

ANNEX A

SUMMARY ANALYSIS OF INITIATIVES/PROGRAMMES FOR DfES, OGDs/PARTNERS AND EXTERNAL CONTACTS MAPS

EXPLANATIONS TO DIFFERENT CATEGORIES ON MAPS

“Pri only” – primary initiatives or programmes covering key stages (KSs) 1 and 2

“Sec only” – secondary initiatives or programmes taking place at secondary level and covering KSs 3 and 4 and up to ‘A’ level

“FE only” – initiatives taking place at post-16 level including ‘A’ level and up to degree level

“HE only” – initiatives taking place at university level including undergraduate, graduate and postgraduate

“Adults only” – initiatives for adults.

"Adults+" - Initiatives or programmes taking place in the Adults sector plus the other sectors of education at the same time.

"Pri+" - Initiatives or programmes taking place in the primary sector plus the other sectors of education at the same time.

"Sec+" - Initiatives or programmes taking place in the Secondary sector plus the other sectors of education at the same time.

"FE+" - Initiatives or programmes taking place in the FE/Post 16 sector plus the other sectors of education at the same time.

“HE+” - Initiatives or programmes taking place in HE sector plus the other sectors of education at the same time

"Adults++" - Initiatives or programmes taking place solely within the Adult sector, plus adults initiatives involving the other sectors of education as in "Adults+" above.

“E+” represents initiatives or programmes evaluated and appear to be working or producing positive results

“E” means some sort of "evaluation" ongoing including end of year reviews to check whether programme is worth pursuing further

“NE” means not evaluated for any reason

“NEA” - no evaluation anticipated

DfES MAP

1.1 Attached at Annex E, Volume 3 are the STEM initiatives mapped across the DfES. The tables and charts below summarise the activity mapped.

By Sector of Education

1.2. There are some initiatives that occur solely in one particular sector (**sector only** initiatives) and others that take place in more than one sector (**combined sector** initiatives). For example, whereas ‘Interactive Whiteboard Pilot’ (p. 4, Annex E, Vol 3) is taking place solely in the primary sector, ‘Skills Strategy’ (pp. 76-7, Annex E, Vol 3) is taking place in the primary, secondary, FE, HE and Adults sectors.

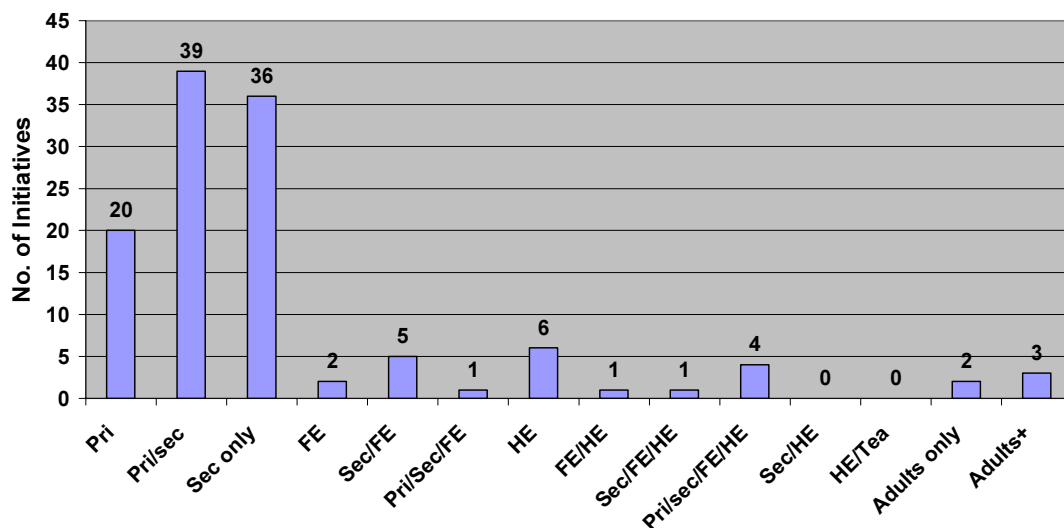
Table 5: Number of Initiatives in the Main Sectors of Education (DfES Map)

Sector	Initiatives
Pri only	20
Sec only	36
FE only	2
HE only	6
Adults only	2
Total	66

As such, there are a total of 66 initiatives in the main individual sectors as shown in Table 5 above.

Chart 5

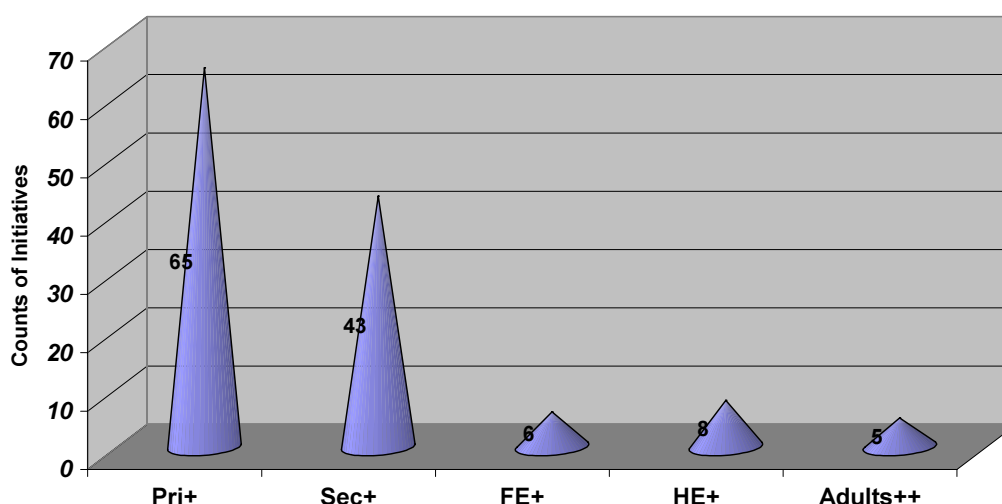
STEM Mapping - DfES Initiatives: Total Number of Initiatives by Sector of Education (120)



1.3 Chart 5 above represents numbers of initiatives by sector of education, including all the different combined sectors. There are a total of 120 initiatives across all sectors including the combined sectors.

Chart 6

STEM Mapping - DfES Initiatives: Total Number of Initiatives in each main Sector of Education including Combinations in each of these Sectors



1.4 Chart 6 above represents the total number of counts of initiatives in each main sector of education plus the combinations in each of these main sectors. For example, “HE+” will include initiatives in HE only, plus initiatives taking place in any combination of sectors including HE such as HE/FE, HE/Sec, HE/FE/Sec, HE/FE/Sec/Pri, HE/Teachers/ or HE/Adults. “Adults++” represents all “Adults only” initiatives, plus all other initiatives which includes adults – categorised as “Adults+” in Chart 5 above. So, for example, “Adults++” will include initiatives such as ‘Skills Strategy’ (pp. 76-7, Annex E, Vol 3) which covers the primary, secondary, FE, HE and Adults sectors.

1.5 It can be seen that there is an immense amount of STEM activity going on across the DfES which is concentrated in the primary and secondary sectors. *There is not as much activity in the FE and HE sectors and even less for adults.* There is post 16 activity in teaching and learning with science and maths as two priority areas.

By Type of Initiative

1.6 The mapping also itemised types of initiatives. For example, Science (SCI), Technology (TECH), Engineering (ENG), Maths, STEM, Information Technology (IT), Knowledge Transfer (KT) and Teaching (TEA) initiatives. Some initiatives cover more than one type. For example the ‘Aimhigher Programme’ (pp. 65-7, Annex E, Vol 3) is a STEM initiative and covers Science, Technology, Engineering and Maths. There are a total of 144 initiatives by type. Most are in Maths, Science and Teaching, and the least in

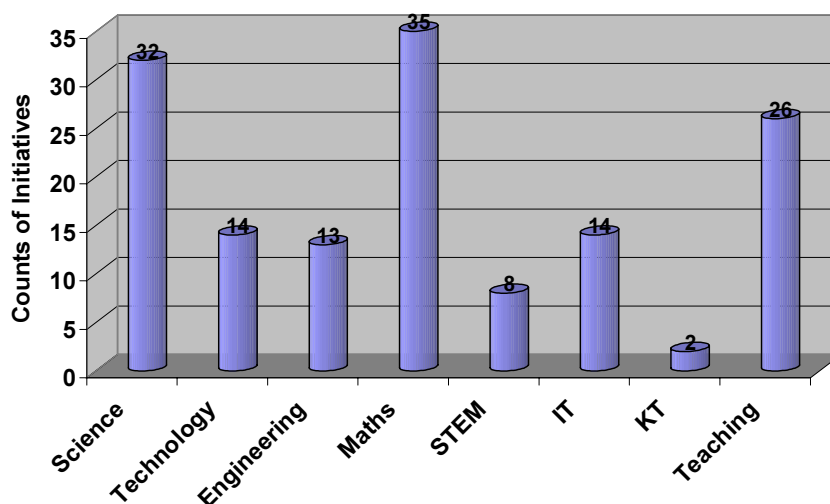
knowledge transfer. It should be noted that the total by type (144) is more than the total number of initiatives (120) because one initiative may cover more than one type.

Table 6: Total Count: Types of Initiatives by Subject (DfES Map)

Initiative	Count	%
Science	32	22.22
Tech	14	9.72
Eng	13	9.02
Maths	35	24.3
S.T.E.M.	8	5.55
I.T.	14	9.72
K.T.	2	1.38
Teaching	26	18.05
Total	144	99.96

Chart 7

STEM Mapping - DfES Initiatives: Total Number of Initiatives by Subject in all Sectors of Education including the Combined sectors



1.7 As can be seen from Table 6 and Chart 7 above, there are:

- 35 Maths initiatives, forming 24.3% of the total number of initiatives by type;
- 32 in Science, or 22.2% of the total;
- 26 in Teaching, or 18.05% of the total;
- 14 each in Technology (design/engineering) and IT, or 9.72% each of the total;
- 13 in Engineering, or 9% of the total;
- 8 in STEM or 5.55% of the total; and
- 2 in KT, or 1.67% of the total.

Other Key Statistics that can be drawn from the Map

Evaluation

1.8 As with the OGDs/partners and external contacts maps, there is a lack of readily available evaluation to make an assessment on impact for most of the initiatives.

Table 7: Evaluation Status: DfES Initiatives

Evaluation	Total	%
E+	24	20
E	34	28.33
NE	51	42.5
NEA	11	9.17
Total	120	100

As can be seen from Table 7 above:

- 20% of all initiatives appear to have been evaluated, and seem to be working;
- Another 28.33% have experienced some sort of evaluation. Even though this may not be formal, there is some evidence that the initiative is making an impact, e.g. where there is an increase in the number of pupils participating in that initiative;
- The remaining 51.67% have not been evaluated; and
- there is no evaluation anticipated for 9.17 %.

Evaluation when it is done does not generally incorporate supply/demand aspects so it is extremely difficult to assess whether the supply of STEM graduates is being addressed.

Initiatives addressing Recommendations from the Sir Gareth Roberts Review

1.9

- 40 or 33.3% of initiatives can be classified as addressing the Roberts recommendations
- 16 or 13.33% are taking place in the 'secondary only' sector; 8 or 6.67% are taking place in the combined primary and secondary sectors, and; 6 or 5% in the 'HE only' sector.

It should be noted that, although there are not many initiatives that have been identified in the map as commissioned to address the Roberts recommendations, many of the 81 other initiatives have a positive impact on taking the recommendations forward.

OTHER GOVERNMENT DEPARTMENTS/PARTNERS MAP

2.1 Attached at Annex F, Volume 4 are the STEM initiatives mapped across other government departments or partners (OGDs). This list is by no means exhaustive. The tables and charts below summarise the activity mapped.

By Sector of Education

2.2 As with the DfES map, there are some initiatives that occur solely in one particular sector (**sector only** initiatives) and others that take place in more than one sector (**combined sector** initiatives). For example, whereas 'Primary Maths Challenges' (p. 3, Annex F, Vol 4) is taking place solely in the primary sector, 'Learning Zone Website' (p. 228, Annex F, Vol 4) covers the primary, secondary, FE and Adults sectors.

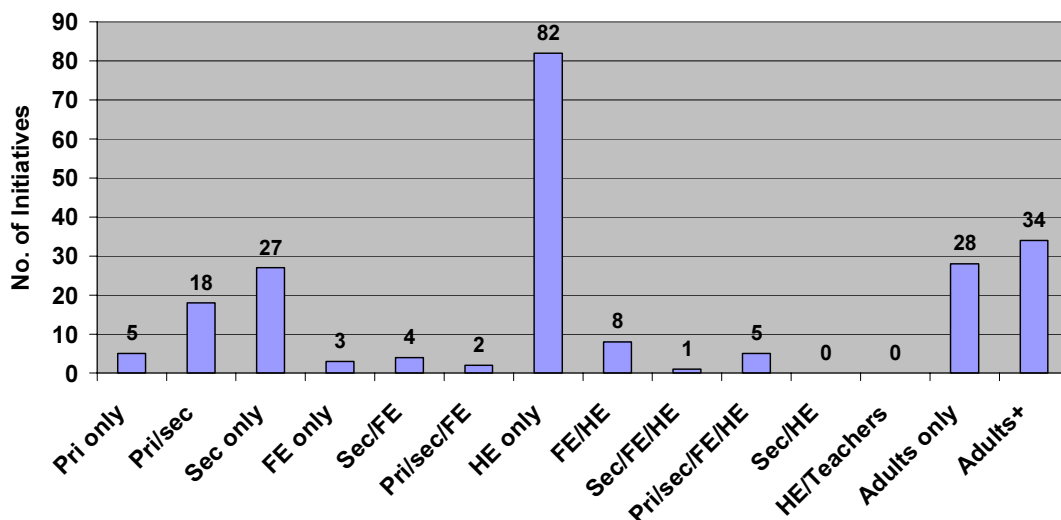
Table 8: Number of Initiatives in the Main Sectors of Education (OGDs/Partners Map)

Sector	Initiatives
Pri only	5
Sec only	27
FE only	3
HE only	82
Adults only	28
Total	145

As such, there are a total of 145 initiatives in the main individual sectors as shown in Table 8 above.

Chart 8

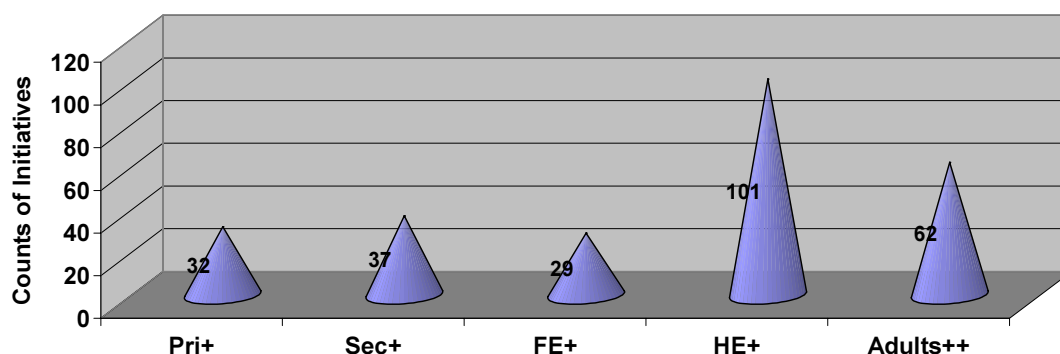
STEM Mapping on Other Government Departments/Partners: Total Number of Initiatives by Sector of Education (217)



2.3 Chart 8 above represents numbers of initiatives by sector of education, including all the different combined sectors. There are a total of 217 initiatives across all sectors including the combined sectors.

Chart 9

STEM Mapping on Other Government Departments/Partners: Total Number of Initiatives in each main Sector of Education including Combinations in each of these Sectors



2.4 Chart 9 represents the total number counts of initiatives in each main sector of education plus the combinations in each of these main sectors. For example, “HE+” will include initiatives in HE only, plus initiatives taking place in any combination of sectors including HE such as HE/FE, HE/Sec, HE/FE/Sec, HE/FE/Sec/Pri, HE/Teachers/ or HE/Adults. “Adults++” represents all “Adults only” initiatives, plus all other initiatives which includes adults – categorised as “Adults+” in Chart 8 above. So, for example, “Adults++” will include initiatives such as the ‘Learning Zone Website’ (p. 228, Annex F, Vol 4) which covers the primary, secondary, FE and Adults sectors.

2.5 It can be seen that there is a wide range of national and local STEM activity similar to the DfES map but as one would expect there is more of a slant towards STEM activity in the HE, Adults and secondary sectors with much more activity at HE compared to the primary and secondary activity in the DfES map. This goes someway to complementing the STEM activity going on in the DfES.

By Type of Initiative

2.8 The mapping also itemised types of initiatives. For example, Science initiatives (SCI), Technology (TECH), Engineering (ENG), Maths, STEM, Information Technology (IT), Knowledge Transfer (KT) and Teaching (TEA) initiatives. Some initiatives cover more than one TYPE. For example the ‘Science Enterprise Challenge’ (pp. 105-7, Annex F, Vol 4) is a STEM initiative and covers Science, Technology, Engineering and Maths. There are a total of 270 initiatives by type, and most are in Science, the least being in Technology. It should be noted that the total by type (270) is more than the

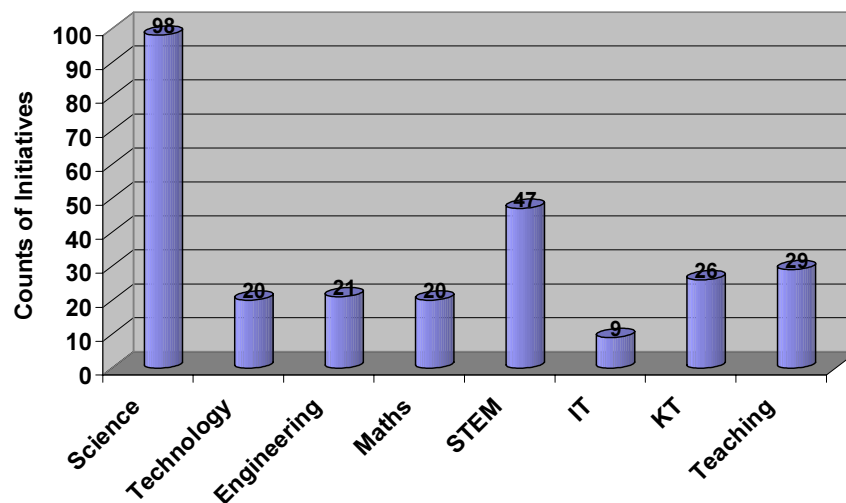
total number of initiatives (217) because one initiative may cover more than one type.

Table 9: Total Count: Types of Initiatives by Subject (OGDs/Partners Map)

Initiative	Count	%
Science	98	36.3
Tech	20	7.41
Eng	21	7.78
Maths	20	7.41
S.T.E.M.	47	17.41
I.T.	9	3.33
K.T.	26	9.63
Teaching	29	10.74
Total	270	100.01

Chart 10

STEM Mapping on Other Government Departments: Total Number of Initiatives by Subject in all Sectors of Education including the Combined sectors



2.8 As can be seen from Table 9 and Chart 10 above, there are:

- 98 Science initiatives, forming 36.3% of the total number of initiatives by type;
- 46 in STEM, or 17.41% of the total;
- 29 in Teaching, or 10.74% of the total;
- 26 in Knowledge Transfer, or 9.63% of the total;
- 21 in Engineering, or 7.78% of the total;
- 20 each in Maths and Technology, or 7.46% each of the total; and
- 9 or 3.3% of the total in IT.

Other Key Statistics that can be drawn from the Map

Evaluation

2.8 As with the DfES and External Contacts maps there is a lack of readily available evaluation to make an assessment on impact for most of the initiatives.

Table 10: Evaluation Status: Initiatives by OGDs/Partners

Evaluation	Total	% of 217
E+	6	2.76
E	76	35.02
NE	109	50.23
NEA	27	12.44
Total	218	100.45

As can be seen from Table 10 above:

- 2.8% of all initiatives appear to have been evaluated, and seem to be working;
- Another 35% have experienced some sort of evaluation. Even though this may not be formal, there is evidence that the initiative is making an impact, for example, where there is an increase in the number of pupils participating in that initiative;
- The remaining 62.67% have not been evaluated; and
- there is no evaluation anticipated for 12.44 %.

Evaluation when it is done does not generally incorporate supply/demand aspects so it is extremely difficult to assess whether the supply of STEM graduates is being addressed.

Initiatives addressing Recommendations from the Sir Gareth Roberts Review

2.9

- 40 or 18.4% of initiatives can be classified as addressing the Roberts recommendations
- Most or 25 (11.52%) are taking place in the HE only sector, representing 30.5% of this sector.

It should be noted that, although there are not as many initiatives as expected that have been identified in the map as commissioned to address the Roberts recommendations, many of the 177 other initiatives have a positive impact on taking the recommendations forward. Several had already been established, particularly those that relate to knowledge transfer and those taken forward by the Research Councils. Some of the Roberts' recommendations have not been mapped because they are not linked directly to STEM initiatives such as those that relate to the Sector Skills Councils.

EXTERNAL CONTACTS MAP

3.1 Attached at Annex G, Volume 5 are the STEM initiatives mapped across external organisations such as subject associations, industry and institutes. This list is by no means exhaustive. The tables and charts below summarise the activity mapped.

By Sector of Education

3.2 As with the previous maps, there are some initiatives that occur solely in one particular sector (**sector only** initiatives) and others that take place in more than one sector (**combined sector** initiatives). For example, whereas each of the ‘Commissioned guides’ initiatives (pp. 93-8, Annex G, Vol 5) is taking place in HE only, ‘Teacher Network’ (pp.45-7, Annex G, Vol 5) is taking place in the primary, secondary, FE and HE sectors.

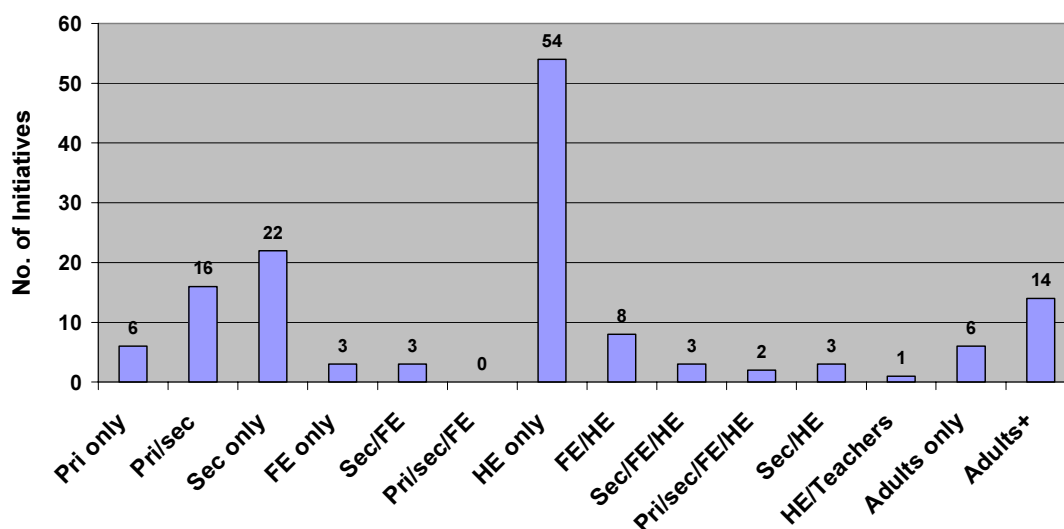
Table 11: Number of Initiatives in the Main Sectors of Education (External Contacts Map)

Sector	Initiatives
Pri only	6
Sec only	22
FE only	3
HE only	54
Adults only	6
Total	91

As such, there are a total of 91 initiatives in the main individual sectors as shown in Table 11 above.

Chart 11

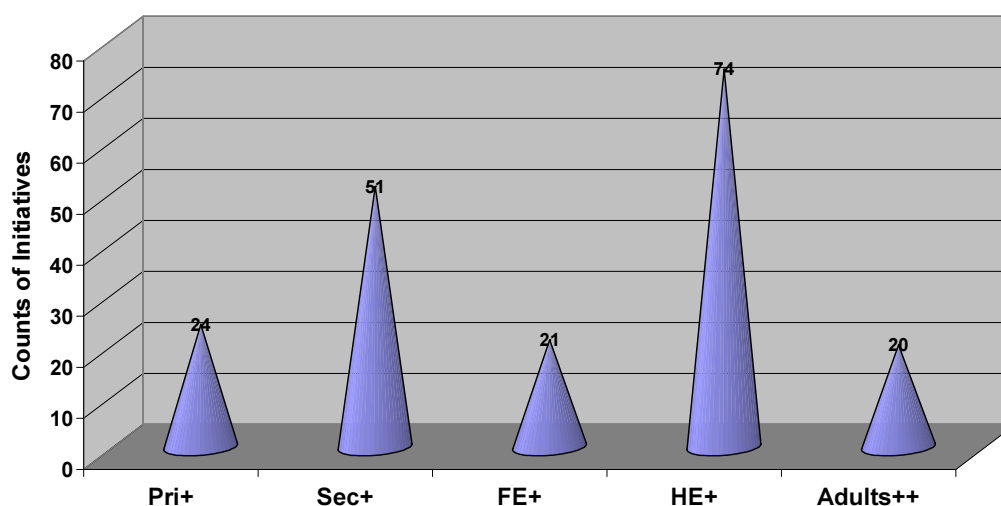
STEM Mapping on External Contacts: Total Number of Initiatives by Sector of Education (141)



3.3 Chart 11 above represents numbers of initiatives by sector of education, including all the different combined sectors. There are a total 141 initiatives across all sectors including the combined sectors.

Chart 12

STEM Mapping on External Contacts: Total Number of Initiatives in each main Sector of Education including Combinations in each of these Sectors.



3.4 Chart 12 above represents the total number of counts of initiatives in each main sector of education plus the combinations in each of these main sectors. For example, “HE+” will include initiatives in HE only, plus initiatives taking place in any combination of sectors including HE such as HE/FE, HE/Sec, HE/FE/Sec, HE/FE/Sec/Pri, HE/Teachers/ or HE/Adults. “Adults++” represents all “Adults only” initiatives, plus all other initiatives which includes adults – categorised as “Adults+” in Chart 11 above. So, for example, “Adults++” will include initiatives such as ‘Lets TWIST’ (pp. 129-32, Annex G, Vol 5) which covers the secondary, FE, HE and Adults sectors.

3.5 It can be seen that there are a variety of STEM initiatives on a regional and local rather than a national scale being run by external organisations. The bulk of the activity as can be seen from the charts seems to be in the HE and Secondary sectors.

By Type of Initiative

3.6 The mapping also itemised types of initiatives. For example Science (SCI), Technology (TECH), Engineering (ENG), Maths, STEM, Information Technology (IT), Knowledge Transfer (KT) and Teaching (TEA) initiatives. Some initiatives cover more than one type. For example ‘Postgraduate Industry Study Tours’ (p. 52, Annex G, Vol 5) is a STEM initiative and covers Science, Technology, Engineering and Maths. There are a total of 202 initiatives by type. Most are in Engineering, Teaching and Science, and the least in KT and Maths. It should be noted that the total by type (202) is more

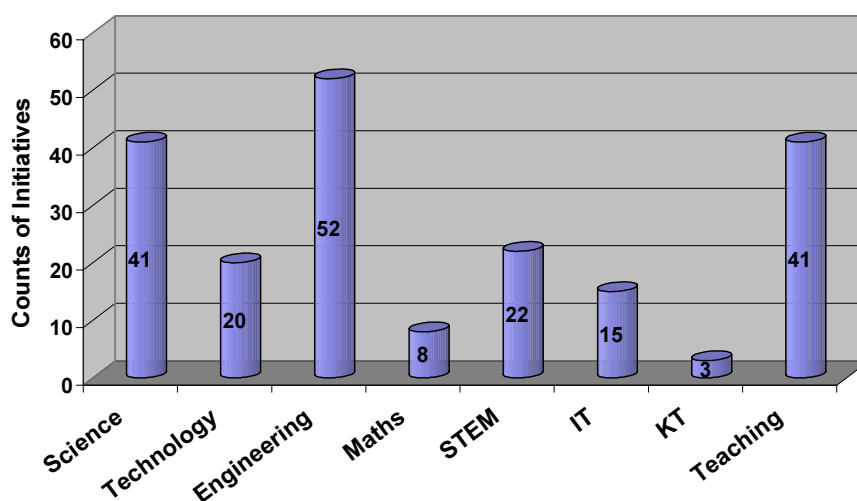
than the total number of initiatives (141) because one initiative may cover more than one type.

Table 12: Total Count: Types of Initiatives by Subject (External Contacts Map)

Initiative	Count	%
Science	41	20.3
Technology	20	9.9
Engineering	52	25.74
Maths	8	3.96
STEM	22	10.89
IT	15	7.43
KT	3	1.49
Teaching	41	20.3
Total	202	100.01

Chart 13

STEM Mapping on External Contacts: Total Number of Initiatives by Subject in all Sectors of Education including the Combined sectors



3.7 As can be seen from Table 12 and Chart 13 above, there are:

- 52 Engineering initiatives, forming 25.74% of the total number of initiatives by type
- 41 each in Science and Teaching, or 21.3% each of the total;
- 22 in STEM or 10.89% of the total;
- 20 in Technology, or 9.9% of the total;
- 15 in IT, or 7.43% of the total;
- 8 in Maths, or 3.96% of the total; and
- 3 in KT, or 1.49% of the total.

Other Key Statistics that can be deduced from the Map

Evaluation

3.8 As with the DfES and OGDs/partners maps there is a lack of readily available evaluation to make an assessment on impact for most of the initiatives.

Table 13: Evaluation status: Initiatives by External Contacts

Evaluation	Total	%
E+	10	7.09
E	23	16.31
NE	95	67.38
NEA	13	9.22
Total	141	100

As can be seen from Table 13 above:

- 7.09% of all initiatives appear to be evaluated, and seem to be working;
- Another 16.31% have experienced some sort of evaluation. Even though this may not be formal, there is evidence that the initiative is making an impact, for example, where there is an increase in the number of pupils participating in that initiative;
- The remaining 76.6% have not been evaluated; and
- there is no evaluation anticipated for 9.22 %.

Evaluation when it is done does not generally incorporate supply/demand aspects so it is extremely difficult to assess whether the supply of STEM graduates is being addressed.

Initiatives addressing Recommendations from the Sir Gareth Roberts Review

3.9

- 5 or 3.55% of initiatives can be classified as addressing the Roberts recommendations, 4 of which are taking place in the HE only sector, representing 7.4% of this sector.

It should be noted that, although there are not many initiatives that have been identified in the map as commissioned to address the Roberts recommendations, many of the 136 other initiatives have a positive impact on taking the recommendations forward.

CONCLUSION

4.1 The following conclusions can be drawn from the analysis of the maps.

4.2 For the DfES map:

- there are a total of 120 initiatives;
- 144 different types of initiatives with the most initiatives being taken forward in maths followed by science;
- there is a concentration of initiatives in the primary and secondary sectors, less activity in FE and HE sectors, and even fewer initiatives for adults; and
- there are 40 initiatives which address the Roberts recommendations, with the most in the secondary sector.

4.3 For the OGDs/partners map:

- there are a total of 217 initiatives;
- 270 different types of initiatives with the most initiatives being taken forward in science followed by STEM;
- there is a concentration of initiatives in the HE, Adults and secondary sectors; and
- there are 40 initiatives which address the Roberts recommendations, with the most in the HE sector.

4.4 For the external contacts map:

- there are a total of 141 initiatives;
- 202 different types of initiatives with the most initiatives being taken forward in engineering followed by science and teaching;
- there is a concentration of initiatives in the HE and secondary sectors; and
- 5 initiatives which address the Roberts recommendations, with the most in the HE sector.

4.5 There is a lack of readily available evaluation. For all maps less than 50% of the initiatives have had some sort of evaluation with 48.33% of initiatives having some sort of evaluation for the DfES map, 37.78% for the OGDs/Partners map and 23.4% for the External Contacts map. Evaluation when it is done does not generally incorporate supply/demand aspects, so it is

difficult to assess whether the supply of STEM graduates is being addressed.

4.6 Not many initiatives have been mapped as addressing the Roberts recommendations. This may be due to the fact that some do not begin until 2004, and others are not linked directly to STEM initiatives such as those relating to skills planning for businesses and the Sector Skills Councils.

ANNEX B

AIM, OBJECTIVES AND SCOPE

MAPPING REVIEW – SCIENCE, TECHNOLOGY, ENGINEERING & MATHS

Aim

To address concerns raised about:

- the decline in demand for university places in maths, science, engineering and technology
- the perceived lack of supply of graduates and qualified technicians in the engineering and related professions.

Objectives

- To understand the analysis and recommendations of the Roberts report ('SET for success'), and the concerns expressed by lobby groups and others (by end March 2003).
- To map initiatives in maths, science, technology and engineering being carried out by the DfES, DTI/OST and others (by end May 2003).
- To review findings from the mapping exercise to assess whether i) the Roberts' recommendations are being taken forward coherently, ii) legitimate concerns raised elsewhere are being addressed (by end July 2003).
- To formulate recommendations for i) filling any identified gaps in the present initiatives and ii) how the various activities might best be brought together (by end October 2003).
- To draft a paper/report on findings and next steps to be presented to the HE Director General (by mid January 2004).
- To communicate and disseminate information on the review to opinion formers (by end February 2004).

Scope

- During the course of the project links will be developed and maintained with all internal and external stakeholders, particularly the DTI to obtain up to date information on initiatives in the teaching and learning of maths, science, technology and engineering.
- Information gathering will involve the collection of hard and soft data in order to assess whether the Roberts' recommendations are being taken forward, whether initiatives are joined up and form a coherent package to address concerns raised by lobby groups and whether they

make an impact.

- Formulating a strategy for next steps based on the findings from the mapping/information gathering exercise.
- Building a rapport with lobby groups by providing convincing arguments to allay concerns raised.
- Ad hoc progress updates on the project for DfES/DTI joint board kit.

ANNEX C

STAKEHOLDERS LIST

Stakeholders/lobby groups

Internal stakeholders	External stakeholders	Lobby groups
<ul style="list-style-type: none"> • HE funding and Organisation Division (HEFOD) • Schools Plus Division (SP) • Schools Workforce Unit (SWU) • Standards and Effectiveness Unit (SEU) • Strategy and Innovation Unit (SIU) • HE Funding Council for England (HEFCE) • School and College Qualifications Division (SCQD) • Quality and Employability Division (QED) • Curriculum Division (CD) • Further Education Strategy Division (FESD) • Secondary Education Group (SEG) • Adult Basic Skills 	<ul style="list-style-type: none"> • Office of Science and Technology (OST part of DTI) • British National Space Centre (BNSC part of DTI) • Qualifications and Curriculum Authority (QCA) • Learning and skills Council (LSC) • British Educational Communications and Technology Agency (BECTa) • Education Business Link Partnerships (EBPs) • Science, Engineering and Technology networks (SETNET) • Learning and Skills Development Agency (LSDA) • Business in the Community (BiTC) • Sector Skills Development Agency (SSDA) • Sector Skills 	<ul style="list-style-type: none"> • Engineering and Technology Board (ETB) • Engineering Education Alliance (EEA) • Teacher Training Agency (TTA) • Association for Science Education (ASE) • The Maths Association (plus other subject associations where not covered by ASE) (ATM, MA, IOMA, LMS, RSS) • Confederation of British Industry (CBI)

Unit (ABSU)	<p data-bbox="715 190 938 226">Councils (SSC)</p> <ul data-bbox="667 264 970 1818" style="list-style-type: none"> <li data-bbox="667 264 970 371">• Learning and Teaching support networks (LTSN) <li data-bbox="667 409 970 517">• Higher Education Development Agency <li data-bbox="667 555 954 591">• Imperial College <li data-bbox="667 629 970 840">• Research Councils (PPARC, MRC, NERC, EPSRC, BBSRC, ESRC, RL) <li data-bbox="667 878 970 1059">• Professional associations (IOB, RS, Geo. Soc, RSC, IOP, ILT in HE) <li data-bbox="667 1097 970 1240">• Engineering professional associations (RAE, EC, IOCE) <li data-bbox="667 1279 970 1346">• UCAS/HESA for data <li data-bbox="667 1384 858 1451">• Scottish Executive <li data-bbox="667 1489 906 1597">• National Assembly for Wales <li data-bbox="667 1635 970 1818">• Department for Employment and Learning Northern Ireland (DELNI) 	
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ANNEX D

STEM MAPPING REVIEW PROJECT PLAN

PROJECT PLAN MAPPING REVIEW – MATHS, SCIENCE, TECHNOLOGY, ENGINEERING

KEY MILESTONES	MAIN TASKS	DEPENDENCIES/ LINKS	RISKS – H, M, L	IMPACT – H, M, L	CONTINGENCY
Scoping and planning project – Mid February to end February 2003	<ul style="list-style-type: none"> • Identify aim, objectives and stakeholders • Arrange meetings with internal and external contacts • Draft project plan 	HEFOD T/Ls, internal divisions and external contacts	<ul style="list-style-type: none"> • Scale of mapping not clearly defined impacting on timescale to collect information - M 	M	<ul style="list-style-type: none"> • Identify scope of project early on and limitations of mapping exercise • Build float into project plan to allow for slippage
Information gathering of initiatives from internal and external stakeholders – March to end May 2003	<ul style="list-style-type: none"> • Identify hard and soft data to be collected • Draw up template to collect information from stakeholders • Circulate template to all stakeholders • Build and maintain contacts for the mapping exercise 	Internal and external stakeholders	<ul style="list-style-type: none"> • Information not provided by stakeholders by deadline – H • Miss one or more central stakeholders - M 	H L	<ul style="list-style-type: none"> • Build float into project plan to allow for slippage • Progress chase stakeholders • Enter disclaimer - list is not exhaustive
Review of data collected – June to end	<ul style="list-style-type: none"> • Analyse data collected and 	HEFOD T/Ls	<ul style="list-style-type: none"> • Mapping does not 	M	<ul style="list-style-type: none"> • Recommendation of a sound ,

KEY MILESTONES	MAIN TASKS	DEPENDENCIES/ LINKS	RISKS – H, M, L	IMPACT – H, M, L	CONTINGENCY
July 2003	<p>assess whether addresses concerns and whether recommendations in Roberts' report are being implemented – identify gaps, are they coherent</p> <ul style="list-style-type: none"> Focus group for HEFOD, QED, CD, SP T/Ls to brainstorm on findings and formulate recommendations and next steps 		<p>address concerns – H</p> <ul style="list-style-type: none"> Recommendations in Roberts' report not implemented - L 	M	<p>practical strategy for next steps in place</p> <ul style="list-style-type: none"> Recommendations in place on how initiatives can be made more joined up and coherent in order to build on the Roberts' recommendations
Draft paper/report on findings for senior managers and Ministers – by mid January 2004	<ul style="list-style-type: none"> Draft paper/report including recommendations and next steps Circulate first draft to internal and external stakeholders for comment and amendments 	Internal and external stakeholders	<ul style="list-style-type: none"> Stakeholders fail to return comments/ amendments by deadline - M 	L	<ul style="list-style-type: none"> Build float into project plan to allow for slippage

KEY MILESTONES	MAIN TASKS	DEPENDENCIES/ LINKS	RISKS – H, M, L	IMPACT – H, M, L	CONTINGENCY
	<ul style="list-style-type: none"> • QA final draft with a lobby group and Sir Gareth Roberts • Present paper/report to HE DG • Draft brief submission for Ministers to accompany paper/report • Clear submission and paper/report with senior managers and policy leads before forwarding to Ministers 				
Develop communications strategy to disseminate information of the review – by end February 2004.	<ul style="list-style-type: none"> • Design and print paper/report for circulation to opinion formers • Draft forward from Alan Johnson and Lord Sainsbury for paper/report 	Designers, printers, Publicity Division, Press office, Senior managers, Ministers, Special Adviser	<ul style="list-style-type: none"> • Delay in design and printing – L • Delay in Ministerial clearance - M 	<p>L</p> <p>L</p>	<ul style="list-style-type: none"> • Delay announcement and distribution until April • Delay announcement until April

KEY MILESTONES	MAIN TASKS	DEPENDENCIES/ LINKS	RISKS – H, M, L	IMPACT – H, M, L	CONTINGENCY
	<ul style="list-style-type: none"> • Draft announcement/PN • Draft PN for clearance with Press Office • Clear PN with senior managers and Minister 				
Announcement and report published – by February/March 2004	<ul style="list-style-type: none"> • Circulate PN and paper/report to opinion formers • Ensure PN and report available on DfES website • Ensure PN is available • To circulate announcement in scientific periodicals/ TES/ Teachers' Magazine 	Press Office, Publicity division	<ul style="list-style-type: none"> • Delay in circulating PN and report - L 	L	<ul style="list-style-type: none"> • Postpone circulation until April

GLOSSARY

ABSU – Adult Basic Skills Unit

ACME – Association for Mathematics and its Applications

AHRB – Arts and Humanities Research Board

ASE – Association for Science Education

BNSC – British National Space centre

CBI – Confederation of British Industry

CCEA – Council for Curriculum, Examinations and Assessment

CfBT – Centre for British Teachers

CoVE –Centres of Vocational Excellence

CLC – City Learning Centre

CPD – Continued Professional Development

CRAC – Careers Research and Advisory Centre

CTC – City Technology College

DE – Department of Education (NI)

DEL – Department for Employment and Learning

EAZ – Education Action Zone

EBP – Education Business Partnership

EIC – Excellence in Cities

ELWA – Education and Learning, Wales

EMTA – Engineering and Marine Training Authority

ESPRC – Engineering and Physical sciences Research Council

ETB - Engineering and Technology Board

FD – Foundation Degree

FE – Further Education

FEC – Further Education Colleges

GO – Government Offices

HE - Higher Education

HEFCE – Higher Education Funding Council for England

HEI – Higher Education Institute

HEIF – Higher Education Innovation Fund

HMT – Her Majesty’s Treasury

HESA – Higher Education statistics Agency

IAT – Institute of Applied Technology

IOP – Institute of Physics

ITEC – Information Technology, Engineering and Computing

KS – Key Stage

KT – Knowledge Transfer

LEA – Local Education Authority

LINK – LINK Collaborative Research programme

LFS – Labour Force Survey

LSC – Learning and Skills Council

LSDA – Learning and Skills Development Agency

LTSN – Learning and Teaching support Network

MA – Modern Apprenticeship

NASA – National Aeronautics and Space Administration

NEBP – National Education Business partnership.

NESTA – National Endowment for Science, Technology and Arts

NNS – National Numeracy Strategy

NPL – National Physical Laboratory

NTI – New Technology Institute

NVQ – National Vocational Qualification

OFSTED – Office for Standards in Education

OGD – Other Government Department

OLS – Overseas Labour Service

OST – Office of Science and Technology (DTI)

PGCE – Post Graduate Certificate in Education

PSET – Public Engagement with Science and Technology Team (OST)

QCA – Qualifications and Curriculum Authority

QR – Quality Related

RC – Research Council

R & D – Research and Development

RDA – Regional Development Agency

SCBC – Scottish Colleges Biotechnology Consortium

SFEFC – Scottish Further Education Funding Council

SHEFC – Scottish Higher Education Funding Council

SEA s – Science and Engineering Ambassadors

SEMTA – Science, Engineering and Manufacturing Technologies Alliance

SET – Science, Engineering and Technology

SETNET – SET Network

SETPOINTS – 53 point UK programme established by SETNET

SFEFC – Scottish Further Education Funding Council

SHEFC – Scottish Higher Education Funding Council

SLICT – The Strategic leadership of ICT

SRIF – Science Research Investment Fund

SSC – Sector Skills Council

STEM – Science, Technology, Engineering and Maths

TC – Technology College

TTA – Teacher Training Agency

WDA – Welsh Development Agency

Key to Maps, Tables and Figures

SCI - Science

TECH - Technology

ENG - Engineering

MATHS - Mathematics

STEM - Science, Technology, Engineering and Maths

IT - Information Technology

KT - Knowledge Transfer

TEA - Teaching

TEA (. . . subject of teaching initiative)

“Pri only” – primary initiatives or programmes covering key stages (KSs) 1 and 2

“Sec only” – secondary initiatives or programmes taking place at secondary level and covering KSs 3 and 4 and up to ‘A’ level

“FE only” – initiatives taking place at post-16 level including ‘A’ level and up to degree level

“HE only” – initiatives taking place at university level including undergraduate, graduate and postgraduate

“Adults only” – initiatives for adults.

"Adults+" - Initiatives or programmes taking place in the Adults sector plus the other sectors of education at the same time.

"Pri+" - Initiatives or programmes taking place in the primary sector plus the other sectors of education at the same time.

"Sec+" - Initiatives or programmes taking place in the Secondary sector plus the other sectors of education at the same time.

"FE+" - Initiatives or programmes taking place in the FE/Post 16 sector plus the other sectors of education at the same time.

"HE+" - Initiatives or programmes taking place in HE sector plus the other sectors of education at the same time

"Adults++" - Initiatives or programmes taking place solely within the Adult sector, plus adults initiatives involving the other sectors of education as in "Adults+" above.

"E+" represents initiatives or programmes evaluated and appear to be working or producing positive results

"E" means some sort of "evaluation" ongoing including end of year reviews to check whether programme is worth pursuing further

"NE" means not evaluated for any reason

"NEA" - no evaluation anticipated

R - Initiative or programme commissioned by DfES in response to a Roberts recommendation

R% - percentage of programmes pursuing a Roberts recommendation in sectors of education. Please note that this is column-specific.

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