# Systems Thinking Practitioner Apprenticeship

For more information see

https://www.instituteforapprenticeships.org/apprenticeship-standards/systems-thinking-practitioner/

# Why do organisations need Systems Thinking Practitioners?

- Organisations are confronted by situations of unprecedented complexity and turbulence
  - everything is connected and going through a continuous process of change
  - no single organisation, or part, has either visibility or control over all the factors giving rise to a situation
- Decision makers need to work across multiple organisational boundaries to:
  - gather, explore and analyse relevant data, bringing together diverse stakeholders to develop a shared understanding the situation and its root causes
  - collaboratively generate options and find accommodations for moving forward
- Process of engagement is fundamental to the success of complex interventions
  - as the complexity is such that there is no single, right solution
  - diversity of the stakeholders is such that they their different purposes, needs and values give rise to different perspectives on what the problem is and how it should be solved
- In these circumstances organisations cannot effect change alone, deliberate collaboration is critical to success; a systems approach is required

### What is the role of an STP?

To support decision-makers in strategic and leadership roles to understand and address complex and sometimes even 'wicked' problems through provision of expert systemic analysis, advice and facilitation

- Although the underlying purpose is to address highly complex problems STPs are not directly responsible for effecting change
  - facilitate discussion collaboration between those with a stake (individuals/organisations)
  - to help decision-makers make sense of the challenges and co-develop effective interventions

#### • Requires:

- specialist knowledge of systems and how they behave
- specialist knowledge of systemic methods and tools
- range of specialist facilitation and engagement skills
- practitioners to be comfortable in working with high degrees of uncertainty and volatility providing constructive challenge function to leaders
- reflective practice

## STP's duties

Engage to explore perspectives and scope

Apply systems concepts, models and tools to gain understanding

Design the systemic approach and define the problem situation

(Co)design and continuously evolve a stakeholder engagement strategy

Analyse patterns and trends of behaviour; develop conceptual models

Design and facilitate engagement activities to build shared systemic models

Use systems
tools, models &
concepts to
explain
observations
identify driving
forces, causal
factors

Use a range of systems tools and models to identify, develop and test possible systemic intervention options

Use collaborative futures thinking techniques to explore future challenges, critical uncertainties, potential risks

Design systemic intervention approach and support decision-makers to develop an intervention plan

Support DMs to explore the ethics of an intervention; dealing with value conflicts and power dynamics

(Co-)design and enable relevant monitoring and evaluation processes to assess efficacy of interventions

# Knowledge: K1 & K2

#### Systems thinking

- Understands core systems concepts and laws that underpin and inform the practical methodologies and methods
- Understands provenance of Systems Thinking methodologies and approaches
- Aware of the inter-relationships between Systems Thinking approaches

#### Systems approaches

- Has a sound working knowledge of at least three modelling approaches as identified in SCiO's professional standard framework\*:
  - Critical Systems Heuristics, Soft Systems Methodology, System Dynamics, Viable Systems Model
- Understands the applicability, benefits and limits of each systems approach and how to integrate them into a broader approach
- Understands relevance of, and knows methods for, determining appropriate scope, scale and levels, for understanding, diagnosing and modelling situations, or for system design

# Knowledge: K3 & K4

#### Intervention and engagement

- Knows a range of approaches for delivering systemic interventions
- Has a working knowledge of at least two methods or methodologies for:
  - intervention planning
  - information gathering
  - engagement
  - change implementation
- Understands strengths and limitations of each approach
- Understands the principles of effective relationship building and stakeholder management

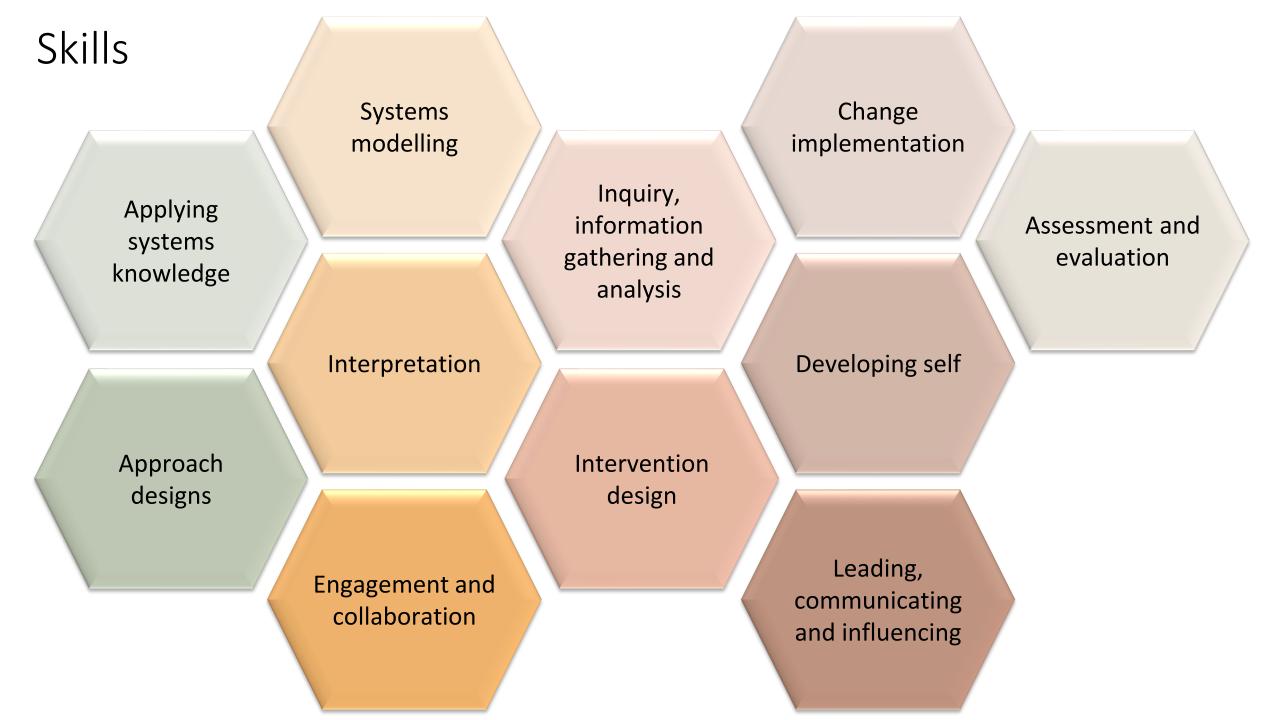
#### Ethics

- Working knowledge of ethics as applied to systems interventions generally, and as applied specifically to sector where practitioner is working
- Appreciates the regulatory environment, and the legal, health and safety and compliance requirements

Knowledge: K5

#### Assessment and evaluation

 Understands a range of quantitative and qualitative assessment and evaluation methods for determining the outcomes and impact of interventions



# Behaviours

Courage and constructive challenge

Curious and

innovative

and cognitively flexible

**Professional** 

Collaborative

Resilient

Open-

minded

Adaptable

**Practical** 

and practice

Develops self

#### The mechanics

- L7 apprenticeship
  - non-degree qualification equivalent to a Masters degree
  - university providers will award a post-graduate certificate but this varies
- Apprentices typically on programme for 30 months
  - minimum of 12 months
- Minimum of 20% off-the-job training
- Entry qualifications:
  - level 2 English and Maths (GCSE grade C)
  - those without will need to achieve this level prior to taking the End-Point Assessment

# End Point Assessment (EPA)

- Tests the knowledge, skills and behaviours that an apprentice has gained during their training
- Only an approved EPAO can carry out the assessment as laid out in the assessment plan for the occupational standard
- End Point Assessment period should only commence when:
  - the employer is satisfied that the apprentice is deemed to be consistently working at or above the level set out in the occupational standard
  - all the pre-requisite gateway requirements for the EPA have been met and can be evidenced to an EPAO
  - apprentices have achieved level 2 in English and mathematics
- EPA must be completed within 6 months

#### Assessment Criteria

The tables below set out the assessment criteria for the qualification, based on the standard and EPA plan, together with the level of attainment required for a pass or distinction for each assessment cluster and the method of assessment for each assessment cluster.

Core systems concepts: K1 & S1	Assessment Method 1: Project
Pass: Identifies and uses systems principles, concepts and laws, within systems approaches.	<b>Distinction:</b> Identifies and uses systems laws and principles outside of formalised systems approaches, whilst compensating for own bias.

#### Assessment Criteria:

- Understands core systems concepts and laws that underpin and inform the practical methodologies and methods.
- Aware of the inter-relationships between Systems Thinking approaches (including methods and methodologies), enabling comparisons of paradigms and underpinning philosophies.
- Understands provenance of Systems Thinking methodologies and approaches in context of 'schools' of systems thinking, and own ontology and epistemology.
- Understands essential concepts of systems: complexity, emergence, boundaries, inter-relationships, multiple-perspectives, randomness, non-linear relationships, feedback loops, sensitive dependence on initial conditions, and unpredictability.
- Applies systems laws, concepts and systems thinking approaches in real world situations, either applied directly, or to support systems methodologies.

#### For more information on EPA see:

https://irp.cdn-website.com/f609fd91/files/uploaded/Learner%20guide.pdf https://irp.cdn-website.com/f609fd91/files/uploaded/Qualification%20Specification.pdf https://www.systemspractitionerassessment.org/

# **SPA** About **SPA** - Systems Practitioner Assessment Ltd.

- Your apprenticeship is assessed at the end by an external body the 'End Point Assessment Organisation' or EPAO.
- For this apprenticeship SPA will be EPAO.
- SPA was set up by SCiO the professional body specifically to run the assessment (at the request of providers with the Trailblazer group).

# **SPA** The Apprenticeship & Assessment

- There is no exam
- There are two assessments:
  - 1. Project report
  - 2. Professional discussion based on your portfolio
- Both are about how you used the systems approaches from the standard in your workplace.
- This means:
  - you can build your portfolio of evidence as you go through the course and...
  - It should deliver benefits to your employer

# **SPA** The 'Gateway' & Assessment

- Your project & portfolio are 'pre-Gateway' and can be supported by the provider
- The Project report and all assessment is after the Gateway and must be all your own work.