

Curriculum Design Toolkit

Using design thinking to help with the 'how' of
curriculum design and innovation

Understanding the learners

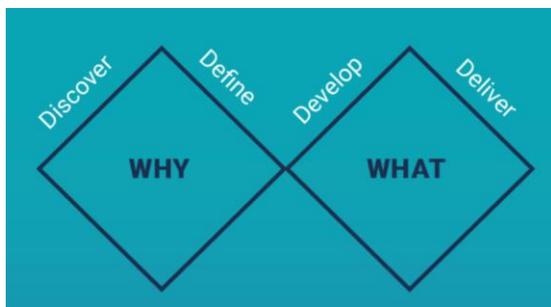
Understanding the learners



Select the tools that work best for you and support curriculum design in your own context. Many of the tools can be used directly with learners, and others can be used by staff, to better understand learner needs.

You can **adapt the tools** to suit your own enquiry and all are designed so you can share, organise and display the voice of your learners visually and effectively.

You may be familiar with some of these, many of which are drawn from other resources available on the National Improvement Hub, and all of which support the 'how' of delivering [Scotland's Curriculum](#).



Understanding the learners and their needs is a fundamental element of good curriculum design and ensures you are following a service design approach. This will help you design the **right curriculum** for your learners, and design the **curriculum right**.

Imagine If...

Popular process to reveal learner needs and ambitions for their curriculum and ensure creative responses.
(Workshop/PowerPoint)

The Four Capacities

Capture learners' responses to the four capacities and identify where learners' needs are strongest
(Online Tool/A4 Sheet)

Skills Spidergram

Capture and explore learners' skills and identify where needs are strongest – adapt to your own skillsets
(A4 Sheet)

We Are Creative

Capture learners' responses around creativity skills and identify where learners' needs are strongest
(Online Tool)

Creative teaching and learning graphic equaliser

Explore the whole curriculum experience with focuses on learning, teaching and the environment.
(A3 sheet)

Personas

Summarise the unique context and needs of individual learners and create 'go to' personas of learner types
(A4 Sheet)

Empathy Maps

Focus on the actual needs of learners, taking note of the emotional underpinnings.
(A4 Sheet)

On Target

Encourage learners of all ages to reflect on their employability needs and aspirations.
(A4 Sheet)

Polarised Thinking

Explore the underlying needs hidden behind learners' thinking by polarising their views first.
(A4 Sheet)

Imagine If...

A creative workshop to capture the needs and wishes of learners using Imagine If... questions and creativity skills.

The process can be done with learners across all ages and stages and takes the form of a 45-60 minute workshop that can be used with class-sized groups. Learners can use paper to write down their responses but post-it notes and a wall/white-board are more exciting.

The Imagine If... statements that the process generates can be used to inform rich discussion around improving the curriculum that your school, establishment or learning environment offers founded on the voices of learners.

The process can be used individually to support a single planning session, or collectively as part of a broader process.

Download the full PowerPoint presentation [here](#). You can also share your learners' voice at a national level by emailing responses to curriculuminnovation@educationscotland.gov.scot and we will add them to the growing bank on the National Improvement Hub.

This tool has been used extensively across P1 – S6 year groups – click [here](#) to learn more.



Approaching the curriculum creatively

Imagine if...



If curriculum means 'the totality of young people's learning experiences', how might we do things differently to truly listen to learners, to engage them and equip them for life, learning and work in the 21st Century?



Imagine if...

you could take your best, or happiest, or most useful moment of school or learning, and make sure that this moment happens more of the time, or even, all of the time.



Imagine if...

you were the King of schools and you could change everything and anything you wanted – what would it be like?



Imagine if...

you could take your worst, or unhappiest, or least useful moment of school or learning, and make sure that this moment happens less of the time, or even, never.



Imagine if...

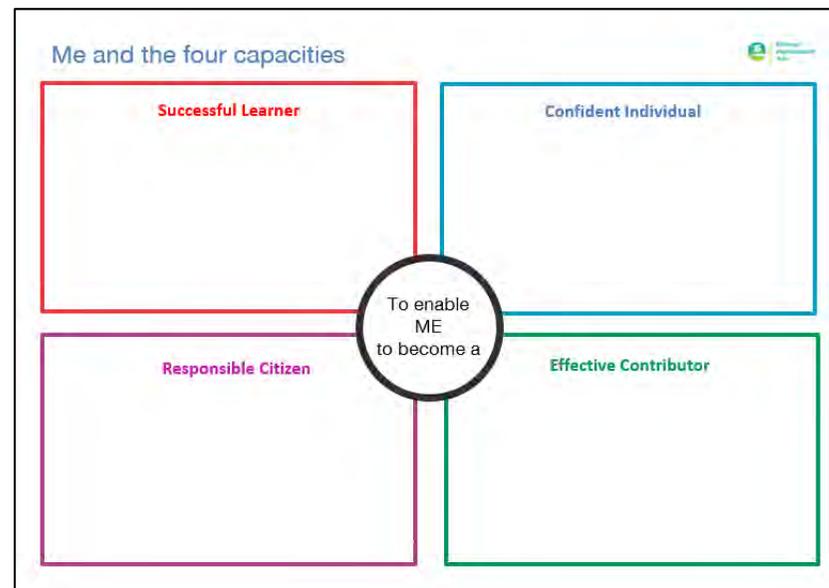
there were no schools, no teachers. Imagine they had never been invented. How would you learn the things you need to learn to get a job and to have a great life?



The Four Capacities

Capture learners' responses to the four capacities and identify where learners' needs are strongest.

This is an A4 printable sheet, but can also be completed in an editable online version [here](#).

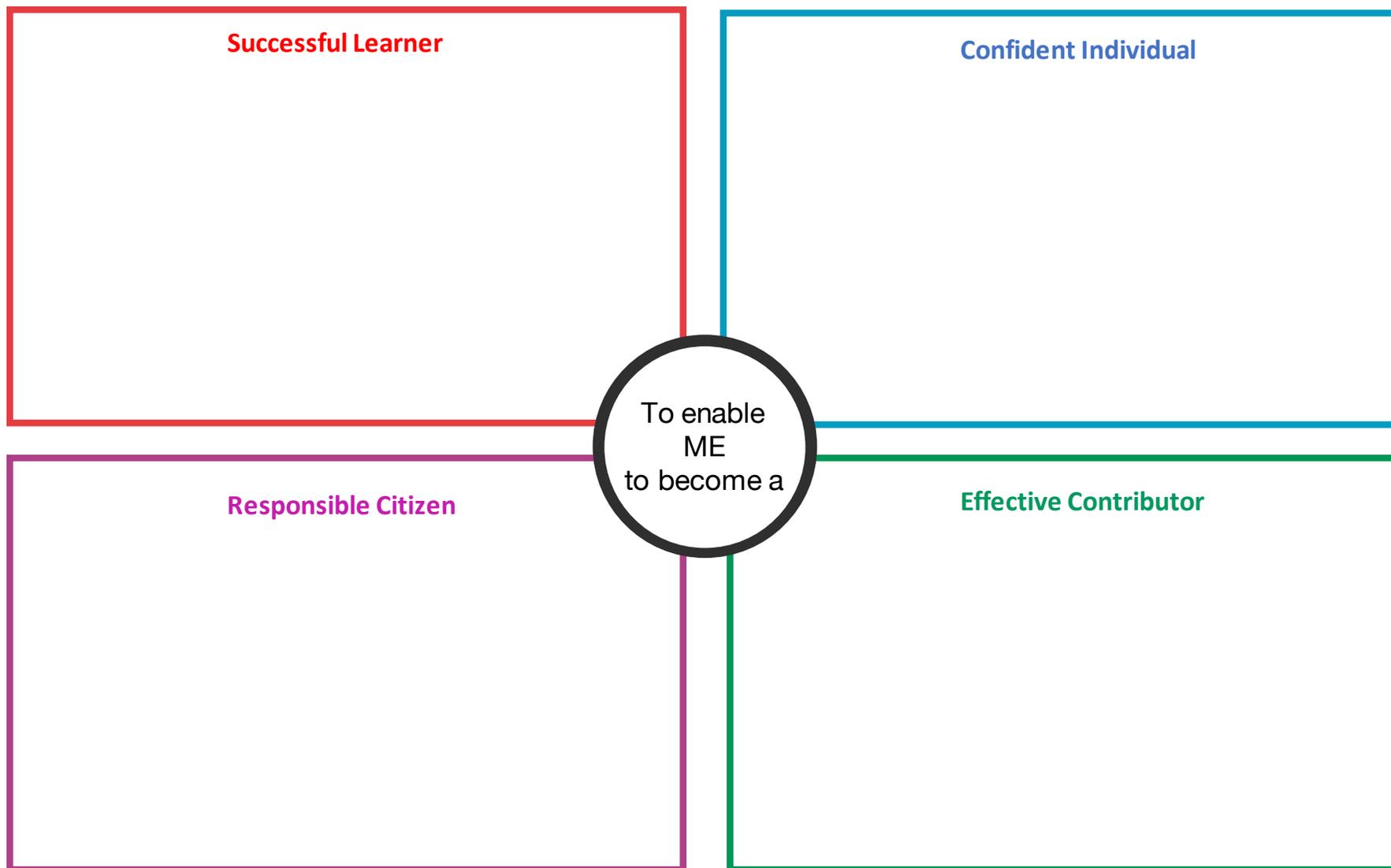


The template is simple enough to allow you to focus on the four capacities in a number of different ways. For example you might ask:

- What did you do this year that developed the capacities?
- How strong are your four capacities? How do you demonstrate them?
- What would you like to do to help you build your capacities?

It can be revealing to see which capacities they struggle to articulate as much as which ones they feel strong in. You could repeat the process for in-classroom and out-of-classroom learning to capture where learners' interests and social lives can be built upon.

This tool has been used extensively with a range of learners and purposes – click [here](#) to learn more.



Skills Spidergram

A tried and tested way of mapping skills and identifying areas for development.

This is an A4 printable sheet that can be adapted to your own sets of skills.

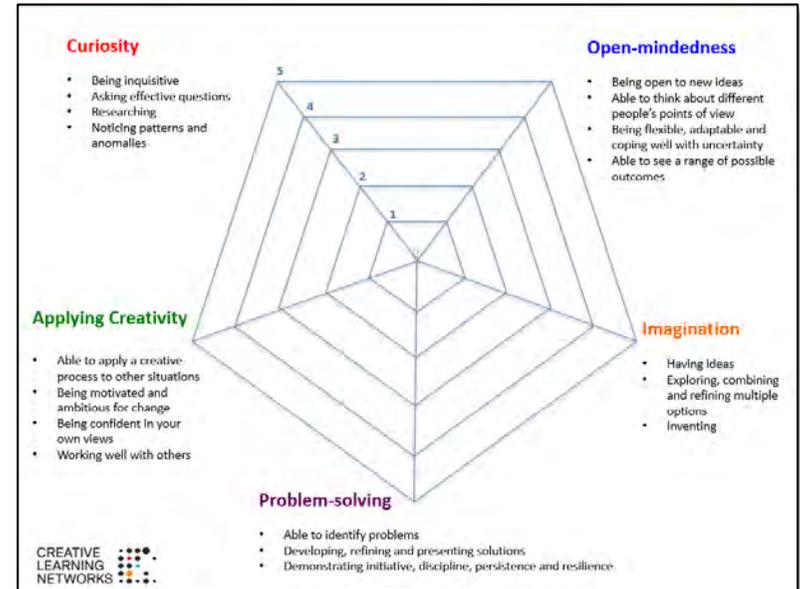
Capture learners' or educators' responses around skills and capture where learners' needs are strongest.

You might ask:

- The learner marks on the lines radiating out from the centre how strong their skills are, with 5 being strong and 0 being non-existent.
- The learner can join the marks up to create a shape. This can give a visual representation of how balanced/imbalanced their skills are.
- You can even average these responses across a whole group to form an overview of the group's needs and strengths.

This is a helpful process as it develops learners' understanding of the skills and can provide rich conversation in groups.

This tool has been used extensively with a range of learners and purposes – click [here](#) to learn more.



Curiosity

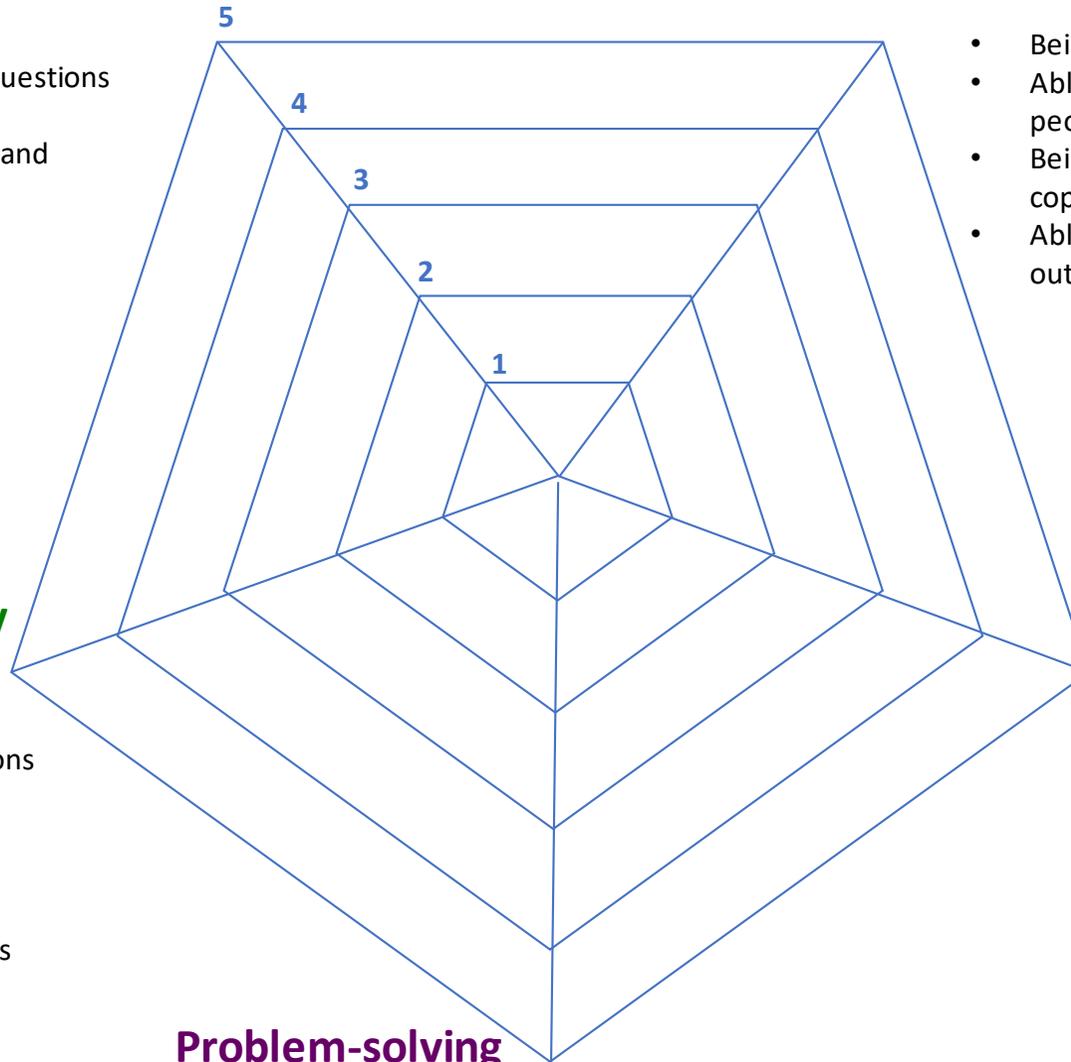
- Being inquisitive
- Asking effective questions
- Researching
- Noticing patterns and anomalies

Open-mindedness

- Being open to new ideas
- Able to think about different people's points of view
- Being flexible, adaptable and coping well with uncertainty
- Able to see a range of possible outcomes

Applying Creativity

- Able to apply a creative process to other situations
- Being motivated and ambitious for change
- Being confident in your own views
- Working well with others



Imagination

- Having ideas
- Exploring, combining and refining multiple options
- Inventing

Problem-solving

- Able to identify problems
- Developing, refining and presenting solutions
- Demonstrating initiative, discipline, persistence and resilience

We Are Creative Infographic

An online design tool that anyone can use to map and share their creativity skills.

Access the resource [here](#) or use the template on the next slide.



Capture learners' responses around creativity skills and where learners' needs are strongest. In groups or on their own learners can reflect upon their own creativity skills, identifying how they apply them together in the central box.

You might also ask learners' to reflect on how their school or group is creative. This is a helpful process as it develops learners' understanding of the skills and can provide rich conversation in groups.

This tool has been used extensively with a range of learners and purposes – click [here](#) to learn more.



A graphic featuring a teal horizontal bar with the text 'Creative Teaching and Learning Graphic Equaliser' centered on it. Behind the bar is a light blue circle surrounded by a ring of colorful dots in shades of yellow, orange, pink, purple, and black.

Creative Teaching and Learning Graphic Equaliser

A process that allows learners to reflect upon how creative their learning experiences and learning environment are in an intuitive, conversation- stimulating way.

A printable A3 sheet.

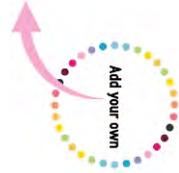
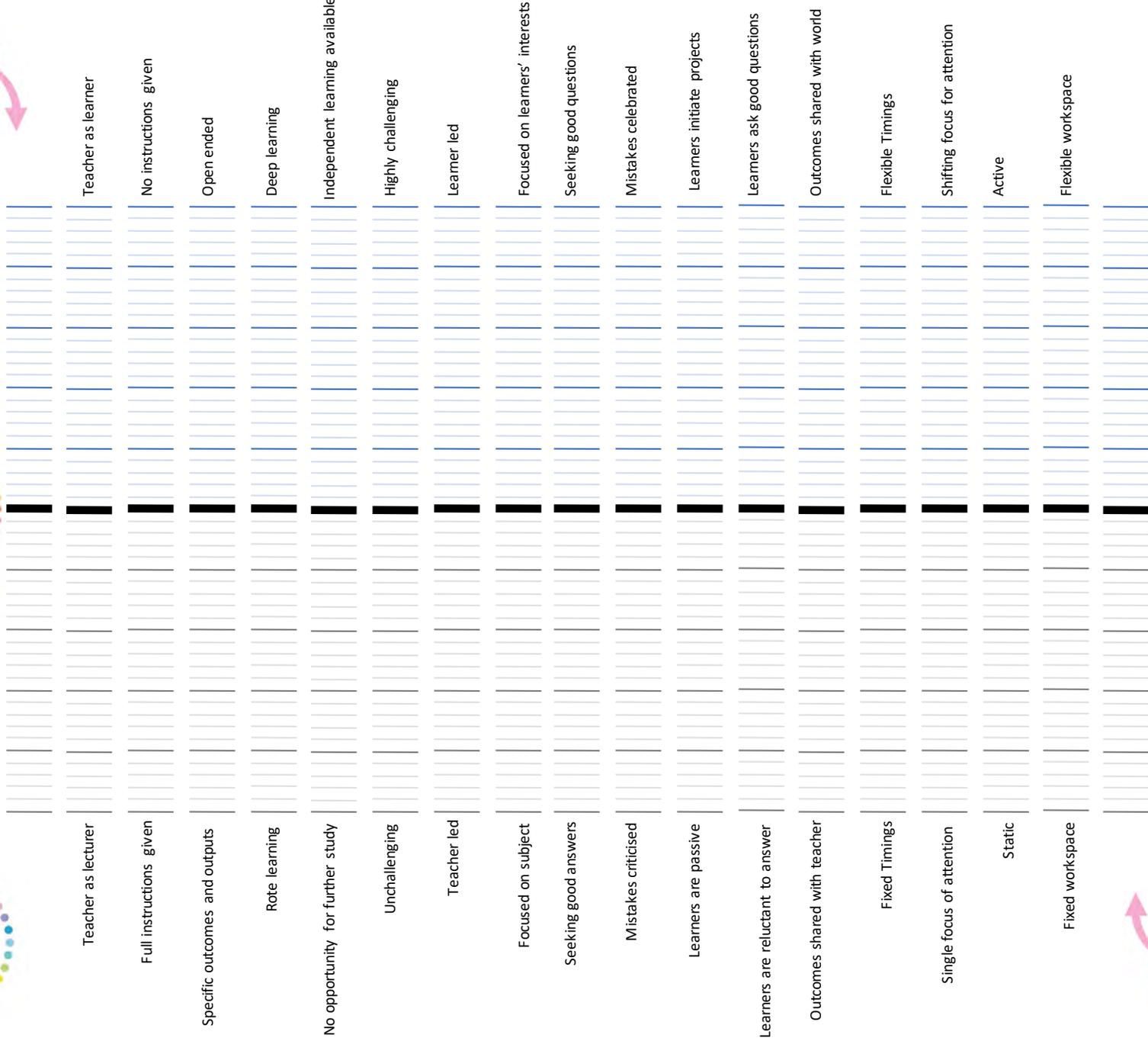
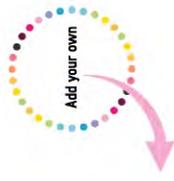
The tool serves as an invaluable stimulus for discussion and allows for varied perspectives and experiences to co-exist whilst offering informative overviews that can inform plans to improve teaching, learning and the learning environment.

It can be interesting to use this activity with learners and educators separately before comparing their responses.

This tool has been used extensively with primary and secondary learners and staff – click [here](#) to learn more.



Creative Teaching and Learning Graphic Equaliser



Personas

A tried and tested way of recognising user needs by mapping a holistic overview of specific, typical or extreme users.

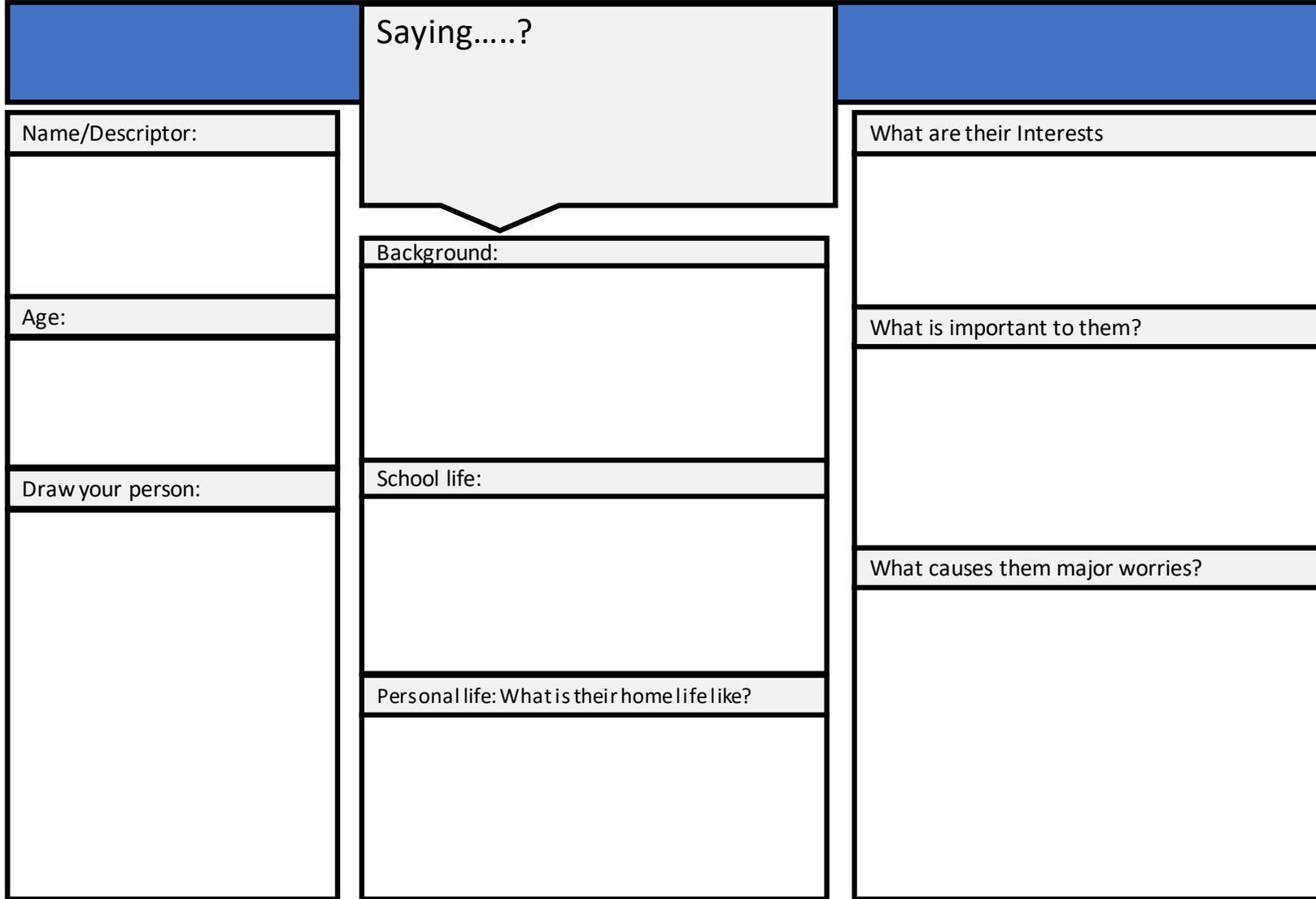
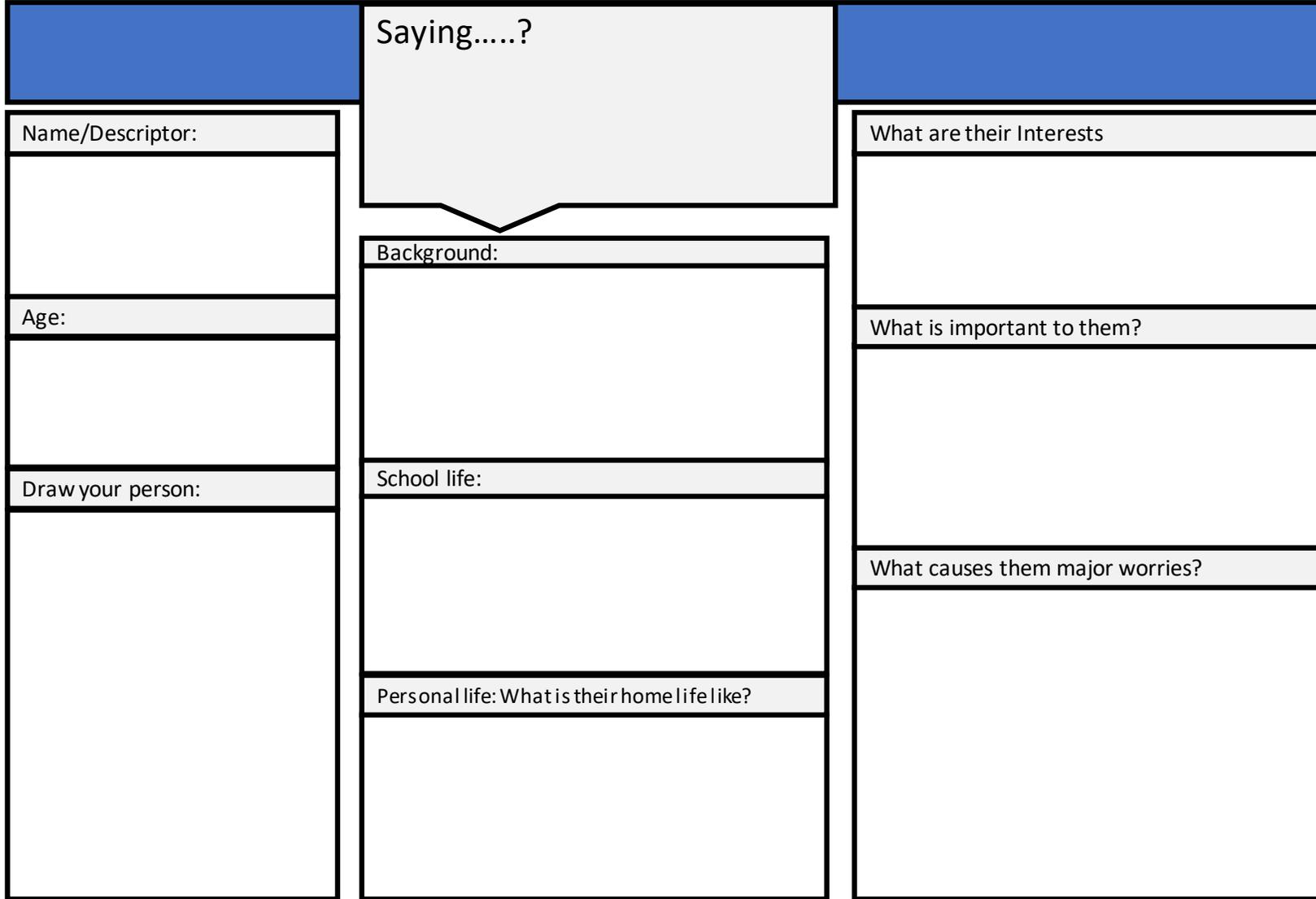
Completely adaptable to your own learners this persona offers suggested areas that might define a learner's individual needs from their curriculum.

Persona		Saying.....?
Name:		What are their Interests
Age:		
	Background:	What is important to them?
	Career/Work life:	
Draw your person:	Personal life: What is their home life like?	What causes them major worries?

Having clear, concise personas can allow you to quickly and constantly return to your users' needs to check that your work is still 'on track' and responds to their needs. You might also map 'extreme users' at either end of a spectrum (for example very engaged, and dis-engaged). Designing for both of these extremes will naturally answer the needs of most learners in between.

This tool has been used extensively with secondary learners – click [here](#) to learn more.

Persona

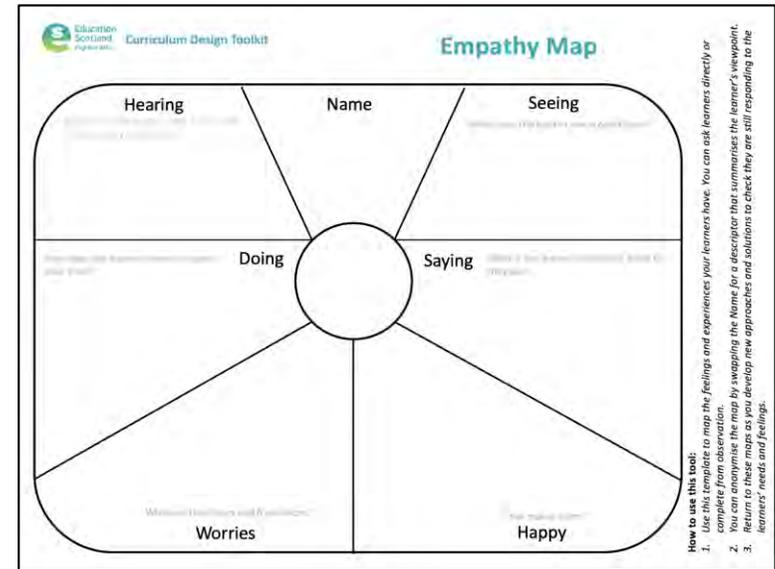
 <p>The diagram shows a central grey box labeled 'Saying.....?' with a downward-pointing arrow. To the left is a vertical column of four boxes: 'Name/Descriptor:', 'Age:', 'Draw your person:', and a large empty box. To the right is another vertical column of four boxes: 'What are their Interests', 'What is important to them?', 'What causes them major worries?', and a large empty box. The 'Background:', 'School life:', and 'Personal life: What is their home life like?' boxes are positioned between the left and right columns, overlapping the central 'Saying.....?' box.</p>	<p>Saying.....?</p>	
Name/Descriptor:		What are their Interests
	Background:	
Age:		What is important to them?
	School life:	
Draw your person:		What causes them major worries?
	Personal life: What is their home life like?	

How to use this tool:

1. *Understanding the diverse needs of your learners is vital to designing the best curriculum for them. Use this template to map the distinguishing elements of key groups of learners – for example different year groups or levels of engagement.*
2. *You should return to the personas regularly to ensure that these learners are represented and that your solutions will work for them.*
3. *You might have a specific learner in mind when creating the persona but it is important to ensure that the persona is both general enough and detailed enough to be useful.*

Empathy Maps

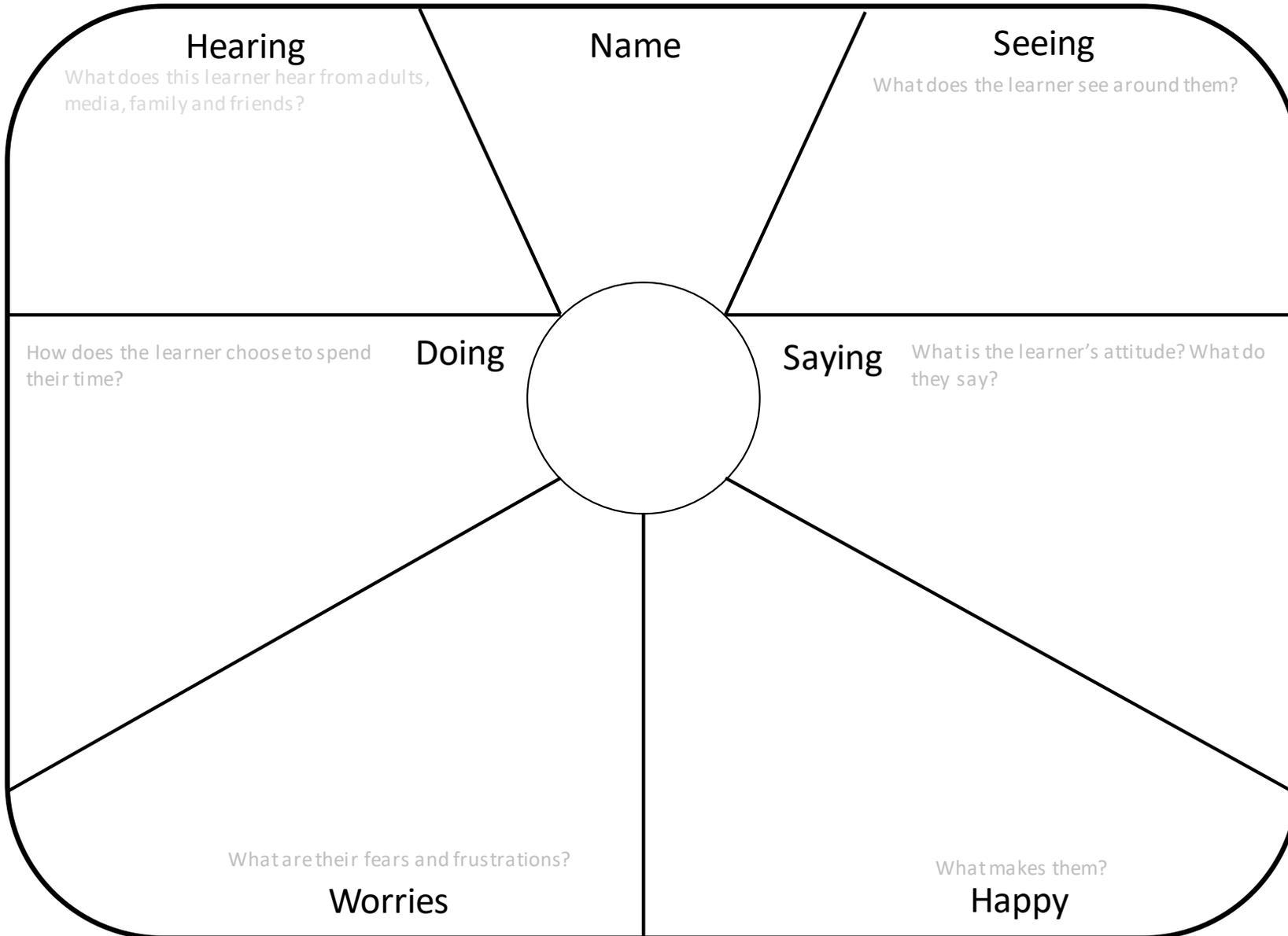
Empathy Maps offer an emotional focus on individual learners which gets closer to their actual needs.



You can complete this map of learners' emotional worlds from your own observations or tweak the wording (from "What makes them happy?" to "What makes you happy?" for example) and ask learners to complete the map themselves.

As with personas, you might identify similarities or groupings of learners across several maps and choose just one to represent that group in your planning. You can anonymise it by removing the 'name' and swapping it for a general descriptor.

Empathy Map



How to use this tool:

1. Use this template to map the feelings and experiences your learners have. You can ask learners directly or complete from observation.
2. You can anonymise the map by swapping the Name for a descriptor that summarises the learner's viewpoint.
3. Return to these maps as you develop new approaches and solutions to check they are still responding to the learners' needs and feelings.

On Target?

A template to explore learners' career and skills needs and plans.



You might adapt this tool to suit a number of different enquiries into learner interests and needs. This example focuses on the skills learners already have, the skills they feel they need and their interests and passions. For learners who have not settled on an 'ideal job' the outer questions remain powerful evidence of learners' needs. For these learners their passions may inform the 'needs' they have from a career (caring, protecting, creating etc) and the World Of Work [About Me](#) tool can be helpful.

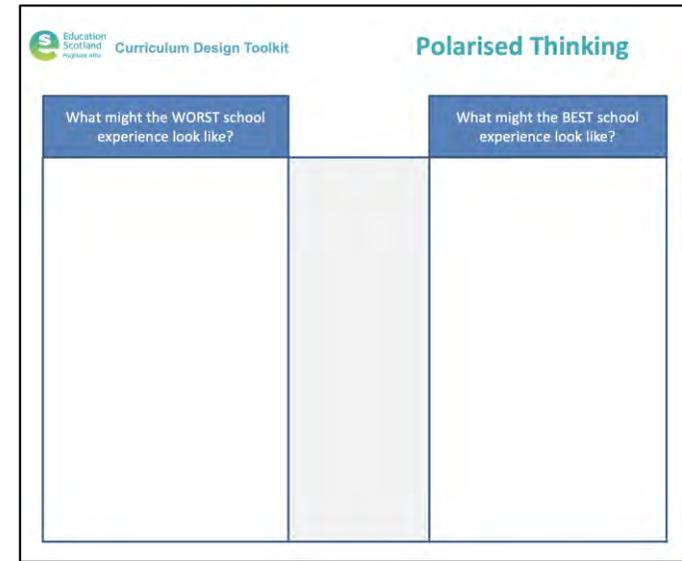
This tool has been used extensively with secondary learners – click [here](#) to learn more.

On Target?



Polarised Thinking

Explore the underlying needs hidden behind learners' thinking by polarising their views.



The image shows a worksheet titled "Polarised Thinking" from the Curriculum Design Toolkit. It features a central vertical line that divides the page into two columns. The left column is headed "What might the WORST school experience look like?" and the right column is headed "What might the BEST school experience look like?". The central line is shaded grey, and the two columns are white with blue borders. The top left corner of the worksheet contains the Education Scotland logo and the text "Curriculum Design Toolkit".

You might adapt this approach to suit a number of different enquiries into learner interests and needs. The overall aim is to look at the same question from two polarised perspectives. By looking at the 'best' and the 'worst' scenarios it may be possible to see what connects them, what they have in common, so that you can unpick what needs sit beneath learners' wishes.

By focusing on the 'worst' you may also identify things that you can 'stop' doing or adapt to improve your curriculum without necessarily adding anything new.

This tool has been used extensively across education including Scotland's Creative Learning Networks, the national Review of Inspection Processes and as part of the Imagine If... approach.

Polarised Thinking

What might the WORST school experience look like?		What might the BEST school experience look like?

How to use this tool:

1. Adapt the questions to suit your own context and learners. You might ask about the 'worst' and 'best' of any form of learning experience: a school day, a lesson, a CLD workshop, an outdoor walk, a morning break, the journey home, anything.
2. Ask the learners individually or in pairs to add **as many** sentences as possible to each question.
3. Once you have the learners' responses you can use the middle box to map where these statements connect or reinforce each other, and begin to draw out any underlying themes.