# IL925-15 Design Thinking for Social Good

## 23/24

**Department**
> Institute for Advanced Teaching and Learning

**Level**
> Taught Postgraduate Level

**Module leader**
> Ed Watson

**Credit value**
> 15

**Module duration**
> 10 weeks

**Assessment**
> 100% coursework

**Study location**
> University of Warwick main campus, Coventry

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# Description

## Introductory description

"Design Thinking" (Buchanan, 1992; Brown, 2008) refers to:

- a socio-political movement for empowering people with the capabilities of professional designers;
- and a rapidly coalescing interdisciplinary academic field, seeking to understand and improve how we do designing and how it can have a positive impact on the world.

This interdisciplinary module provides an induction into Design Thinking as research and practice, with a focus on its uses and limitations in the field of "social change" - especially participatory design and the development of design capabilities amongst communities (designing by communities, as opposed to designing for communities)

The module has developed out of Robert O'Toole's "transdisciplinary" PhD thesis on Design Thinking in Higher education, and Bo Kelestyn's PhD research on digital innovation and scaling through patterns (WBS). It will draw upon the synthesis of academic and professional work achieved in this research, and our experiences as design thinking consultants. It will combine theory, creative practice and formal methods.

It will give you a framework, based on experience and research, that can be used to better understand and transform the world through innovation and enterprise. It aims to be a transformative experience. You will develop a powerful set of capabilities through which you can interpret and change the world around you, with positive social and economic impacts.

The module draws upon insights from a broad range of disciplines (philosophy, psychology, sociology, creative arts, technology, history) to address essential questions such as: What constitutes a design? How are designs created? What is successful designing? Who does the designing? How can we analyse designs, their operation and impacts, using qualitative and quantitative means? What are the common challenges in managing design capability?

After completing the module, you will have a powerful and far-reaching "designerly" way of thinking and acting (Lawson, 2005). You will apply this during the module to a series of "design challenges", collectively exploring the challenges and "wicked problems" (Buchanan, 1992), defining design briefs, and developing design ideas – one of which will be developed into a more detailed proposal with prototypes. Design challenges will be defined by experts from a variety of domains with a focus on social innovation and (most excitingly) the UN Sustainable Development Goals.

A critical dimension runs throughout the module. This is especially essential when considering DT as an approach for social change. Design Thinking and design anthropology will be considered as a critical response to the role of so-called 'scientific design' in industrial and colonial capitalism. But is Design Thinking really the emancipatory force that many claim it to be? Or is it merely the latest means through which the newly evolved 'platform Capitalism' exploits the free labour of participants? This will be debated as we proceed through our investigation.

Module web page

## Module aims

Having completed the module, students will be able to confidently and successfully undertake participatory innovation and enhancement projects using the design thinking approach with real, diverse communities. They will understand what it means to 'think like a designer', supported by knowledge of academic research in design, and will naturally translate this into action. They will have an effective repertoire of techniques and tools. They will also have a critical appreciation of the limits of Design Thinking, and the negative impacts it may have when undertaken without a sound appreciation of culture, power, history and difference.

They will be well positioned to continue their work as design thinkers social enterprise. They might also consider further research in design thinking and its related fields.

## Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

The module will explore Design Thinking in two parts to allow you to build your knowledge, skills and confidence when using Design Thinking for social impact:

PART 1: Foundations in Design & Design Thinking

-Empathise: developing an awareness for the importance of empathy and user needs gathering for effective design thinking. In this session we will also explore the need to devise 'Theory of Change' and focusing on WHAT, rather than HOW of design. Social impact / social good projects can be riskier due to limited resources and more critical user needs. In this session we will challenge each other to, in IDEO's words flip Maslow's Hierarchy on its head, designing not just for functionality, but for impact, joy, delight, and ultimately lasting social impact.

-Define: continuing the thread of Design Thinking process we will then explore the way in which key design questions and challenges can be sharpened using user insights and empathy. We will use case studies from IDEO,org and IDEO to illustrate the value of understanding the need and focusing the efforts and limited resources to make the right impact, and make impact right.

-Ideate: at this point we will begin introducing the value of creativity and working in interdisciplinary teams. We will challenge each other to explore failure, learn from mistakes and uncertainty, and engage diverse stakeholders in the process of design and co-design with the audience we are hoping to make a social impact on. Throughout this and the previous two steps we will emphasize the need to diverge and converge in the way you create ideas and generate impact, aligning with stakeholders and ensuring you are following the WHY and embodying the 'Theory of Change'.

-Prototype: continuing with the idea of diverging and converging we will encourage each other to select from the pool of ideas and zoom in on those that have the potential to make a greater social impact and iterate on these further.

-Test: working with communities and audience which we are designing for, testing ideas and solutions and so continuing to co-create and creating shared ownership of designs. Throughout all five steps, we will encourage each other to move between the steps in an iterative and feedback loop way, instead of looking at the steps as a linear process. This will allow to connect the various tools and steps into a coherent process and discipline, whilst allowing students to create your own meanings through home disciplines and ambitions.

PART 2: Advanced Design Thinking

-Storytelling for Impact, Influence & Inspiration: introduce key storytelling techniques and its value in design thinking and creating social impact and mobilising action.

-Humans and Behaviour: explore various strands of psychology and human behaviour, such as nudge theory, to push each other to empathise further and draw on both rational and emotional human nature to create change and social impact. This session will build on your knowledge of all five parts of the design process outlined in Part 1 of the module.

-Leading and Facilitating Design Thinking: one of the key learning outcomes is to coach each other into becoming independent change agents and facilitators of design thinking for social impact. We will introduce various facilitation techniques and leadership skills to create change and impact, such as challenging the devil's advocate, fostering creativity and designerly activism in organisations, leading teams, gathering user insights.

Weekly sessions delivered by module leaders will include reflective jams, open-ended and reflective group discussion, where students will be encouraged to share ideas, thoughts, inspirations, and opinions on the reading set. We will critique design thinking and limitations of approaches associated with it, as well as critically reflect on the UN SDGs.

This module is delivered as an in class group experience. You will be expected to explore additianal content in your own time. This will also allow us to focus on discussions, teamwork and reflections when we come together as a group.

## Learning outcomes

By the end of the module, students should be able to:

- Develop theoretical and practical knowledge of foundation and advanced design thinking mindset, techniques and tools.
- Independently and successfully undertake participatory innovation and enhancement projects using the design thinking approach.
- Evaluate and apply theory and practice of design thinking to making social impact and translate their design thinking work across a multitude of contexts and challenges.
- Creative thinking and ability to look at familiar problems, experiences and environments and re-imagine them in a new way.
- Critical thinking and ability to deconstruct arguments and ideas, avoid bias, create informed arguments.
- Storytelling and ability to mobilise communities and inspire action with stories that are meaningful and powerful; ability to develop compelling arguments and presentations.

## Indicative reading list

All freely available online, these articles are the essential readings for the module:

Alexander, C. (1965) "A City is Not a Tree".
Argyris, C. (1977) "Double Loop Learning in Organizations".
Brooks, F. (1986) "Essence and Accident in Software Design".
Brown, T. (2008) "Design Thinking".
Buchanan, R. (1992) "Wicked Problems in Design Thinking".
Dovey, K. (1990) "The Pattern Language and its Enemies".
Eisbach, K. (2003) "How to Pitch a Brilliant Idea".
Kelley, T. (2001) "Prototyping is the Shorthand of Design".
Leonard, D. and Rayport, J. F. (1997) "Spark Innovation Through Empathic Design".
Suchman, L. (2011) "Anthropological Relocations and the Limits of Design".
Teece, D. (2007) "Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance".
Weiser, M., R. Gold, and J. S. Brown. (1999) "The Origins of Ubiquitous Computing Research at PARC in the Late 1980s."

Students will be directed to explore the many articles by Dori Tunstall on "decolonized design anthropology and designing": https://theconversation.com/profiles/elizabeth-dori-tunstall-105620/articles and a movement called Decolonising Design http://decolonisingdesign.com/, led by Ahmed Ansari particularly articles Abdullah et al. (2019) A Manifesto for Decolonising Design and Schultz et al. (2018) What Is at Stake with Decolonizing Design? A Roundtable.

And we will use the High Resolution series of video interviews with designers and design theorists: https://www.youtube.com/channel/UCzBkNPSxw15qrW_Y8p-oCUw

Books (that students can refer to for specific needs to explore further and deeper):

Alexander, C. (1977) A Pattern Language: Towns, Buildings, Construction.

Amabile, T. et al. (1999) Harvard Business Review on Breakthrough Thinking.

Bilton, C. (2006) Management and Creativity: From Creative Industries to Creative Management.

Brown, T. (2009) Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation.

Chapman, J. (2005) Emotionally Durable Design.

Clark, H., and D. Brody. (2009) Design Studies.

Cross, N. (2007) Designerly Ways of Knowing.

Cross, N. (2011) Design Thinking.

Csikszentmihalyi, M. (2009) Flow.

Gunn, W., Ton, O., and Smith, R. C. (2013) Design Anthropology: Theory and Practice.

Jencks, C., and N. Silver. (2013).

Kahneman, D. (2011) Thinking, Fast and Slow.

Kelley, T., and Kelley, D.M. (2013) Creative Confidence: Unleashing the Creative Potential in us All.

Kelley, T., and J. Littman. (2004) The Art of Innovation.

Kelley, T., and J. Littman. (2016) The Ten Faces of Innovation.

Knapp, J. (2016) Sprint: How to Solve Big Problems and Test New Ideas in Just Five Days.

Krug, S. (2009) Don't Make Me Think.

Lawson, B. (2005) How Designers Think: The Design Process Demystified.

Lewrick, M. (2017). The Design Thinking Playbook: Mindful Digital Transformation of Teams, Products, Services, Businesses and Ecosystems.

Margolin, V., and R. Buchanan. (1995) The Idea of Design.

Norman, D.A. (1988) The Psychology of Everyday Things. Basic Books.

Norman, D. A. (2007a) Emotional Design. Basic Books.

Norman, D. A. (2007b) The Design of Future Things. Basic Books.

Norman, D. A. (2013) The Design of Everyday Things. Basic Books.

Polanyi, M. (1966/2009) The Tacit Dimension.

Rogers, E. M. (2003) Diffusion of Innovations.

Schön, D. A. (1987) Educating the Reflective Practitioner.

Sennett, R. (2009) The Craftsman.

Thaler, R. H., and C. R. Sunstein. (2008) Nudge.

## Research element

Student will be exposed to design thinking and design research and will be tasked with reading materials each week. The module will challenge students to go beyond the content covered and explore resources from a variety of sources. Weekly design studies and the final assessment will equally challenge students to create their meanings, draw their conclusions, and ultimately create new knowledge. The social impact angle of the module will seek to empower students to be designerly change-makers and use their skills to research user insights as part of the design process.

Using Microsoft Teams we also generate a culture of sharing inspirations and insights, which covers research articles and other resources that students find interesting. This additionally allows us to create a culture of intellectual curiosity and research on the module.

## Interdisciplinary

Design Thinking is inherently interdisciplinary. It connects multiple strands of design research, psychology, sociology, organisational studies, etc. This module will have a specific angle of social impact and students will be exploring design thinking from the point of view of UN Sustainable Development Goals, looking to make impact locally. This will allow them to draw on multiple disciplines and viewpoints to solve wicked problems effectively.

We additional envison that the module will involve external expertise from guest speakers that make social impact through their work. Exposure to diverse voices will further student interdisciplinary experience on the module.

## International

Similarly to Interdisciplinarity, using the UN Sustainable Development Goals and exposing students to global challenges faced by humanity will allow us to broaden their viewpoint, understanding and application of design thinking. The ethos of the module is Think Global, Act Local. As such, students will be focusing on solving global challenges locally, using the knowledge and tools from the module.

The module is also likely to attract students from various backgrounds and we encourage students to share their stories and bring their backgrounds into the discussions, both during the introduction community-building activity, as well as throughout the rest of the module.

## Subject specific skills

-Empathising (ability to connect with target audience and draw valuable and in depth insights from user research to inform action).
-Interdisciplinary decision making and problem solving (drawing on mindset and tools of design thinking, ability to solve problems and make decisions faster, more effectively, and innovatively).
-Working with failure and uncertainty (design thinking challenges to build on past failures and pushes to learn from positive and negative experiences. Working with wicked problems such as Sustainable Development Goals encourages to develop tolerance to uncertainty and risk, where no previous solutions exist or no longer work).
-Innovation and social impact (ability to recombine and come up with ideas that are radical, innovative, creative, whilst being focused on the target audience and on making impact).

## Transferable skills

-Research skills (familiarising with methods such as ethnography and interviewing techniques, as well as develop broader academic research mindset and skills).
-Team work and collaboration skills (working in interdisciplinary teams and creating effective dynamics to constructively move forward).
-Problem solving (interdisciplinary problem solving with a focus on creating value and making a social impact).
-Creative thinking (ability to look at familiar problems, experiences and environments and re-imagine them in a new way).
-Critical thinking (ability to deconstruct arguments and ideas, avoid bias, create informed arguments).
-Leadership (ability to lead design thinking processes and teams of people in problem-solving scenarios; ability to provide thought leadership to communities in need).

-Storytelling (ability to mobilise communities and inspire action with stories that are meaningful and powerful; ability to develop compelling arguments and presentations).

## Study

## Study time

| Type | Required |
|------|----------|
| Practical classes | 10 sessions of 3 hours (20%) |
| Online learning (independent) | 10 sessions of 2 hours (13%) |
| Private study | 40 hours (27%) |
| Assessment | 60 hours (40%) |
| Total | 150 hours |

### Private study description

The 30 hours designated for private study will be dedicated to team work, peer to peer feedback, consultations with module leaders, content recapping , and other individual work required by the student.

## Costs

| Category | Description | Funded by | Cost to student |
|----------|-------------|-----------|-----------------|
| Other | External speaker expenses | Department | £0.00 |

## Assessment

You must pass all assessment components to pass the module.

### Assessment group A1

| | Weighting | Study time |
|---|-----------|------------|
| Design Thinking for Social Good Portfolio | 50% | 30 hours |

Students will be tasked with exploring a design challenge each week, following the progression of the module and expanding student knowledge base and confidence using design thinking mindset and tools for social impact. Weekly draft submissions will give students the opportunity to gain formative feedback and iterate their studies for the final portfolio. One of the challenges will involve students working in teams in order to appreciate the value of designing, decision making and problem solving in interdisciplinary teams. Students will also be giving and receiving

|  | **Weighting** | **Study time** |
|---|---|---|

feedback from their peers as part of this group challenge. Students can apply their creativity to format the portfolio in any way they like. Effective use of audio, video, diagrams and photos will be strongly encouraged and can replace up to 50% of the word count in the design studies.

| Design Thinking for Social Good Reflective Essay | 25% | 15 hours |
|---|---|---|

Students will be encouraged to explore the topic of Design Thinking for Social Impact using their learning from the module, home discipline, and extra curricular activities, and their personal background. Students will be supported with reflective writing with resources on different reflective models and 1:1 coaching by module leaders.

| Storytelling for Social Impact | 25% | 15 hours |
|---|---|---|

Presentation will challenge students to use the knowledge and skills gained on the module to craft a creative and emotionally engaging story related to their chosen or UN Sustainable Development Goal or any other social goal, interpreted and narrowed down by the students. This story and presentation will help students to communicate their personal passion, user insights and findings, and their final design (where possible and appropriate) to diverse audience. Presented in front of and to the rest of the cohort each student in the audience will give student presented anonymous feedback using the likes/wishes/questions/ideas feedback methodology, allowing student presenters to gain rich feedback from peers as well as module leaders.

## Feedback on assessment

Each of the individual design challenges will provide students with formative feedback as the module evolves, helping students grow their capabilities and confidence. Feedback will be given on the completed portfolios, as they will go on to be used by the students to assist their further development of design thinking capabilities, projects and careers. During the group challenge they will peer review each other's contributions using a structured format, and provide feedback on presentations (live and online) of other students. Team work and constructive peer feedback is essential to the design thinking approach. In addition, the teaching team will provide feedback on each presentation. Drop-in consultancy sessions will be available for one hour each week during weeks 6, 7 and 8, to which students are encouraged to bring work in progress. Students can receive feedback on their draft reflective essays and presentations during these sessions.

# Availability

# Courses

This module is Optional for:

- TESA-H1CA Postgraduate Taught Diagnostics, Data and Digital Health
  - Year 1 of H1CA Diagnostics, Data and Digital Health
  - Year 1 of H1CC Diagnostics, Data and Digital Health (Medical Imaging)

- TCHA-F764 Postgraduate Taught Global Decarbonisation and Climate Change
  - Year 1 of F764 Global Decarbonisation and Climate Change
  - Year 1 of F76B Global Decarbonisation and Climate Change (Policy)
  - Year 1 of F76A Global Decarbonisation and Climate Change (Science)

This module is Option list B for:

- Year 1 of TGDA-L801 Postgraduate Taught Global Sustainable Development