Survey questionnaire and topline

2017 STEM SURVEY QUESTIONNAIRE
JULY 11-AUG. 10, 2017
N=4,914

ASK ALL:
SCH1   Thinking about what's being taught in the K to 12 public schools these days, what ONE subject should schools emphasize more than they do now? **[OPEN-END]**

Jul 11 – Aug 10
<u>2017</u>

	Responses coded into the following categories:
19	English/Grammar/Writing/Reading
18	Math/Statistics
12	History/Social Studies/Civics/Politics/Current events/Engineering
9	Science/Engineering
7	Economics/Finances
6	Life skills/Home economics
4	Manner/Respect/Anti-bullying/Social skills
3	Computers/Computer science
3	Art/Arts/Music
3	Physical education/Health/Sex education/Abstinence
2	Critical thinking/Logic
1	Foreign Languages
1	Religion/Christianity/Bible/Prayer/Creationism
1	Nothing
<1	Everything
12	Don't know/Not answer
28	**(NET) STEM subjects**

TREND FOR COMPARISON:
Pew Research Center/Smithsonian Magazine survey conducted by telephone: *Thinking about what's being taught in kindergarten-through-12th-grade schools these days, what ONE subject should schools emphasize more than they do now?* **[OPEN END. ACCEPT ONLY ONE RESPONSE. USE PRECODED LIST IF RESPONSE CLEARLY FITS. OTHERWISE RECORD OPEN-END RESPONSE. PROBE FOR CLARITY – DO NOT PROBE FOR ADDITIONAL MENTIONS.]**

	March 7-10 2013
Math/Mathematics/Arithmetic	30
English/Grammar/Writing/Reading	19
Science	11
History/Social studies/Civics/Politics/Current events/Government	10
Art/Arts/Music	6
Computers/Computer science	4
Physical education/Health/Sex education/Abstinence	2
Religion/Christianity/Bible/Prayer/Creationism	2
Economics/Finances	2
Foreign Languages	1
Manner/Respect/Anti-bullying	1
Other	3
Don't know/No answer	7
(NET) STEM subjects	**45**

ASK ALL:
SCH2 Overall, how much would you say you know about the K to 12 public schools…

    a. In your local community

        23   A lot
        56   A little
        20   Nothing at all
        <1   No answer

    b. In the U.S. as a whole

        11   A lot
        68   A little
        20   Nothing at all
         1   No answer

ASK ALL:
SCH3 How would you rate the K to 12 public schools in your local community in the following areas?
[RANDOMIZE ITEMS]

    a. In providing the knowledge and skills needed for pursuing a four-year college degree

        12   Excellent
        47   Good
        31   Only fair
         7   Poor
         3   No answer

    b. In teaching reading, writing and mathematics

        11   Excellent
        51   Good
        31   Only fair
         6   Poor
         2   No answer

    c. In providing the knowledge and skills needed for pursuing a vocational or technical career

         8   Excellent
        44   Good
        36   Only fair
         9   Poor
         3   No answer

SCH3 continued…

a. In teaching critical-thinking and problem-solving skills

7	Excellent
41	Good
38	Only fair
11	Poor
2	No answer

ASK ALL:
SCH4 Compared with other developed nations, how would you rate the United States in the following area... education in K to 12 public schools?

3	The U.S. is the best in the world
23	The U.S. is above average
42	The U.S. is average
31	The U.S. is below average
1	No answer

RANDOMLY ASSIGN HALF OF RESPONDENTS ITEMS IN ORDER a-c AND OTHER HALF ITEMS IN ORDER c-a
ASK ALL:
SCH5 a. Compared with other developed nations, how would you rate the United States in the following area…education in science, technology, engineering and math in K to 12 public schools?

3	The U.S. is the best in the world
22	The U.S. is above average
43	The U.S. is average
30	The U.S. is below average
2	No answer

TREND FOR COMPARISON:
Pew Research Center survey conducted by telephone: We'd like you to compare the United States to other industrialized countries in a few different areas … Do you think the U.S. is the BEST IN THE WORLD, above average, average or below average in science, technology, engineering and math education for grades K to 12 compared to other industrialized countries?

	Aug 15-25 <u>2014</u>
Best in the world	7
Above average	22
Average	39
Below average	29
Don't know/Refused **(VOL.)**	3

b. Compared with other developed nations, how would you rate the United States in the following area…undergraduate education in science, technology, engineering and math in colleges and universities?

6	The U.S. is the best in the world
29	The U.S. is above average
46	The U.S. is average
17	The U.S. is below average
2	No answer

c. Compared with other developed nations, how would you rate the United States in the following area…graduate education in science, technology, engineering and math in universities?

9	The U.S. is the best in the world
29	The U.S. is above average
43	The U.S. is average
17	The U.S. is below average
2	No answer

ASK ALL:
SCH6 Thinking about science, technology, engineering and math education in the nation's K to 12 public schools these days, do you think each of the following is a big problem, a small problem or not a problem? **[RANDOMIZE ITEMS]**

		A big problem	A small problem	Not a problem	No answer
a.	Too little time is spent on these subjects in elementary school	48	39	11	2
b.	Teachers do not have curriculum materials that are up-to-date with the newest developments in these subjects	48	37	13	2
c.	Students lack interest in learning about these subjects	57	33	8	2
d.	Too much emphasis is given to meeting state standards in these subjects	55	32	11	2
e.	Teachers do not emphasize the practical uses of these subjects for everyday life	53	38	7	2
f.	Parents are not involved in supporting school education in these subjects	61	31	6	2
g.	Students are not willing to work hard to excel in these subjects	59	32	7	2
h.	Teachers rarely use methods that help students think critically and problem-solve in these subjects	49	40	9	2

ASK ALL:
SCH7   What's the main reason many young people don't pursue college degrees in science, technology, engineering and mathematics? Is it mostly because… **[RANDOMIZE; "some other reason" always last]**

July 11- Aug 10 <u>2017</u>	
52	They think these subjects are too hard
12	They think these subjects are too boring
23	They think these subjects are not useful for their careers
12	Some other reason (please specify) **[OPEN END]**
2	No answer

TREND FOR COMPARISON:
Pew Research Center/Smithsonian Magazine survey conducted by telephone: What's the main reason many young people don't pursue degrees in math and science? Is it mostly because they think these subjects…. **[READ AND RANDOMIZE]**

	March 7-10 <u>2013</u>
Are too hard	46
Are too boring	20
Are not useful for their careers	22
Other **(VOLUNTEERED)**	7
Don't know/Refused **(VOLUNTEERED)**	4

ASK ALL:
SCH8   Thinking back to your own experiences in grades K to 12, did you generally like or dislike…
[RANDOMIZE ITEMS]

a.   Science classes

75	Liked
25	Disliked
1	No answer

b.   Math classes

58	Liked
42	Disliked
<1	No answer

ASK IF SCH8A=1:
SCH9A Thinking back to your experiences in grades K to 12, which of these was the main reason you generally liked SCIENCE CLASSES?

Based on those who liked science classes [N=3,932]

31	I liked the way science classes were taught
68	I liked the subject matter of the science classes
1	No answer

ASK IF SCH8A=2:
SCH9A Thinking back to your experiences in grades K to 12, which of these was the main reason you generally disliked SCIENCE CLASSES?

Based on those who disliked science classes [N=963]
36	I disliked the way science classes were taught
61	I disliked the subject matter of the science classes
3	No answer

ASK IF SCH8B=1:
SCH9B Thinking back to your experiences in grades K to 12, which of these was the main reason you generally liked MATH CLASSES?

Based on those who liked math classes [N=3,117]
38	I liked the way math classes were taught
61	I liked the subject matter of the math classes
1	No answer

ASK IF SCH8B=2:
SCH9B Thinking back to your experiences in grades K to 12, which of these was the main reason you generally disliked MATH CLASSES?

Based on those who disliked math classes [N=1,788]
40	I disliked the way math classes were taught
59	I disliked the subject matter of the math classes
1	No answer

ASK IF LIKED SCIENCE CLASSES (SCH8A=1):
SCH10A   Thinking back to your own experiences in grades K to 12 which of these, if any, describe reasons you generally liked SCIENCE CLASSES?

Select all answers that apply **[RANDOMIZE ITEMS; none of these always last]**

Based on those who liked science classes [N= 3,932]

		Selected	Not selected/ No answer
a.	I found science classes easy	31	69
b.	It was easy to see how science would be useful for the future	40	60
c.	I felt that I belonged in science classes	25	75
d.	I liked the labs and hands-on learning experiences	70	30
e.	I had a lot of support at home or after school to help me do well in these classes	15	85
f.	None of these	6	94

ASK IF DISLIKED SCIENCE CLASSES (SCH8A=2):
SCH10B   Thinking back to your own experiences in grades K to 12, which of these, if any, describe reasons you generally disliked SCIENCE CLASSES?

Select all answers that apply **[RANDOMIZE ITEMS; none of these always last]**

Based on those who disliked science classes [N=963]

	Selected	Not selected/ No answer
a. I found science classes hard	46	54
b. It was not easy to see how science would be useful for the future	36	64
c. I felt that I didn't belong in science classes	24	76
d. I didn't like the labs and hands-on learning experiences	18	82
e. I didn't have enough support at home or after school to do well in these classes	17	83
f. None of these	15	85

ASK IF EMPLOYED (DOV_EMPLOYED=1)
JOBVALU1   Thinking about your own work experiences…
                    Which of these things, if any, is important to you personally when choosing a job?

Select all answers that apply **[RANDOMIZE ITEMS; none of the above always last]**

Based on employed [N=4,702]

	Selected	Not selected/ No answer
a. Having a high-paying job	46	54
b. Having flexibility to balance work and family needs	68	32
c. Having opportunities for promotion or advancement	53	47
d. Making a meaningful contribution to society	38	62
e. Having a job that others respect and value	39	61
f. Having a job that focuses on helping others	35	65
g. Being in a workplace that is welcoming for people like me	46	54
h. None of the above	5	95

COMBINED RESPONSES JOBVALU1 AND JOBVALU2
JOBVALU1   Thinking about your own work experiences…
                Which of these things, if any, is important to you personally when choosing a job?
                Select all answers that apply **[RANDOMIZE ITEMS; none of the above always last]**
ASK IF MORE THAN ONE ITEM SELECTED ON JOBVALU1:
JOBVALU2   And, which of these things is MOST important to you personally when choosing a job?

Based on employed [N=4,702]

		NET Important (JOBVALU1)	Most important (JOBVALU2) /Selected alone (JOBVALU1)	Important (JOBVALU1)/Not most important (JOBVALU2)	Not selected/ No answer
a.	Having a high-paying job	46	16	30	54
b.	Having flexibility to balance work and family needs	68	38	30	32
c.	Having opportunities for promotion or advancement	53	14	39	47
d.	Making a meaningful contribution to society	38	9	30	62
e.	Having a job that others respect and value	39	5	35	61
f.	Having a job that focuses on helping others	35	8	27	65
g.	Being in a workplace that is welcoming for people like me	46	6	40	54
h.	None of the above	5			95

ASK IF EMPLOYED (DOV_EMPLOYED=1):
AHEAD Thinking about the kind of work you do, would you say each of the following helps, hurts, or makes little difference for your chances of getting ahead in your job? **[RANDOMIZE ITEMS]**

Based on employed [N=4,702]

		Helps my chances of getting ahead in my job	Hurts my chances of getting ahead in my job	Makes little difference	No answer
a.	Being assertive	60	10	29	1
b.	Participating in informal social activities with my coworkers	29	5	65	1
c.	Speaking out about problems I see in the workplace	34	22	43	1
d.	Having a workplace mentor to advise me	59	3	37	1
e.	Talking about my personal life at work	8	28	63	1
f.	Working harder than others	65	3	31	1
g.	Being vocal about my work and accomplishments	35	13	52	1

ASK IF EMPLOYED (DOV_EMPLOYED=1):
TALENT For the kind of work that you do, how important, if at all, would you say having a natural ability is or has been for you, personally, to get ahead in your job?

Based on employed [N=4,702]

38	Very important
45	Somewhat important
12	Not too important
5	Not at all important
1	No answer

ASK IF WORKING BUT NOT SELF-EMPLOYED (WORK_1=1 OR WORK_2=1):

PROVE   How often, if ever, do you feel the need to prove yourself at work in order to be respected by your coworkers?

Among those asked N=4,246		Among all employed N=4,702
18	All the time	17
37	Some of the time	33
31	Not too often	28
14	Never	13
1	No answer	1
	Not asked	9

RANDOMIZE AND RECORD ORDER OF RESPECTA AND RESPECTB
ASK IF WORKING BUT NOT SELF-EMPLOYED (WORK_1=1 OR WORK_2=1):

RESPECTA   How much would you say that your contributions at work are valued by your SUPERVISOR?

Among those asked N=4,246		Among all employed N=4,702
42	A lot	38
40	Some	37
12	Not too much	11
5	Not at all	5
<1	No answer	<1
	Not asked	9

ASK IF WORKING BUT NOT SELF-EMPLOYED (WORK_1=1 OR WORK_2=1):

RESPECTB   How much would you say that your contributions at work are valued by your COWORKERS?

Among those asked N=4,246		Among all employed N=4,702
37	A lot	33
45	Some	41
13	Not too much	12
4	Not at all	4
1	No answer	1
	Not asked	9

ASK ALL:
FAMSTEM1   Do you have any close family members who work or have worked in a job or career that involves science, technology, engineering or math?

45   Yes
55   No
<1   No answer

ASK ALL:
FAMSTEM1   Do you have any close family members who work or have worked in a job or career that involves science, technology, engineering or math?
FAMSTEM2   These close family members who work or have worked in a job or career that involves science, technology, engineering or math are…

45   Yes
24   Older family member working in STEM
21   No older family member working in STEM
1   No answer
55   No family members working in STEM
<1   No answer

ASK IF NON-STEM WORKER (WORKTYPE_FINAL=2):
INTEREST1   Were you, personally, ever interested in pursuing a job or career that involves science, technology, engineering or math?

Based on non-STEM workers [N=2,354]
16   Yes, I was very interested
24   Yes, I was somewhat interested
21   No, I was not too interested
27   No, I was not at all interested
9   My job or career currently involves science, technology, engineering or math
<1   No answer

ASK IF SOMEWHAT OR VERY INTERESTED (INTEREST1=1,2):

INTEREST2   When were you **[IF INTEREST1=1:**very**; IF INTEREST1=2:**somewhat**]** interested in pursuing a job or career that involves science, technology, engineering or math? [Enter your age at the time. If you don't recall a specific age, describe the time period in your life.] **[OPEN-END]**

Based on those who were very or somewhat interested in pursuing a STEM job [N=849]

Jul 11 – Aug 10
   <u>2017</u>
   10   Childhood/elementary school
   28   Teenage years/high school
   41   20s/College
   5   Age 30 and older
   1   Always interested
   1   Currently or previously in STEM career
   1   Never interested in STEM career
   6   Can't classify
   8   Don't know/Don't remember/No answer

ASK IF SOMEWHAT OR VERY INTERESTED (INTEREST1=1,2):
INTEREST3   What's the main reason you did not pursue a job or career that involves science, technology, engineering or math? **[OPEN-END]**

Based on those who were very or somewhat interested in pursuing a STEM job [N=849]

Jul 11 – Aug 10 2017	
27	Cost and time barriers NET
15	*Too expensive*
6	*Not enough education*
4	*Lack of access to resources and opportunities*
3	*Too large of a time commitment*
2	*Too much work/Too many classes to take*
20	Ended up on a different path NET
7	*Found another interest/passion*
6	*Got or already had a job in another field*
5	*Chose to pursue a different career*
2	*Not encouraged to pursue these subjects/careers*
14	Specific problems with subject NET
4	*Didn't do well in STEM classes*
4	*Classes seemed too difficult*
3	*Lost interest in the subject*
3	*Specific class turned them off*
1	*Didn't study; was too lazy*
<1	*Didn't know how to get into a career in STEM*
<1	*Thought these subjects were too specific/too narrow*
<1	*Didn't have a STEM degree*
<1	*Didn't see how STEM subjects would be applicable*
11	Personal circumstances/family NET
6	*Starting or was already taking care of family*
3	*Other personal circumstances*
2	*Disability/Illness*
7	Problems with STEM jobs and careers themselves NET
4	*Lack of jobs/Too much competition*
2	*These jobs don't pay well enough*
1	*Didn't like perceived work environment*
1	Issues because of gender
9	Did pursue STEM job/changed jobs
4	Currently pursuing STEM job/might pursue STEM job in future
4	Other
13	Don't know/No answer

ASK ALL:
STEMJOB Compared with jobs in other industries, would you say… **[RANDOMIZE ITEMS]**

    a. Jobs in science, technology, engineering and math…

        71   Offer higher pay than jobs in other industries
         7   Offer lower pay than jobs in other industries
        20   Offer similar pay to jobs in other industries
         2   No answer

    b. Jobs in science, technology, engineering and math…

        50   Offer more opportunities for advancement than jobs in other industries
        12   Offer fewer opportunities for advancement than jobs in other industries
        36   Offer about the same number of opportunities for advancement as jobs in other industries
         2   No answer

    c. Jobs in science, technology, engineering and math…

        18   Have more flexibility to balance work and family needs than jobs in other industries
        28   Have less flexibility to balance work and family needs than jobs in other industries
        52   Have about the same amount of flexibility to balance work and family needs as jobs in other industries
         2   No answer

    d. Jobs in science, technology, engineering and math…

        45   Make a more meaningful contribution to society than jobs in other industries
         5   Make a less meaningful contribution to society than jobs in other industries
        48   Make a about the same contribution to society as jobs in other industries
         2   No answer

    e. Jobs in science, technology, engineering and math…

        53   Are more well-respected than jobs in other industries
         9   Are less well-respected than jobs in other industries
        36   Are respected about the same as jobs in other industries
         2   No answer

STEMJOB continued...

f. Jobs in science, technology, engineering and math...

28	Are more focused on helping others than jobs in other industries
16	Are less focused on helping others than jobs in other industries
54	Are focused about the same amount on helping others as jobs in other industries
2	No answer

g. Jobs in science, technology, engineering and math...

58	Attract more of the brightest and most qualified young people than jobs in other industries
13	Attract fewer of the brightest and most qualified young people than jobs in other industries
27	Attract about the same number of the brightest and most qualified young people as jobs in other industries
2	No answer

h. Jobs in science, technology, engineering and math...

49	Are more difficult to get into than jobs in other industries
14	Are less difficult to get into than jobs in other industries
35	Are similarly difficult to get into as jobs in other industries
2	No answer

CREATE DOV_FORM [S]
Randomly assign half of respondents into FORM=1 and the other half into FORM=2
IF FORM=1, show REASON1 first then REASON2. IF FORM=2, show REASON2 first then REASON1.

ASK ALL:
REASON1   As you may know, women are underrepresented in some science, technology, engineering and math jobs in this country.

For each of the following, please indicate whether you think it is a major reason, a minor reason or not a reason why there are not more women working in science, technology, engineering and math jobs. **[RANDOMIZE ITEMS]**

a. From an early age, girls are not encouraged to pursue these subjects in school

39	A major reason
31	A minor reason
28	Not a reason
2	No answer

REASON1 continued...

a. Women are less likely than men to believe that they can succeed in these fields

    23   A major reason
    34   A minor reason
    41   Not a reason
     2   No answer

b. Women do not pursue these jobs because there are so few female role models in these fields

    24   A major reason
    36   A minor reason
    37   Not a reason
     2   No answer

c. Women face discrimination in the recruitment process, hiring and promotions

    39   A major reason
    29   A minor reason
    29   Not a reason
     2   No answer

d. More women are being trained in science, technology, engineering and math than before, but it takes time and the process is slow

    27   A major reason
    38   A minor reason
    33   Not a reason
     2   No answer

e. Women are just less interested in science, technology, engineering and math than men

    18   A major reason
    32   A minor reason
    47   Not a reason
     3   No answer

f. It is more difficult to build a career while balancing work and family responsibilities in science, technology, engineering and math jobs than jobs in other industries

    33   A major reason
    36   A minor reason
    28   Not a reason
     2   No answer

ASK ALL:
REASON2   As you may know, blacks and Hispanics are underrepresented in science, technology, engineering and math jobs in this country.

For each of the following, please indicate whether you think it is a major reason, a minor reason or not a reason why there are not more blacks and Hispanics working in science, technology, engineering and math jobs. **[SHOW IN SAME ORDER AS REASON1]**

a. From an early age, blacks and Hispanics are not encouraged to pursue these subjects in school

41	A major reason
25	A minor reason
32	Not a reason
2	No answer

b. Blacks and Hispanics are less likely than others to believe that they can succeed in these fields

33	A major reason
31	A minor reason
34	Not a reason
2	No answer

c. Blacks and Hispanics do not pursue these jobs because there are so few black and Hispanic role models in these fields

27	A major reason
33	A minor reason
37	Not a reason
3	No answer

d. Blacks and Hispanics face discrimination in the recruitment process, hiring and promotions

31	A major reason
29	A minor reason
38	Not a reason
3	No answer

e. More blacks and Hispanics are being trained in science, technology, engineering and math than before, but it takes time and the process is slow

22	A major reason
38	A minor reason
36	Not a reason
3	No answer

REASON2 continued...

    a. Blacks and Hispanics are just less interested in science, technology, engineering and math than others

22	A major reason
26	A minor reason
49	Not a reason
3	No answer

    b. Blacks and Hispanics are less likely to have access to quality education to prepare them for these fields than others

42	A major reason
26	A minor reason
30	Not a reason
3	No answer

QUESTIONS TECH1-TECH6 PREVIOUSLY RELEASED, see "Women are concerned about gender discrimination in tech industry," question wording and topline is available here.

IF FORM=1, show GEND1-6 first. IF FORM=2, show ETHN1-6 first

ASK IF EMPLOYED (DOV_EMPLOYED=1):
Thinking about your own workplace…

GEND1   What is the balance of men and women in your workplace? **[RANDOMIZE ORDER OF 1 AND 2]**

    Based on employed [N=4,702]

32	There are more men
33	There are more women
34	There is an even mix of men and women
1	No answer

ASK IF EMPLOYED (DOV_EMPLOYED=1):
GEND2   How would you say your workplace treats women when it comes to the recruitment and hiring process?

      Based on employed [N=4,702]

72	Usually treated fairly in the recruitment and hiring process
21	Sometimes treated fairly and sometimes treated unfairly
5	Usually treated unfairly in the recruitment and hiring process
2	No answer

ASK IF EMPLOYED (DOV_EMPLOYED=1):
GEND3   How would you say your workplace treats women when it comes to opportunities for promotion and advancement?

      Based on employed [N=4,702]

64	Usually treated fairly in opportunities for promotion and advancement
27	Sometimes treated fairly and sometimes treated unfairly
7	Usually treated unfairly in opportunities for promotion and advancement
2	No answer

ASK IF EMPLOYED (DOV_EMPLOYED=1):
GEND4   Would you say your workplace pays too much, too little or about the right amount of attention to increasing gender diversity?

      Based on employed [N=4,702]

9	Too much attention
21	Too little attention
68	About the right amount of attention
2	No answer

ASK ALL:
GEND5   How important would you say it is to have gender diversity in workplaces today?

25	Extremely important
27	Very important
26	Somewhat important
10	Not too important
11	Not at all important
1	No answer

ASK IF DIVERSITY IS EXTREMELY/VERY/SOMEWHAT IMPORTANT (GEND5=1-3):

GEND6   Which of these, if any, do you consider important reasons to increase gender diversity in the workplace?

Select all answers that apply **[RANDOMIZE ITEMS; item d always last]**

Based on those saying gender diversity is "extremely, very or somewhat important" [N=3,920]

	Selected	Not selected/ No answer
a. Gender diversity in the workplace gives people an equal opportunity to succeed	55	45
b. Gender diversity provides other perspectives that contribute to the overall success of companies and organizations	59	41
c. Gender diversity makes good business sense because it increases the supply of potential workers	42	58
d. None of these	10	90

ASK IF EMPLOYED (DOV_EMPLOYED=1):

ETHN1   Which of these best describes your workplace? **[SHOW IN SAME ORDER AS GEND1]**

Based on employed [N=4,702]

33	Most people are the same race and ethnicity as I am
14	Most people are a different race or ethnicity than I am
52	There is a mix of people from different racial and ethnic backgrounds
1	No answer

ASK IF EMPLOYED (DOV_EMPLOYED=1):

ETHN2   How would you say your workplace treats people in each of the following groups when it comes to the recruitment and hiring process? **[RANDOMIZE ITEMS]**

a. Whites

Based on employed [N=4,702]

81	Usually treated fairly in the recruitment and hiring process
14	Sometimes treated fairly and sometimes treated unfairly
3	Usually treated unfairly in the recruitment and hiring process
3	No answer

b. Blacks

Based on employed [N=4,702]

65	Usually treated fairly in the recruitment and hiring process
25	Sometimes treated fairly and sometimes treated unfairly
8	Usually treated unfairly in the recruitment and hiring process
3	No answer

ETHN2 continued...

c. Hispanics

Based on employed [N=4,702]

65	Usually treated fairly in the recruitment and hiring process
25	Sometimes treated fairly and sometimes treated unfairly
7	Usually treated unfairly in the recruitment and hiring process
3	No answer

d. Asian Americans

Based on employed [N=4,702]

71	Usually treated fairly in the recruitment and hiring process
22	Sometimes treated fairly and sometimes treated unfairly
4	Usually treated unfairly in the recruitment and hiring process
3	No answer

ASK IF EMPLOYED (DOV_EMPLOYED=1):
ETHN3 How would you say your workplace treats people in each of the following groups when it comes to opportunities for promotion and advancement? **[RANDOMIZE ITEMS]**

a. Whites

Based on employed [N=4,702]

78	Usually treated fairly in opportunities for promotion and advancement
16	Sometimes treated fairly and sometimes treated unfairly
3	Usually treated unfairly in opportunities for promotion and advancement
3	No answer

b. Blacks

Based on employed [N=4,702]

63	Usually treated fairly in opportunities for promotion and advancement
26	Sometimes treated fairly and sometimes treated unfairly
8	Usually treated unfairly in opportunities for promotion and advancement
3	No answer

c. Hispanics

Based on employed [N=4,702]

63	Usually treated fairly in opportunities for promotion and advancement
27	Sometimes treated fairly and sometimes treated unfairly
7	Usually treated unfairly in opportunities for promotion and advancement
3	No answer

ETHN3 continued...

d. Asian Americans

Based on employed [N=4,702]

68	Usually treated fairly in opportunities for promotion and advancement
24	Sometimes treated fairly and sometimes treated unfairly
4	Usually treated unfairly in opportunities for promotion and advancement
3	No answer

ASK IF EMPLOYED (DOV_EMPLOYED=1):
ETHN4   Would you say your workplace pays too much, too little or about the right amount of attention to increasing racial and ethnic diversity?

Based on employed [N=4,702]

11	Too much attention
22	Too little attention
65	About the right amount of attention
2	No answer

ASK ALL:
ETHN5   How important would you say it is to have racial and ethnic diversity in workplaces today?

26	Extremely important
27	Very important
27	Somewhat important
9	Not too important
9	Not at all important
2	No answer

ASK IF DIVERSITY IS EXTREMELY/VERY/SOMEWHAT IMPORTANT (GEND5=1-3):
ETHN6   Which of these, if any, do you consider important reasons to increase racial and ethnic diversity in the workplace?

Select all answers that apply **[SHOW IN SAME ORDER AS GEND6]**

Based on those saying racial and ethnic diversity is "extremely, very or somewhat important" [N=4,014]

	Selected	Not selected/ No answer
a. Racial and ethnic diversity in the workplace gives people an equal opportunity to succeed	56	44
b. Racial and ethnic diversity provides other perspectives that contribute to the overall success of companies and organizations	56	44
c. Racial and ethnic diversity makes good business sense because it increases the supply of potential workers	42	58

IF DOV_FORM=1, show GENDJOB1-GENDJOB2 first; IF DOV_FORM=2 show ETHNJOB1 ENTHNJOB2 first

ASK IF EMPLOYED (DOV_EMPLOYED=1):

GENDJOB1   Overall, which of these best describes your experience? **[RANDOMIZE ORDER OF ITEMS 1 AND 2]**

Based on employed [N=4,702]

13	My gender has made it harder for me to succeed in my job
17	My gender has made it easier for me to succeed in my job
68	My gender has not made much difference in my job
2	No answer

IF STEM WORKER AND GENDER MADE IT HARDER TO SUCCEED (WORKTYPE_FINAL=1 AND GENDJOB1=1)

GENDJOB2   Why do you think that your gender has made it harder to succeed in your job? **[OPEN-END]**

Based on STEM workers who say their gender has made it harder to succeed in their job [N=298]:

Jul 11 – Aug 10
<u>2017</u>

22	Hiring, promotion and salary barriers NET
10	*Promoted less often than men*
7	*Most leadership positions are held by men*
3	*More likely to get turned down for a job*
1	*Passed over for opportunities*
1	*Paid less*
<1	*Guided into certain professions*
19	Treatment by coworkers NET
13	*Automatically assumed to be less competent*
3	*Criticized for not meeting gender behavior expectations*
2	*Assumed to do less important tasks*
2	*Experience general slights*
<1	*Others associate them with negative stereotypes*
14	Need to work harder than others NET
7	*Feel need to constantly prove themselves*
5	*Have to work harder than others/Held to different standards*
3	*Ideas are ignored until someone else states them*
13	Affected by reverse discrimination NET
7	*Both reverse gender and racial discrimination*
6	*Reverse gender discrimination*
13	Unwelcoming workplace environment NET
7	*Feeling of being the only female in the workplace*
6	*"Boys club" among male coworkers*
2	*Harassment*
12	General bias against women
11	Problems with balancing work and family NET
10	*Others expect they cannot have family responsibilities and work*
1	*Hard to balance expected family responsibilities*
<1	*Inadequate leave/childcare policies*
8	Other
7	Don't know/No answer

ASK IF EMPLOYED (DOV_EMPLOYED=1):
ETHNJOB1 Overall, which of these best describes your experience? **[SHOW IN SAME ORDER AS GENDJOB1]**

Based on employed [N=4,702]
- 13 My race or ethnicity has made it harder for me to succeed in my job
- 15 My race or ethnicity has made it easier for me to succeed in my job
- 70 My race or ethnicity has not made much difference in my job
- 2 No answer

IF STEM WORKER AND RACE OR ETHNICITY MADE IT HARDER TO SUCCEED (WORKTYPE_FINAL=1 AND ETHNJOB1=1)
ETHNJOB2 Why do you think that your race or ethnicity has made it harder to succeed in your job? **[OPEN-END]**

Based on STEM workers who say their race or ethnicity has made it harder to succeed in their job [N=216]:

	Jul 11 – Aug 10 2017
19	Treatment by coworkers NET
9	*Automatically assumed to be less competent*
8	*Others associate them with negative stereotypes*
2	*Criticized for not meeting racial behavior expectations*
1	*Assumed to do less important tasks*
1	*Experience general slights*
19	Affected by reverse discrimination NET
10	*Both reverse gender and racial discrimination*
8	*Reverse racial discrimination*
1	*Reverse gender discrimination*
14	General bias against minorities
12	Hiring, promotion and salary barriers NET
5	*Promoted less often than whites*
4	*Passed over for opportunities*
2	*Most leadership positions are held by whites*
1	*More likely to get turned down for a job*
<1	*Paid less*
9	Unwelcoming workplace environment NET
7	*Feeling of being the only minority in the workplace*
2	*Excluded from the "club"*
<1	*Uncomfortable workplace/don't fit in*
9	Need to work harder than others NET
6	*Have to work harder than others/Held to different standards*
4	*Feel need to constantly prove themselves*
1	*Ideas are ignored until someone else says them*
4	Bias because not from the U.S.
10	Other
8	Don't know/No answer

ASK IF EMPLOYED (WORKTYPE_FINAL=1) AND BLACK MAN (PPGENDER=1 AND PPETHM=2) OR EMPLOYED (WORKTYPE_FINAL=1) AND BLACK WOMAN (PPGENDER=2 AND PPETHM=2) OR EMPLOYED (WORKTYPE_FINAL=1) AND HISPANIC MAN (PPGENDER=1 AND PPETHM=4) OR EMPLOYED (WORKTYPE_FINAL=1) AND HISPANIC MAN (PPGENDER=2 AND PPETHM=4) OR EMPLOYED (WORKTYPE_FINAL=1) AND ASIAN AMERICAN WOMAN (PPGENDER=2 AND (PPETHM=3 AND XRACEM=4))

CHANGE   In your view, what would be the most effect way to attract more **[IF PPGENDER=1 AND PPETHM2:** black men**; IF PPGENDER=1 AND PPETHM=4:** Hispanic men**; IF PPGENDER=2 AND PPETHM=2:** black women**; IF PPGENDER=2 AND PPETHM=4:** Hispanic women**; IF PPGENDER=4 AND XRACEM=4 AND PPETHM=3:** Asian American women**]** to jobs in science, technology, engineering and math? **[OPEN END]**

Based on STEM workers who are black men, Hispanic men, black women, Hispanic women or Asian American women [N=1,323]

Jul 11 – Aug 10 2017	
37	Change aspects of schooling and education NET
16	*Start teaching these subjects to children early*
7	*Increase scholarship/recruitment efforts*
6	*Improve education quality*
6	*Educate students on opportunities and career paths in these fields*
3	*Provide fun, interactive, hands-on experiences*
2	*Provide more internships and career opportunities throughout education*
2	*Make science accessible/applicable*
<1	*Teach in all-girls setting*
23	Change the job or work environment NET
9	*Increase pay*
8	*Increase work-life balance*
6	*Promote and provide more opportunities for women and minorities*
2	*Increase overall fair and equal treatment*
2	*Reduce workplace discrimination/harassment*
23	Provide encouragement and role models NET
12	*Provide visible role models/mentors*
5	*Provide confidence/Make sure girls and minorities know they can do anything*
4	*Encourage them to enjoy science*
2	*Increase encouragement from home and parents*
1	*Have science camps, after school programs, STEM clubs*
1	*Increase representation in field*
4	Change the culture of science and science careers NET
2	*Better marketing for science and science careers*
1	*Changing images of STEM workers on TV and in media*
2	This isn't about gender or race
3	Other
9	Don't know/No answer

IF DOV_FORM=1 ask GENDDISC first; IF DOV_FORM=2 ask ETHNDISC first
ASK IF EMPLOYED (DOV_EMPLOYED=1):

GENDDISC   Here are a few things that some people have experienced in their workplace because of their gender.

Which, if any, of the following has ever happened to you?

Select all answers that apply **[RANDOMIZE ITEMS; item i always last]**

Based on employed [N=4,702]

		Selected	Not selected/ No answer
a.	Been denied a promotion because of your gender	6	94
b.	Earned less than a **[IF PPGENDER=1**:woman; **IF PPGENDER=2:** man]** who was doing the same job	15	85
c.	Been turned down for a job because of your gender	5	95
d.	Felt isolated in your workplace because of your gender	7	93
e.	Received less support from senior leaders than a **[IF PPGENDER=1**:woman; **IF PPGENDER=2**: man]** who was doing the same job	11	89
f.	Had someone treat you as if you were not competent because of your gender	14	86
g.	Been passed over for the most important assignments because of your gender	7	93
h.	Experienced repeated, small slights at work because of your gender	11	89
i.	None of these	67	33

Trends for comparisons on items a, b and c reported in December 2013: "On Pay Gap, Millennial Women Near Parity – For Now

ASK IF EMPLOYED (DOV_EMPLOYED=1):

ETHNDISC   Here are a few things that some people have experienced in their workplace because of their race or ethnicity.

Which, if any, of the following has ever happened to you?

Select all answers that apply **[SHOW IN SAME ORDER AS GENDDISC]**

Based on employed [N=4,702]

	Selected	Not selected/ No answer
a. Been denied a promotion because of your race or ethnicity	5	95
b. Earned less than a coworker who was doing the same job because of your race or ethnicity	8	92
c. Been turned down for a job because of your race or ethnicity	7	93
d. Felt isolated in your workplace because of your race or ethnicity	8	92
e. Received less support from senior leaders than another worker who was doing the same job because of your race or ethnicity	7	93
f. Had someone treat you as if you were not competent because of your race or ethnicity	10	90
g. Been passed over for the most important assignments because of your race or ethnicity	7	93
h. Experienced repeated, small slights at work because of your race or ethnicity	9	91
i. None of these	73	27

ASK IF EMPLOYED (DOV_EMPLOYED=1):

HARASS1   As far as you know, would you say sexual harassment is a big problem, a small problem or not a problem in your workplace?

Based on employed [N=4,702]
10	Big problem
25	Small problem
64	Not a problem
1	No answer

ASK IF EMPLOYED (DOV_EMPLOYED=1):

HARASS2   Overall, would you say sexual harassment is a big problem, a small problem or not a problem in jobs in the industry where you work?

Based on employed [N=4,702]
12	Big problem
35	Small problem
51	Not a problem
2	No answer

ASK IF EMPLOYED (DOV_EMPLOYED=1):

HARASS3   Have you ever personally experienced sexual harassment at work, or have you not experienced this?

Based on employed [N=4,702]

14	Yes, I have experienced sexual harassment at work
85	No, I have not experienced sexual harassment at work
1	No answer

ASK ALL:

VOTECH   Just a few more questions about your background and experiences…

Have you completed any vocational or technical training, certificate or apprenticeship?

	All U.S. adults	College degree or more	Some college or less
Yes	33	28	35
No	66	70	63
No answer	2	2	1

TREND FOR COMPARISON:
Pew Research Center survey conducted by telephone: Have you completed any vocational or technical training, certificate or apprenticeship?
Based on/Asked of those with some college or less education [N=2,240]

	May 25-Jun 29 2016
Yes	38
No	61
Don't know/Refused **(VOL.)**	<1

ASK IF ASSOCIATE DEGREE OR MORE (PPEDUC=11-14]:
DEGREE1   What was your major field of study in college? (Please fill in as many as apply) **[OPEN END FOR UP TO TWO MAJOR FIELDS]**
Based on those with an Associate Degree or more [N=3,269]

Jul 11-Aug 10
<u>2017</u>

29	Business NET
14	*General and other business*
7	*Accounting*
6	*Business management and administration*
4	*Marketing and marketing research*
2	*Finance*
1	*Human Resources*
20	Arts and Humanities NET
5	*English/Literature/Writing*
4	*History*
3	*Art (e.g., visual arts, theater, dance, art history)*
2	*Communications*
2	*Liberal arts/Humanities/General Studies*
1	*Foreign language/Linguistics*
1	*Other arts and humanities*
1	*Journalism*
1	*Philosophy/Religion/Theology*
1	*Music*
15	Social Sciences NET
8	*Psychology/Behavioral Science*
3	*Political science*
2	*Economics*
1	*Sociology*
1	*General/Other social sciences*
1	*Anthropology/Archaeology*
11	Health-related
10	Computers/Mathematics/Statistics NET
8	*Computer and information sciences*
3	*Mathematics and statistics (including actuarial science)*
8	Engineering and Architecture NET
7	*Engineering*
1	*Architecture*
7	Biological, Agricultural Sciences NET
7	*Life sciences (e.g., biology, biochemical sciences, zoology, plant science, ecology)*
<1	*Agriculture*
6	Education, not specified
5	Physical and Earth Sciences NET
4	*Physical science (e.g., chemistry, physics)*
2	*Earth science (e.g., geology, environmental sciences)*
4	Non-STEM education
<1	STEM education (e.g., math teacher education, science teacher education)
12	Other fields NET
2	*Law and legal studies*
2	*Criminal justice/Criminology*
1	*Social work and counseling*
1	*Human development and family studies (e.g. gerontology)*

<1	*Public policy and administration*
<1	*Library science*
6	*General other*
2	Not enough information
2	Don't know/No answer

ASK IF GRADUATE DEGREE (PPEDUC=13,14]:
DEGREE2   Thinking about your most recent graduate degree, what was your degree field? **[OPEN-END TEXT BOX; SINGLE LINE]**

Based on those with a graduate degree [N=1,131]

Jul 11-Aug 20
<u>2017</u>

25	Business NET
14	*Business management and administration*
3	*Accounting*
2	*Marketing and marketing research*
1	*Finance*
1	*Human resources*
3	*General/Other Business*
11	Health-related
7	Education, not specified
7	Engineering and Architecture NET
6	*Engineering*
1	*Architecture*
7	Non-STEM education
6	Arts and Humanities NET
2	*Philosophy/Religion/Theology*
1	*English/Literature/Writing*
1	*History*
1	*Liberal arts/Humanities/General Studies*
<1	*Art (e.g., visual arts, theater, dance, art history)*
<1	*Journalism*
<1	*Music*
<1	*Foreign language/Linguistics*
<1	*Communications*
<1	*Other arts and humanities*
4	Social Sciences NET
2	*Psychology/Behavioral Science*
1	*Economics*
<1	*Sociology*
<1	*General/other social sciences*
4	Physical and Earth Sciences NET
2	*Physical science (e.g., chemistry, physics)*
1	*Earth science (e.g., geology, environmental sciences)*
3	Computers/Mathematics/Statistics NET
2	*Computer and information sciences*
1	*Mathematics and statistics (including actuarial science)*
2	Biological, Agricultural Sciences NET
2	*Life sciences (e.g., biology, biochemical sciences, zoology, plant science, ecology)*
<1	*Agriculture*
1	STEM education (e.g., math teacher education, science teacher education)
<1	Science, not specified
12	Other fields NET
5	*Law and legal studies*
2	*Public policy and administration*
2	*Social work and counseling*
2	*Library science*

<1	*Criminal justice/Criminology*
<1	*Human development and family studies (e.g. gerontology)*
1	*General other*
6	Not enough information
2	Don't know/No answer

ASK IF EMPLOYED AND ASSOCIATE DEGREE OR MORE (DOV_EMPLOYED=1 AND PPEDUC=11,12,13,14]:
RELATE1   How closely related is your current job to **[IF PPEDUC=11, 12:**your college major(s)**/ IF PPEDUC=13, 14:**the field you received your graduate degree in**]**?

Based on employed with an Associate Degree or more [N=3,193]

46	Very closely related
24	Somewhat closely related
14	Not very closely related
16	Not at all related
1	No answer

TREND FOR COMPARISON:
Pew Research Center survey conducted by telephone: How closely related is your current job to the field or major you received your (IF EDUC=5,6,7: college; If EDUC=8: graduate) degree in?
Based on college education or more education and currently employed [N=742]

	Oct 7-27 2013
Very closely	46
Somewhat closely	19
Not very closely	10
Not at all related	25
Don't know/Refused **(VOL.)**	1

ASK IF EMPLOYED AND ASSOCIATE DEGREE OR MORE (DOV_EMPLOYED=1 AND PPEDUC=11,12,13,14]:
RELATE2   How often do you use skills and knowledge from your **[IF PPEDUC=11,12:** college major(s)**; IF PPEDUC=13,14:**graduate degree**]** in your current job?

Based on employed with an Associate Degree or more [N=3,193]

43	All the time
33	Some of the time
15	Not too often
8	Never
1	No answer

ASK IF SOME COLLEGE OR MORE (PPEDUC=10-14):
SCICOUR1   Have you ever taken any college-level science courses?

    Based on those with some college or more education [N=4,015]

      July 11-
      Aug 10
      <u>2017</u>

70	Yes
24	No
5	Don't remember
1	No answer

    TREND FOR COMPARISON:
    General Social Survey: Have you ever taken any college-level science courses?

    Based on those with some college or more education [N=802]

     Apr 5-Nov 19,
      <u>2016</u>

68	Yes
31	No
<1	Don't know
<1	No answer

ASK IF TAKEN COLLEGE-LEVEL SCIENCE COURSES (SCICOUR1=1):
SCICOUR2   How many college-level science courses have you taken?

    Based on those who have taken college-level science courses [N=3,168]

      July 11-
      Aug 10
      <u>2017</u>

27	0-2 courses
20	3-5 courses
5	6-8 courses
13	9 or more courses
34	Don't remember
1	No answer

    TREND FOR COMPARISON:
    General Social Survey: How many college-level science courses have you taken?

    Based on those who have taken college-level science courses [N=578]

     Apr 5-Nov 19,
      <u>2016</u>

39	1-2 courses
31	3-5 courses
7	6-8 courses
17	9 or more courses
5	Don't know
1	No answer

ASK IF SOME COLLEGE OR MORE (PPEDUC=10-14):
MATHCOUR1   Have you ever taken any college-level math courses?

      Based on those with some college or more education [N=4,015]
77	Yes
19	No
4	Don't remember
1	No answer

ASK IF TAKEN COLLEGE-LEVEL MATH COURSES (MATHCOUR1=1):
MATHCOUR2   How many college-level math courses have you taken?

      Based on those who have taken college-level math courses [N=3,302]
37	0-2 courses
24	3-5 courses
7	6-8 courses
4	9 or more courses
27	Don't remember
<1	No answer

ASK IF SOME COLLEGE OR MORE (PPEDUC=10-14):
FIRSTCOLL   Are you the first person in your immediate family to have attended college, or not?
          [Immediate family includes parents and siblings.]

      Based on those with some college or more education [N=4,015]
31	Yes
68	No
1	No answer

ASK IF PARENT OF CHILD UNDER 18 (XPARENT=1):
PUBLIC   Do you have any children in kindergarten through 12th grade attending a public school, or not?

      Based on parent of a child under 18 [N=1,288]
72	Yes
28	No
1	No answer