

## **STEM Directories Teacher Questionnaire**

#### Section 1. Introduction

Thank you for taking part in our survey. This questionnaire asks you about your experiences of Engagement and Enrichment (E&E) activities. E&E activities are many and varied. They include things like visiting lecturers, national competitions, or downloadable lesson plans; anything that adds to your current teaching.

At this stage we are only looking at E&E provision for KS3 and KS4 science, technology, engineering and maths (STEM) teaching, so please only complete the questionnaire if you teach these subject areas at this Key Stage.

The questionnaire should take approximately 20 minutes to complete. Most answers are multiple choice, but there are spaces for you to tell us about your experiences in your own words.

The information you provide will only be used for this research and all data will be anonymous and stored securely. The information will be combined with other participants' opinions and desk-based research to form the basis for a report which will be used by the STEM Directories. This report may also be publicly available.

#### Section 2. About you

 Which Local Authority area do you teach in? (free text)

2. What Key Stage(s) do you teach?

KS3

KS4

3. How many years have you been teaching?

0-5

6-10

11-15

15+

4. Which of these subjects/KS do you teach regularly (please select no more than 3 answers)?

KS3 Applied science KS4 Applied science

KS3 Biology KS4 Biology KS4 Chemistry KS4 Chemistry

KS3 Design and Technology KS4 Design and Technology

KS3 Engineering KS4 Engineering

KS3 ICT KS4 ICT

KS3 Manufacturing
KS3 Mathematics
KS4 Mathematics
KS4 Physics
KS4 Physics
KS4 Science
KS4 Statistics
KS4 Statistics
KS4 Statistics

5. Which of these subjects/KS do you spend the most time teaching (please select one only)?

KS3 Applied science KS4 Applied science

KS3 Biology
KS3 Chemistry
KS4 Biology
KS4 Chemistry

KS3 Design and Technology KS4 Design and Technology

KS3 Engineering KS4 Engineering

KS3 ICT KS4 ICT

KS3 Manufacturing
KS3 Mathematics
KS4 Mathematics
KS4 Physics
KS4 Physics
KS4 Science
KS4 Statistics
KS4 Statistics
KS4 Statistics

#### Section 3. How you currently use E&E activities

6. How often, on average, do you use E&E activities?

Once a week

Once a term

Once a year

Every other year

Never

Other (please specify)

7. For the subject and KS you teach the most (identified in question 5) why do you include E&E activities in your teaching?

To have a change of teacher

To have a change of environment

E&E is readily available for this subject

To access specialist equipment

To access specialist expertise

To get experience of a workplace environment

To consider wider issues (eg careers, attitudes and values) around STEM subjects

To introduce a topic

To summarise / conclude a topic

8. When you are looking for E&E activities what do you take into consideration to help you decide which to use?

	High priority	Low priority	No consideration	N/A
Content: attitude and values				
Content: skills				
Content: subject				
Format				
Price				
Recommendation by a colleague				
Reputation of the provider				
Where the provider is based				
Other (please specify)				

## Section 4. How you currently use E&E activities (page 2)

9. Do you return to the same provider(s) repeatedly?

Yes

No (please skip the next question and go to question 11)

10. Why do you return to the same provider(s) repeatedly?

Ability to engage the students

Content: subject Content: skills

Content: attitude and values

Format Price

Reliability of the provider Where the provider is based

Other (please specify)

11. When you search for E&E activities do you use terms from the...

National Curriculum (eg chemical and material behaviour)

Personal, learning and thinking skills

Schemes of work

Specific activity (eg solar powered buggies)

Specific provider

Subject area (eg physics)

Subject specific skills (eg PCR)

12. How do you look for an E&E provider?

Approach a local industry Approach a local university Go to FutureMorph Go to Learning Grid Go to local STEMNet

Go to STEM Directories

Go to subject-specific organization eg Institute of Physics Internet search for subject / format / skills / KS

Repeat providers used before

Talk to a colleague in school

Use an online forum to get peer recommendations

Other (please specify)

13. When are you most likely to look for E&E resources?

At the beginning of the year
At the beginning of term
The week before I teach the subject
I don't look for them
I use the same resources each year
Other (please specify)

## Section 5. Your perceptions of E&E provision

14. For the subject you mostly teach (identified in question 5) please rate the quality of the resources for teachers to use.

	Very	Good	OK	Poor	Very	Don't use
	good				poor	
Continuing professional						
development and training						
Websites and downloads						
Teaching packs, resources						
and lesson plans						
Interactive whiteboard						
resources						

15. For the subject you mostly teach (identified in question 5) please rate the quality of the resources that students can use.

	Very	Good	OK	Poor	Very	Don't use
	good				poor	
Websites and downloads						
Careers advice and mentoring						
Work experience and						
placements						

16. For the subject you mostly teach (identified in question 5) please rate the quality of the Out-of-School events that are available.

	Very	Good	OK	Poor	Very	Don't use
	good				poor	
Trips and visits						
Partnerships with universities						
and industry						
Summer schools, residentials						
and camps						

17. For the subject you mostly teach (identified in question 5) please rate the quality of the In-School events that are available.

	Very	Good	OK	Poor	Very	Don't use
	good				poor	
Lectures and talks						
Debates and discussions						
Science shows, interactives						
and demonstrations						
After school clubs and science						
clubs						
Competitions, quizzes and						
challenges						
STEM Ambassadors						

## Section 6. Your perceptions of E&E provision

18. If you have not used E&E provision, please tell us why.

I wasn't aware of them

We have a diverse range of resources in school

The activities are not relevant for my students

There aren't activities that support the subjects I teach

Price

Disrupts the teaching timetable

Lack of time to maximise the benefit from the activities

Activities I want to use are not available when I need them

## 19. Which subject areas which you would like to see more E&E activities available for?

	Like more E&E	Plenty of this	Don't need	Don't teach
	for this	is available	E&E for this	this
Applied science				
Biology				
Chemistry				
Design and Technology				
Engineering				
ICT				
Manufacturing				
Mathematics				
Physics				
Science				
Statistics				

## 20. Which skills would you like to see more E&E activities for?

	Like more E&E for this	Plenty of this is available	Don't need E&E for this	Don't teach this
Career development (eg CV writing)				
Confidence building				
Creativity				
Group work and collaboration				
Laboratory techniques (eg aseptic technique)				
Problem solving				
Scientific enquiry / How science works				
Verbal communication skills				
Written communication skills				

## 21. Have you ever decided not to use an E&E activity because of the:

Content: attitude and values

Content: skills Content: subject

Format Price

Recommendation by a colleague Reputation of the provider

Where the provider is based

## <u>Section 7. Your perceptions of E&E provision</u>

22. For the subject you mostly teach (identified in question 5) please rate the number of the resources for teachers to use.

	Very	Good	OK	Poor	Very	Don't use
	good				poor	
Continuing professional						
development and training						
Websites and downloads						
Teaching packs, resources						
and lesson plans						
Interactive whiteboard						
resources						

23. For the subject you mostly teach (identified in question 5) please rate the number of resources that students can use.

	Very	Good	OK	Poor	Very	Don't use
	good				poor	
Websites and downloads						
Careers advice and mentoring						
Work experience and						
placements						

24. For the subject you mostly teach (identified in question 5) please rate the number of Out-of-School events that are available.

	Very	Good	OK	Poor	Very	Don't use
	good				poor	
Trips and visits						
Partnerships with universities and industry						
Summer schools, residentials and camps						

25. For the subject you mostly teach (identified in question 5) please rate the number of In-School events that are available.

	Very	Good	OK	Poor	Very	Don't use
	good				poor	
Lectures and talks						
Debates and discussions						
Science shows, interactives						
and demonstrations						
After school clubs and science						
clubs						
Competitions, quizzes and						
challenges						
STEM Ambassadors						

# Section 8. Your views on E&E provision

26. For the area and Key Stage you mostly teach (as indicated in question 5) do you think there is adequate provision of E&E?
Yes
No
Please explain your answer
27. Have you ever looked for an E&E activity and not found anything relevant? Please let us know what you were looking for.
28. The next section is about your experiences of the STEM Directory. Have you used the STEM Directory?
Yes
No
Section 9. Your views of the STEM Directories
29. How many times have you used the STEM Directories?
1
2
3
3+
Never used (please click NEXT at the bottom of the page)
30. When using the STEM Directory, what are you most likely to be looking for?
Specific activity or provider
Activity in a certain place
Activity which covered skills
Activity for my KS Activity for Gifted and Talented
Activity for SEN
Activity just for girls or boys
Just browsing
Specific aspect of the curriculum (please specify)
31. Last time you used the STEM Directory, did you find what you looking for?
Yes
Yes, too much to choose from No
No – but found something else useful instead
Don't know

32. Which aspects of the STEM Directories do you find useful?

	Useful	Neutral	Not Useful	Don't Know
Everything being in one place				
Search engine provides relevant				
information				
The design and layout				
That activities have been				
evaluated				
The range of choice for my KS				
The range of choice for the				
subjects I teach				

- 33. Is there anything else you would like to see in the STEM Directory?
- 34. In comparison to other sources for E&E activities, how would you rate the following?

	About the same as other sources	Better than other	Worse than other
	other sources	sources	sources
Number of resources			
Variety of resources			
Innovative resources			
Relevant search results			
Browseability			
Geographical spread of			
resources/activities			

## Section 10. End of survey

Thank you very much for completing this questionnaire. If you have any comments about the survey or the research please get in touch via science.communication@uwe.ac.uk.

35. We are looking for teachers who would be available to be interviewed for another aspect of this research project. If you would like to be interviewed, or know a colleague who would be available, please provide your contact details below. These will not be used other than to contact you to arrange the interview.

Alternatively, you can email us at the email address above.