FUEL4 DESIGN



FUTURES LITERACY METHODS











FUTURES LITERACY METHODS





















FUTURES LITERACY METHODS

The main aim of Futures Literacy Methods is to transform and convey <u>FUEL4Design</u> outcomes into learning processes.

Learning Future Literacies Methods concerns both the preparation of a complete Futurist Designer training course and the design of small Independent Learning Units to cross breed design studios or speculative/ theoretical courses. The Units are specifically created to cater to the needs of future literacy and geared to acquire knowledge on anticipatory practice, critical future design and future making through the dedicated tools.

This booklet presents one orientation unit (Unit 00) and ten educational content Units (Unit 01 to 11). In the first section of this booklet, there are a set of "Maps" and paths to help educators in navigating through the eleven Units. These maps are meant to be used as suggestive paths rather than prescriptive ones. The basic concept behind these units is to be independent (yet connected). Educators are free to select the suitable units to their courses, put them together and structure their pedagogical paths based on their needs as well as the context of use.

In each Unit, there is a section for the tools and devices. These are tools and devices developed or assembled during the <u>FUEL4Design</u> project. They play an important role in supporting and facilitating the pedagogical process. Each of these tools or devices is linked to the <u>FUEL4Design</u> website, where you can further read about them.

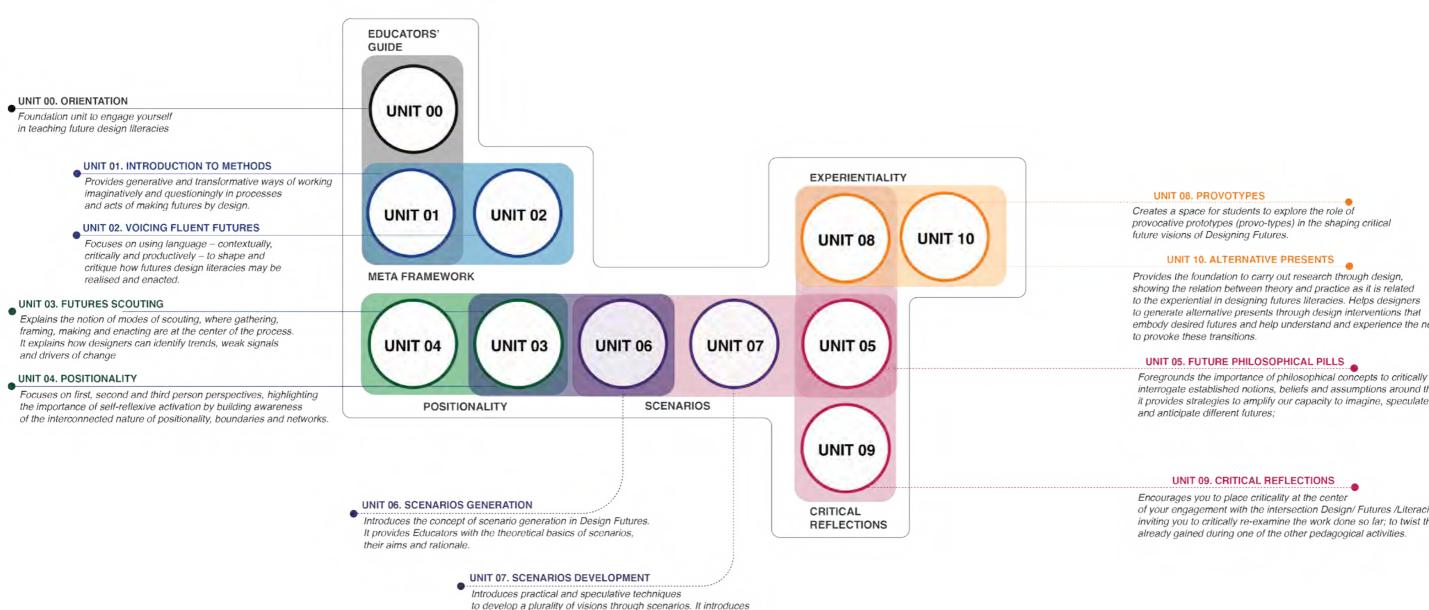
FUEL4DESIGN

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EDUCATORS' GUIDE TO FUTURES LITERACIES METHODS AND METHODOLOGIES THE ROAD-MAP

Connections and overlaps between the units



the tools to understand how to implement, use and

narrate design scenarios.

Creates a space for students to explore the role of provocative prototypes (provo-types) in the shaping critical

Provides the foundation to carry out research through design, showing the relation between theory and practice as it is related to the experiential in designing futures literacies. Helps designers to generate alternative presents through design interventions that embody desired futures and help understand and experience the needs

interrogate established notions, beliefs and assumptions around the future; it provides strategies to amplify our capacity to imagine, speculate

Encourages you to place criticality at the center of your engagement with the intersection Design/ Futures /Literacies. inviting you to critically re-examine the work done so far; to twist the perspective

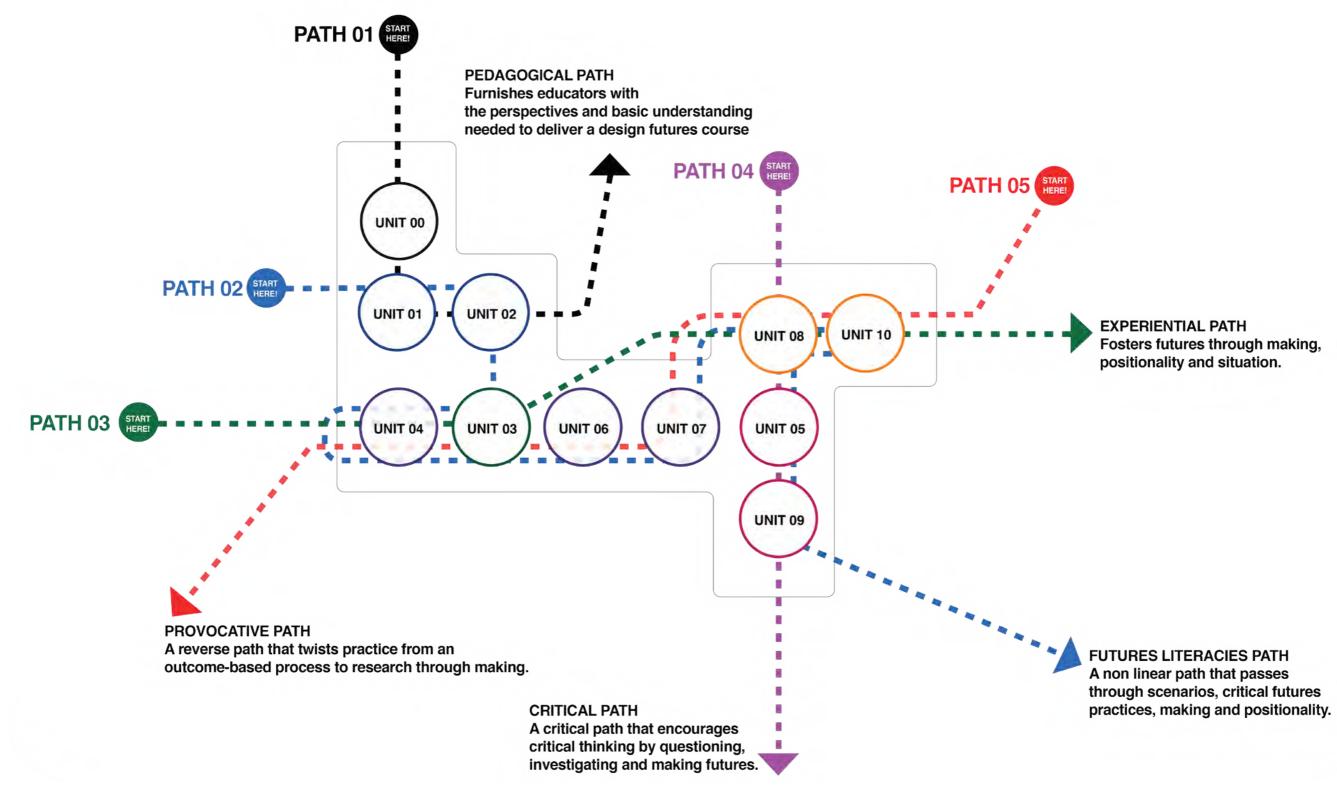
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EDUCATORS' GUIDE

TO FUTURES LITERACIES METHODS AND METHODOLOGIES

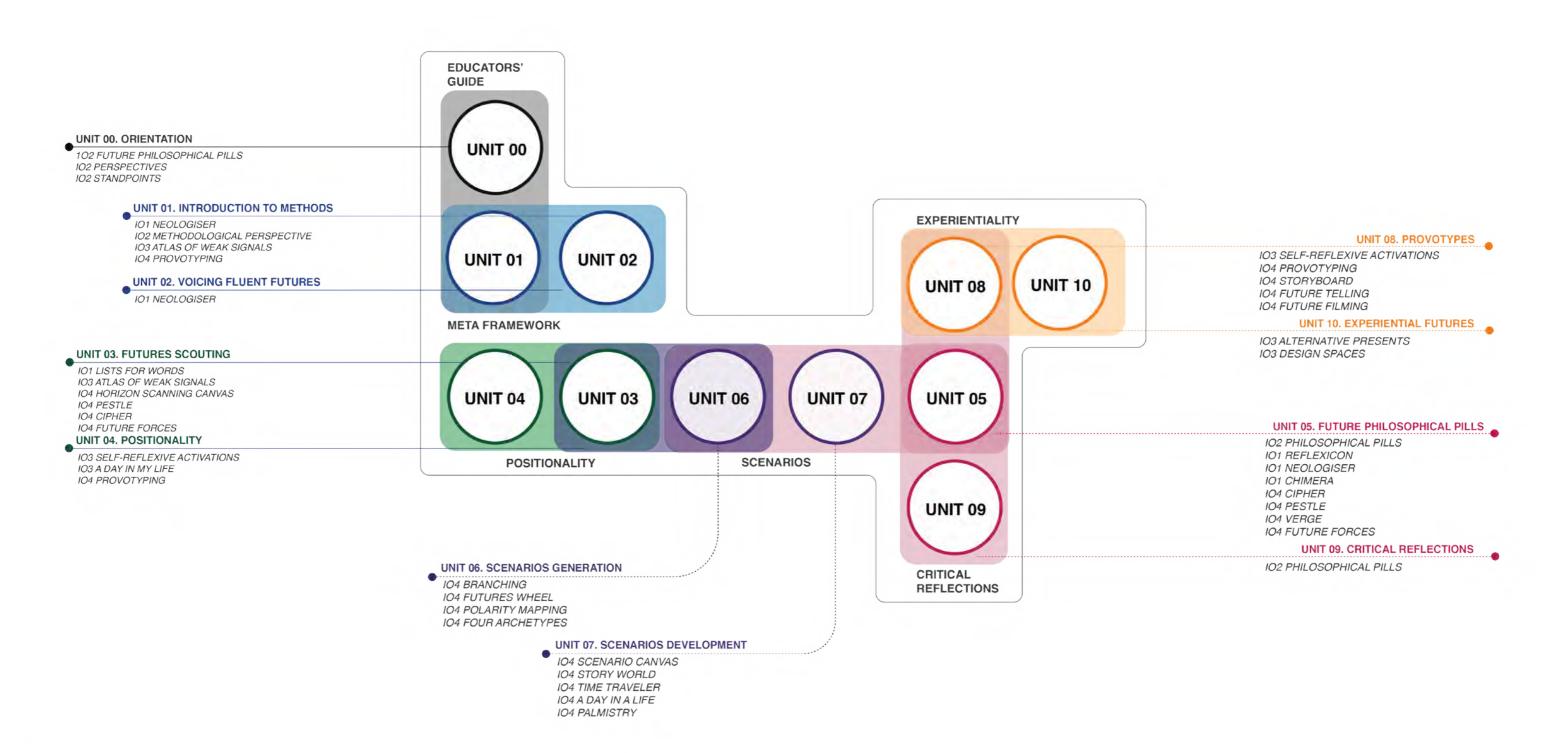
THE PATHS

Suggested pedagogical paths through the units



EDUCATORS' GUIDE

TO FUTURES LITERACIES METHODS AND METHODOLOGIES TOOLS AND DEVICES





FUTURES LITERACY METHODS

UNIT 00 ORIENTATION



















UNIT 00 - ORIENTATION UNIT 00 - ORIENTATION

DESCRIPTION

This unit provides the foundation for educators to engage in teaching future design literacies. It enables you to deconstruct your prior learning. It challenges you to re-evaluate your teaching practice with a view to reframe the intersection future - design - literacies.

The subject of this Unit is Teaching- This is about understanding how to create a learning environment where to teach future literacies by actively re-imagining the practices of teaching. What is crucial, therefore, is how to unlearn.

The content is centred on facilitating 'change makers' (i.e., your students) to develop the ability to navigate their way through uncertainty and complexity in their future-building practice. Through reflecting on

your positionality and its influence on your actions, you will be invited to identify spaces for inclusive interventions with the potential to transform peer / student experience.

The Unit is underpinned by the principles of collegiality and active participation. You will share your own knowledge and experience with the group, and give and receive feedback through presentations, discussion, micro-teaching and peer observation in an atmosphere of mutual support and solidarity. This is a space to foster self-criticality in relation to your teaching practice. This Unit suggests a series of teaching tools and learning activities which are framed through a collaborative, participatory, reflective, hybrid and transdisciplinary ethos.

COMPETENCIES

The core competence of the Unit is to refine ways of working together to engage with uncertainty in a creative, critical and open manner. Specifically, by engaging with this unit you will acquire and demonstrate the following competencies:

- Reflecting on your attitudes to, and experiences of, learning and teaching to develop ethical awareness of your current position, practices, and contexts.
- Learning how to be empathic, to be an active listener and enabling others.
- Demystifying academic research, its purpose, and philosophical underpinnings, and how to decentering research canons, questioning histories and disciplinary silos

- Developing meaningful relationships with the community of educators, professionals, researchers with each other, and with other species (paying attention to the role of the nonhuman)
- Responding responsibly and ethically to complex situations arising within teaching and learning situations
- Understanding, embracing, and modelling the ethos of the unit. In other words, being prepared to embody the collegial, participatory and hybrid spirit of the unit, which intends to nurture self- reflection, openness, and practices of care tailored to whichever situation you find yourself in.

AIMS

The Unit will enable you:

- To support you to critically relate educational theory and practice (pedagogical knowledge) to your own disciplinary knowledge (e.g., design studies, future studies, engineering, art, and any other domain you are working with). The aim is to foster an ongoing reflection on how your field of expertise is taught and learned, and to view this process as dynamic and situated. For instance, by learning strategies on how to work with, and facilitate, learners' journey, group work and community building.
- To continually enhance your teaching practice in a way that responds to the complex and evolving contexts of institution, policy, and society. For instance, by examining the drive around decolonization, and other urgent matters emerging in society, by affirming education as a social purpose, which means reflecting on the future of design education, not on the future of educators only.

 To interrogate and demystify your current academic research language and practice so to be aware of gatekeeping mechanisms, and how they impinge on inclusivity and diversity. For instance, by looking at different modes of knowledge-production, hierarchies, and communication; challenging the status quo and developing awareness of alternatives (e.g., journals vs. zines).

DEPTH OF DETAIL

This Unit is a pre-requisite for educators before engaging with the rest of the material provided in Units 1-10. The purpose is twofold and concerns these two levels:

- Level 1: To provide a solid pedagogical platform ahead of engaging with the units 1-10. This unit will highlight and suggest practices in relation to ways of teaching with particular attention to groups dynamics, inclusivity, diversity, fairness and representation. It will also assist with making an informed choice among the units 1-10 through a selection of the pathways that best respond to your requirements, interests, and needs. It will introduce key terms (glossary) that you will encounter throughout.
- Level 2 (meta-level): To inspire educators to apply the learning gained through this unit to your own practice. The meta-level concerns how your way of teaching will change as you keep on engaging with the material and will impact on how your way of using the FUEL4Design material with your students. It fosters self-reflection and self-evaluation and is predicated on an ethos of education as transformative experience for educators and students alike. You, me, everyone: we are learning all the time.

UNIT 00 - ORIENTATION UNIT 00 - ORIENTATION

EXPECTED LEARNING OUTCOMES

A. Knowledge and understanding	Articulate your positionality as educator and researcher, in relation to disciplinary practices, research philosophy and ethics.
B. Cognitive Skills	Explore new ways of knowing and sharing knowledge made possible through decentring research and design practice
C. Practical Skills	Identify a focused design topic/exercise/activity that has value for you as an educator/designer, demonstrating how this connects to relevant fields of future study
D. Generic Skills	Critically evaluate institutional, national, and global perspectives of equality and diversity, and their relevance to your academic practice context.
E. Collaborative Skills	Develop and enact hightened ways of working and being together through lived experience so to produce new knowledge

ACTIVITY

Individual task

To assist educators in the process of engaging with the levels indicated above, these tasks are recommended:

- a 'positionality' statement to reflect on who you are as an educator/designer, not only in relation to your disciplinary practices but also in considering research avenues that address the contexts in which you work and the individuals you work with.
- a 30-minute learning activity that activates discussion around a theme or issue emerging from your own research (e.g. workshop, seminar, other activity etc.) directed toward a mixed group of 5-8 students.

Group task

Working in collaboration with a small peer group (2-5 or more) to develop a document inclusive of code of conduct / set of principles/ core values informing your teaching practice within a diverse environment. This could be a manifesto-type

document, a flow-chart, a diagram etc. and the outcome of a mutually enriching process of discussion, negotiation and collaborative engagement (co-design).

Self and Peer-to-Peer evaluation

It is recommended that educators do self-evaluation throughout this unit. Self-evaluation can be a reflection journal, a series of blog entries or a mini-portfolio of notes and insights. Its purpose is to document your response to teaching practice as it evolves, and your responses to literature and other sources on teaching and learning.

Whenever possible, include Peer-to-Peer evaluation where colleagues come together to share experiences and reflection in a supportive and critically constructive environment.

Ongoing evaluation whether self or peerto-peer will encourage skills such as risktaking, independent enquiry, effective negotiation skills, as well as critical and civic engagement.

TOOLS AND DEVICES

Tools and devices appropriate to this
Unit are those that encourage educators
to reflect on their positionality, to critical
appraise their learning and to experiment
with ways of exercising agency, even in a
'risky' or disruptive mode. For instance, the
Perspectives and Standpoints (from the
Prompts cards in IO2) assist with questioning
the nature of the future you envision, the
knowledge it produces, the values and
politics attached to it etc. (Perspectives).
Also, they assist with reflecting on what can
(or cannot) be achieved through the position
you express (Standpoints).

Equally relevant here are tools that enable you to question your own learning and experiment with unlearning activities, for instance the Neologiser prompts you to work with imaginative words, each envisioning a

different futurescape, with potentially

innovative and alternative roles to cast a new light on the space of future-making

Perspectives

- Ontological Perspective
- Epistemological Perspective
- Methodological Perspective
- Axiological Perspective
- Political Perspective
- Technological Perspective

Standpoints

- Declarative
- Disruptive/ Re-framing
- Reformative
- Rejective

CASES AND EXPERIENCES

In this unit you might want to use the following methods, test them out and embed them in your teaching practice. Feel free to adapt them to your own teaching style. They can be used online and IRL.

- Silent brainstorming: working in silence is a powerful pedagogical technique that affords sustained reflection. It is ideal for intense idea-generation and pattern and visionbuilding; by diluting the clamour of dominant voices in a group dynamic, it empowers all participants equally
- Vision-building: using image research to collectively populate a board (or a wall if IRL) illustrating a specific future vision (e.g. around a year/theme), usually best initiated in silence. Participants add keywords and comments on each other's images.
- I DO ARRT (adapted from KaosPilot*): a guided way of setting the scene when

facilitating a group. The acronym stands for Intention, Desired Outcome, Agenda, Rules & Roles and Time. Participants co-design the items, making assumptions explicit and building a common culture where everyone feels represented.

*a creative leadership and educational accreditation <u>HERE</u>
In more detail: how to apply IDOARRT and Micro-teaching

1.IDOARRT

The purpose of IDOARRT is to aid you in co-designing your roadmap across the 1-10 Units in IO5.

It is a tool you can use to set and define your boundaries and scope in relation to IO5. It is predicated on a group working together, thus it requires negotiation and communication skills, and teamworking.

UNIT 00 - ORIENTATION UNIT 00 - ORIENTATION

CASES AND EXPERIENCES

As said above, IDOARRT is a way of setting the scene. The acronym stands for Intention, Desired Outcome, Agenda, Rules & Roles and Time. Participants are invited to co-design each item, making their own assumptions explicit and striving to build a common culture where everyone feels represented and heard. Principles:

- Intention: why are we here?
- Desired Outcome: what will we leave with?
- -Agenda: Build your own roadmap according to your own trajectory, needs, and requirements, goals, the gaps you are identifying (but you may not be certain of as yet)
- Roles and Rules: who are we? Who are you?

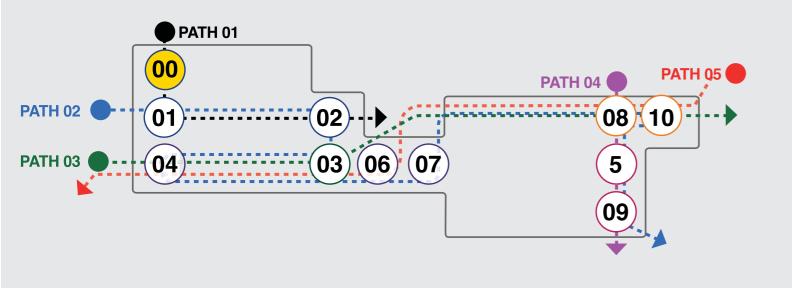
- Time: what is the timeframe you want/can allocate to their learning to ? Eg 2 hours? 2 days?

2. Micro-teaching

Prepare a 30-min learning activity of your choice (i.e. workshop, seminar or intervention) directed towards a mixed-student cohort that

activates discussion around an emerging themes or issue in relation to design and futures. The purpose of this session is both to highlight your existing practice in relation to design futures and to foster reflection on your teaching. Draw on your existing knowledge and your specialism. What are the aims of the session? How are you engaging your students? What do you want them to achieve? How are you going to self-evaluate?

ROADMAP AND CONNECTIONS



The yellow color indicates the position of the current Unit.

UNIT CONTENT

This unit is called Orientation because it intends to assist you with navigating the complex terrains of future-making throughout the IO5 set of units, by enabling you to find your own mode (of teaching, working, learning, unlearning). What this Unit does not wish to do is to provide you with a map: in this sense orientation is about you developing your own compass, rather than following a given blueprint. It is your journey of discovery, and is about developing agency, rather than been given all the answers. This also is in line with the meta-level of this project which asks what are futures made of?

Key features of the orientation process:

Building Community: The unit could start with a 3-day induction workshop to build an online cohort dynamic; to share and exchange cultural values; to communicate design tales and backgrounds; to introduce the unit/course ethos and provide key induction sessions. Peer learning is embedded into the course, allowing for the creating of a multidisciplinary community of practice that capitalises on diverse disciplinary, professional, and practice-based ways of knowing.

Testing Tools: Tutors are encouraged to run a pilot of the tools that they will be applying in the different units. A way of doing this is to engage in a Micro-teaching workshop. (Micro-teaching concerns leading a short activity with a peer group as if they were your students). The workshop takes place with tutors working with each other in order to become familiar with the chosen material, adapting it to their own situations and getting ready to implement it (for instance a micro-teaching capsule using the Pills or the Lexicon for a short session). This is a way to enhance your pedagogic ideas, experience, and expertise in collaboration with other members of the programme/course community; moreover, it actively

encourages participants to evolve traditional design research and practice approaches by surfacing deep knowledge of creative and professional practice and amalgamating it into their research.

Positioning Yourself: Opening with an introduction to varied ontological and epistemological approaches to constructing knowledge, we will explore together how as researchers and practitioners we situate ourselves in the pursuit and communication of knowledge. By reflecting on your positionality, mapping your positionality, and sharing it with others you create conditions to develop sensitivity and evaluate the impact of your teaching.

Transdisciplinary practices: Educators are encouraged to think and act transversally to unsettle both verticality and horizontality, and the hierarchies these might conceal. They are encouraged to explore the value of transdisciplinary in breaking boundaries and questioning existing disciplinary silos. Investigating and playing with a range of methodologies drawn from diverse disciplinary fields will enable you to develop an experiential understanding of your own knowledge production. Acknowledging expertise in the classroom and voicing the voiceless surfaces issues of how to stay with divergence and engage in bridge-building rather than pushing for consensus.

Educators will be invited to critique research traditions and practices, considering decolonial imperatives and consider what it means to decentre academic research and practice traditions in the 21st century.

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UNIT 00 - ORIENTATION

UNIT 00 - ORIENTATION

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FUTURES LITERACY METHODS

UNIT 01 INTRODUCTION TO METHODS



















DESCRIPTION

As a set of social-material design practices, how we go about making and analysing our futures by designing is central to facilitating prospective literacies. They implicate us in the kinds of futures we configure and that we and others live within. The devices and tools we employ thus script, generate and situate short- and longer-term futures: these are 'lifeworlds' others may experience and endure without us. This demands attention to ethics, sustainable uses of resources and materials, and modes of participation. Futures methods are not neutral transactions: they construct and position how we may know what we know by how they do what they do and they ways they performatively allow or facilitate design.

Below is an orientation to select futures methods, with disciplinary origins and world

views. We include a tool to map dynamics of how we know what we know in shaping futures by designing and unpack methods from Foresight (from Futures Studies and professional 'futurists'). We indicate ways a in which tools and methods here and across F4D may support learners' practices of design making together with critical reflective competencies. This includes generative and transformative ways of working imaginatively and questioningly in processes and acts of making futures by design.

COMPETENCIES

The competencies involved in this Unit include the following that are also connected to the others in IO5:

Acuity on futures methodologies and methods

Fluency with select futures design tools and techniques

Facility in working relationally with methodscontent

Applying criticality to methods in use and reflection

Motivating self and shared generation of new means and tools

Critiquing prospective means used in projecting and promoting futures

AIMS

This Unit seeks to engage you in working anticipatorially with a diversity of tools and techniques, means and methods in future oriented acts of design and analysis. The dynamic relations between these 'methods' allow us to activate and value expertise in the making, by making. It includes critical and reflexive reviewing and revision in, through and on such acts of knowing through futures designing.

A related key aim is to activate curiosity and critical interest in looking closely into how design futures methods themselves may be understood and activated as design materials and processes. This extends to ways we know what we know about shaping futures through designing.

The Unit further seeks to:

- clarify relations in futures making between world views, methodologies, designing and design inquiry
- situate an anticipatory design view on how we co-create design artifacts, tools, processes and experiences
- indicate pathways and potentials in shaping pedagogies and literacies via diverse ways of knowing and acting on, with and through 'methods'
- distinguish how futures design techniques and tools may contribute to how we may know about and prospectively shape our needs and world
- connect exploratory, experimental resources developed in and across F4D.

DEPTH OF DETAIL

Students in different parts of the curriculum and their own learning trajectories will need to meet, identify, select and enact a diversity of methods in shaping futures by design.

LEVEL 01 - BACHELOR

Students select a specific futures method for a particular activity/course and focus on how to follow it through as a 'future-scaping' exercise on point of view and boundaries. Write a short reflection on the 'hows' of the designing, annotating images included to highlight methods.

LEVEL 02 - MASTERS

A series of prompts for design educators. How can we look at methods more actively, critically and creatively in working with our futures pedagogies? How and why might this matter (for a domain area of design or a specific issue, say sustainability) in learning? How might this matter in preparation for worlds of work, professionalism and practices, outside the design school studio?

LEVEL 03 - PhD

For a supervisor and PhD student. How might the 4-part demarcation on 'methods' (Morrison et al. 2018) be applied in:

- a) a 'futures methods' take to an overall research design
- b) processes of sketching and writing a conference paper /journal article, and c) the multimodal and written discourse rhetoric of a methods chapter.

EXPECTED LEARNING OUTCOMES

A. Knowledge and understanding	To be able to identify how different methods shape how we know what we know and how we may design futures by design
B. Cognitive Skills	To distinguish between aspects and practices of making and analysing in how we know what we know Identify what 'designerly ways of knowing' might be in shaping design futures literacies pedagogies, designing and researching
C. Practical Skills	Navigate different types of methods and apply them
D. Generic Skills	Navigate different types of methods and apply them
E. Collaborative Skills	Know how different ways and means of making can be realised in co- design

ACTIVITY

Horizon scanning

HERE

Aim

The aim of accentuating this resource from IO4 is to engage teachers and students in the activities of working with Horizon Scanning as a method and means to better understand the content and changes of contexts within which emerging challenges and trends concerning the future may be mapped.

Duration

A working session of an hour, individual/pairs

Description

As a method Horizon Scanning aims to motivate exploration of emerging, new and unexperienced futures and to situate them in relation to the emerging challenges and trends of the present. Scanning for weak signals, macro trends and drivers of change is mapped onto the cognitive and collaborative skills of mapping current activities and sorting them to be able to

process a diversity of mediations (online, on site, interpersonal etc).

Method

Teachers are invited to access the online tool and study how it works as a device for engaging with challenges of key societal futures developments and emerging futures trends. Invite a class of students, working in groups, to activate the tool to critically assess the key outcomes of the COPP26 summit. Referring to the goal to not exceed global warming limited to 1.5C. Using the demarcations in the tool,

a) map the projected and actual key decisions arrived at by the summit, b) write a short statement outlining the resulting outcomes and the 'trend' or consequence of the horizons for climate change for low lying communities and nations by 2050.

ACTIVITY

Design fiction: personas & scenarios (see also Unit 6 and 7)
HERE

Aim

OCTOPA's JOURNEY has been co-designed with sets of movement words generated from the LEXICON as a means to situate them inside the fictive, ironic persona of a travelling device. The activity aims to engage teachers and students in critical engagement in a design fiction future narrative activity, to travel an online journey via imaginary scenarios abductively connected to the actual world and to relate them back to their own concerns as design educators and students in the present.

Duration

1-2 hours, individual/pairs/groups of 4

Description

OCTOPA's JOURNEY offers a design fictive method for making more apparent human-nonhuman relations by way of a persona and scenario based narrative means. Online materials provide access to methods such as pastiche and counterfactuals. Related research is also accessible.

Method

Teachers and students are invited to travel

with the design fiction persona OCTOPA into 28 imaginary scenarios located in the histories, presents and futures of the North East Passage and related 'Northern Sea Route'. The online knowledge building method engages participants in connecting cognitive skills of 'travelling' to translating the experiences, affect and problems generated to their own actual contexts of translation in the contemporary world.

TOOLS AND DEVICES

From the diversity of methods F4D has assembled, we have selected four examples of different methods. These are:

IO1 Lexicon - NEOLOGISER (Generation)IO2 Pills - Methodological Perspective (Prompting)

IO3 Scouting - Atlas of Weak Signals (Mapping)

IO4 Tools - Provotyping (Technique)

We suggest you may wish to select one or two of the method themes (shown in brackets), to consider how the theme is pertinent in an aspect of your own pedagogy. In doing so, you may refer to the F4D resources and work abductively to draw up an outline for how you would work with the chosen theme/s and your own

needs and context (e.g. by discipline/task/material/medium/context/process and form of delivery).

In support of this focus on methods and pedagogy, the two CASES also included in this Unit. They suggest ways how selected views on methods and design futures literacies may be elaborated pedagogically.

CASES AND EXPERIENCES

Case 1 Case title: Working with concepts and form

The future may be indistinct, yet the ways we go about making it through our methods gives it form. This was taken up in a cotaught master's workshop with a Product Design teacher, Nina Bjørnstad (AHO) and F4D's LEXICON. Together, we selected sets of futures terms from the LEXICON to connect in a clay abstract form-giving activity. In pairs, then groups, students were asked to form associations with their design studies, product design, futures and abstract forms. Items from the Lexicon provided prompts. Making abductive conceptual and trans-methodological connections, students discussed their own associations, experiences and ideas prior to shifting into work in a 3D haptic mode. Referring to given lists of words from the LEXICON, on large table top surfaces covered in paper students worked with clay, while also drawing concepts and making notes. The teachers discussed notions of tags and types of abstract terms that emerged. Next, students created a fully formed abstract form of their own, with discussion on associations. connections to LEXICON terms and qualities of abstractness. In plenary presentation of each clay piece, reference was made to

lexical items (earlier cut up by students from lists of futures terms and their own selected made). The form teacher presented her reading of the artifacts. She presented students' different categorisations, associative groupings and potential taxonomies for parsing 'form language'- and thereby abductive and affective senses and associations in shaping abstract, named and embodied futures.

Link:

For a more detailed account with images see (pp. 126-127) in: Morrison, A. et al. (2020). 'Lexicons, literacies and design futures.' Temes de Disseny, 36: 114-149.

HERE

Case 2

Case title: Scenarios and archetypes

Short descriptions: 200 words

'4 Archetypes' is a method used to identify the uncertainties of futures. It helps to investigate your assumptions about the direction of the futures in regard to particular drivers of change.

Suggestion: Add a short text on use of this tool in PhD workshops

UNIT CONTENT

Introduction to 'methods'*

*Note this section includes text from Morrison et al. 2018)

Human futures are shaped by our imaginations and directed actions, by our practices and behaviours too. Our futures are also are made through the methods we select and enact, together with the materials, actors and contexts within which those methods are articulated and circulated

For design futures literacies, engaging with well-chosen methods suited to an activity or design brief or task is critically important. Design teachers and students are familiar with the many methods, tools and techniques taken up in processes of designing, such ideating, sketching and user-centred feedback. In recent years, the multi-domain of Design has begun to make clearer distinctions and linkages between its 'methods', that is ones in its educational and professional practices and ones applied in its research, drawn from other academic disciplines.

Morrison et al. (2018) artificially separated out what are often connected aspects in processes of making and reflection between

designing and researching. They present a multi-level and mixed method approach to unpacking these relations to how we know what we know by how we do what we do by design (see Fig. 1). Linked are exploratory and known methods together with existing and emergent expertise in a charting of modes of knowing and ways of making by design methods. A methodological distinction is made between Research Frames and Design Processes, connected to ways of knowing as Research Methodologies and Design Techniques, respectively. Further a distinction is made between Research

Activities as means of enacting and Design practices as including devices for shaping designs.

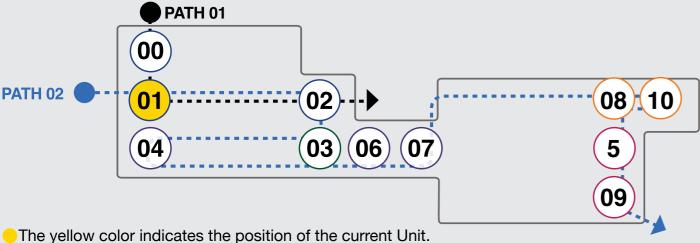
	Research Frames	Design Processes	
Ways of Knowing	RESEARCH METHODOLOGIES	DESIGN TECHNIQUES	Ways of Making
Means of Enacting	RESEARCH METHODS	DESIGN TOOLS	Devices fro shaping
	Research Activities	Design Practices	

Fig. 1: Mapping relations in making by Design (Morrison 2021)

is that we then do, and what this means for people we engage and include and the types of futures we prepare, and project ahead of and back into the present.

Many Futures Studies methods (Popper 2008) are largely qualitative in character (see Fig. 2) and fall under the realm of Foresight, including Strategic Decision Making and Policy matters. Foresight methods are diverse (from backcasting to Causal Layered Analysis). Foresight acknowledges multiple futures, with focus on arriving at procedures and outcomes directed back into decisive presents. Consultancy and management views may predominate as may governmental and agency policy making processes and techniques such as, for example, technology roadmapping and scenarios.

ROADMAP AND CONNECTIONS



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Inayatuttah (2012) notes that 'it is useful to envision policymaking, planning and futures process as having four dimensions or types: predictive, interpretive, critical and action learning.' (see Fig.2). Following his typology, the predictive draws on linear forecasting methods. The interpretive employs methods of learning from models via universalist narratives. In critical futures studies poststructuralist methods are applied to deconstruct and distance diverse discourses. In participatory action stakeholder views are central to shaping futures and include collaborative methods. In addition, Inayatullah goes on to elaborate that such methods may be further viewed in work that centres on foresight processes. This includes A Generic Foresight Process Framework (Voros, 2003) and the Six Pillars Approach (Inayatullah, 2008).

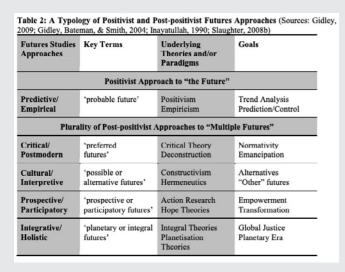


Fig. 2. A typology of approaches in Futures (Inyatullah, 2012).

In contrast, but not exclusively removed from such motivations to work with futures to affect better presents and generate new modes of making better tomorrows, design futures methods that are cocreatively and contextually framed. They may be said to fall under the title of Design Anticipatory Methods Futures methods. These are primarily 'designerly' in character, characterized by their cultural, imaginary, situated and communicative intent and practices and drawing on participation and contextual engagement. These methods may sit within and span design domains

such as may interactions, services, products and systems design (to mention some core components that are located within design and less social science, management and policy alone).

Anticipatory cultural imaginaries

Developing pedagogies for Design futures can draw on a diversity of resources from Futures and Foresight studies and practices. There are also culturally framed mediations of futures that we meet in artistic, literary, performance and mediated culture, including digital artifacts, tools, platforms and modes of engagement. Working in an artistic and poetic mode has been central to cultural manifestations and imaginaries concerning futures, especially in the early 20th century.

Russian futurist

imaginaries burst through in a diversity of the creative arts, in art, film and literature (see Perloff 2014) and have had a huge influence on conceptual and practical techniques of communicating futures to publics. Creative imaginaries have been powerful cultural carriers of possible and potential, but also avant-gardist and science fictional futures. In short, futures have also been invented in what Poggi (2009) examines as the art and politics of the artificial. The future is coconstructed via its methods and materials. It is mediated and it is resituated through our collective responses and ongoing creative productions.

Futures mediated by design

Projections of preferred or utopian, destructive dystopic and even the persuasive projection of political futures have been generated from narrative and visual methods within our cultural histories and their increased velocity of change in 'imaginary futures (Barbrook 2007) that are embedded in and co-construct popular mediated cultures, extending to digital methods, including gaming (e.g. Coulton, 2016; Candy, 2018) and distributive, locative

UNIT CONTENT

and participative social media.

Our design futures literacies are thus embedded in the legacies and emergent methods and practices of other sectors of the creative industries, art and culture. Here too relations between design, creativity, language, visualisation and power are materials and forces, potentials and mediational devices and resources through which design takes part in shaping shared, motivated, select and specific futures.

Yet again, we always need to ask whose views, whose mediated lives and experiences and what relations between humans and non-humans, environment and transformation are being depicted or offered as canvasses for methods of active user participation and world building of ones and our own.

On design fiction

One domain that has emerged in working the fictive in design futures and futures design is 'design fiction' (see Unit 7).

Design fiction has been taken up as a method toolbox to address our complex world (Grand & Wiedmer 2010), while fiction as a mode of making has been used as a resource for participatory prototyping (Knutz, et al., 2016) and pastiche scenarios out to work as fictional aids to user centred design (Blythe & Wright, 2006). Personas have also been deployed to address maters of design fictive projections of learning, climate change and situated experience for surfacing and potentially transforming assumptions and expectations (e.g. Morrison & Chisin, 2017; Morrison et al., 2021).

Design fiction allows a suspension of disbelief in contexts populated by imaginary potential, possible and even outlandish scenarios.

This is a method aimed at providing disjunctures, swerves, disruptions and encounters with the unknown and unfamiliarly familiar. It works to motivate

thinking, actions and revisions of notions of remote worlding, of assumptions of dynamic situations and changes in aspirations and perspective through unexpected events. Performatively, design fictions shift between the actual and the imaginary, the factual and the fabulous so as to engage us in guerying the status of both what is given and projected, and by whom and where and when. Design fictions may seem ethereal and narratively remote from material conditions of the present. Yet, they work to shift ideas and perception back into motivations for design action and students' ongoing agency in altering futures present and present futures.

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ANNEX 01 ANNEX 02

STORYWORLD

TIME TRAVELER

PROVOTYPING

STORYBOARD

FUTURE TELLING

FUTURE FILMING

PALMISTRY

LIST OF TOOLS AND DEVICES

IO1 IO1 IO1 IO1 IO1 IO1 IO1 IO1 IO1	LISTS FOR WORDS FRAMES FOR FUTURES FUTURES DESIGN LITERACIES MATRIX WORD-O MAP NEXUS SEMANTIC CATEGORIES BALLUSION REFLEXICON FUTURES DESIGN DISCOURSE MOVES CHIMERA NEOLOGISER UNMAKER	104 104 104 104 104 104
IO2 IO2 IO2 IO2 IO2 IO2 IO2 IO2 IO2 IO2	AFFECTIVE MODES PERSPECTIVES STANDPOINTS PILLS (STEWARDSHIPS) PILLS (CAPACITIES) PILLS (BELIEFS) PILLS (CHARTS) PILLS (CRISES) PILLS (STORIES) PILLS (STRATEGIES) PILLS (TRAJECTORIES) PILLS (UNKOWNS) PILLS (VISIONS)	
IO3 IO3 IO3 IO3 IO3	ATLAS OF WEAK SIGNALS ALTERNATIVE PRESENTS SELF-REFLEXIVE ACTIVATIONS 1PP DESIGN INTERVENTIONS DESIGN SPACES	
IO4 IO4 IO4 IO4 IO4 IO4 IO4 IO4 IO4	HORIZON SCANNING CANVAS CIPHER PESTLE VERGE FUTURE FORCES FPP CANVAS BRANCHING FUTURES WHEEL POLARITY MAPPING 4 ARCHETYPES SCENARIO CANVAS	

IO4

A DAY IN A LIFE

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