min | **PRESENTATION OF RESULTS AND DISCUSSION** | Each group explains its results and the whole group discusses. |
| 80-90 min | **BREAK** | |
| 90-100 min | **THE FOUR LEARNING SPACES /** Group Discussion | Reflect on the role of the instructor and/or facilitator in the 4 learning spaces. |
| 100-120 min | **SUM UP / OPEN DISCUSSION**<br>Wrap-up and check out | Final discussion. |

**Expected outcomes of the workshop**:
- Understand the basic structure of the Compass.
- Experience a practical overview of fundamental aspects of the Compass.
- Produce fruitful interactions between participants.
- Understand the flexibility of the Compass as a frame of action to organize, structure, and manage problem-solving processes.

**Minimum and maximum numbers of participants**: 5/30

**Participants will benefit from the workshop in the following**:
- They will be introduced to a new methodology to apply with their students or co-workers.
- They will experience a collaborative activity with professionals from various backgrounds.
- They will be able to share their experiences within their group.

**The workshop is relevant to the track's aims because**:
- Although the Compass has been used in many different educational and professional contexts in Denmark and abroad, it is not known among the design research community.
- The Compass is a methodology that has been successfully implemented at school and higher education settings, it shares common tools with other design processes, but its sustainable standpoint is fundamental for future professionals.

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