



FUTURES LITERACY METHODS



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The main aim of Futures Literacy Methods is to transform and convey [FUEL4Design](#) 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 [FUEL4Design](#) project. They play an important role in supporting and facilitating the pedagogical process. Each of these tools or devices is linked to the [FUEL4Design](#) website, where you can further read about them.

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Connections and overlaps between the units

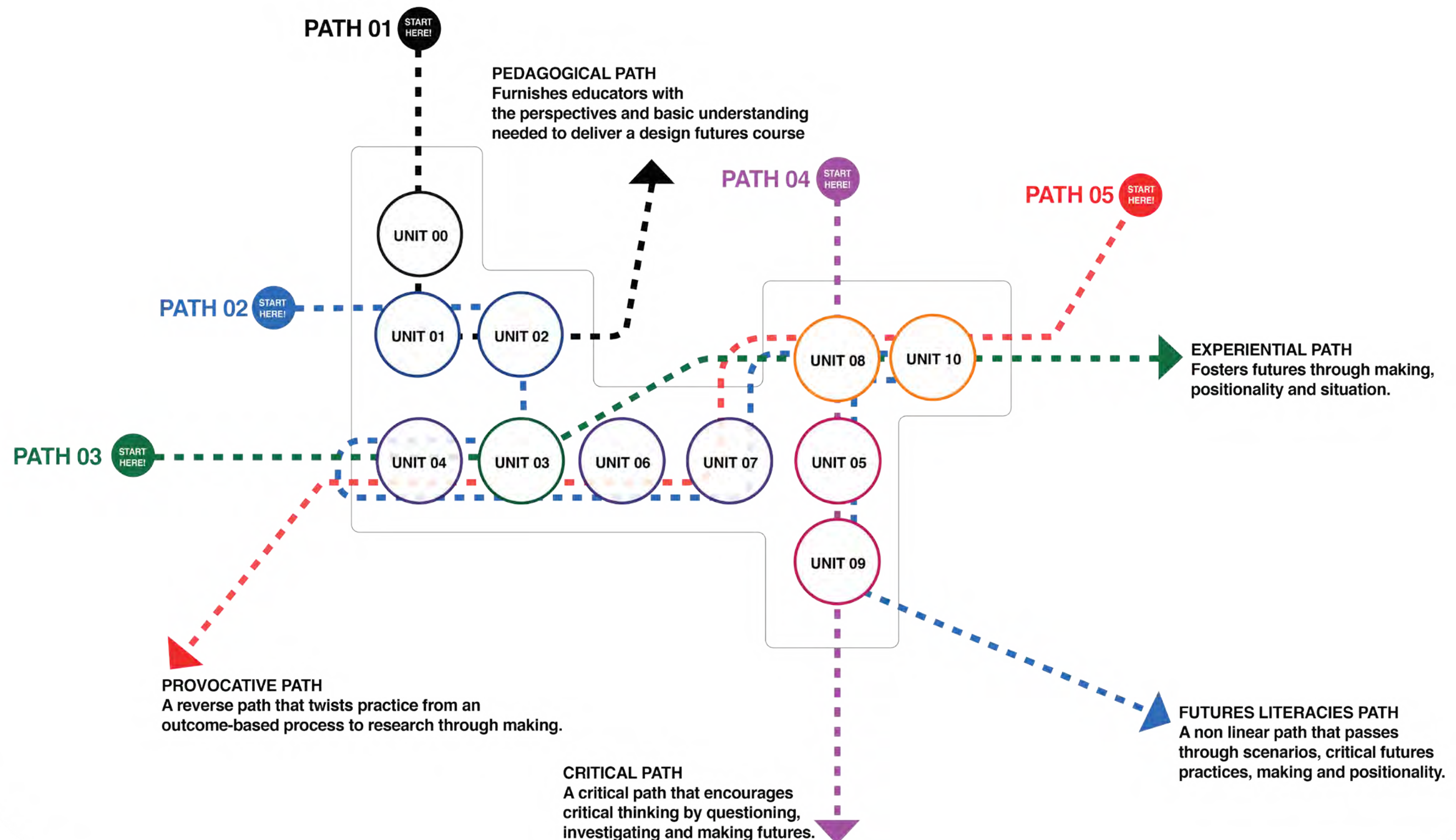


EDUCATORS' GUIDE

TO FUTURES LITERACIES METHODS AND METHODOLOGIES

THE PATHS

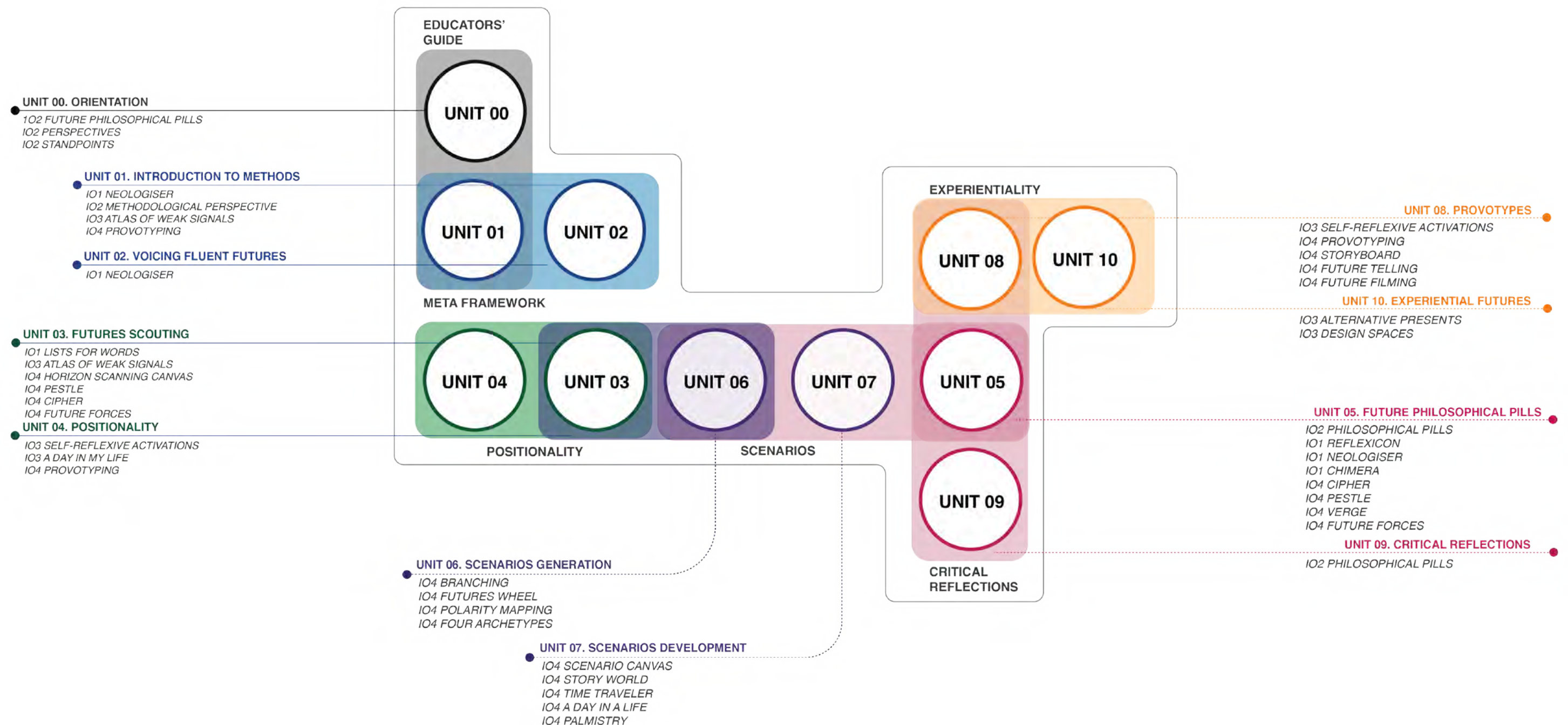
Suggested pedagogical paths through the units



EDUCATORS' GUIDE

TO FUTURES LITERACIES METHODS AND METHODOLOGIES

TOOLS AND DEVICES





FUTURES LITERACY METHODS

UNIT 00 ORIENTATION



Co-funded by the
Erasmus+ Programme
of the European Union

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.

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 heightened 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 peer-to-peer will encourage skills such as risk-taking, 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 vision-building; 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 [HERE](#)*

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.

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?

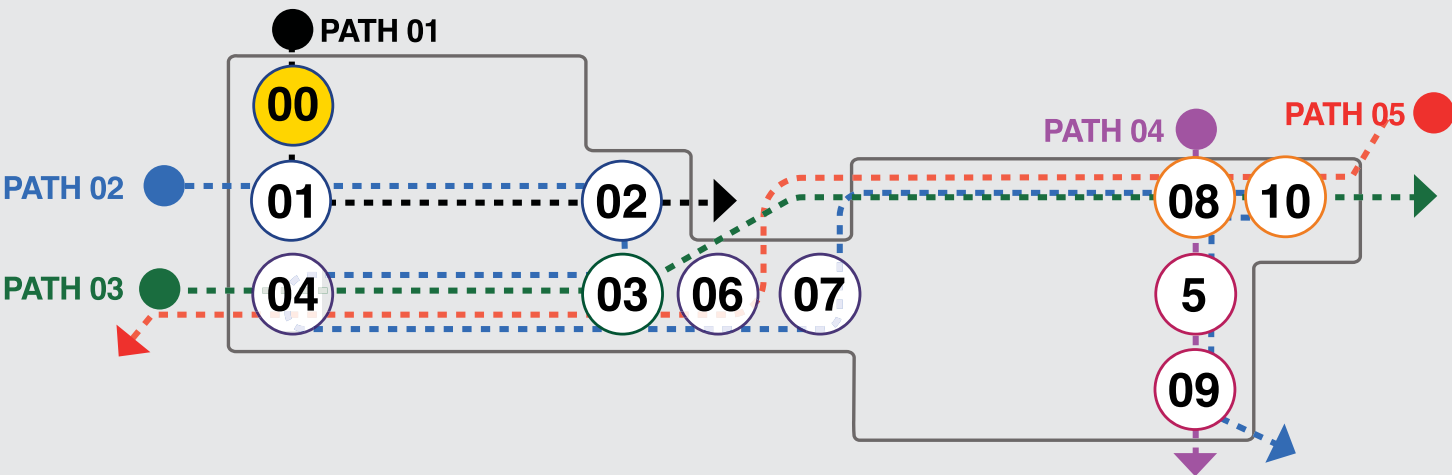
- Time: what is the timeframe you want/can allocate to their learning to ? Eg 2 hours? 2 days?

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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FUTURES LITERACY METHODS

UNIT 04 POSITIONALITY



Co-funded by the
Erasmus+ Programme
of the European Union

DESCRIPTION

This unit explains first, second and third person perspectives, highlighting the importance of self-reflexivity and self-reflexive activation by building awareness of the interconnected nature of positionality, boundaries and networks. 3rd person perspective relates to gathering information without getting involved, and a 2nd person perspective is about designing with a sample of the target group. In a 1st person perspective, the designer is part of a system within the existing social structures.

It enables learners through autoethnographic research to create a personal vision to *design for the unknown* by means of a reflective and transformative design process.

The content presented will allow students to re-evaluate their approach continuously, helping them to be more aware of their contexts, scales and location within the relevant socio-technical system.

AIMS

The aim of this unit is to communicate that self-reflexive activation is key to infuse the design process thoroughly with fundamental principles like responsibility, accountability, transparency, empathy and positionality, These principles have become hugely relevant in re-orienting design processes towards regeneration and sustainability.

If focuses on making explicit the routines designers are following, the infrastructure, social connections and tools that could become relevant to them, and ultimately, the motivations, cultural background and interests they are bringing to the research they are starting.

It also supports the creation of new practices constantly related, limited, shaped by and encouraged by the different elements in the socio-technical systems they are part of.

COMPETENCIES

This unit will give learners competences in order to:

-Be aware of the contexts and scales learners are inhabiting and their positionality in them.

-Create ever-evolving new ways of action in which they develop their practice and themselves.

-Develop their practice mapping the tools, materialities, infrastructures, communities of practice and social networks that are part of the socio-technical system they are designing with, and inhabiting.

DEPTH OF DETAIL

LEVEL 01 - BACHELORS

Learners at this level will be able to understand and experience first, second and third person perspectives in their design process. They can undertake self-reflexive activation exercises in order to help them reconsider their positioning.

LEVEL 02 - MASTERS

Gives students tools to design for the unknown providing extensive guidance into the reflective transformative design

processes to help them re-evaluate their practice. Focus will be on understanding how the design process reshapes them continuously.

LEVEL 03 - PHD

To inspire learners to apply the autoethnographic research learning gained through this unit to their own practice. Allowing them to critically and instrumentally re-imagine ways of thinking and acting differently, creating their own self-reflexive activation techniques.

EXPECTED LEARNING OUTCOMES

A. Knowledge and understanding	To understand that self-reflexive activation is key to infuse the design process thoroughly with fundamental principles like responsibility, accountability, transparency, empathy and positionality
B. Cognitive Skills	Reflect on who learners are as agentic actors.
C. Practical Skills	Bottom-up and top-down transformation processes using materials at hand.
D. Generic Skills	Assemble a collection of experiments, reference objects, projects, products or materials.
E. Collaborative Skills	Collectively aims to describe and systematically analyse experience to understand its cultural context. By locating several personal experiences within a common socio-technical system one understands more holistically one’s own context.

ACTIVITY

My New Me

AIM OF THE ACTIVITY: invite the participants to reflect on who they are as agentic actors constantly related, limited, shaped by and encouraged by the different elements in the socio-technical systems they are part of.

DURATION: it can be done in a single day, but it is recommended to repeat this activity multiple times during a project.

DESCRIPTION: As practitioners, we are influenced by the contexts, materialities, infrastructures, power structures, social bonds and motivations that we embody throughout the day. These, in turn, are always shifting, creating ever-evolving “new normals” in which we develop our practice and ourselves. This exercise can help to bring these inter-relations into awareness in our practice.

METHOD: Any activity that supports positioning yourself in relation to the context of study by means of analysing and reflecting on personal and professional activities and interests. Teachers can ask the students to bring a poster with an image, illustration or picture that represents their fight, meaning, any issue, concern, cause or particular interest they feel strongly about. This deliverable can be a trigger for group discussion among students and teachers.

My New Augmented Context

AIM OF THE ACTIVITY: to gain awareness of the tools, materialities, infrastructures, communities of practice and social networks that are part of the socio-technical system we are designing with. A deeper inquiry into the infrastructure and limitations will be helpful to start framing the spaces and tools that will become part of their practice.

DURATION: it can be done in a single day, but it is recommended to repeat this activity multiple times during a project.

DESCRIPTION: Participants are encouraged to expand their notion of what their workspace is, understanding that it goes way beyond their desk or the lab in the university; that their hyperlocal and hyperconnected workspace can consist of their kitchens, the urban garden next to their apartment, the restaurant in their neighbourhood, their closet, their balconies, their leisure spaces, the sewing machine at their mother’s home, a digital community elsewhere in the world... and so many other possibilities. Observing our habitual spaces with this new set of eyes might bring awareness of how rich our environments are to become part of our working and prototyping infrastructure.

METHOD: Any activity that supports positioning yourself in relation to the context of study by means of analysing and reflecting on personal and professional activities and interests. Teachers can invite participants to actively reflect on their current spaces, routines, connections and habits are shaping them personally and professionally through visual methods (photos, videos, drawings, etc.). The outcomes can be presented in a shared session to trigger discussion among participants.

TOOLS AND DEVICES

IO3 – 3 - SELF-REFLEXIVE ACTIVATIONS

Actions aimed at creating awareness in the practitioners on the contexts and scales they are inhabiting and their positionality in them. The routines they are following. The infrastructure, social connections and tools that could become relevant to them. Ultimately, the motivations and interests they are bringing to the research they are starting.

IO4 PROVOTYPING

IO3 A DAY IN MY LIFE

CASES AND EXPERIENCES

A Day in My life

This assignment invites participants to actively reflect on how their current spaces, routines, connections and habits are shaping them personally and professionally. In this example, Morgane Sha’ban (Master in Design for Emergent Futures, 20/21) represents the most important things and activities that are shaping her personally and she would like to bring to her design practice. She called it “my magic ship” as a way to navigate a difficult topic to deal with (ecological collapse).

[HERE](#)

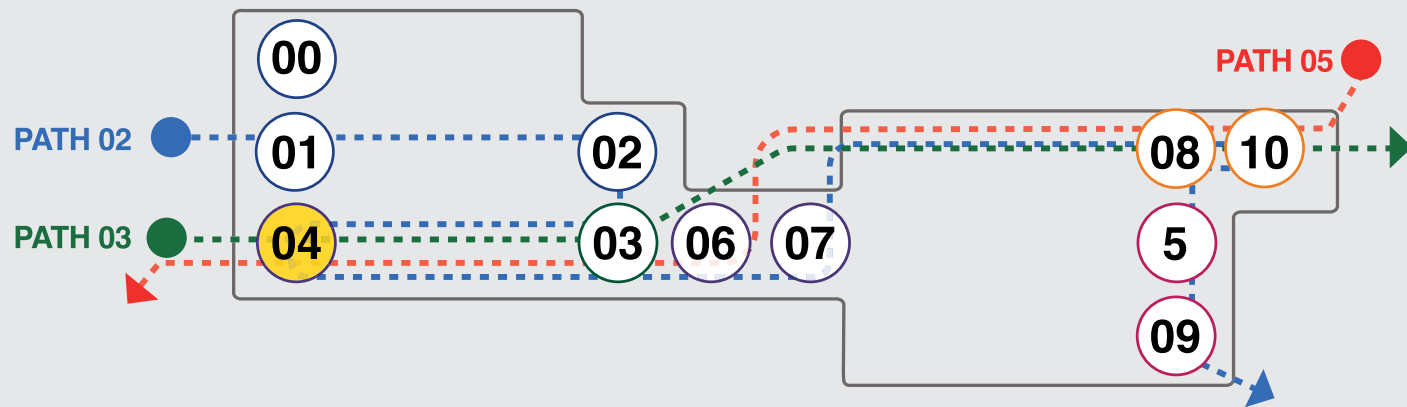
What’s your Fight?

Each participant is asked to bring a poster with an image, illustration or picture that represents their fight, meaning, any issue, concern, cause or particular interest they feel strongly about. When working with a group, not only is this a way to start meeting each other, breaking the ice, but also a means of starting the process of finding resonance to form possible collaborations. For teachers and facilitators, it presents an opportunity to start observing the areas of interest in the group as a whole, but mostly, this strategy ultimately represents a prompt for the practitioner to actively reflect on what they care about, and find fertile ground on which to start inquiring.

In this example, Morgane Sha’ban (Master in Design for Emergent Futures, 20/21) represents the intersection of the topics she most cares about. Some of them being ecological collapse, urban spaces, education, ecofeminism, activism and regeneration.

[HERE](#)

ROADMAP AND CONNECTIONS



● The yellow color indicates the position of the current Unit.

UNIT CONTENT

Almost everyday now in this first quarter of the century, incoming data about ecosystemic collapse and inequality has been offering a wide range of apocalyptic scenarios which urge us to implement changes in how we do almost everything, but, how can we engage as designers in such wicked, multi-dimensional crises? This unit prepares the learners to position themselves against these challenges, gain agency and develop design interventions that bring about the changes that are urgently required.

1st, 2nd & 3rd person perspectives

There are different approaches to relate to the socio-technical system object of study. 3rd person perspective relates to gathering information without getting involved, and a 2nd person perspective is about designing with a sample of the target group. In a 1st person perspective, the designer is part of a system within the existing social structures.

Qualities of auto-ethnography

Autoethnography understood as a qualitative research method aims to describe and systematically analyze personal experience to understand cultural context. Research

done in social sciences can help us to reflect and self-evaluate design auto-ethnography and autobiographical design. The main qualities are the following: defined study boundaries, authenticity, plausibility or scholarship, Criticality, self-revealing communication, ethnographic material with confessional content and generalisability.

Design for the unknown

A reflective transformative design process is key when exploring futures in design. Fast iterations alternating between envisioning and validating, and making and analysing by means of multiple iterations allows for trial-and-error learning processes. Reflecting on the actions taken allows us to adapt the design direction accordingly.

UNIT CONTENT

Self-reflexivity

The main goal of self-reflexivity is self-awareness, to understand the interconnected nature between positionality, boundaries and networks. The aim is to acknowledge the contexts and scales that the designer inhabits and their positionality in them. By using tools such as self-reflexivity, designers are critically reconsidering their process, positioning and connections within their contexts.

Typologies of self-reflexive activations

As practitioners, we are influenced by the contexts, materialities, infrastructures, power structures, social bonds and motivations that we embody throughout the day. These, in turn, are always shifting, creating ever-evolving “new normals” in which we develop our practice and ourselves. Self-reflexive activations help us through a series of guided exercises to do just this.

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LIST OF TOOLS AND DEVICES

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

IO4	STORYWORLD
IO4	TIME TRAVELER
IO4	PALMISTRY
IO4	PROVOTYPING
IO4	STORYBOARD
IO4	FUTURE TELLING
IO4	FUTURE FILMING

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Co-funded by the
Erasmus+ Programme
of the European Union

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