Young Innovators Panel – Final Report: Appendix



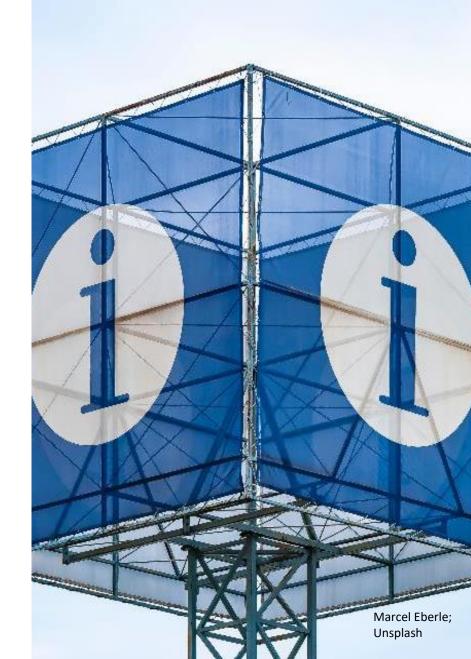
Young Innovators Panel – DAY 1 Materials

This appendix includes the slide show and discussion guide used on DAY 1 of the South Staffs Young Innovators Panel. For full report, please refer to *South Staffs YIP 2023 FINAL REPORT*.

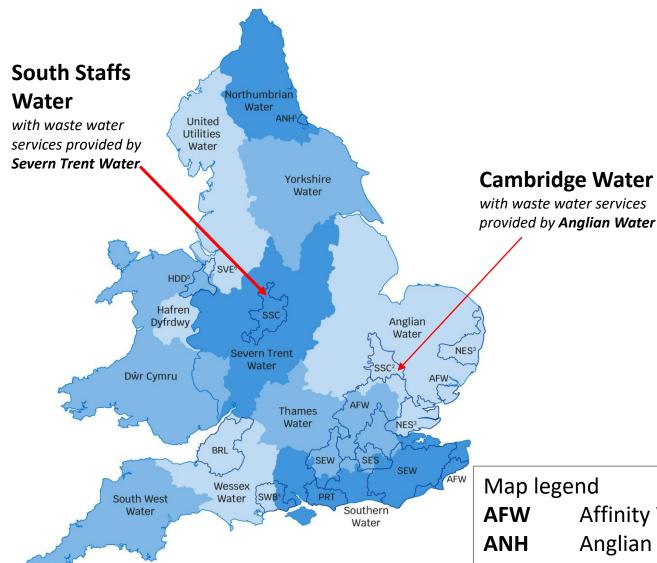


Today's agenda

	What's happening when
09:30	Welcome
09:45	Meet your team
10:00	Discovery session: introduction to the water sector
10:30	Group discussion: life today & environmental views
11:00	Comfort break
11:15	Speed immersion: topics for main challenge
12:30	Lunch
13:15	Speed immersion: topics for main challenge
14:00	Main challenge briefing
14:15	Comfort break
14:30	In teams: main challenge planning
15:45	Next steps
16:00	End of Day 1!



Water companies in England and Wales



- One water company per area household customers don't get to **choose** their company
 - 10 water and sewerage companies (WASCs)
 - 6 water only companies (WOCs)

NES

 South Staffs Water and Cambridge Water (which it merged with in 2013) provide only clean water services.

Affinity Water Anglian Water **Bristol Water** BRL

HDD Hafren Dyfrdwy (Welsh)

Portsmouth Water **PRT**

SES Sutton and East Surrey Water SEW South East Water SSC South Staffs & Cambridge Water **SVE** Severn Trent Water South West Water **SWB**

Northumbrian Water



Cambridge Water

South Staffs
Water is not
responsible for
steps 7 and 8

8. Severn Trent Water puts the clean water back into rivers

1. Heat from the sun evaporates the water



2. The water vapour condenses to form tiny droplets, which makes clouds appear

7. Dirty water is taken to a wastewater treatment works by Severn Trent Water



THE WATER CYCLE



00000

3. Precipitation (rain, snow, hail or sleet) falls from the clouds

6. South Staffs Water pumps treated water to houses and other properties, e.g.

factories, farms, offices

4. Water is collected and stored in reservoirs, or filters naturally under the ground into aquifers.

South Staffs Water ther pump it to treatment works

ories, farms, offices

Securing your water future

5. South Staffs Water reats water at their water

treatment works

Here's an overview of what South Staffs Water do every day

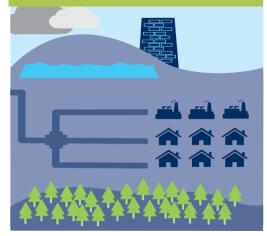
Collect and treat water



25 underground sources 2 surface water reservoirs 40 water treatment works

1.3 million people living in just under 556,000 homes and working in over 37,000 business properties

Store and distribute water



Over 30 service reservoirs and water towers to store water locally for supply

113 pumping stations which send water through 6,200km of pipes

Customer services, billing and support for those who need extra help

Take meter readings: 45% of domestic properties have a water meter. The figure is over 90% for business properties in both regions

Customer service: helping customers in person, by phone or through digital channels - e.g. e-mail

Sending bills: by email, through an app or by post

Providing extra support for customers struggling to pay their bills – e.g. discounted bills or payment plans

There are currently over 48,700 household receiving discounted bills Providing support for customers who need extra assistance because of medical, learning, physical disabilities.

The companies manages a Priority Services Register which currently has more than 57,600 customers registered for support

One thing South Staffs Water and Cambridge Water don't do is take away the wastewater which has been used in homes and businesses across the regions they supply. That is the responsibility of Severn Trent Water in the South Staffs region.



The amount of water supplied to the South Staffs region per day is the same as 1.67 million full baths

About South Staffs Water

- Serves 1.3 million people across 1,500 km²
- Supply approx. 556,000 homes and almost 35,000 business properties
- Supply 305 million litres water per day
- Drinking water comes from 2 surface water sources (River Severn and Blithfield reservoir, pictured below) and 20 underground water sources









South Staffs Water: key stats



- South Staffs Water use 6,200km of pipes to get water to their customers that's the Equivalent of Birmingham to Boston (USA)
- 45% of South Staffs Water domestic customers have a water meter installed, which means that they pay for how much water they use.
- **Between 2% and 5%** of the money from customers' bills is paid to company shareholders (investors) each year.



South Staffs Water employ approximately 380 staff in Walsall





The average water bill in England and Wales and what's included

AVERAGE WATER BILL

£215

What's Included

- Maintaining the network of reservoirs, treatment works, pumping stations and pipes
- Gathering and collecting the water from rivers and reservoirs or pumping it from underground rocks
- · Storing the water ready to be treated
- Treating, cleaning and distributing water to properties



Typical bill in South
Staffs Water supply
area 2023/24

South Staffs Water

£173 a year or 47p a day



That's £42 cheaper per year than the typical bill for England and Wales





Source: Water UK; England and Wales, forecast average bill for Apr 2023 – Mar 2024



Water companies are heavily regulated. Various bodies monitor their performance against legal requirements and commitments to customers/the environment



Environment Agency

Regulates environmental impact of water industry



Drinking Water Inspectorate

Ensures water is clean and healthy to drink



Consumer Council for Water

Represents customer interests



Office of Water Services

Reviews company performance and sets bills





How water companies are monitored

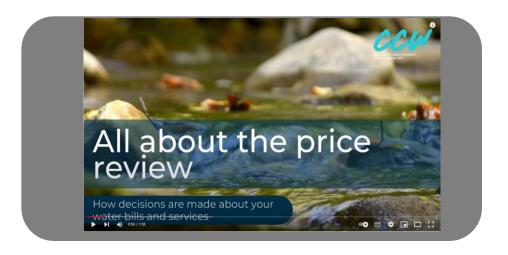
Ofwat

Business plan

- Every five years, water companies develop a
 'business plan' that sets out how they want to
 develop their services, and the proposed cost
 to customers.
- As customers are not able to choose their water company, water companies must give them a say about what they want from their services and the price they pay.
- Water companies also develop plans for the longer term (long-term delivery strategy).

PR24

 The business plan and prices are then checked and finalised by Ofwat in a process known as the Price Review.





South Staffs Waters' long-term planning has to account for challenges in the future

Increased demand for water due to:

- population of the region being forecast to increase by 18% by 2045
- property development **125,000** new homes are expected to be built by 2045.
- Changing rainfall patterns leading to higher risk of flooding or longer periods of drought.
 - climate change means that we are forecast to have drier summers with **50%** less rainfall and wetter winters with **30%** more rainfall by 2080s.

Leakage from pipes

 currently around 20% of treated water is lost to leaks each day, which is about the same as the national average.

Carbon emissions

these must be reduced to combat the impacts of global warming

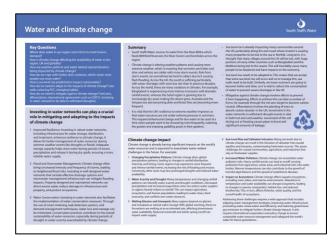
Protecting the water environment

- taking water from rivers and underground sources for human needs could lead to a deterioration of the environment.
- currently, only 14% of rivers in England are classed by the Environment Agency as being in ecologically good condition - i.e. healthy and able to fully recover if damaged.

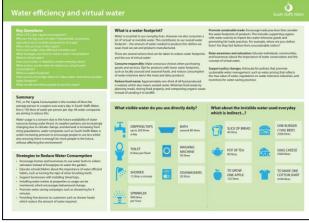
All whilst balancing the need to offer affordable water bills and ensuring the long-term resilience of water services to meet these challenges



You will receive handouts with key information on your topic – so don't worry if you can't note down everything you hear













Main challenge briefing

Intro to the main challenge: teaching programme

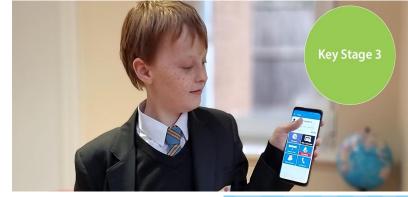
- South Staffs Water delivers an education programme to mainly primary schools within their area of supply.
- Sessions link to areas of the National Curriculum, like Science, Literacy and Geography.

Why are water education programmes important?

- Sessions encourage students to use water more carefully (who can then educate their parents too) and reduce overall usage of water.
- Reducing water use is key to ensuring that there is an adequate supply for everyone in the future, in light of increasing demand and reducing supply.

How can the Young Innovators' Panel help?

- South Staffs Water is expanding its education programme to cover Key Stage Three (11-14 year olds).
- As part of this process, they need to develop four, hour-long workshops for students, to be delivered by Emily Eden (education co-ordinator).
- South Staffs Water would like you to design a key teaching resource for the workshops, to make them as effective, fun and engaging as possible.







This is Emily! She can answer any teaching related questions you have about the main challenge





The main challenge

- Your team has been allocated one of the teaching topics
- Design a teaching resource in the form of a game-style activity, based on the topic aimed at 11 – 14-year-olds.
- The teaching resource needs to be informative, fun, and should take between 15 and 30 minutes to complete.
- Think back to when you were that age, what type of teaching engaged you the most?





What makes a good teaching resource?

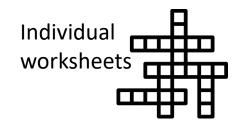


- Communicates the key information
- Is fun and interactive
- Helps all students remember the information in little chunks
- Encourages all students to take on a challenge
- Suits 11 14-year-olds think of colours and making users feel like they are winning at something!

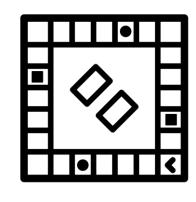
- Is too wordy
- Doesn't promote conversation or thought around the topic
- Is tricky to follow
- Isn't fun!
- Will work for some students, but not others

What does a teaching resource look like?

Teaching resources need to communicate the key information, in a way that is interesting, engaging and helps the students remember the information or how to do something!

















Main challenge: the presentation

- In teams, prepare a 10-minute team presentation on your teaching resource idea
- Come ready to present it on 19th
 July
- The judging panel will be made up of senior members of South Staffs Water and Key Stage 3 students who will test your ideas and pick a winner.

Presentations need to:

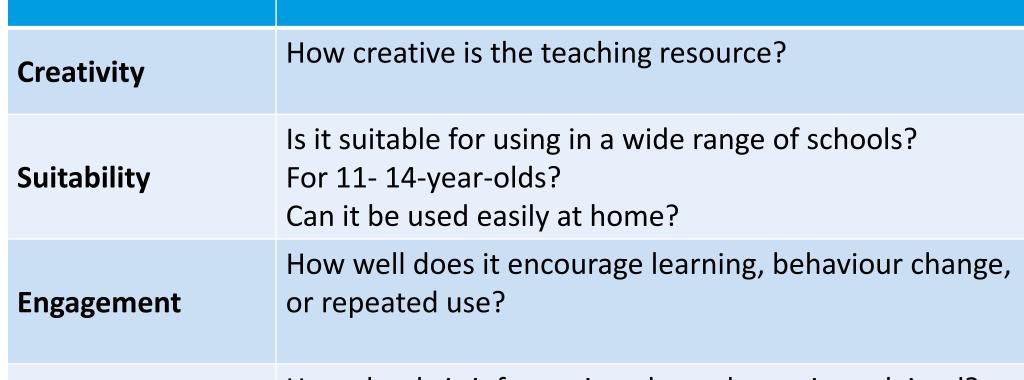
Explain the idea/premise of the teaching resource and show how it works. If you are able to make a version for us to play/have a go with, even better!

Explain what students will learn from the app or game (the learning outcomes)

Show how South Staffs Water will know if the app or game is successful – how will you measure this?

How will the competition be judged?

Î)
Ī	Ī





How clearly is information about the topic explained?

Is it easy to understand how to use it?

Team topic allocation

GLOBAL WATER INSECURITY WATER
EFFICIENCY &
VIRTUAL
WATER

WATER
POLLUTION
AND QUALITY

WATER & CLIMATE CHANGE



South Staffs Water Young Innovators' Panel Discussion guide & logistics for table facilitators – DAY 1

Length	
Format	In-person engagement event
	28 Young People 16 – 18-year-olds
Logistics	Arrive at 08:00 for set-up Pack-up 16:00 – 16:30 Conference suite, South Staffordshire Water PLC, Green Lane, Walsall, WS2 7PD
Objectives	 To introduce participants to the water sector
	 To gain insight into YP's general attitudes and environmental beliefs and attitudes
	 To prepare participants to learn about the 4 teaching topics and be able to work on the teaching resource output as teams

Time	Format	Session	Duration
08:00		Set-up	
09:00		Registration (refreshments, ice breaker if time allows)	
09:30	Plenary	Welcome	
09:45	Plenary	Ice-breaker & meet your group	
10:00	Plenary	Discovery session: introduction to water industry	
10:30	Groups	Current and environmental attitudes discussion	
11:00		Comfort break	
11:15	Plenary	Speed immersion into teaching topics	
12:30		Lunch	
13:15	Plenary	Speed immersion into teaching topics	
14:00	Plenary	Task briefing	
14:15		Comfort break	
14.30	Groups	Task planning in teams	
15:45	Plenary	Next steps, feedback & close	

Duration	Activity	Materials
08:00	Set-up checklist:	



	 Set-up 4 tables, with enough chairs for 6 participants + 1 BM (+ chairs nearby for SS staff to pull up if they want to observe). Tables should have pens for students to use. Place e.g. team colour card on table, so students know where to sit. Set-up welcome desk, laptop with sign in list, name badges, photo/comms consent forms Help SS put up signage to the event, wifi login and ice breakers on tables. Allocate one facilitator to each screen/stand that will be used in the day. Connect laptops to screens, and check digital stim working for discovery carousel & teaching topic immersion (or set-up printed posters for the discovery carousel) Check catering OK for the day Check where toilets etc. are to inform participants 	
09:00	Registration & refreshments	
	 1 – 2 BM staff to manage sign-in, name badge indicating team/table, consent forms Indicate where toilets are and refreshments Others to float and greet 09:20/25 – start encouraging students to sit down and say hi to each other at tables. 1 BM staff per table. Ice breaker printed out on tables to complete if time: 'Pick one of these dogs that you think represents you, your personality and values. Explain to your team, what it is about your chosen dog that represents you' 	
09:30	Welcome	Slide deck
	Plenary: Lead facilitator to cover welcome information, process, objectives - handover to table facilitators for intro Natalie to give intro from South Staffs side	
09:45	Ice-breaker & meet your team	
	Hi, I'm [name] from Blue Marble Research, here today to support your discussion and make sure we capture your views.	
	All of you at this table will be in a team together for the young innovators teaching resource competition.	



To get started, let all take a turn to say our name, which school/college we're from, who lives with you at home, and something about our interests / passions. Which dog did you pick as representing you best in the ice breaker activity?

What do you think your team name should be?

10:00

Discovery session: introduction to water industry EF to explain Slido

Slido: Please scan the QR code on the screen with your phones to access Slido – this is a platform we will be using to gather your feedback throughout the day. Let's start to think about the water industry:

What words come to mind when you think about water companies in the UK?

What words come to mind when you think about South Staffs Water?

Then, lead facilitator to introduce activity: in pairs/ threes they should tour the stations with digital or poster information to find out more about the water industry. They have a quiz sheet to fill in as they do this. They have 10 ish mins to find out as much as they can! [this should be a high energy, speed about activity]

Table facilitators to hand out 'quiz sheets' to students in pairs/threes, and encourage them to start moving.

Table facilitators to hover near stands to support anyone looking lost, and ensure digital / poster stim is working.

10:15 – LF to ask students to start returning to tables.

10:20 – LF to present key information on slides – animations set-up so they can ask the students for the response to the quiz questions throughout the presentation, and then show the answer.

[if not disturbing, table facilitators to switch off / remove discovery stim then sit at tables]
LF to repeat Slido polls at the end of the activity

10:30

Groups: Current and environmental attitudes discussion

[At the table] We're now going to ask for your opinions as young people about some current topics and the environment.

Discussion guide + pro-forma to capture key points

Printed posters.

Slide deck for answers.



Please do take turns to speak, but you don't have to wait for me to point at you. However, I may interrupt to make sure everyone gets a turn, and to move us through the discussion questions. I'll be writing down a few notes as we go, so please don't speak too quickly!

We are also recording the discussion to help our analysis and reporting. The recording will remain confidential and deleted after the project has closed – their names won't be included in the report. Themes of the discussion will be shared with South Staffs Water but comments will not be attributed to an individual.

[press record and place audio recorder in middle of table].

 How have the events of the last few years - the pandemic and now the cost-of-living crisis affected your current and future plans?

Probe

- Are you/your household impacted by the cost-ofliving crisis, and how do you feel about it?
- Is this affecting how you use utilities like energy and water at home?
 - If so, are you driving this or your parents/ family?
- [if it doesn't come up prompt] Do they feel the COVID pandemic is no longer an issue affecting them? What has changed for you/your family?
- What do you think about water companies what 3 words come to mind when you think of a water company? [elicit spontaneous response]

Probe

- Have you seen anything in the media about water companies recently? Has that affected what you think about water companies?
- What do you think water companies should be doing as responsible actors within society?
- 3. How concerned are you as young people, if at all about climate change?

Probe

 If you are concerned - are you encouraging other people in your household to change their



11:00 encourage participants to take comfort / refreshment break and be back at tables at 11:15. 11:00 Comfort break Facilitators to switch stim at stations from discovery info, to teaching topic stim / support SS staff to be ready at the stations Speed immersion: teaching topics [plenary] Lead facilitator to introduce activity [5mins]: we are now going to find out useful information about the topics that you'll be doing the main challenge on. Table teams should explore each of the 4 stations in turn, listening to the information and asking questions. Please visit 2 stations before lunch and we'll do 2 after. For the 'main challenge' we will be giving you 1 of the 4 topics to base it on – so find out as much information as you can! Don't worry we will be giving out summary handouts of the information after. [Table facilitators to accompany team to a station, and encourage them to listen and ask the SS staff member questions about the subject. Make sure they swap stations after 15 ish mins. At 12:30 tell them they have 45mins for lunch].		 habits? What sort of things are you / family doing differently? Does this change how you use water at home? Or does it not? Do you see climate change as an issue water companies should be leading on, even if this means paying more in water bills in future to invest in initiatives that will protect the environment? Do you have any views on how water companies should be forming relationships with to help raise awareness and spread important messages – e.g. influencers? Have you heard anything about managing water supplies and climate change/ If so, what was it and how important an issue do you think it is? 	
Facilitators to switch stim at stations from discovery info, to teaching topic stim / support SS staff to be ready at the stations Speed immersion: teaching topics [plenary] Lead facilitator to introduce activity [5mins]: we are now going to find out useful information about the topics that you'll be doing the main challenge on. Table teams should explore each of the 4 stations in turn, listening to the information and asking questions. Please visit 2 stations before lunch and we'll do 2 after. For the 'main challenge' we will be giving you 1 of the 4 topics to base it on – so find out as much information as you can! Don't worry we will be giving out summary handouts of the information after. [Table facilitators to accompany team to a station, and encourage them to listen and ask the SS staff member questions about the subject. Make sure they swap stations after 15 ish mins. At 12:30 tell them they have 45mins for lunch].		11:00 encourage participants to take comfort /	
to teaching topic stim / support SS staff to be ready at the stations Speed immersion: teaching topics [plenary] Lead facilitator to introduce activity [5mins]: we are now going to find out useful information about the topics that you'll be doing the main challenge on. Table teams should explore each of the 4 stations in turn, listening to the information and asking questions. Please visit 2 stations before lunch and we'll do 2 after. For the 'main challenge' we will be giving you 1 of the 4 topics to base it on – so find out as much information as you can! Don't worry we will be giving out summary handouts of the information after. [Table facilitators to accompany team to a station, and encourage them to listen and ask the SS staff member questions about the subject. Make sure they swap stations after 15 ish mins. At 12:30 tell them they have 45mins for lunch].	11:00		
[plenary] Lead facilitator to introduce activity [5mins]: we are now going to find out useful information about the topics that you'll be doing the main challenge on. Table teams should explore each of the 4 stations in turn, listening to the information and asking questions. Please visit 2 stations before lunch and we'll do 2 after. For the 'main challenge' we will be giving you 1 of the 4 topics to base it on – so find out as much information as you can! Don't worry we will be giving out summary handouts of the information after. [Table facilitators to accompany team to a station, and encourage them to listen and ask the SS staff member questions about the subject. Make sure they swap stations after 15 ish mins. At 12:30 tell them they have 45mins for lunch].		to teaching topic stim / support SS staff to be ready at	
Lead facilitator to introduce activity [5mins]: we are now going to find out useful information about the topics that you'll be doing the main challenge on. Table teams should explore each of the 4 stations in turn, listening to the information and asking questions. Please visit 2 stations before lunch and we'll do 2 after. For the 'main challenge' we will be giving you 1 of the 4 topics to base it on – so find out as much information as you can! Don't worry we will be giving out summary handouts of the information after. [Table facilitators to accompany team to a station, and encourage them to listen and ask the SS staff member questions about the subject. Make sure they swap stations after 15 ish mins. At 12:30 tell them they have 45mins for lunch].	11:15	Speed immersion: teaching topics	Slide deck
going to find out useful information about the topics that you'll be doing the main challenge on. Table teams should explore each of the 4 stations in turn, listening to the information and asking questions. Please visit 2 stations before lunch and we'll do 2 after. For the 'main challenge' we will be giving you 1 of the 4 topics to base it on – so find out as much information as you can! Don't worry we will be giving out summary handouts of the information after. [Table facilitators to accompany team to a station, and encourage them to listen and ask the SS staff member questions about the subject. Make sure they swap stations after 15 ish mins. At 12:30 tell them they have 45mins for lunch].		[plenary]	
For the 'main challenge' we will be giving you 1 of the 4 topics to base it on – so find out as much information as you can! Don't worry we will be giving out summary handouts of the information after. [Table facilitators to accompany team to a station, and encourage them to listen and ask the SS staff member questions about the subject. Make sure they swap stations after 15 ish mins. At 12:30 tell them they have 45mins for lunch].		going to find out useful information about the topics that you'll be doing the main challenge on. Table teams should explore each of the 4 stations in turn, listening to	
Table facilitators to accompany team to a station, and encourage them to listen and ask the SS staff member questions about the subject. Make sure they swap stations after 15 ish mins. At 12:30 tell them they have 45mins for lunch].		For the 'main challenge' we will be giving you 1 of the 4 topics to base it on – so find out as much information as	
encourage them to listen and ask the SS staff member questions about the subject. Make sure they swap stations after 15 ish mins. At 12:30 tell them they have 45mins for lunch].		,	
12:30 Lunch		encourage them to listen and ask the SS staff member questions about the subject. Make sure they swap stations after 15 ish mins. At 12:30 tell them they have	
	12:30	Lunch	



	13:10 encourage participants back to main space, and that we will start again at 13:15	
13:15	Speed immersion: teaching topics Table facilitators to accompany team to a station, and encourage them to listen and ask the SS staff member questions about the subject. Make sure they swap stations after 15 – 20 mins. 13:55 – encourage to return to tables	Slide deck
14:00	Teaching task competition briefing Emily Eden to cover: this is the purpose, what makes a great teaching output etc. Lead facilitator to re-cap the task and competition / criteria, allocate teams to topic.	Slides
14:15	Comfort break	Handouts
14.30	Audience Q&A Session (Slido): If you have any questions about what you're being asked to do for the teaching competition, please type them in now (answers are anonymous). If you see a question on the board that you would like to be answered, press the thumbs up emoji to upvote it – LF and EE to answer Table facilitator to give topic handout relevant to the topic allocated to the team. Also handout: research resource tips, task briefing summary incl. teaching output tips, plus prompts for planning. Check that they are happy to go ahead, and encourage them to take over the conversation, rather than you facilitating. South Staffs staff to float and provide additional topic guidance / answer questions if needed.	
15:45	Close Lead facilitator to cover: next steps, thanks, feedback questions and close.	Slide deck Feedback forms or
	•	STIDO \$

ST Classification: restricted



Encourage students to carry out feedback form on SLIDO	