



Evaluation of Science in Society initiatives: A survey of STEM teachers for the Office of Science and Innovation, Department of Trade and Industry

Why are we doing the survey?

This survey has been commissioned by the Office of Science and Innovation at the Department of Trade and Industry in collaboration with the Economic and Social Research Council as part of an evaluation of the impact of Science in Society initiatives aimed at enhancing the delivery of Science, Technology, Engineering and Mathematics (STEM) in schools. The evaluation is designed to establish if these initiatives are working, and how they can be improved, and we would very much welcome your views on this.

Science in Society initiatives are aimed at creating a society that is confident about the development, regulation and use of science, and a science workforce that is representative of the society it serves. They span a wide range of activities including large scale public engagement events to activities in the class room. In this evaluation we are focussing on initiatives that are targeted at schools and their students (as opposed to members of the general public). These initiatives are intended to engender a positive attitude towards STEM, increase knowledge and understanding of STEM, and raise awareness of possible STEM careers.

This survey is designed to be answered by teachers of Science, Mathematics, and Design & Technology, and any other subject which may fall within the remit of STEM.

We are interested in your perceptions, understandings, experience and expertise and would encourage you to answer all the survey questions which should take no more than 15 minutes. The results of the survey will be combined with findings from interviews and case study work to provide the OSI with an evaluation report at the end of the year.

Confidentiality:

The Tavistock Institute is an independent research and consultancy organisation. All data collected will be treated in strictest confidence. The Tavistock Institute team will not reveal individual names of teachers or schools to *any* other party. However, for internal data collection and analysis purposes we would be grateful if you could tell us who you are and what school you represent.

Completing and returning:

Please can you return the survey electronically to Scienceinsociety@tavinstitute.org or print and post the completed electronic survey to Fay Sullivan at the Tavistock Institute, Tavistock House, 30, Tabernacle Street, London, EC2A 4UE by 15th January 2007.

We would like to thank you in advance for your cooperation and time.

Joe Cullen, Fay Sullivan, and Kerstin Junge
Science in Society evaluation team, Tavistock Institute

A. About you

1. What is your name?
2. What is your position at your school?
3. What is the subject specialism of your teaching qualification?
4. What subjects do you teach in your current position?
5. How long have you been a qualified teacher?
6. Are you a member of a subject association?

Please put a cross in the appropriate box:

- | | |
|--|---|
| The Association for Science Education (ASE) | <input type="checkbox"/> |
| The Design and Technology Association (DATA) | <input type="checkbox"/> |
| The Association of Teachers of Mathematics (ATM) | <input type="checkbox"/> |
| The Mathematical Association (MA) | <input type="checkbox"/> |
| Other | <input type="checkbox"/> <i>please specify:</i> |
| No, I am not a member of a subject association | <input type="checkbox"/> |

B. About your school

1. What is the name of your school?
2. What is your school's post code?
3. Approximately how many pupils are there in the whole of your school?
4. Does your school have a sixth form?
yes no
5. If your school has specialist status, please tell us what its specialism is here
6. Is your school mixed gender or single sex?
mixed single sex girls single sex boys
7. Approximately what proportion of pupils are from Black and Minority Ethnic backgrounds?
8. Approximately what proportion of pupils are eligible for free school meals?
9. What was the classification awarded to your school in its last Ofsted report?

C. Use of STEM resources (materials)

By STEM resources (materials) we mean specialist books, leaflets, CD-Roms, website material, and any other teaching materials which are used in addition to the core curriculum materials.

1. Have you used any STEM resources (materials) in the last 2 years?
Yes no (if no, go to section D)

2. How much of a contribution have STEM resources (materials) made to your teaching?

Very considerable contribution	Considerable contribution	Some contribution	Very little contribution	No contribution
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Please name up to 3 organisations that have provided you with STEM resources or information about where to access STEM resources

Organisation 1
 Organisation 2
 Organisation 3

4. Which organisation do you feel has provided you with the STEM resources or information about where to access STEM resources that have most effectively contributed to your teaching?

D. Use of STEM support (non-material resources)

By STEM support we mean support for teachers that is not in the form of teaching materials. Examples include: STEM-related CPD activities, short courses, away days, and on-line support.

1. Have you accessed any STEM support in the last 2 years?

yes no (if no, go to section E)

2. What form did this support take?

Please state nature of support activity or activities (e.g. short course, mentoring etc) and title/s, if known, for up to 3 activities

Nature of support activity 1	Title of support activity 1
Nature of support activity 2	Title of support activity 2
Nature of support activity 3	Title of support activity 3

3. How much of a contribution has STEM support made to your teaching?

very considerable contribution	considerable contribution	some contribution	very little contribution	no contribution
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Please name up to 3 organisations that have provided you with STEM support

Organisation 1
 Organisation 2
 Organisation 3

5. Which organisation do you feel has provided you with the support that has most effectively contributed to your teaching?

E. Participation in STEM activities

We are interested in all STEM activities that you have developed or delivered in partnership with external organisations which enhance delivery of the STEM curriculum. Examples of such activity might include:

- A Science Week
- A Young Engineers for Britain competition
- A trip to a car manufacturer
- Speakers from industry talking about STEM in an applied context

1. In the last 2 years has your *department* taken part in any of these activities?

Yes No (if no, go to section F) don't know

2. How many activities has *your department* taken part in over the last 2 years?

1 2 to 5 more than 5

3. Which type of STEM activities has your department participated in?

Please put a cross in the appropriate box or boxes

A project or activity within school lesson and curriculum time
An extra-curricular activity or out of school club
A competition award or celebration event

4. Have any *other* departments in your school taken part in any STEM activities?

Please put a cross in the appropriate box or boxes

Yes, the science department has
Yes, the maths department has
Yes, the design and technology department has
Yes, another department has *which department:*
No, no other department has
Don't know

5. How important do you think this type of activity is to delivering STEM subjects in a way that is informative and engaging?

Very important Important Not very important Not important at all

6. Please name up to 3 organisations that have provided you with STEM activities

Organisation 1
Organisation 2
Organisation 3

7. Which organisation do you feel has provided you with the most effective STEM activities?

F. Impact of STEM activities

Please tell us the extent to which you agree with the following statements:

Please put a cross in the appropriate box (one per statement)

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1. <i>'STEM activities enhance teachers' abilities to deliver the National Curriculum'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. <i>'STEM activities enhance teachers' abilities to teach STEM subjects in way that engages with students'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. <i>'STEM activities have a positive impact on students' (academic) knowledge of STEM subjects'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. <i>'STEM activities increase the likelihood that students will go on to study STEM subjects at a higher level'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. <i>'STEM activities have a positive impact on students' knowledge of the role STEM plays in today's society'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. <i>'STEM activities help to encourage a positive attitude towards STEM in students'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. <i>'STEM activities help to equip students to participate fully in public debate about the role of science in society'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. <i>'STEM activities raise the level of awareness that students have of STEM careers opportunities'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

G. Involvement in STEM activities

Please tell us the extent to which you agree with the following statements:

Please put a cross in the appropriate box (one per statement)

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1. <i>'It is difficult to find enough time for STEM activities'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. <i>'STEM activities are generally too expensive for our school to afford them'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. <i>'Our school should give STEM activities and initiatives a higher priority than it currently does'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. <i>'It is difficult to get information about what sorts of STEM activities are available'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. <i>'Our school doesn't get enough external support, for example from local organisations, Higher Education Institutions or parents, to facilitate STEM activities'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. <i>'Our school wanted to run a STEM activity but couldn't find one suitable for our purposes'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. <i>'Our school does not feel that such STEM activities really benefit the students'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. <i>'Our school feels that high quality STEM activities are beneficial, but there aren't enough high quality activities available'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. <i>'There is not enough reliable information provided about which organisations are providing which STEM activities'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. <i>'I would find a 'one-stop-shop' for information about STEM activities useful'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. <i>'There are just too many types of initiatives and activities for schools to get involved in – we can't do all of them'</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

BLANK PAGE

Please do not turn over/ scroll down until you have completed the questions above – ***we do not want the following questions to influence your answers to the questions above.***

H. Contact with SETNET and SETPOINTS

1. SETNET (the Science, Engineering, Technology and Mathematics Network) is an educational charity which aims to develop a nation-wide framework of services providing STEM education support and activities for schools. Have you heard of this organisation?

Yes No

2. SETNET's aims are delivered on a local basis through organisations called SETPOINTS. Have you heard of the term SETPOINT?

Yes No

3. Have you or your departmental colleagues had any contact with your local SETPOINT in the last 2 years? (Please include any written correspondence as well as phone calls or meetings)

Yes, we have contact at least once a fortnight	Yes, we have contact about once a month	Yes, we have contact about once a term	Yes, we have contact about once a year	Yes, we have contact less than once a year	No, we have not had any contact	Don't know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Have you or your departmental colleagues made use of STEM resources (materials) provided by a SETPOINT in the last 2 years?

Yes No (if no go to question H6) Don't know

5. How would you compare the contribution of SETPOINT STEM resources (materials) to your teaching to those produced or provided by other organisations?

SP much higher contribution	SP somewhat higher contribution	Of equal contribution	SP somewhat lower contribution	SP much lower contribution	Don't know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Have you or your departmental colleagues made use of STEM support (non-material resources) provided by a SETPOINT in the last 2 years?

Yes No (if no, go to question H8) Don't know

7. How would you compare the contribution of SETPOINT STEM support (non-material resources) to your teaching to those provided by other organisations?

SP much higher contribution	SP somewhat higher contribution	Of equal contribution	SP somewhat lower contribution	SP much lower contribution	Don't know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Have you or your departmental colleagues been involved in any STEM activities that have been organised or delivered by a SETPOINT in the last 2 years?

Yes No (if no, go to question H11) Don't know

9. How many activities organised or delivered by a SETPOINT has your department been involved in over the past 2 years?

1 2 to 5 more than 5

10. How would you compare the effectiveness of SETPOINT STEM activities to STEM activities organised or delivered by other organisations?

SP much more effective <input type="checkbox"/>	SP somewhat more effective <input type="checkbox"/>	Of equal effectiveness <input type="checkbox"/>	SP somewhat less effectives <input type="checkbox"/>	SP much less effective <input type="checkbox"/>	Don't know <input type="checkbox"/>
---	---	---	--	--	--

11. What would you say is particularly good about the STEM resources, support, and activities provided by SETPOINTS?

12. What needs to be improved?

I. Science and Engineering Ambassadors

1. Science and Engineering Ambassadors, known as SEAs for short, are people with skills and experience in science, technology, engineering or maths who deliver STEM educational activities to schools, under the management of SETPOINTS. Have you heard of SEAs?

yes no

2. Have you had any contact with a SEA in the last 2 years?

yes no *(if no, go to section J)*

3. Have you had a SEA come into your school to give a talk in relation to a STEM activity in the last 2 years?

yes, we have a visit at least once a fortnight <input type="checkbox"/>	yes, we have a visit about once a month <input type="checkbox"/>	yes, we have a visit about once a term <input type="checkbox"/>	yes, we have a visit about once a year <input type="checkbox"/>	no, we have not had a visit in the last 2 years <input type="checkbox"/>	<i>(if no, go to section J)</i>
---	--	--	--	--	-------------------------------------

4. How effective do you think the SEAs were in delivering they activity they had undertaken to do?

very effective <input type="checkbox"/>	quite effective <input type="checkbox"/>	not very effective <input type="checkbox"/>	not at all effective <input type="checkbox"/>
--	---	--	---

J. And finally...

1. If you have any other comments you wish to make, please make them here:

2. We may want to talk to you about STEM educational activities again at some time in the future. Would you be willing for us to contact you again about this?

yes no

Thank you!