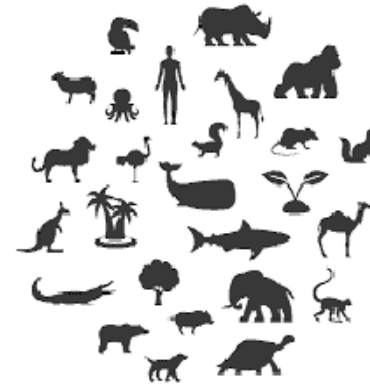


DDL313 Creativity and Sustainability in Nature

DDL753 Design of Sustainable Habitats



HUMAN-CENTERED
DESIGN



ENVIRONMENT-CENTERED
DESIGN

Jay Dhariwal
Asst Professor, Dept of Design,
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Project development
14th October, 2024

Human centred design for environment

Assignments



What is your yearly carbon footprint?
How can you get to zero kgCO₂e?

MICRO

Course Project



Design for Environment

meets



Human Centred Design

- How to meet a human need in an envt. friendly way?
e.g. - Design entertainment, classroom, birthday and so on.
- Compute LCA for base vs. alternative case(s), look at lifecycle cost, social/health related implications.
 - Suggest an awareness campaign to scale

MACRO

Why do we do what we do? Human needs?

- Workspace
- Clothing
- Entertainment
- Travel
- Shelter
- Classrooms
- Sleep
- Food
- Health
- Hygiene



<https://www.thevoiceoffashion.com/sustainability/opinion/rewind-the-year-of-khadi-1996>

Eco-friendly birthday design



E.G. - Celebrating birthdays

Understanding human needs

Design brief based on pain points from environment, social, economic and other considerations

Eating cake – ultra processed food neither good for health or environment. Hence, need to design birthdays. Design brief: How to celebrate healthy and eco-friendly birthdays?



Idea generation and conceptualization methods,
Evaluation of ideas based on LCA and other sustainability frameworks



Comparing LCA of cake, papaya, **planting tree**

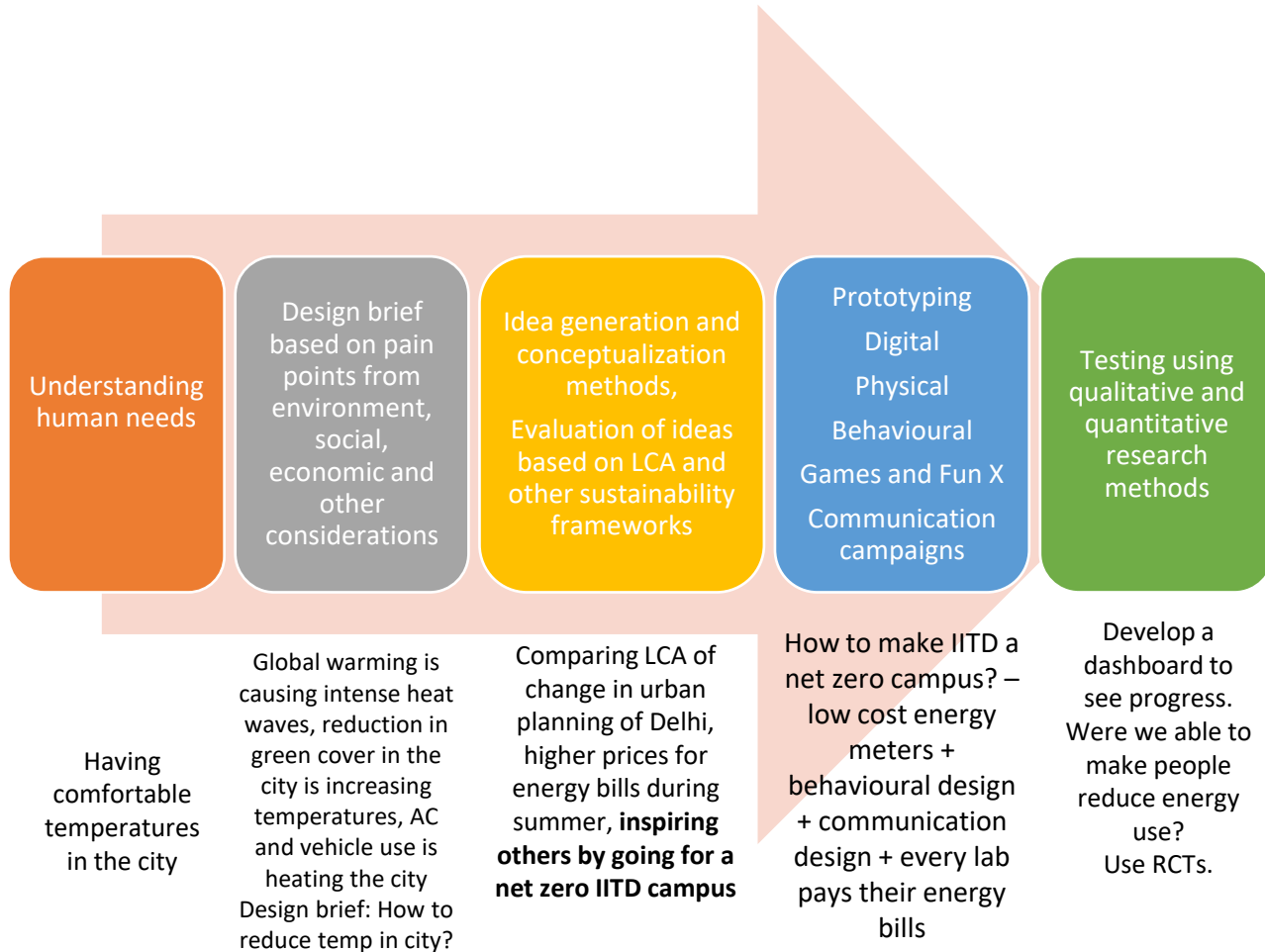
Prototyping
Digital
Physical
Behavioural
Games and Fun X
Communication campaigns

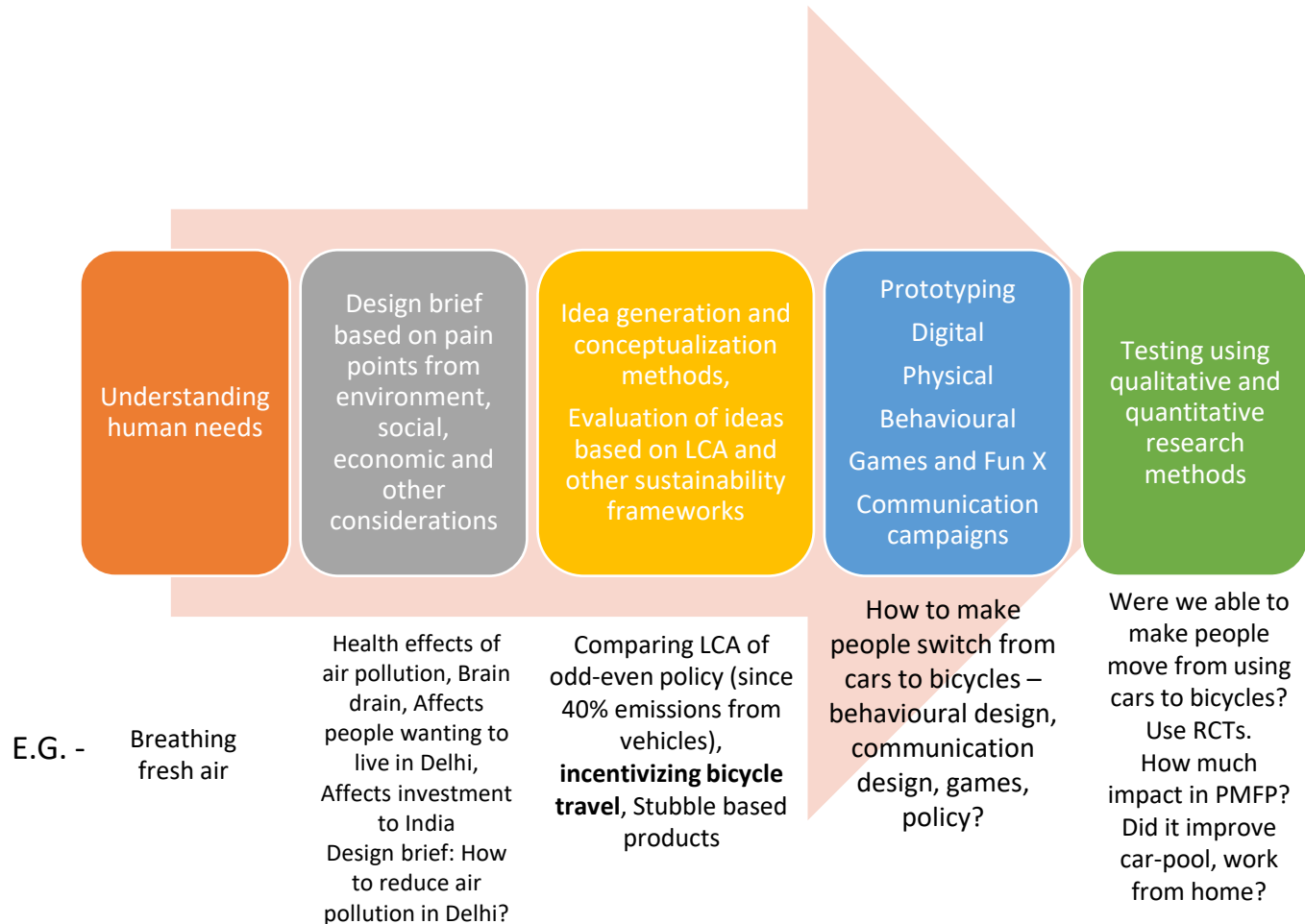
How to make people switch from cakes to planting trees – behavioural design, communication design, games?

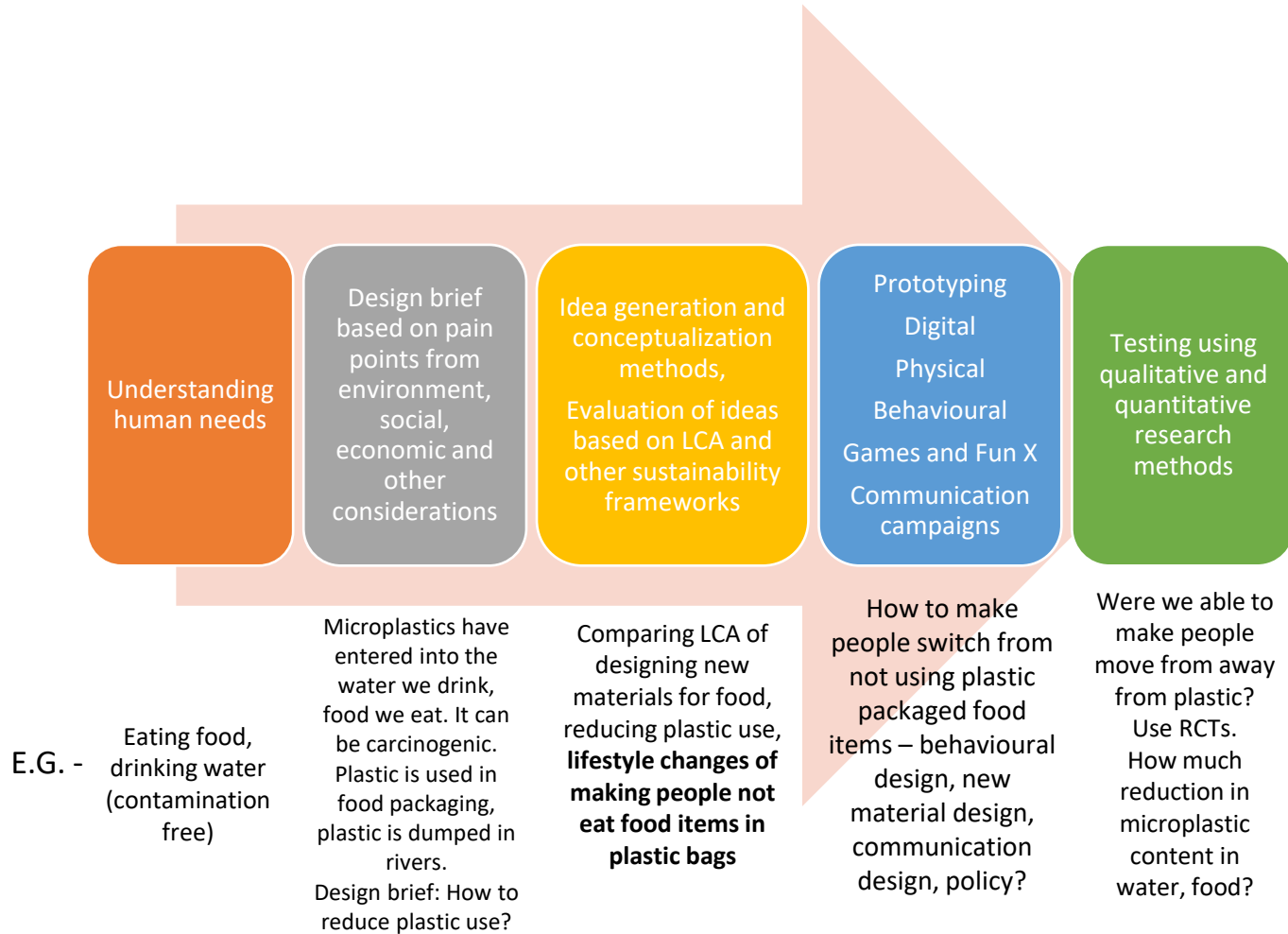
Testing using qualitative and quantitative research methods

Were we able to make people move from eating cake to planting trees?
Use RCTs.
How much impact in human toxicity?

E.G. -







Which human need would your team would like to work on?

- **Socializing**
- **Health - heat waves**
- **Air quality**
- **Food and Water**
- **Workspace**
- **Clothing**
- **Entertainment**
- **Travel**
- **Shelter**
- **Classrooms**
- **Sleep**
- **Health**
- **Hygiene**



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Project proposal guidelines

Team formation and project pitches