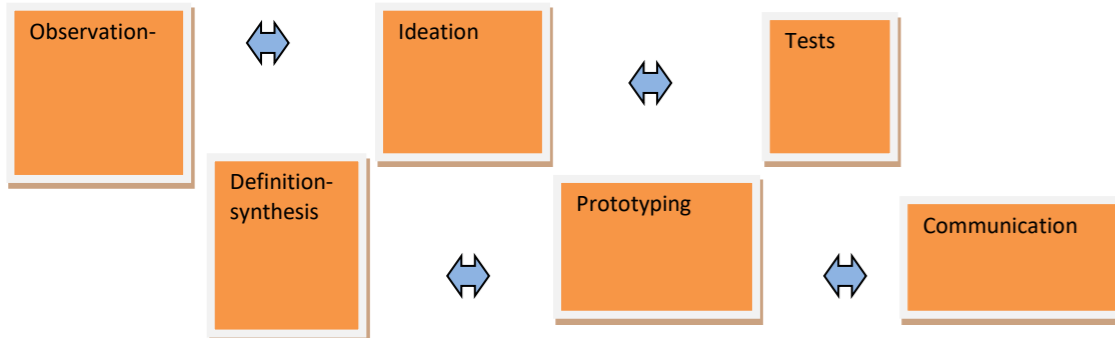


Affordances and Improvements of Design Thinking to Support Farmers in Adaptation to Climate Change

Diane Pruneau, Abdellatif Khattabi, Sébastien Weissenberger, Anne-Marie Laroche (Université de Moncton, ENFI, UQAM)
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The Design Thinking Process



Advantages

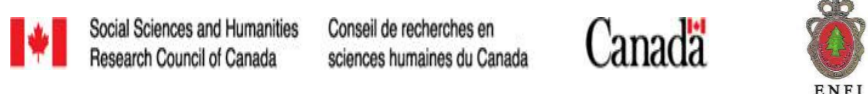
- to produce valid solutions
- to develop people's cognitive skills



Research Objectives

- To identify the affordances of design thinking in sustainable development projects
- To improve the design thinking process for effective use on climate change adaptation with farmers

Questions? Contact us:
diane.pruneau@umoncton.ca



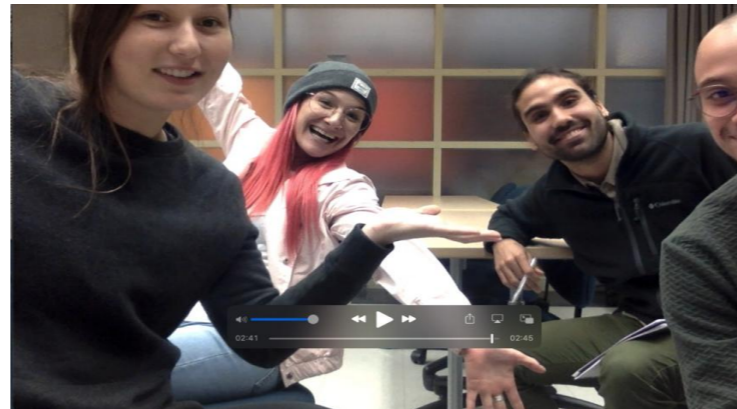
A study on farmers' adaptation competencies (2012)



We accompanied farmers throughout an adaptation process. They focused on poor soil quality. They planted tillage radish and rotated crops more often. They showed many adaptation competencies: futures thinking, local area knowledge, risk prediction, hindsight, systems thinking, problem awareness, problem solving...

Five trials on Design Thinking (2017-2023)

With people on plastic pollution, floods, water quality...



Affordances of Design Thinking

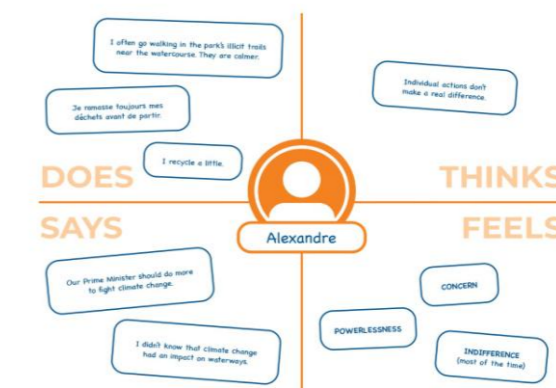
Identifies real needs
Problem is reframed, leading to different solutions
Most solutions meet users' needs and some are original
Promotes interest and broader understanding of issues
Coproduct of knowledge and solutions (team work)
Empathy towards users
Mobilizes certain skills: problem solving, collaboration, communication, creativity, critical thinking

Challenges with Design Thinking

Limited by the solvers' knowledge
Focused on people, less on natural elements
Short-term consideration of the issues
Little mobilization of certain sustainability skills: anticipation, risk prediction, systems thinking, strategic planning, resilience thinking

Improving Design Thinking for Use in Climate Change Adaptation with Farmers

With their input, build a large definition of an issue: resources, emotions, root causes, links to other issues, possible risks,...
Build innovation competencies : tinkering, synthesizing information, finding opportunities for resolution...
Mobilize their sustainability skills: systems thinking, futures thinking, strategic planning, past adaptation experience, ...
Observation step: deconstructing the problem to capture as many social and scientific elements as possible (ex: Empathy Map)



Definition step: visual representations techniques (ex: Zoom in Zoom out) would help farmers to reconstruct the issue: organize, classify and prioritize information,

