Creativity and Education: Why it Matters

November 7, 2012

Adobe

BACKGROUND & METHODOLOGY

METHODOLOGY

Edelman Berland conducted a ten-minute online survey among a sample of n=1,000 Americans ages 25+ who are college-educated and full-time (salaried) employees. The margin of error for this sample is ± 3.1% at the 95% confidence level. The online survey was fielded between October 17 – October 19, 2012.

KEY FINDINGS

KEY HEADLINES

- **57%** of college educated professionals believe creativity is a learned skill that can be learned in their career while **65%** believe it is a personality trait that is innate

- **88%** agree creativity should be built into education curriculums and **72%** agree they were more focused on subject matter than creative thinking in school

- **85%** agree creative thinking is critical for problem solving in their career but nearly one-third (**32%**) do not feel comfortable thinking creatively at work
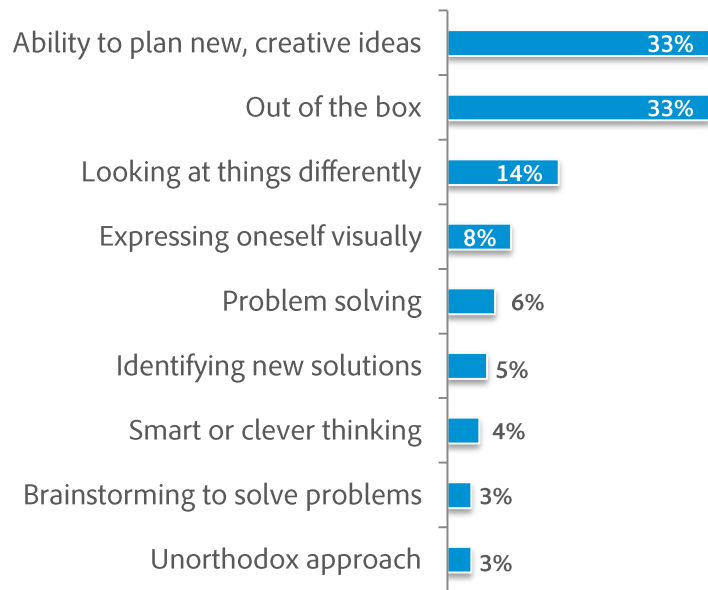
78% ...creativity is important to their current career

71% ...creativity should be a taught course

DETAILED FINDINGS
Creative Thinking

When asked unaided, most educated professionals associate *creative thinking* with thinking out of the box, or the ability to come up with innovative ideas
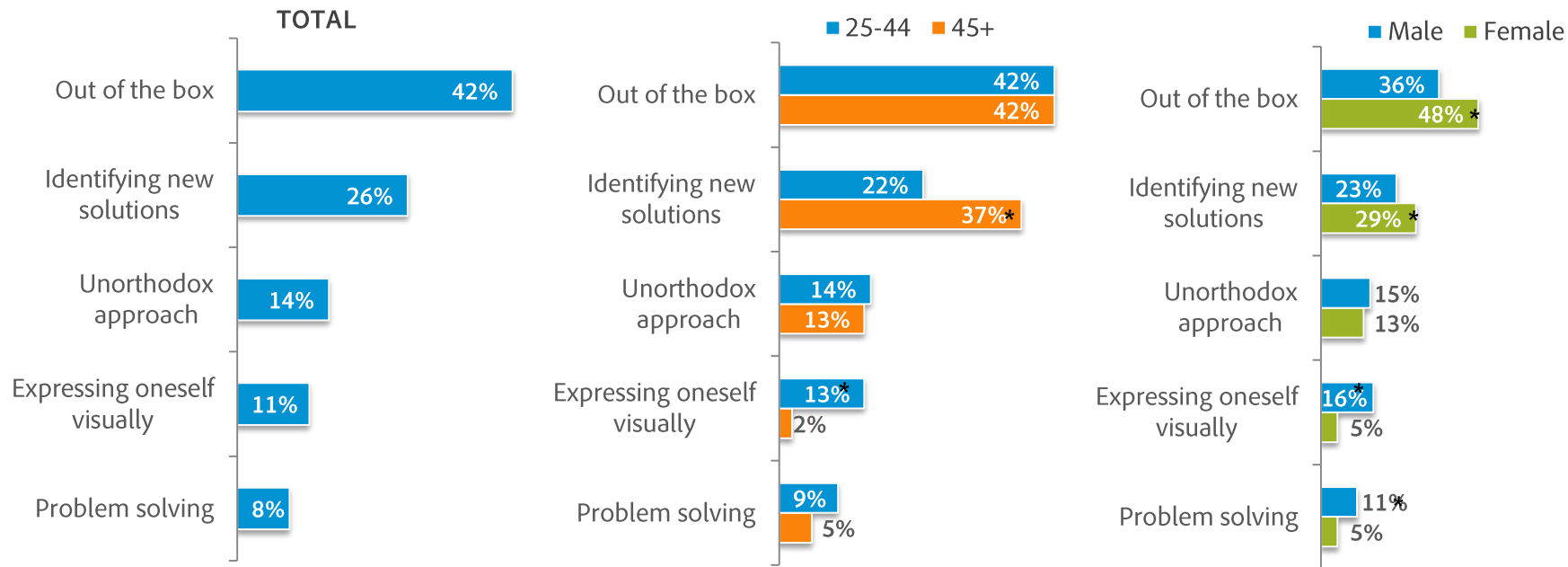
Category	Percentage
Ability to plan new, creative ideas	33%
Out of the box	33%
Looking at things differently	14%
Expressing oneself visually	8%
Problem solving	6%
Identifying new solutions	5%
Smart or clever thinking	4%
Brainstorming to solve problems	3%
Unorthodox approach	3%

Other: **3%**
Don't know/unsure: **16%**

Q1. In your own words, what is **"creative thinking"**? [Open-Ended].
Base: Total (n= 1,000)

Younger professionals are more likely to associate *creative thinking* with being visual, while older generations associate it with ideas and results
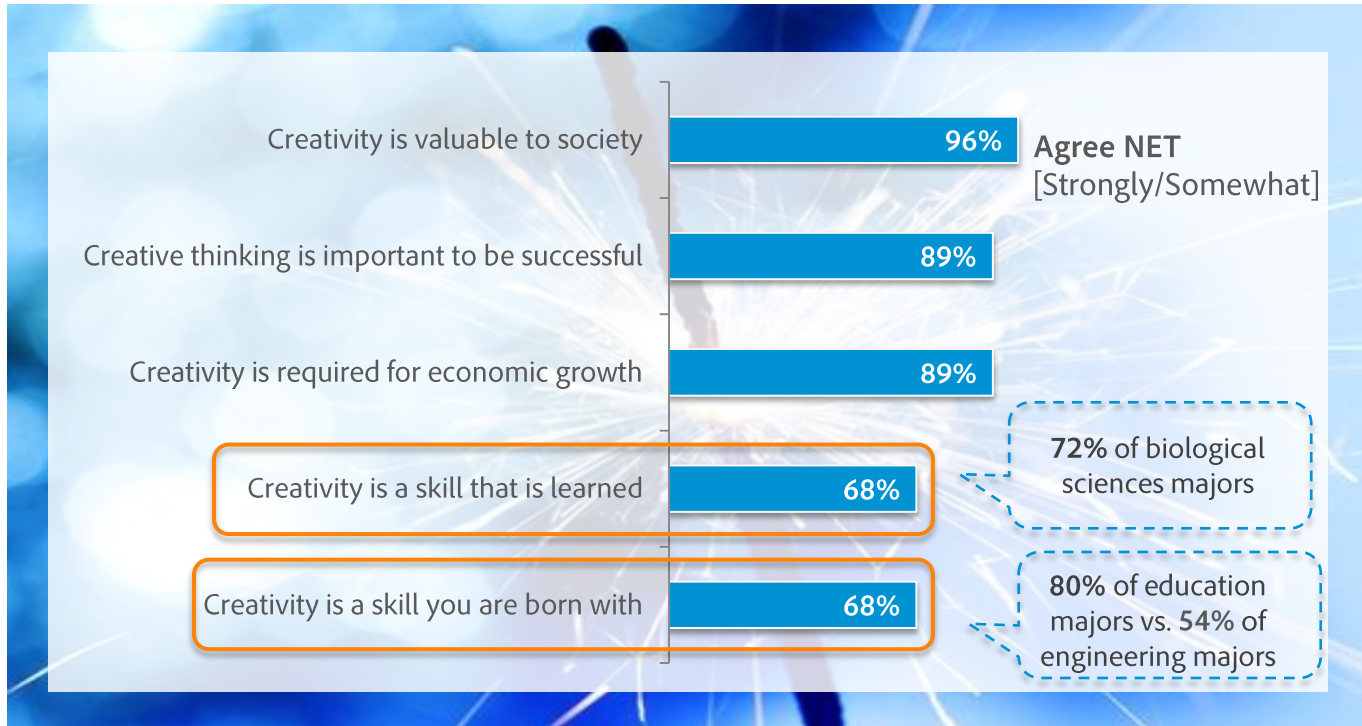
TOTAL

Out of the box	42%
Identifying new solutions	26%
Unorthodox approach	14%
Expressing oneself visually	11%
Problem solving	8%

■ 25-44 ■ 45+

	25-44	45+
Out of the box	42%	42%
Identifying new solutions	22%	37%*
Unorthodox approach	14%	13%
Expressing oneself visually	13%*	2%
Problem solving	9%	5%

■ Male ■ Female

	Male	Female
Out of the box	36%	48%*
Identifying new solutions	23%	29%*
Unorthodox approach	15%	13%
Expressing oneself visually	16%*	5%
Problem solving	11%	5%

Q2. Which of the following phrases best defines **"creative thinking"**?
Base: Total (n= 1,000), Male (n=523), Female (n=477), Age 25-44 (n=769), Age 45+ (n=231)
* Indicates statistically significant difference

While most recognize the value of creativity to society, Education majors are more likely to agree creativity is an innate skill

Creativity is valuable to society — **96%**

Creative thinking is important to be successful — **89%**

Creativity is required for economic growth — **89%**

Creativity is a skill that is learned — **68%**

Creativity is a skill you are born with — **68%**

Agree NET [Strongly/Somewhat]

72% of biological sciences majors

80% of education majors vs. **54%** of engineering majors

Q4. Please indicate how much you agree or disagree with each of the following statements.
Base: Total (n=1,000), Biological Science Majors (n=85), Education Majors (n=91), Engineering Majors (n=120)

DETAILED FINDINGS
Creative Thinking & Education

Many teachers encouraged creative thinking with inventive approaches to learning that were challenging and thought-provoking

*"Encouragement to express ideas freely - without fear of acceptance/rejection. I learned **the value and impact of acknowledgement and validation**."*

*"I had a science teacher that told us on the first day of school that **"curiosity is the beginning of science**." She said if you don't ask questions or wonder why...or why not...you will never make new discoveries."*
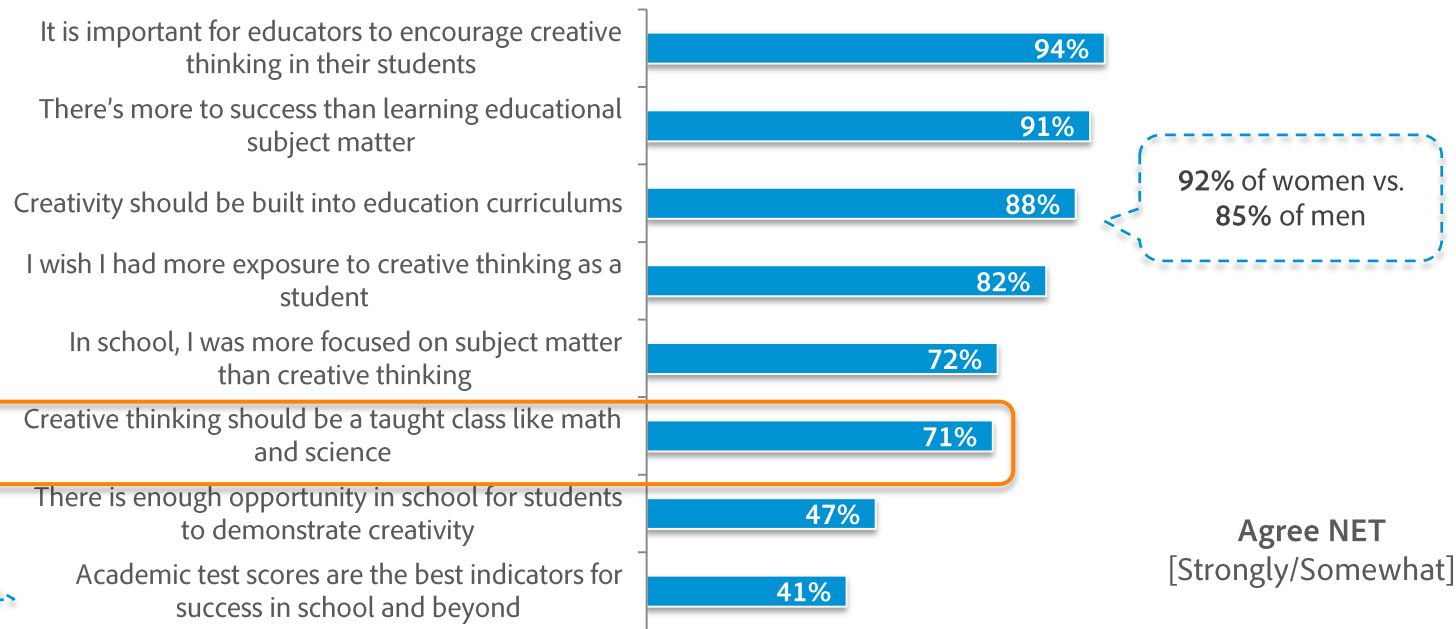
*"We approached the texts and course material from **new perspectives, engaged our senses** and presented information and understanding of course concepts through mixed media rather than just papers or exams."*

*"My favorite college professor didn't just lecture about science... I was forced to see his lessons as not only static information on a page but **dynamic interactions that were constantly in motion**."*

Q5. Thinking of your favorite teacher or professor while in school, what did they do to encourage creative thinking? What did you learn from them? [Open-Ended].
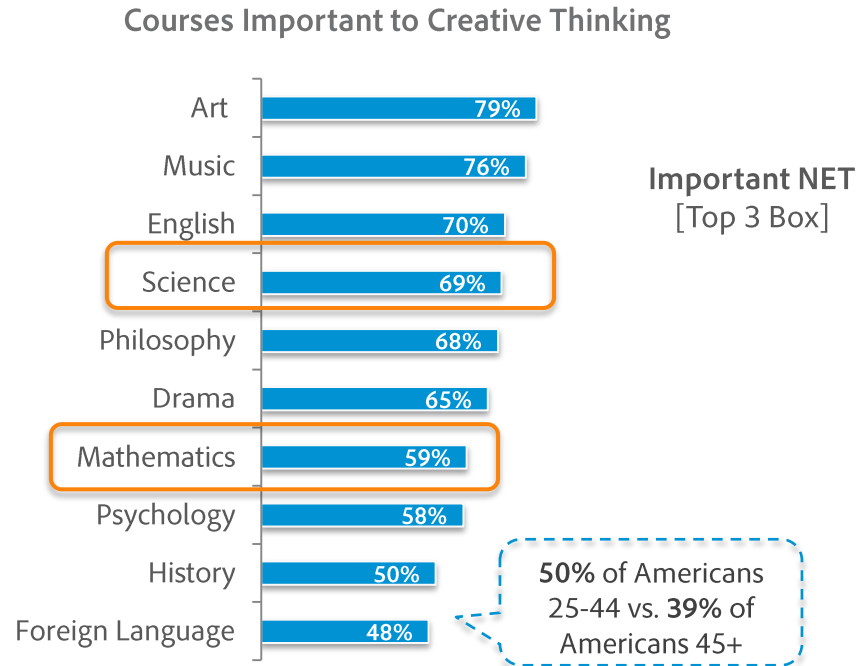Base: Total (n= 1,000)

Nearly three-quarters of college educated professionals agree creativity should be a taught course

It is important for educators to encourage creative thinking in their students — **94%**

There's more to success than learning educational subject matter — **91%**

Creativity should be built into education curriculums — **88%**

> **92%** of women vs. **85%** of men

I wish I had more exposure to creative thinking as a student — **82%**

In school, I was more focused on subject matter than creative thinking — **72%**

Creative thinking should be a taught class like math and science — **71%**

There is enough opportunity in school for students to demonstrate creativity — **47%**

> **49%** of those 25-44 vs. **17%** of those 45+

Academic test scores are the best indicators for success in school and beyond — **41%**

Agree NET
[Strongly/Somewhat]

Q6. Please indicate how much you agree or disagree with each of the following statements.
Base: Total (n=1,000), Male (n=523), Female (n=477), Age 25-44 (n=769), Age 45+ (n=231)

Subjects regarded as making important contributions to *creative thinking* include art and music, but science and mathematics also score highly

Courses Important to Creative Thinking

Subject	Percent
Art	79%
Music	76%
English	70%
Science	69%
Philosophy	68%
Drama	65%
Mathematics	59%
Psychology	58%
History	50%
Foreign Language	48%

Important NET
[Top 3 Box]

50% of Americans 25-44 vs. **39%** of Americans 45+

Other: **7%** None: **1%**

Q7. On a 1 to 10 scale where 1 is NOT AT ALL IMPORTANT and 10 is EXTREMELY IMPORTANT how important are each of the following course areas in terms of **their contribution to creative thinking?**

Base: Total (n=1,000), Male (n=523), Female (n=477), Age 25-44 (n=769), Age 45+ (n=231)

DETAILED FINDINGS
Creative Thinking & Your Career

Creative thinking is frequently used when interacting with clients, creating solutions or developing innovative strategies

*"As a manager, instead of requiring the same success factors for all of my employees, **I need to tailor my expectations to their strengths,** allowing them to expand their roles in unique ways."*

*"I have worked though various floor plans for houses and **without a creative mind a floor plan would just be a standard box** with out any real distinct look."*

*"I'm a grant writer and **need to come up with creative ways to tell the organization's story** so that we can reach donors based on their individual interests."*
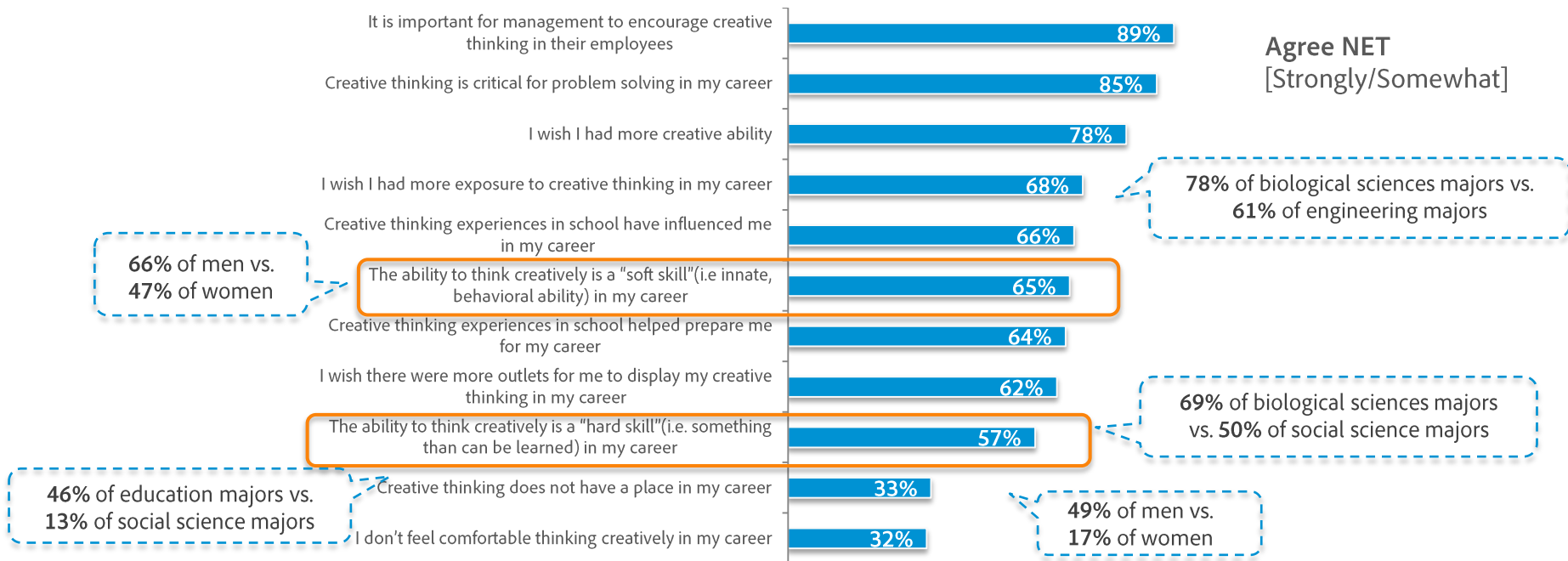
*"I am in sales, so I need to think of creative approaches to appeal to my clients. **I basically need to put myself in their shoes** and understand more of the psychology behind their decisions."*

*"I utilize creative thinking **in the conceptualization process of creating animations.** It is very important to create a rough but somewhat detailed painting/sketch that depicts what you want to convey to your team."*

Q9. Thinking about your current career, please describe an experience where you utilized creative thinking? [Open-Ended].
Base: Total (n= 1,000)

While many agree on the significance of creativity in their careers, fewer professionals believe creative thinking is a skill that can be learned on the job

Agree NET [Strongly/Somewhat]

Statement	Percent
It is important for management to encourage creative thinking in their employees	89%
Creative thinking is critical for problem solving in my career	85%
I wish I had more creative ability	78%
I wish I had more exposure to creative thinking in my career	68%
Creative thinking experiences in school have influenced me in my career	66%
The ability to think creatively is a "soft skill"(i.e innate, behavioral ability) in my career	65%
Creative thinking experiences in school helped prepare me for my career	64%
I wish there were more outlets for me to display my creative thinking in my career	62%
The ability to think creatively is a "hard skill"(i.e. something than can be learned) in my career	57%
Creative thinking does not have a place in my career	33%
I don't feel comfortable thinking creatively in my career	32%

78% of biological sciences majors vs. **61%** of engineering majors

66% of men vs. **47%** of women

69% of biological sciences majors vs. **50%** of social science majors

46% of education majors vs. **13%** of social science majors

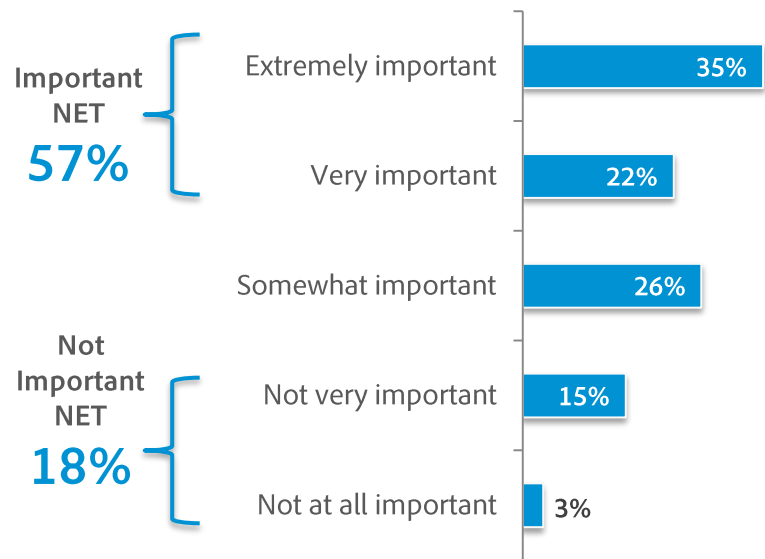**49%** of men vs. **17%** of women

Q10. Please indicate how much you agree or disagree with each of the following statements.
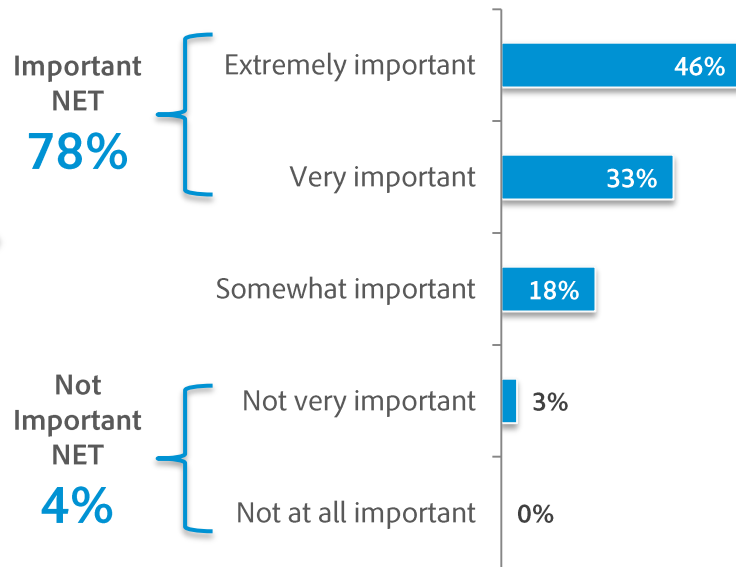Base: Total (n=1,000), Male (n=523), Female (n=477), Biological Science Majors (n=85), Social Science Majors (n=101), Engineering Majors (n=120), Education Majors (n=91)

Creativity is more important now than most professionals believed it would be in college

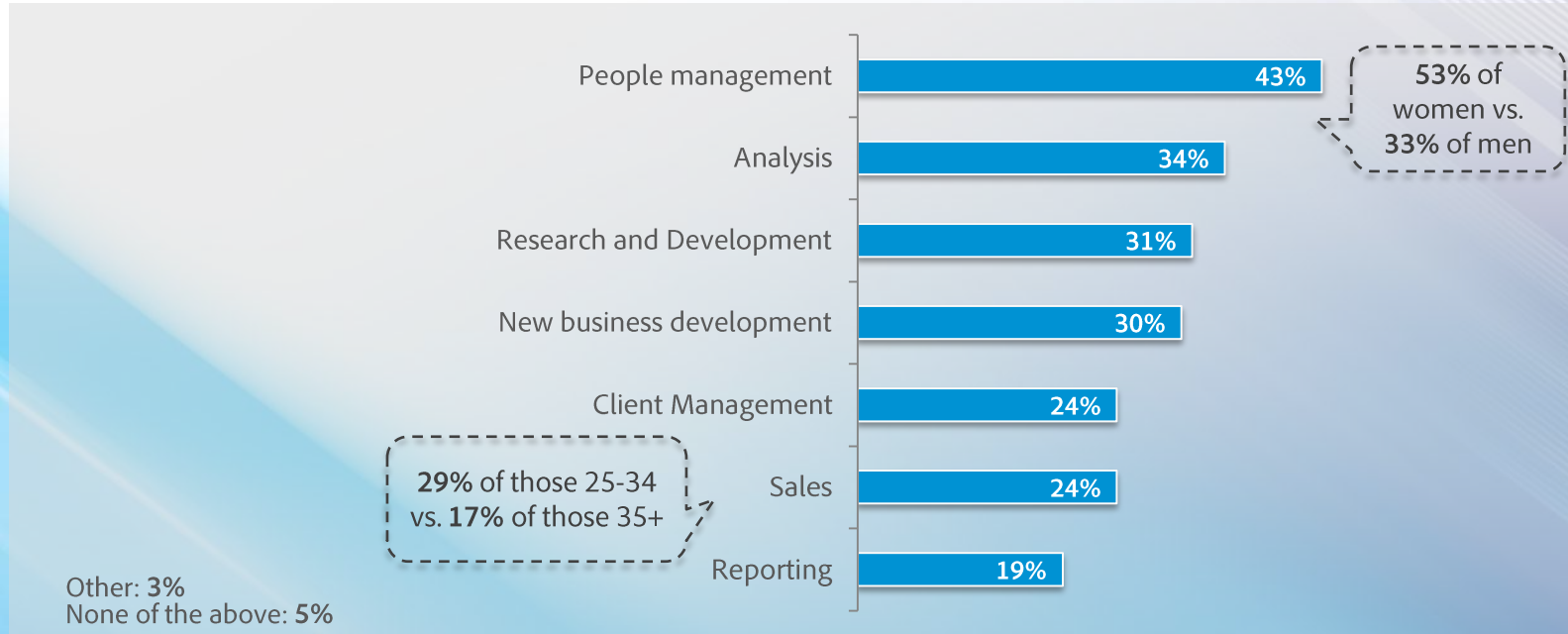## Importance of Creativity *While in College*

Important NET
57%

- Extremely important — 35%
- Very important — 22%
- Somewhat important — 26%

Not Important NET
18%

- Not very important — 15%
- Not at all important — 3%

Importance of Creativity *Now*

Important NET
78%

- Extremely important — 46%
- Very important — 33%
- Somewhat important — 18%

Not Important NET
4%

- Not very important — 3%
- Not at all important — 0%

Q11. How important did you feel creativity was going to be in your career **while you were in college?**
Q12. How important do you feel creativity is to your career **now?**
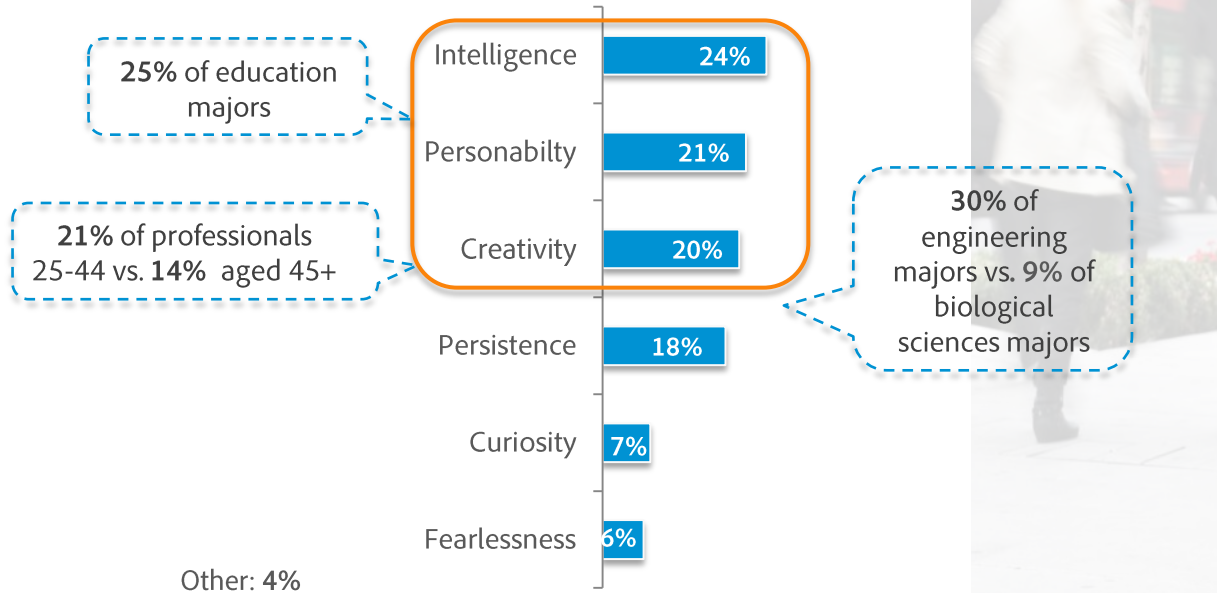Base: Total (n=1,000)

The ability to work with and manage others internally is in need of more creativity than working with external clients

People management — 43%

53% of women vs. 33% of men

Analysis — 34%

Research and Development — 31%

New business development — 30%

Client Management — 24%

29% of those 25-34 vs. 17% of those 35+

Sales — 24%

Reporting — 19%

Other: **3%**
None of the above: **5%**

Q13. Which of the following aspects of your career are in need of more creativity?
Base: Total (n=1,000), Male (n=523), Female (n=477), Age 25-34 (n=551), Age 35+ (n=449)

Creativity is regarded as one of the top three personality traits most important to career success

25% of education majors

21% of professionals 25-44 vs. **14%** aged 45+

30% of engineering majors vs. **9%** of biological sciences majors

Trait	%
Intelligence	24%
Personabilty	21%
Creativity	20%
Persistence	18%
Curiosity	7%
Fearlessness	6%

Other: **4%**

Q14. Outside of job-specific skills what is the **most important** trait to success in your field?
Base: Total (n=1,000), Age 25-44 (n=769), Age 45+ (n=231), Engineering Majors (n=120), Biological Sciences Majors (n=85), Education Majors (n=91)
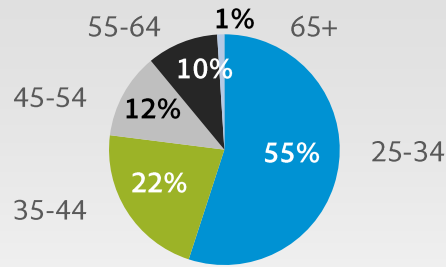
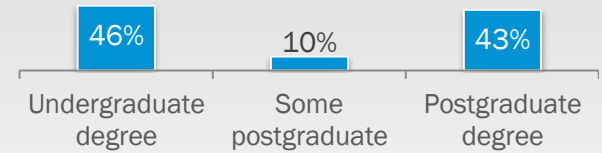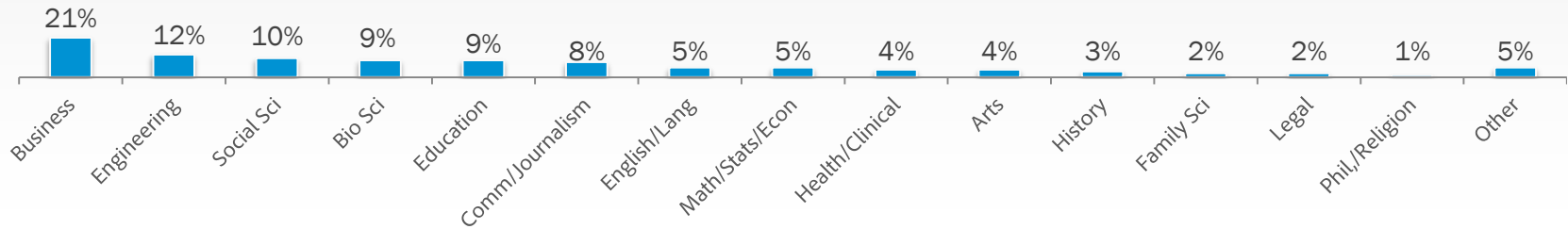APPENDIX

DEMOGRAPHIC PROFILE (1)

n=1,000

Gender

Male 52%
Female 48%

Age

65+ 1%
55-64 10%
45-54 12%
35-44 22%
25-34 55%

Education

Undergraduate degree 46%
Some postgraduate 10%
Postgraduate degree 43%

Major of Study

Business	Engineering	Social Sci	Bio Sci	Education	Comm/Journalism	English/Lang	Math/Stats/Econ	Health/Clinical	Arts	History	Family Sci	Legal	Phil./Religion	Other
21%	12%	10%	9%	9%	8%	5%	5%	4%	4%	3%	2%	2%	1%	5%
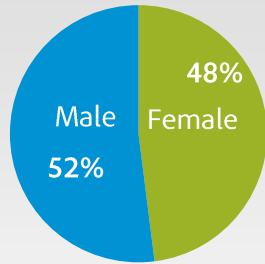
DEMOGRAPHIC PROFILE (2)

n=1,000

Residential Area

29% Urban center
49% Suburb
12% Medium sized town
10% Small town/rural area

Children at Home

39% Yes
61% No

of Children at Home

48% 1
41% 2
9% 3
1% 4
1% 5+

Adobe®