1 APPENDICES

Appendix 1: Annotated Part 1 questionnaire from Mentors who have completed both parts of the CLPL

Appendix 2: Annotated Part 2 questionnaire from Mentors who have completed both parts of the CLPL

Appendix 3: Annotated Headteacher questionnaire (completed after Part 2 events)

Appendix 4: Annotated 'other' teacher questionnaire (completed after Part 2 events)

Annotated pupil questionnaires are based on pupils who completed baseline and follow-up questionnaires. They are not matched at individual variable levels, so the actual numbers completing individual questions may vary from baseline to follow-up stage.

Appendix 5: Annotated P2-P4 pupil questionnaire (baseline)

Appendix 6: Annotated P2-P4 pupil questionnaire (follow-up)

Appendix 7: Annotated P5-P7 pupil questionnaire (baseline)

Appendix 8: Annotated P5-P7 pupil questionnaire (follow-up)

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Appendix 1

SSERC Primary Cluster Programme in Science and Technology: Evaluation

Annotated Part 1 questionnaire from Mentors who have completed both parts of the CLPL

Based on 431 mentor responses across 32 local authorities

NB - Due to the effects of rounding percentages may not always add to 100%

Section 1 – About you

1. Are you ….? *(tick one box)* ***N= 431***

Male 17% Female **84%**

2. Age group….? *(tick one box)* ***N=430***

21–25	7%	26–30	**18%**	31–35	15%	36–40	16%
41–45	15%	46–50	13%	51–55	11%	56–60	5%
61+	1%						

3. Do you work….? *(tick one box)* ***N=430***

Full-time **92%** Part-time 8%

4. What is your role within the school? Are you: ***N=429***

Headteacher	3%	DHT/AHT	9%	Principal teacher	20%
Class teacher	**65%**	Other	4%		

5. For how many years have you been a teacher? *(tick one box)* ***N=428***

I am a probationer	1%
I am fully qualified and have been teaching for up to 5 years	26%
I have been teaching for between 6 to 15 years	**46%**
I have been teaching for 16 or more years	27%

6. Which cluster do you teach in? *(tick one box)* ***N=429***

Local authorities represented

Aberdeen	Inverclyde
Aberdeenshire	Midlothian
Angus	Moray
Argyll and Bute	North Ayrshire
Clackmannanshire	North Lanarkshire
Dumfries and Galloway	Orkney
Dundee	Perth and Kinross
East Ayrshire	Renfrewshire
East Dunbartonshire	Scottish Borders
East Lothian	Shetland
East Renfrewshire	South Ayrshire
Edinburgh	South Lanarkshire
Falkirk	Stirlingshire
Fife	West Dunbartonshire
Glasgow	West Lothian
Highland	Western Isles

Section 2 – Involvement in other SSERC sponsored events

7. Which of the following SSERC CPD events have you have taken part in since August 2005? *Tick all that apply* ***N=431***

Format of CPD	Attended
PGDE workshop other than residential / SUSS	4%
Summer school (residential)	7%
Single day workshops (other than as part of a PGDE course)	6%
Glow meets	**8%**
School based CPD	7%
Other SSERC CPD	4%

Section 3 – Involvement in the SSERC Primary Cluster CPD

8. Thinking about your experience at this CPD event, please indicate the extent to which you agree with the following statements. *Tick one box on each line*

The CPD event …	Completely agree	Mostly agree	Not sure either way	Mostly disagree	Completely disagree
Was conducted in a professional manner **N=430**	**99%**	1%	-	-	-
Comprised presentations of a high standard **N=430**	**97%**	3%	-	-	-
Gave access to quality support materials **N=428**	**98%**	2%	-	-	-
Encouraged networking with other colleagues **N=427**	**96%**	4%	<1%	-	-
Increased my knowledge of science and technology **N=429**	**88%**	11%	-	1%	-
Increased my enthusiasm for science and technology **N=430**	**91%**	8%	1%	-	-
Increased my confidence for teaching science and technology **N=430**	**85%**	14%	1%	-	-
Was relevant to my science and technology teaching **N=429**	**88%**	11%	<1%	-	-
Provided support for my development as a school mentor in science and technology **N=426**	**89%**	11%	<%	-	-
Provided support for my development as a cluster mentor in science and technology **N=422**	**85%**	14%	1%	-	-
Provided support for my leadership development **N=427**	**65%**	28%	7%	<1%	-
Provided support for developing science and technology education in my cluster **N=427**	**88%**	11%	1%	-	-
Provided a number of useful ideas for teaching **N=428**	**96%**	3%	1%	-	-
Encouraged me to try new ideas **N=429**	**95%**	4%	1%	-	-
Increased my awareness of sources of support for teaching science **N=426**	**89%**	10%	1%	-	-

Highlighted the importance of science and technology education for pupils **N=429**	**87%**	13%	<1%	-	-
Left me with a desire to attend similar CPD **N=429**	**82%**	15%	3%	<1%	-
Underlined the importance of CPD for my professional development **N=426**	**78%**	18%	4%	-	<1%
Encouraged me to be more positive about my career prospects **N=426**	**49%**	29%	20%	2%	<1%
Will help me enthuse pupils about science and technology **N=429**	**90%**	9%	<1%	<1%	-
Will mean I'm better able to meet the range of pupil needs in teaching science and technology **N=429**	**83%**	15%	2%	-	-
Improved my pedagogic skills in science and technology **N=429**	**81%**	17%	2%	<1%	-
Improved my reflective practice skills in science and technology **N=427**	**59%**	28%	12%	1%	<1%
Left me with a better understanding of what SSERC offers **N=429**	**91%**	9%	<1%	-	-

Thinking ahead now…

9. How likely is it that the following will happen as a result of your involvement in the Primary Cluster initiative? *(tick <u>one</u> box on each line)*

	Very likely	Quite likely	Unsure	Unlikely	Very unlikely
I will take on a more significant role in science development in my school **N=428**	**90%**	8%	1%	1%	-
I will take on a greater role in science development in my cluster **N=431**	**80%**	18%	2%	<1%	-
I will take on a greater role in science development at local authority level **N=430**	22%	25%	**43%**	9%	1%
I will take on a greater role in science development at national level **N=427**	9%	6%	**43%**	31%	11%

10. To what extent has the CPD prepared you for the following? *(please tick <u>one</u> box on each line)*

	Well prepared	Prepared	Unprepared	No at all prepared
Planning for your mentor role **N=428**	**64%**	36%	<1%	-
Carrying out a gap task **N=422**	**70%**	30%	<1%	-
Reporting on these activities **N=422**	**55%**	43%	2%	-

11. Which of the following statements best reflects how you feel about becoming a science mentor/champion? *(Tick <u>one</u> box only)* ***N=425***

I am looking forward to becoming a mentor and feel confident at the prospect	**82%**
I am a bit nervous at the prospect of becoming a mentor and I'm not too confident	18%
I am fairly nervous at the prospect of becoming a mentor and lack confidence	<1%

12. How do you think you can spend your time most productively as a Science mentor/champion? Please say why you think this.

413 responses

13. What do you see as the priorities for your role as a science mentor/champion in your cluster? *(tick one box on each line)*

Priority	High priority	Middle priority	Low priority	Unsure
Support colleagues' science teaching approaches generally **N=430**	**83%**	16%	1%	<1%
Support teachers' ability to conduct practical work **N=427**	**72%**	27%	<1%	<1%
Support teachers knowledge of science topics in the curriculum **N=421**	**61%**	35%	4%	<1%
Help teachers to understand how they can address the primary science experiences and outcomes in their practice **N=429**	**75%**	25%	<1%	<1%
Help build teachers' confidence and expertise to deliver science topics **N=428**	**87%**	12%	1%	<1%
Promoting an interdisciplinary learning approach where science can be incorporated into a range of common primary topics **N=427**	42%	**48%**	9%	2%
Supporting teachers' reflective practice and self-evaluation **N=427**	25%	**53%**	20%	2%
Promoting teacher networks to support their science teaching CPD **N=426**	**55%**	38%	5%	2%
Promoting the capacity of classroom assistants to support the delivery of science in the primary curriculum **N=428**	17%	**39%**	36%	8%

14. What support from SSERC would best help you to address these priorities?

346 responses

15. How can you spend your time most productively as a Science mentor/ champion? Please say why you think this.

71 responses

(This question was omitted from later batches of questionnaires)

16. Speculating a little now, how likely is it that is that you will spend your time as a science mentor/champion on the following activities? *(Tick <u>one</u> box on each line)*

	Very likely	Likely	Unlikely	Very unlikely	Unsure
Working in group settings with colleagues from school **N=427**	**72%**	25%	1%	1%	1%
Working with individual colleagues from school **N=426**	**47%**	42%	9%	1%	1%
Working in group settings with colleagues from the cluster **N=430**	**74%**	25%	<1%	<1%	<1%
Working with individual cluster colleagues **N=431**	36%	**38%**	20%	1%	5%
Carrying out routine administrative tasks related to science and technology **N=429**	30%	**51%**	11%	2%	5%
Responding to colleagues requests for support with science and technology **N=430**	**57%**	43%	<1%	-	<1%
Attending conferences related to science and technology **N=431**	25%	**50%**	13%	2%	10%
Taking part in other science and technology CPD **N=431**	**48%**	46%	4%	-	3%
Working on your own **N=425**	**39%**	34%	19%	5%	3%

17. Do you expect to introduce anything from the SSERC CPD to <u>your science teaching or practice</u>? *(Tick <u>all</u> that apply)*

I intend to introduce **<u>new materials/resources</u> N=430**	99%
I intend to introduce **<u>new methods of teaching</u> N=429**	94%

18. <u>On balance</u>, to what extent do you see the following factors supporting or hindering the development of science education within <u>your school</u>? *(Tick one box on each line)*

	Major support	Some support	Little or no influence	Some hindrance	Major hindrance
Local Authority management **N=424**	23%	**50%**	20%	7%	1%
School management **N=428**	**58%**	33%	2%	7%	-
Colleagues **N=427**	37%	**52%**	5%	6%	-
Resources **N=428**	**36%**	27%	3%	31%	4%
Time **N=429**	15%	14%	2%	**48%**	21%

19. <u>On balance</u>, to what extent do you see the following factors supporting or hindering the development of science education within <u>your cluster</u>? *(Tick one box on each line)*

	Major support	Some support	Little or no influence	Some hindrance	Major hindrance
Local Authority management **N=422**	26%	**51%**	15%	7%	1%
Cluster management **N=421**	**51%**	39%	2%	7%	1%
School management **N=418**	**55%**	36%	2%	6%	1%
Own school colleagues **N=419**	27%	**58%**	11%	4%	-
Colleagues in other schools **N=420**	28%	**57%**	10%	4%	-
Resources **N=420**	32%	29%	3%	**33%**	2%
Time **N=420**	14%	16%	4%	**46%**	21%

20. How do you expect the resources you received at the event to be used?
(Tick as many boxes as apply on each line)

	In my own classroom only	Available to my school and/or cluster colleagues	Didn't receive this	Unsure
Digital video camera **N=132**	3%	**51%**	46%	-
It's not fair… - book **N=399**	1%	**99%**	<1%	<1%
UV beads **N=131**	2%	**55%**	42%	1%
UV discussion pack **N=131**	2%	**56%**	41%	2%
Universals (bottles) **N=429**	1%	**97%**	1%	<1%
Digital thermometers **N=250**	1%	**97%**	1%	<1%
Thermochromic paper **N=248**	3%	**95%**	<1%	2%
Citric acid **N=428**	3%	**95%**	1%	1%
Digital microscope **N=430**	3%	**95%**	1%	1%
USB memory stick **N=427**	7%	**93%**	-	<1%
Bouncy balls **N=178**	2%	**80%**	17%	1%
Tennis balls **N=178**	2%	**80%**	17%	1%
Plants for primary **N=85**	5%	**90%**	-	5%
Electricity resource box **N=262**	2%	**96%**	-	2%
Field study guides **N=151**	1%	**97%**	1%	1%
Pipettes **N=179**	3%	**96%**	-	1%
Renewable energy starter pack **N=151**	2%	**95%**	-	3%

Section 5 – Part two of the CPD

As you are aware SSERC will be hosting the second part of this CPD in a few months time. We would be interested in any suggestions you have for content of this event.

21. Please use this space to make suggestions for what you would like to see included in the second part of this CPD.

272 responses

Section 6 – Other CPD you might have been involved in

(Q22 and 23 were only asked of a subgroup of clusters in Aberdeen, Perth and Kinross and Edinburgh).We are interested in whether you have participated in any non-SSERC CPD regarding science and technology in the past 3 years and your views on this. . For example this includes the recent Primary Science Quality Mark scheme for Aberdeen teachers and the Science Ambassador initiative for teachers in Perth and Kinross Schools

22. Please indicate whether, over the past 3 years, you have been involved in any of the following non-SSERC science and technology CPD and how useful it was to your teaching: *(Tick one box on each line)*

Non-SSERC Science and Technology CPD	Very useful	Somewhat useful	Of little use	Of no use	Didn't attend
Primary Science quality mark scheme (Aberdeen Teachers) **N=15**	47%		-	-	**53%**
The science ambassador initiative for teachers in Perth & Kinross schools **N=21**	**52%**	5%	-	-	43%
In school CPD organised by teachers or local authority **N=88**	21%	23%	2%	-	**55%**
Other externally provided science CPD **N=84**	21%	10%	-	-	**69%**

23. If you have participated in any Non-SSERC CPD regarding science and technology in the past three years, please briefly provide further details on whether this has helped you.

45 responses

Section 7 Final Comments

24. Please use this space to make any final comments

353 responses

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Appendix 2

SSERC Primary Cluster Programme in Science and Technology: Evaluation

Annotated Part 2 questionnaire from Mentors who have completed both parts of the CLPL

Based on 380 mentor responses across 27 local authorities

NB - Due to the effects of rounding percentages may not always add to 100%

Section 1 - About You

1. Are you ….? *(tick one box)* ***N=376***

Male 16% Female **84%**

2. Age group….? *(tick one box)* ***N=378***

21–25	3%	26–30	**19%**	31–35	16%	36–40	14%
41–45	14%	46–50	15%	51–55	11%	56–60	7%
61+	1%						

3. Do you work….? *(tick one box)* ***N=375***

Full-time **93%** Part-time 7%

4. What is your role within the school? Are you: *(tick one box)* ***N=377***

Headteacher	5%	DHT/AHT	10%	Principal teacher	23%
Class teacher	**59%**	Other	3%		

5. For how many years have you been a teacher? *(tick one box)* ***N=377***

I am a probationer	1%
I am fully qualified and have been teaching for up to 5 years	20%
I have been teaching for between 6 to 15 years	**48%**
I have been teaching for 16 or more years	31%

6. Which cluster do you teach in? *(tick one box)* ***N=378***

Local authorities represented

Aberdeen	Moray
Argyll and Bute	North Ayrshire
Clackmannanshire	North Lanarkshire
Dundee	Orkney
East Ayrshire	Perth and Kinross
East Dunbartonshire	Renfrewshire
East Lothian	Scottish Borders
East Renfrewshire	Shetland
Edinburgh	South Ayrshire
Falkirk	South Lanarkshire
Fife	Stirlingshire
Glasgow	West Dunbartonshire
Highland	Western Isles
Inverclyde	

Section 2 – About the SSERC CPD

7. Thinking about your experience at this CPD event, please indicate the extent to which you agree with the following statements. *(Tick one box on each line)*

The CPD event …	Completely agree	Mostly agree	Not sure either way	Mostly disagree	Completely disagree
Was conducted in a professional manner **N=379**	**97%**	3%	-	-	-
Comprised presentations of a high standard **N=378**	**92%**	8%	<1%	-	-
Gave access to quality support materials **N=376**	**93%**	6%	1%	-	-
Encouraged networking with other colleagues **N=377**	**90%**	9%	1%		-
Increased my knowledge of science and technology **N=378**	**85%**	13%	1%	-	<1%
Increased my enthusiasm for science and technology **N=378**	**88%**	11%	1%	-	-
Increased my confidence for teaching science and technology **N=378**	**83%**	15%	2%	-	<1%
Was relevant to my science and technology teaching **N=378**	**83%**	15%	1%	<1%	-
Provided support for my development as school mentor in science and technology **N=378**	**76%**	21%	3%	-	-
Provided support for my development as a cluster mentor in science and technology **N=378**	**74%**	23%	3%	-	-
Provided support for my leadership development **N=376**	**50%**	36%	11%	2%	-
Provided support for developing science and technology education in my cluster **N=377**	**73%**	25%	2%	<1%	-
Provided a number of useful ideas for teaching **N=379**	**93%**	7%	-	<1%	-
Encouraged me to try new ideas **N=379**	**90%**	10%	<1%	-	-
Increased my awareness of sources of support for teaching science and technology **N=379**	**79%**	20%	1%	-	-
Highlighted the importance of science and technology education for pupils **N=377**	**79%**	19%	2%	-	-
Left me with a desire to attend similar CPD **N=378**	**77%**	18%	5%	<1%	-
Underlined the importance of CPD for my professional development **N=377**	**73%**	23%	4%	<1%	-
Encouraged me to be more positive about my career prospects **N=377**	**39%**	31%	28%	2%	<1%
Will help me enthuse pupils about science and technology **N=377**	**87%**	13%	1%	-	-
Will mean I'm better able to meet the range of pupil needs in teaching science and technology **N=378**	**71%**	25%	3%	-	-
Improved my pedagogic skills in science and technology **N=375**	**70%**	26%	4%	-	-
Improved my reflective practice skills in science and technology **N=378**	**59%**	32%	8%	1%	-
Left me with a better understanding of what SSERC offers **N=379**	**79%**	20%	1%	-	-

Section 3 - Impact of the Primary Cluster Initiative

8. Have you introduced anything from the SSERC CPD to your science and technology teaching or practice? *(Tick all that apply)*

Yes, I have introduced **new materials/resources** ***N=377***	96%
Yes, I have introduced **new methods of teaching** ***N=377***	85%

9. Which of the following statements best reflects how you feel about becoming a science and technology mentor/champion? *(Tick one box)* ***N=369***

I have completely enjoyed the experience	**58%**	I have mostly enjoyed the experience	42%	I have mostly disliked the experience	<1%	I have completely disliked the experience	-

Please explain your response to Q9

340 responses

10. Which of the following have happened as a result of your involvement in the Primary Cluster initiative? *(tick one box on each line)*

	Has happened	Not yet happened, still plan to do so	Has not happened
I have take on a more significant role in science and technology developments in my school **N=370**	**93%**	6%	1%
I have taken on a greater role in science and technology developments in my cluster **N=373**	**90%**	9%	1%
I have taken on a greater role in science and technology developments at Local Authority level **N=362**	21%	27%	**52%**
I have taken on a greater role in science and technology developments at national level **N=364**	9%	7%	**84%**

11. Thinking back, to what extent did the CPD prepare you for the following? *(tick one box on each line)*

	Well prepared	Prepared	Unprepared	Not at all prepared
Planning for your mentor/champion role **N=366**	**53%**	44%	3%	-
Carrying out gap-task activities **N=364**	**54%**	43%	3%	-
Reporting on these activities **N=362**	**49%**	46%	5%	-

12. What has been the principal focus of your Gap Task?

347 Responses

13. To what extent has your Gap Task influenced your work as a science and technology mentor/champion? *(tick one box)* ***N=363***

It has been a major help in my mentor role	It has been of some help in my mentor role	It has had no real influence on my mentor role	It has been a bit of a distraction from my mentor role	It has been a major distraction from my mentor role
77%	22%	1%	-	<1%

14. What do you regard as the <u>most successful</u> science/technology development in your cluster since you became a mentor/champion? Please tell us why you view this as successful.

368 responses

15. What do you regard as the <u>least successful</u> science/technology development in your cluster since you became a mentor/champion? Please tell us why you view this as unsuccessful.

227 responses

16. How do you spend your time in your <u>role as science/technology mentor/champion?</u> *(Tick one box on each line)*

	A lot of the time	**Some of the time**	**Little or none of the time**
Working in group settings with colleagues from school **N=369**	16%	**65%**	19%
Working with individual colleagues from school **N=373**	17%	**65%**	18%
Working in group settings with colleagues from the cluster **N=367**	**51%**	45%	4%
Working with individual cluster colleagues **N=366**	21%	**50%**	29%
Carrying out routine administrative tasks related to science and technology **N=367**	26%	**56%**	17%
Responding to colleagues' requests for support with science and technology **N=371**	19%	**67%**	14%
Attending conferences related to science and technology **N=365**	5%	46%	**49%**
Taking part in other science and technology CPD **N=366**	11%	**65%**	24%
Working on your own **N=371**	40%	**53%**	7%

17. <u>On balance</u>, to what extent have the following factors supported or hindered the development of science and technology education within <u>your school</u>? *(Tick one box on each line)*

	Major support	Some support	Little or no influence	Some hindrance	Major hindrance
Local Authority management **N=373**	13%	35%	**46%**	6%	-
School management **N=371**	**47%**	38%	10%	4%	1%
Colleagues **N=375**	**46%**	41%	10%	2%	1%
Resources **N=376**	**37%**	35%	5%	20%	2%
Time **N=374**	4%	14%	6%	**39%**	36%

18. <u>On balance</u>, to what extent have the following factors supported or hindered the development of science and technology education within <u>your cluster</u>? *(Tick one box on each line)*

	Major support	Some support	Little or no influence	Some hindrance	Major hindrance
Local Authority management **N=371**	14%	**40%**	38%	7%	2%
Cluster management **N=371**	**43%**	39%	9%	8%	1%
School management **N=367**	**44%**	42%	9%	4%	<1%
Own school colleagues **N=374**	33%	**46%**	19%	2%	<1%
Colleagues in other schools **N=373**	36%	**46%**	16%	3%	-
Resources **N=373**	35%	**39%**	9%	16%	1%
Time **N=371**	5%	16%	7%	**38%**	33%

19. Which of the following groups have you worked directly with on technology and science developments within your cluster since becoming a mentor/champion? *(Tick one box)* ***N=377***

Senior managers (HTs DHTs, OICs)	59%	Secondary teachers	43%	Primary teachers	**98%**
Early years workers	39%	Secondary pupils	2%	Primary pupils	77%
Children in early years centres	7%	Other professionals in the cluster	35%	Local authority personnel	22%

20. What percentage of <u>early years workers</u> in <u>the cluster</u> have you worked directly with as a science technology champion? *(Tick one box)* ***N=365***

None	**33%**	26-50%	10%	91-100%	11%
Up to 10%	31%	51-75%	2%		
11-25%	10%	76-90%	4%		

21. What percentage of <u>primary teachers</u> in <u>the cluster</u> have you worked directly with as a science/technology champion? *(Tick one box)* ***N=369***

None	<1%	26-50%	8%	91-100%	**46%**
Up to 10%	11%	51-75%	8%		
11-25%	8%	76-90%	18%		

22. What percentage of <u>teachers</u> in your <u>own school</u> have you worked directly with as a science/technology champion? *(Tick one box)* ***N=370***

None	2%	26-50%	3%	91-100%	**71%**
Up to 10%	3%	51-75%	8%		
11-25%	3%	76-90%	8%		

23. What percentage of <u>secondary science teachers</u> in the cluster have you worked directly with as a science/technology champion? *(Tick one box)* ***N=371***

None	40%	26-50%	4%	91-100%	3%
Up to 10%	**46%**	51-75%	1%		
11-25%	5%	76-90%	<1%		

24. Which of the following statements about contact with other science and technology mentors applies to you? *(Tick all that apply)*

I have been in contact with other mentors **N=373**	99%
I have shared ideas/activities with other mentors **N=373**	98%
I have been involved in additional technology/science CPD with other mentors **N=372**	79%
I have collaborated on training programmes with other mentors **N=373**	86%
I have collaborated on other activities with other mentors **N=373**	92%
I have talked over science and technology problems with other mentors **N=373**	89%
I have been involved in other ways with science and technology mentors **N= 368** (Please say how you have been involved with them)	34%

98 responses

25. To what extent have you seen the following happening in the cluster <u>as a result of your science/technology mentoring</u> work? *(Tick one box on each line)*

	To a large extent	To some extent	A little	No change	Don't know
Increase in teachers' confidence to teach science and technology **N=367**	45%	**48%**	5%	1%	1%
Increase in teachers' knowledge to teach science and technology **N=366**	42%	**49%**	7%	1%	1%
Increase in teachers' skills to teach science and technology **N=367**	40%	**52%**	6%	1%	1%
Increased pupil engagement in science and technology **N=366**	**54%**	39%	3%	2%	3%
Increased pupil aspirations towards science and technology careers **N=364**	19%	**41%**	16%	4%	21%
Increased science and technology activities in the curriculum **N=366**	**44%**	42%	10%	3%	2%
More varied approaches to science and technology learning and teaching **N=367**	**45%**	43%	9%	1%	2%
More opportunities for teachers to share their science and technology experiences in clusters **N=366**	**45%**	39%	12%	3%	1%
Increased collegiality between cluster schools **N=366**	**62%**	29%	7%	1%	1%
Increased interdisciplinary learning approach where science can be incorporated into a range of common primary topics **N=366**	24%	**53%**	14%	3%	6%
Increased teachers' reflective practice and self-evaluation **N=366**	16%	**44%**	23%	6%	12%
Increased teacher networks to support their science teaching CPD **N=363**	35%	**42%**	15%	4%	4%
Increased capacity of classroom assistants to support the delivery of science in the primary curriculum **N=363**	8%	15%	17%	**49%**	11%
Greater knowledge about the work of SSERC and NSLC **N=364**	**50%**	39%	8%	<1%	3%

27. Please use this space to make any final comments

170 responses

APPENDIX 3

University of Glasgow | Robert Owen Centre for Educational Change

SSERC Primary Cluster Programme in Science and Technology: Evaluation

Annotated Headteacher/ Heads of Centre questionnaire (completed after Part 2 events)

Based on 219 responses across 30 local authorities

NB - Due to the effects of rounding percentages may not always add to 100%

Section 1 - About You

1. Are you ….? *(tick one box)* ***N=218***

Male	11%	Female	**89%**

2. Age group….? *(tick one box)* ***N=218***

21–25	-	26–30	2%	31–35	4%	36–40	6%
41–45	17%	46–50	19%	51–55	**24%**	56–60	**24%**
61+	4%						

3. Do you work….? *(tick one box)* ***N=219***

Full-time	**99%**	Part-time	<1%

4. What is your role within the school? Are you: *(tick one box)* ***N=217***

Headteacher/Head of Centre	**84%**	DHT/Depute	10%	Other SMT member	5%
Other	1%				

5. For how many years have you been a teacher? *(tick one box)* ***N=218***

I am fully qualified and have been teaching for up to 5 years	3%
I have been teaching for between 6 to 15 years	14%
I have been teaching for 16 or more years	**83%**

6. Which cluster do you work in? *(tick one box)*

Local authorities represented

Local Authority	
Aberdeen	Midlothian
Aberdeenshire	Moray
Angus	North Ayrshire
Clackmannanshire	North Lanarkshire
Dumfries and Galloway	Orkney
East Ayrshire	Perth and Kinross
East Dunbartonshire	Renfrewshire
East Lothian	Scottish Borders
East Renfrewshire	Shetland
Edinburgh	South Ayrshire
Falkirk	South Lanarkshire
Fife	Stirlingshire
Glasgow	West Dunbartonshire
Highland	West Lothian
Inverclyde	Western Isles

7. Is your establishment? *(tick one box)* ***N=218***

Early years centre	Primary	Secondary	More than one
1%	**95%**	<1%	3%

Section 2 - Impact of the Primary Cluster Initiative

This section of the questionnaire is about the impact of the SSERC Primary Cluster Programme and the work of the Science and Technology Champions/Mentors.

8. Has anything from the Primary Cluster Mentor/Champion CPD been introduced to your establishment's science and technology teaching or practice? *(Tick all that apply)*

Yes, we have introduced **new materials/resources** ***N=199***	98%
Yes, we have introduced **new methods of teaching** ***N=195***	89%

9. Which of the following have happened as a result of your establishment's involvement in the Primary Cluster Programme? *(tick one box on each line)*

	Has happened	Not yet happened, still plan to do so	Has not happened
Staff have taken on a more significant role in science and technology developments in the establishment ***N=215***	**90%**	8%	1%
The school has taken on a greater role in science and technology developments within our cluster ***N=210***	**79%**	13%	9%
The school has taken on a greater role in science and technology developments at Local Authority level ***N=196***	25%	25%	**50%**
The school has taken on a greater role in science and technology developments at national level ***N=194***	7%	16%	**77%**

10. What do you regard as the most successful science/technology development to have taken place in your establishment since you became part of the Primary Cluster Programme? Please tell us why you view this as successful.

196 responses

11. What do you regard as the least successful science/technology development to have taken place in your establishment since you became part of the Primary Cluster Programme? Please tell us why you view this as unsuccessful.

86 responses

12. <u>On balance</u>, to what extent have the following factors supported or hindered the development of science and technology education within <u>your establishment</u>? *(Tick one box on each line)*

	Major support	Some support	Little or no influence	Some hindrance	Major hindrance
Local Authority management ***N=208***	19%	**46%**	33%	1%	1%
Colleagues ***N=212***	**67%**	29%	3%	1%	-
Resources ***N=211***	**52%**	41%	2%	5%	<1%
Time ***N=204***	24%	**36%**	8%	25%	8%
Science and Technology Mentor /Champion ***N=210***	**80%**	16%	3%	-	-

13. <u>On balance</u>, to what extent have the following factors supported or hindered the development of science and technology education within <u>your cluster</u>? *(Tick one box on each line)*

	Major support	Some support	Little or no influence	Some hindrance	Major hindrance
Local Authority management ***N=208***	21%	**45%**	32%	2%	1%
Cluster management ***N=204***	**51%**	39%	8%	1%	-
Own school colleagues ***N=210***	**59%**	35%	6%	-	<1%
Colleagues in other schools ***N=188***	43%	**50%**	7%	-	-
Resources ***N=209***	**47%**	40%	11%	2%	<1%
Time ***N=207***	21%	**36%**	14%	23%	6%
Science and Technology Mentor /Champion ***N=210***	**76%**	19%	5%	-	-

14. What percentage of staff (<u>teaching or childcare)</u> in <u>your establishment</u> have worked directly with a science/technology mentor/champion? *(Tick one box)* ***N=211***

None	4%	26-50%	9%	91-100%	**64%**
Up to 10%	3%	51-75%	5%		
11-25%	3%	76-90%	12%		

15. What percentage of staff (<u>teaching or childcare)</u> in <u>your establishment</u> have attended other <u>non-residential</u> and/or school based science CPD organised as part of the Primary Cluster Programme? *(Tick one box)* ***N=100***

None	5%	26-50%	5%	91-100%	**58%**
Up to 10%	10%	51-75%	5%		
11-25%	1%	76-90%	15%		

16. To what extent have you witnessed the following happening in your establishment <u>as a result of staff involvement with the science/technology mentoring/championing</u> work? *(Tick one box on each line)*

	To a large extent	To some extent	A little	No change	Don't know
Increase in staff confidence to teach science and technology ***N=215***	**54%**	41%	3%	1%	1%
Increase in staff knowledge to teach science and technology ***N=215***	46%	**51%**	2%	1%	-
Increase in staff skills to teach science and technology ***N=213***	44%	**50%**	5%	1%	-
Increased pupil engagement in science and technology ***N=214***	**50%**	40%	6%	2%	2%
Increased pupil aspirations towards science and technology careers ***N=211***	8%	**43%**	17%	7%	26%
Increased science and technology activities in the curriculum ***N=213***	38%	**52%**	8%	1%	1%
More varied approaches to science and technology learning and teaching ***N=214***	43%	**50%**	6%	1%	1%
More opportunities for staff to share their science and technology experiences in clusters ***N=214***	42%	**44%**	10%	4%	-
Increased collegiality between cluster schools ***N=213***	**46%**	42%	8%	4%	<1%
Increased interdisciplinary learning approach where science can be incorporated into a range of common primary topics ***N=214***	23%	**53%**	19%	2%	2%
Increased reflective practice and self-evaluation among staff ***N=215***	17%	**61%**	17%	3%	2%
Increased staff networks to support their science teaching CPD ***N=215***	27%	**56%**	14%	3%	-
Increased capacity of classroom assistants to support the delivery of science in primary curriculum ***N=214***	1%	20%	32%	**42%**	5%
Greater knowledge about the work of SSERC and NSLC ***N=214***	25%	**56%**	16%	2%	-

17. What, if any, <u>advantages</u> does the mentor/champion approach bring to the development of science and technology teaching in your establishment?

186 responses

18. What, if any, <u>disadvantages</u> does the mentor/champion approach bring to the development of science and technology teaching in your establishment?

92 responses

19. **In what ways would you like to see the science mentor/champion approach to science and technology education developed in your establishment?**

173 responses

20. **Please use this space to make any final comments**

89 responses

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Appendix 4

SSERC Primary Cluster Programme in Science and Technology: Evaluation

Annotated 'other' teacher questionnaire (completed after Part 2 events)

Based on 315 responses across 26 Local Authorities

NB - Due to the effects of rounding percentages may not always add to 100%

Section 1 - About You

1. Are you ….? *(tick one box)* ***N=275***

Male	10%	Female	**90%**

2. Age group….? *(tick one box)* ***N=314***

21–25	8%	26–30	11%	31–35	10%	36–40	14%
41–45	14%	46–50	9%	51–55	**25%**	56–60	8%
61+	1%						

3. Do you work….? *(tick one box)* ***N=309***

Full-time	**84%**	Part-time	16%

4. What is your role within the school? Are you: *(tick one box)* ***N=313***

DHT/Depute	6%	Principal teacher	12%	Class teacher	**73%**
Early years officer	<1%	Other	9%		

5. For how many years have you been a teacher? *(tick one box)* ***N=312***

I am a probationer	8%
I am fully qualified and have been teaching for up to 5 years	17%
I have been teaching for between 6 to 15 years	35%
I have been teaching for 16 or more years	**40**%

6. Which cluster do you teach in? *(tick one box)*

Local authorities represented

Aberdeen	Inverclyde
Aberdeenshire	Midlothian
Angus	Moray
Argyll and Bute	North Ayrshire
Clackmannanshire	North Lanarkshire
Dundee	Perth and Kinross
Dumfries and Galloway	Renfrewshire
East Ayrshire	Scottish Borders
East Lothian	South Ayrshire
Falkirk	Stirlingshire
Fife	West Dunbartonshire
Glasgow	West Lothian
Highland	Western Isles

7. Is your establishment? *(tick one box)* ***N=314***

Early years centre	Primary school	Secondary school
<1%	**99%**	1%

Section 2 - Impact of the Primary Cluster Initiative

This section of the questionnaire is about the impact of the SSERC Primary Cluster Programme and the work of the Science and Technology Champions/Mentors.

8. To what extent are you aware of the SSERC Primary Cluster Programme? *(tick one box)* ***N=266***

Very aware – I have a good grasp of what it is about	**67%**
Partly aware – I have some idea of what it is about	32%
Not aware – This is the first time I have heard of it	1%

If you replied 'Not aware' of the SSERC Primary Cluster Programme then please go to the final question.

9. Please indicate which of the following activities you have engaged in or changes you have introduced to your practice? *(tick one box on each line)*

I have worked with my Science and Technology Champion/Mentor ***(N=263)***	77%
I have taken part in school/cluster based science CPD organised as part of the Primary Cluster Programme ***(N=270)***	**95%**
I have introduced new materials/resources to my science and technology teaching or practice from the Programme ***(N=269)***	75%
I have introduced new methods to my science and technology teaching or practice from the Programme ***(N=268)***	77%
I have taken on a more significant role in science and technology developments in the establishment ***(N=263)***	36%
I have taken on a greater role in science and technology developments within our cluster ***(N=264)***	25%

10. <u>On balance</u>, to what extent have the following factors supported or hindered the development of science and technology education within <u>your establishment</u>? *(Tick one box on each line)*

	Major support	Some support	Little or no influence	Some hindrance	Major hindrance
Local Authority management ***N=258***	17%	**50%**	30%	2%	-
School management ***N=259***	**54%**	38%	7%	1%	-
Colleagues ***N=259***	**61%**	32%	7%	-	-
Resources ***N=258***	**41%**	40%	5%	11%	2%
Time ***N=257***	13%	**42%**	13%	22%	10 %
Science and Technology Mentor /Champion ***N=257***	**69%**	26%	5%	-	-

11. To what extent has the following happened <u>as a result of your involvement with the science/technology mentoring/championing</u> work?

(Tick one box on each line)

	To a large extent	To some extent	A little	No change	Don't know
Increase in my confidence to teach science and technology ***N=267***	38%	**44%**	12%	6%	<1%
Increase in my knowledge to teach science and technology ***N=267***	37%	**43%**	14%	5%	-
Increase in my skills to teach science and technology ***N=266***	38%	**45%**	11%	5%	<1%
Increased pupil engagement in science and technology ***N=267***	**42%**	40%	9%	5%	4%
Increased pupil aspirations towards science and technology careers ***N=267***	21%	**38%**	15%	8%	18%
Increased science and technology activities in the curriculum ***N=265***	37%	**42%**	15%	4%	3%
More varied approaches to science and technology learning and teaching ***N=267***	37%	**44%**	12%	4%	2%
More opportunities for staff to share their science and technology experiences in clusters ***N=269***	31%	**47%**	14%	6%	2%
Increased collegiality between cluster schools ***N=264***	31%	**35%**	21%	9%	4%
Increased interdisciplinary learning approach where science can be incorporated into a range of common primary topics ***N=266***	26%	**46%**	22%	5%	1%
Increased reflective practice and self-evaluation among staff ***N=266***	24%	**42%**	23%	7%	5%
Increased staff networks to support their science teaching CPD ***N=262***	27%	**44%**	20%	6%	4%
Increased capacity of classroom assistants to support the delivery of science in the primary curriculum ***N=266***	8%	14%	22%	**41%**	16%
Greater knowledge about the work of SSERC and NSLC ***N=264***	27%	**40%**	22%	7%	4%

12. What, if any, <u>advantages</u> does the mentor/champion approach bring to the development of science and technology teaching in your establishment?

176 responses

13. **What, if any, <u>disadvantages</u> does the mentor/champion approach bring to the development of science and technology teaching in your establishment?**

90 responses

14. **In what ways would you like to see the science mentor/champion approach to science and technology education developed in your establishment?**

125 responses

15. **Please use this space to make any final comments**

38 responses

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SSERC primary cluster evaluation
Primary 2-4 questionnaire

Annotated questionnaire based on 6288 paper and online responses.

As a result of rounding percentages may not always add to 100%.

Identifier questions removed

3. Are you ….? *(colour one box)* ***N*** **= 6284**

Boy	Girl
3157 (50%)	3127 (50%)

4. What year group are you in? *(colour one box)*

Primary 2	Primary 3	Primary 4
1805 (29%)	2120 (34%)	**2350 (37%)**

5. How much do you like school? *(colour one face)*
N=6122



65% *27%* *8%*

6. How much do you like these subjects at school?
(colour one face on each line)

Language/Literacy **N=6169**	**49%**	32%	12%	8%
Maths/Numeracy **N=6151**	**63%**	20%	10%	7%
Science **N=6136**	**75%**	14%	6%	4%
Physical Education (PE) **N=6161**	**81%**	13%	4%	3%
RME/RE **N=6067**	**52%**	24%	13%	11%
ICT **N=6114**	**83%**	10%	4%	3%

7a. How much do you enjoy doing the following in school? *(colour one face on each line).*

If there are any that you do not do please leave that line blank.

Doing experiments in class **N=5796**	**78%**	14%	4%	4%
Listening to the teacher talking about science **N=5889**	**59%**	24%	10%	7%
Working in groups in class to do science **N=5851**	**66%**	19%	9%	7%
Working on my own in class to do science **N=5702**	**55%**	19%	10%	15%
Answering the teachers science questions in class **N=5824**	**57%**	23%	11%	9%
Writing about science in school **N=5652**	**53%**	22%	13%	13%
Reading about science in class **N=5570**	**58%**	20%	10%	12%

7b. How much do you enjoy doing the following out of school? *(colour one face on each line).*

If there are any that you do not do please leave that line blank.

				
Doing science homework **N=4413**	**60%**	18%	9%	13%
Reading about science at home **N=5283**	**57%**	19%	10%	14%
Watching science programmes at home **N=5441**	**66%**	15%	8%	11%
Going to the science museum or science centre **N=5285**	**76%**	11%	5%	8%
Watching science fiction programmes or films **N=5315**	**63%**	16%	8%	13%

8. **How happy are you are in your ability to successfully complete each of the following tasks?** *(colour one face on each line)*

I can predict what will happen in an experiment **N=5758**	**51%**	25%	12%	13%
I can create a "fair experiment" **N=5404**	**51%**	21%	12%	16%
I can select appropriate equipment for my experiment **N=5556**	**56%**	21%	12%	12%
I can carry out experiments **N=5618**	**57%**	21%	11%	11%
I can discuss the result of the experiment **N=5605**	**53%**	23%	13%	12%
I can show my findings in different ways **N=5457**	**51%**	21%	14%	14%
I can make suggestions to make the experiment better **N=5559**	**54%**	22%	11%	13%

APPENDIX 6

University of Glasgow | Robert Owen Centre for Educational Change

SSERC primary cluster evaluation
Primary 2-4 questionnaire

Annotated questionnaire based on 6288 paper and online responses.

As a result of rounding percentages may not always add to 100%.

Identifier questions removed

3. Are you ….? *(colour one box)* **N = 6284**

Boy	Girl
3157 (50%)	3127 (50%)

4. What year group are you in? *(colour one box)*

Primary 2	Primary 3	Primary 4
1805 (29%)	2120 (34%)	**2350 (37%)**

5. How much do you like school? *(colour one face)*
N=6146

57%

35%

8%

6. How much do you like these subjects at school?
(colour one face on each line)

Language/Literacy **N=6199**	**40%**	38%	14%	8%
Maths/Numeracy **N=6212**	**60%**	24%	10%	7%
Science **N=6185**	**75%**	16%	6%	3%
Physical Education (PE) **N=6207**	**80%**	14%	4%	2%
RME/RE **N=6114**	**44%**	29%	15%	12%
ICT **N=6171**	**83%**	12%	3%	3%

7a. How much do you enjoy doing the following in school? *(colour one face on each line).*

If there are any that you do not do please leave that line blank.

Doing experiments in class **N=6111**	**78%**	17%	3%	3%
Listening to the teacher talking about science **N=6137**	**50%**	32%	11%	7%
Working in groups in class to do science **N=6092**	**63%**	22%	9%	6%
Working on my own in class to do science **N=6017**	**53%**	22%	13%	12%
Answering the teachers science questions in class **N=6060**	**51%**	29%	13%	7%
Writing about science in school **N=5935**	**46%**	26%	16%	12%
Reading about science in class **N=5814**	**53%**	25%	12%	10%

7b. How much do you enjoy doing the following out of school? *(colour one face on each line).*

If there are any that you do not do please leave that line blank.

				
Doing science homework **N=4904**	**52%**	22%	11%	15%
Reading about science at home **N=5504**	**50%**	24%	13%	13%
Watching science programmes at home **N=5653**	**62%**	19%	9%	10%
Going to the science museum or science centre **N=3540**	**78%**	11%	4%	7%
Watching science fiction programmes or films **N=5640**	**60%**	20%	9%	11%

8. **How happy are you are in your ability to successfully complete each of the following tasks?** *(colour one face on each line)*

I can predict what will happen in an experiment **N=6108**	**45%**	35%	13%	7%
I can create a "fair experiment" **N=5876**	**56%**	28%	10%	6%
I can select appropriate equipment for my experiment **N=5915**	**59%**	26%	10%	6%
I can carry out experiments **N=5997**	**60%**	26%	9%	6%
I can discuss the result of the experiment **N=6002**	**53%**	28%	12%	7%
I can show my findings in different ways **N=5885**	**51%**	29%	14%	7%
I can make suggestions to make the experiment better **N=5932**	**55%**	26%	11%	7%

APPENDIX 7

University of Glasgow | Robert Owen Centre for Educational Change

SSERC primary cluster evaluation
Primary 5-7 questionnaire

Annotated questionnaire based on 5505 responses.

As a result of rounding percentages may not always add to 100%.

Identifier questions removed

3. Are you ….? *(tick one box)* ***N=5504***

Boy 51% Girl 49%

4. What year group are you in? *(tick one box)* ***N=5500***

Primary 5 **35%** Primary 6 33% Primary 7 33%

5. How much do you like school? *(tick one box)* ***N=5443***

I really like school	36%
I like school sometimes	**58%**
I don't like school	7%

6. How much do you like these subjects at school? *(tick <u>one</u> box on each line)*

	Like a lot	Like a little	Don't like much	Don't like at all	N=
Language/Literacy	27%	**50%**	17%	7%	**5385**
Maths/Numeracy	**49%**	31%	13%	7%	**5390**
Science	**69%**	23%	6%	3%	**5328**
Physical Education (PE)	**79%**	15%	4%	2%	**5373**
RME/RE	22%	**38%**	24%	16%	**5295**
ICT	**79%**	17%	3%	2%	**5390**

7. How much do you enjoy doing the following?
(tick one box on each line)

	Really enjoy	Enjoy	Don't like	Really don't like	I don't do this
Doing experiments in class **N=5324**	**71%**	24%	2%	1%	3%
Listening to the teacher talking about science **N=5303**	25%	**46%**	20%	6%	3%
Working in groups in class to do science **N=5266**	**54%**	32%	8%	3%	3%
Working on my own in class to do science **N=5237**	**39%**	31%	18%	8%	4%
Answering the teachers science questions in class **N=5276**	30%	**43%**	18%	6%	4%
Writing about science in school **N=5218**	24%	**35%**	24%	12%	5%
Doing science homework **N=4752**	**33%**	28%	15%	10%	15%
Reading about science in class **N=5060**	32%	**36%**	18%	8%	7%
Reading about science at home **N=4839**	29%	**31%**	19%	8%	13%
Watching science programmes at home **N=4907**	**44%**	28%	11%	5%	12%
Going to the science museum or science centre **N=5138**	**66%**	19%	4%	3%	8%
Watching science fiction programmes or films **N=4944**	**46%**	28%	11%	5%	10%

8. How confident are you are in your ability to successfully complete each of the following tasks?
(tick one box on each line)

	Very confident	Confident	Not confident	Not confident at all
I know when a scientific experiment will help me find the answer to my question **N=5396**	25%	**53%**	17%	6%
I can create a hypothesis to test my predictions **N=5320**	23%	**38%**	24%	16%
I can create a "fair test" **N=5303**	**39%**	37%	15%	9%
I can plan and design experiments **N=5339**	**48%**	35%	12%	6%
I can select appropriate samples, equipment and other resources **N=5375**	**41%**	38%	15%	6%
I can carry out experiments **N=5402**	**48%**	35%	12%	5%
I can observe evidence **N=5345**	36%	**41%**	17%	7%
I can collect evidence **N=5355**	**45%**	37%	13%	5%
I can record evidence **N=5318**	**42%**	36%	16%	6%
I can present data in different formats **N=5342**	27%	**37%**	24%	11%
I can analyse and interpret data to draw conclusions **N=5331**	27%	**35%**	26%	12%
I can review and evaluate results to identify limitations and improvements **N=5331**	27%	**35%**	26%	12%

9. How much do you agree or disagree with the following statements about science? *(tick one box on each line)*

	Strongly agree	Mainly agree	Mainly disagree	Strongly disagree	Don't know
I am amazed by the achievements of science **N=5415**	**52%**	35%	4%	1%	8%
Science is such a big part of our lives that we should all take an interest **N=5382**	**43%**	35%	11%	4%	8%
It is important to know about science in my daily life **N=5369**	**43%**	37%	10%	3%	7%
Science is too specialised for most people to understand it **N=5334**	21%	**30%**	22%	16%	12%
I don't think I'm clever enough to understand science **N=5333**	12%	16%	22%	**42%**	9%
I don't understand the point of all the science being done today **N=5347**	13%	16%	21%	**39%**	12%
It is important for us to learn science in school **N=5371**	**66%**	24%	4%	2%	4%
I can learn about science outside school too **N=5348**	**55%**	27%	7%	4%	6%
I would like to do more science when I finish school **N=5368**	**40%**	25%	13%	11%	11%
I talk to my parents/carers about science **N=5336**	26%	**27%**	17%	19%	11%

University of Glasgow | Robert Owen Centre for Educational Change

SSERC primary cluster evaluation
Primary 5-7 questionnaire

Annotated questionnaire based on 5505 responses.

As a result of rounding percentages may not always add to 100%.

Identifier questions removed

3. **Are you ….?** *(tick one box)* ***N=5504***

Boy 51% Girl 49%

4. **What year group are you in?** *(tick one box)* ***N=5500***

Primary 5 **35%** Primary 6 33% Primary 7 33%

5. How much do you like school? *(tick one box)* ***N=5276***

I really like school	27%
I like school sometimes	**62%**
I don't like school	11%

6. How much do you like these subjects at school? *(tick <u>one</u> box on each line)*

	Like a lot	Like a little	Don't like much	Don't like at all	N=
Language/Literacy	24%	**48%**	20%	8%	**5434**
Maths/Numeracy	**44%**	33%	14%	9%	**5426**
Science	**63%**	27%	7%	4%	**5390**
Physical Education (PE)	**71%**	18%	7%	4%	**5402**
RME/RE	20%	**35%**	26%	19%	**5352**
ICT	**74%**	21%	4%	<1%%	**5415**

7. How much do you enjoy doing the following?
(tick one box on each line)

	Really enjoy	Enjoy	Don't like	Really don't like	I don't do this
Doing experiments in class **N=5446**	**61%**	29%	5%	2%	3%
Listening to the teacher talking about science **N=5417**	20%	**44%**	25%	8%	3%
Working in groups in class to do science **N=5394**	**46%**	37%	9%	4%	3%
Working on my own in class to do science **N=5405**	**34%**	33%	20%	8%	5%
Answering the teachers science questions in class **N=5398**	23%	**41%**	24%	8%	5%
Writing about science in school **N=5415**	18%	**32%**	27%	14%	9%
Doing science homework **N=5384**	23%	**26%**	16%	10%	24%
Reading about science in class **N=5375**	23%	**33%**	22%	9%	12%
Reading about science at home **N=5385**	21%	**27%**	20%	8%	24%
Watching science programmes at home **N=5399**	**34%**	26%	12%	5%	23%
Going to the science museum or science centre **N=4894**	**60%**	21%	4%	2%	13%
Watching science fiction programmes or films **N=5409**	**39%**	27%	12%	5%	18%

8. How confident are you are in your ability to successfully complete each of the following tasks?
(tick one box on each line)

	Very confident	Confident	Not confident	Not confident at all
I know when a scientific experiment will help me find the answer to my question **N=5418**	26%	**54%**	16%	4%
I can create a hypothesis to test my predictions **N=5379**	26%	**41%**	25%	9%
I can create a "fair test" **N=5370**	**42%**	40%	13%	5%
I can plan and design experiments **N=5378**	**47%**	37%	12%	5%
I can select appropriate samples, equipment and other resources **N=5375**	**41%**	**41%**	14%	5%
I can carry out experiments **N=5398**	**51%**	35%	10%	4%
I can observe evidence **N=5373**	38%	**43%**	14%	4%
I can collect evidence **N=5386**	**46%**	40%	11%	4%
I can record evidence **N=5377**	**43%**	40%	14%	4%
I can present data in different formats **N=5346**	27%	**41%**	24%	7%
I can analyse and interpret data to draw conclusions **N=5353**	26%	**41%**	26%	8%
I can review and evaluate results to identify limitations and improvements **N=5290**	23%	**42%**	25%	10%

9. How much do you agree or disagree with the following statements about science? *(tick one box on each line)*

	Strongly agree	Mainly agree	Mainly disagree	Strongly disagree	Don't know
I am amazed by the achievements of science **N=5425**	**51%**	37%	4%	2%	7%
Science is such a big part of our lives that we should all take an interest **N=5407**	**39%**	37%	11%	5%	8%
It is important to know about science in my daily life **N=5379**	**40%**	37%	12%	4%	8%
Science is too specialised for most people to understand it **N=5355**	17%	**27%**	25%	21%	12%
I don't think I'm clever enough to understand science **N=5352**	10%	14%	23%	**44%**	10%
I don't understand the point of all the science being done today **N=5349**	10%	14%	24%	**42%**	11%
It is important for us to learn science in school **N=5366**	**61%**	28%	4%	2%	5%
I can learn about science outside school too **N=5361**	**53%**	30%	7%	5%	6%
I would like to do more science when I finish school **N=5373**	**34%**	26%	15%	11%	14%
I talk to my parents/carers about science **N=5373**	254%	**28%**	18%	20%	10%