YouGov / Text 100 Survey Results

Sample Size: 307 Senior managers in industries that hire STEM graduates
Fieldwork: 28th August - 9th September 2013

Sample Size: 24 Academics Working in a STEM subject
Fieldwork: 2nd - 16th September 2013

	Managers	Academics
Unweighted Sample	306	24
	%	%

Which, if any of the following countries do you think have the best STEM (Science, Technology, Engineering and Maths) graduates? Please select up to three.

Germany	**51**	**75**
UK	**47**	**38**
USA	**37**	**33**
India	**23**	**25**
China	**22**	**17**
Sweden	**8**	**13**
The Netherlands	**7**	**13**
Finland	**6**	**4**
Denmark	**4**	**4**
Norway	**3**	**4**
None of these countries have good STEM graduates	**0**	**0**
Don't know	**17**	**17**

Thinking now about graduates from STEM subjects (Science, Technology, Engineering and Maths), would you say that there are or are not enough skilled candidates from UK universities to meet your company's requirements?

There are enough skilled candidates	**32**	**4**
There are NOT enough skilled candidates	**59**	**79**
Don't know	**9**	**17**

What are the main reasons for the STEM skills gap in the UK? Please tick all that apply.

[All those who think there is a STEM skills gap n=182]

We do not have enough STEM graduates	**53**	**53**
There is not enough collaboration between industry and academia	**52**	**47**
Investment in the teaching of STEM in Further Education and Higher Education is not as high as in other countries	**51**	**37**
There is not enough focus on project-based learning during secondary school, Further Education and Higher Education	**40**	**21**
Students do not have enough access to technology that is used in industry	**32**	**16**
The calibre of students / graduates is not as high as it is in other countries	**30**	**16**
The calibre of teaching is not as high as it is in other countries	**30**	**11**
The base of students is not diverse enough	**18**	**11**
Another reason	**15**	**21**
Don't know	**1**	**11**

Fieldwork: 28th August - 9th September 2013

Sample Size: 24 Academics Working in a STEM subject
Fieldwork: 2nd - 16th September 2013

	Managers	Academics
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	%	%
How long do you think it will take to close the skills gap in STEM? *[All those who think there is a STEM skills gap n=182]*		
Less than ten years	25	5
10 to 19 years	39	53
20 to 29 years	6	5
Longer than 30 years	3	5
The STEM skills gap will never be closed	13	5
Don't know	14	26
Thinking about the skills gap in relation to the UK economy, which statement most closely reflects your view? *[All those who think there is a STEM skills gap n=182]*		
The STEM skills gap needs to be bridged in order for the UK to be competitive in the world economy	83	89
We do not need to bridge the UK STEM skills gap as it is already being filled by overseas graduates	4	5
The STEM skills gap in the UK exists but is over-stated	9	5
None of these	2	0
Don't know	2	0
Project-based learning is a teaching and learning approach that engages students in the investigation of science and real world engineering problems.		
When thinking about project-based learning in STEM subjects to what extent do you agree or disagree with the following statements?		
It is impossible for STEM students to reach their potential without project-based learning		
Strongly agree	15	8
Tend to agree	41	29
TOTAL AGREE	56	37
Neither agree nor disagree	29	25
Tend to disagree	13	21
Strongly disagree	2	17
TOTAL DISAGREE	15	38
There needs to be more project-based learning in STEM subjects		
Strongly agree	17	13
Tend to agree	44	21
TOTAL AGREE	61	34
Neither agree nor disagree	32	42
Tend to disagree	6	21
Strongly disagree	0	4
TOTAL DISAGREE	6	25
Project-based learning needs to be built into the curriculum at secondary school to encourage the best STEM students to continue their studies		
Strongly agree	23	13
Tend to agree	51	29
TOTAL AGREE	74	42
Neither agree nor disagree	20	33
Tend to disagree	6	21
Strongly disagree	1	4
TOTAL DISAGREE	7	25

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It is important for industries to have STEM graduates that are well-versed in project-based learning		
Strongly agree	22	13
Tend to agree	52	46
TOTAL AGREE	74	59
Neither agree nor disagree	21	25
Tend to disagree	4	13
Strongly disagree	0	4
TOTAL DISAGREE	4	17
Project-based learning helps develop skills needed for future careers such as critical thinking, problem solving and collaboration		
Strongly agree	30	25
Tend to agree	48	54
TOTAL AGREE	78	79
Neither agree nor disagree	16	13
Tend to disagree	6	8
Strongly disagree	0	0
TOTAL DISAGREE	6	8
There is too much project-based learning in STEM subjects		
Strongly agree	4	0
Tend to agree	9	17
TOTAL AGREE	13	17
Neither agree nor disagree	43	29
Tend to disagree	34	42
Strongly disagree	9	13
TOTAL DISAGREE	43	55
STEM subjects should focus more on academic learning over project-based learning		
Strongly agree	7	13
Tend to agree	22	25
TOTAL AGREE	29	38
Neither agree nor disagree	38	42
Tend to disagree	29	21
Strongly disagree	5	0
TOTAL DISAGREE	34	21
Thinking about STEM students in further education and universities, do you think they do or do not have enough access to hardware as part of their learning?		
STEM students in the UK do have enough access to hardware as part of their learning	30	33
STEM students in the UK do NOT have enough access to hardware as part of their learning	35	29
Don't know	35	38
And would you say that learning how to work with hardware is or is not integrated into the curriculum?		
Learning how to work with hardware is integrated into curriculum	24	42
Learning how to work with hardware is NOT integrated into curriculum	38	38
Don't know	38	21

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Which of the below statements best reflects your view of the role industry has in shaping how STEM students are taught in Further and Higher Education in the UK?		
Industry should make a greater investment and have a greater say in the shape of the STEM curriculum in the UK	63	46
Industry should maintain the level of investment and say it already has in the STEM curriculum in the UK	26	33
Industry should have less investment and have less of a say in the shape of the STEM curriculum in the UK	2	8
Don't know	9	13
You mentioned that you think industry should make a greater investment and have a greater say in the shape of the STEM curriculum in the UK. How should industry make a greater investment in the STEM curriculum / preparing students? *[All those who think industry should have greater involvement n=194]*		
Provide workplace experiences to students in STEM subjects	88	100
Collaborate more closely with academia in curriculum development	74	82
Provide experts to give guest talks at schools and universities	70	73
Provide equipment in educational institutions	45	64
Publish its own curriculum for the STEM subjects outlining what students should learn	33	0
Something else	2	0
Don't know	1	0