Confidence in Learning Poll

Executive Summary

April 2, 2019
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Methodology

This survey was conducted globally by The Harris Poll on behalf of LEGO® Education from February 6 - 28, 2019, among 5,002 students, 5,001 parents and 1,152 teachers. This online survey is not based on a probability sample and therefore no estimate of theoretical sampling error can be calculated.

Key Audiences

STUDENTS
(n=1,001 US, 1,000 DE, 1,001 RU, 1,000 CN, 1,000 JP)

PARENTS
(n=1,000 US, 1,000 DE, 1,001 RU, 1,000 CN, 1,000 JP)

TEACHERS
(n=251 US, 250 DE, 151 RU, 250 CN, 250 JP)
SECTION I

Global Findings
Lack of confidence hinders learning for students. To build confidence and improve educational outcomes that prepare students for the future we need hands-on learning.
Students are lacking confidence in school, especially in STEAM subjects

This lack is noticed by students, teachers, and parents

ONLY

17%

STUDENTS

Are “very confident” when it comes to learning STEAM subjects.
(Top 1 Box)

ONLY

36%

TEACHERS

Say their students are more confident in STEAM learning than 5 years ago.
(Top 2 Box)

ONLY

30%

PARENTS

Say their children are more confident than their peers.
(Top 2 Box)

ONLY

38%

PARENTS

Say their children are more confident than they were at their age.
(Top 2 Box)

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.
I. GLOBAL STORYLINE

Teachers agree that this lack of confidence hinders learning

Students are not feeling very comfortable when trying new things in school

76% TEACHERS

Anxiety and lack of confidence hinders learning among their students.

(Top 2 Box)

51% STUDENTS

Trying new things at school makes me nervous.

(Y/N)

47% STUDENTS

I avoid subjects where I have failed before.

(Top 2 Box)

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.
I. GLOBAL STORYLINE

Hands-on learning is a critical tool to rebuild confidence at school

The benefits of hands-on learning are noticed by students, teachers, and parents

95% TEACHERS

“Hands-on learning builds students' confidence.”

(Top 2 Box)

93% PARENTS

“Hands-on learning helps children retain knowledge for the future.”

(Top 2 Box)

87% STUDENTS

“When I learn via hands-on projects, I tend to remember the topics for longer.”

(Top 2 Box)

89% STUDENTS

“Hands-on classroom activities help me learn new things.”

(Top 2 Box)

The #1 way to build confidence in STEAM subjects is by working on hands-on projects with others according to Global teachers (77%) and Global parents (62%)

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.

Harris Insights & Analytics, A Stagwell LLC Company © 2018
Teachers are craving more time to integrate hands-on into their lessons

Many also believe it can help build resilience – 9 in 10 teachers say their students need to learn to fail to become more confident and succeed in school.

ONLY

40% teachers say their students usually/always get substantial time to learn through hands-on.

(Top 2 Box)

41% teachers say: “Hands-on learning is not typical at my school.”

(Top 2 Box)

91% teachers say: “I would like to integrate more hands-on lessons in my classroom.”

(Top 2 Box)
I. GLOBAL STORYLINE

Hands-on projects with others positively impact confidence in STEAM

STEAM subjects are critical for the jobs of the future

What builds confidence when it comes to STEAM subjects?

(%, Teachers)

- 77% Hands-on project with other students
- 50% Hands-on project alone
- 39% Teacher explains it
- 29% Read about it
- 25% Write it down

81% Parents agree “I wish my child learned modern skills like computer programming at school.”

(Top 2 Box)

79% Teachers agree “I worry about my students having practical skills to succeed in the world.”

(Top 2 Box)

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.
I. GLOBAL STORYLINE

In turn, confidence in STEAM extends to overall confidence in school

Those who are less confident in STEAM are also less confident in school overall and more likely to be nervous to try new things.

82% STUDENTS CONFIDENT IN STEAM
Felt confident in school today
(Top 2 Box)

Compared to 33% who say they are not confident in STEAM

75% STUDENTS CONFIDENT IN STEAM
Feel more confident in their abilities than most students
(Top 2 Box)

Compared to 33% who say they are not confident in STEAM

45% Students confident in STEAM feel nervous trying new things in school.
(Top 2 Box)

67% Students not confident in STEAM feel nervous trying new things in school.
(Top 2 Box)
SECTION 2

United States Findings
Students who are confident in learning STEAM subjects are more than twice as likely to say they were confident at school today. Hands-on learning can build confidence to try new tasks.
2. US STORYLINE

Building confidence in STEAM is beneficial to academic performance overall

Globally, those who are more confident in STEAM are less likely to feel nervous when trying new things, even more so in the US.

<table>
<thead>
<tr>
<th>US Students Not Confident in STEAM</th>
<th>US Students Confident in STEAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feel nervous trying new things in school (Y/N)</td>
<td>Feel nervous trying new things in school (Y/N)</td>
</tr>
</tbody>
</table>

75% vs. 41%

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.
2. US STORYLINE

Hands-on learning is the key to gaining confidence in school

It is especially effective for building confidence in STEAM subjects

97% US TEACHERS
“Hands-on learning builds students’ confidence.”
(Top 2 Box)

95% US TEACHERS
“Hands-on learning makes my students want to learn new things.”
(Y/N)

Building confidence in STEAM subjects

68% US Students agree that hands-on experience or tools help them master a STEAM subject. (Y/N)

55% US Students agree that working on hands-on projects with other students is the best way to build confidence in STEAM subjects. (Y/N)

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.
US teachers want to integrate more hands-on learning into their lessons

They are restricted by lack of time and curriculum considerations

51% US TEACHERS
My students always/usually get substantial time for hands-on lessons
(Top 2 Box)

33% US TEACHERS
“Hands-on learning is not typical at my school.”
(Top 2 Box)

94% US TEACHERS
“I would like to integrate more hands-on lessons in my classroom.”
(Top 2 Box)

US Teachers cite lack of time (61%) and overall curriculum restrictions (47%) as their biggest barriers to integrating more hands-on lessons.

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers. on behalf of LEGO Education.
SECTION 3

China

Findings
Students who are confident in STEAM are more than twice as likely to say they were confident at school today; hands-on learning is required to create deep learning and confidence.
In China, parental involvement is high – and most are craving even more of it.

This is likely because they believe their child’s performance reflects directly on them.

87% CHINESE PARENTS
Intervene to help with school work once a month or more
(Top 2 Box)
45% intervene weekly

71% CHINESE PARENTS
“My child's performance in school reflects my parenting abilities.”
(Top 2 Box)

78% “I wish I could be more involved in my child’s school work.”

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.
3. CHINA STORYLINE

In this climate, the perceived importance of hands-on learning grows

Chinese teachers are hoping to integrate more hands-on learning so it is more common in their teaching process, but they need the support of more administrators.

<table>
<thead>
<tr>
<th>97% CHINESE TEACHERS</th>
<th>55% CHINESE TEACHERS</th>
<th>96% CHINESE TEACHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Hands-on learning builds students' confidence.”</td>
<td>Hands-on learning is only sometimes or rarely part of their teaching process</td>
<td>“I would like to integrate more hands-on lessons in my classroom.”</td>
</tr>
<tr>
<td>(Top 2 Box)</td>
<td>(Top 2 Box)</td>
<td>(Top 2 Box)</td>
</tr>
</tbody>
</table>

**Chinese Teachers** are unable to integrate more hands-on because of scheduling difficulties (63%) and overall curriculum restrictions (66%).
3. CHINA STORYLINE

Failure is a part of building resilience in learning

Failure is highly recognized as a normal part of the learning process

91% CHINESE STUDENTS
“I know that failure is sometimes a part of learning.”
(Top 2 Box)

93% CHINESE PARENTS
“Failure is sometimes a part of learning.”
(Top 2 Box)

96% CHINESE TEACHERS
“I believe it is important that my students are comfortable with failure.”
(Top 2 Box)

96% CHINESE TEACHERS
“Failure is part of my students' learning process.”
(Top 2 Box)

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.
Eagerness to learn STEAM contributes to willingness to try new things
Hands-on learning is extremely helpful for mastering STEAM subjects

69% CHINESE STUDENTS NOT EAGER TO LEARN STEAM
Feel nervous trying new things in school
(Y/N)

51% CHINESE STUDENTS EAGER TO LEARN STEAM
Feel nervous trying new things in school
(Y/N)

69% CHINESE STUDENTS
Hands-on experience or tools help me master a STEAM subject
(Y/N)

77% feel that real world applications help them learn STEAM

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.
SECTION 4

Germany
Findings
Hands-on learning is the key to help children become more confident learners, especially when engaging in the field of STEAM. Developing STEAM-expertise is key for students to be equipped for tomorrow’s working environment.
4. GERMANY STORYLINE

The state of confidence in Germany

There is a lack of confidence in school, especially in STEAM subjects

**ONLY**

14% **GERMAN STUDENTS**

Are “very confident” when it comes to learning STEAM subjects.

(Top 1 Box)

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**ONLY**

22% **GERMAN PARENTS**

say their children are more confident than their peers.

(Top 2 Box)

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Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.

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4. GERMANY STORYLINE

Yet confidence in STEAM is foundational to being adventurous in school

German students who are not confident in STEAM are more than twice as likely to be nervous trying new things in school.

58% GERMAN STUDENTS NOT CONFIDENT IN STEAM
Feel nervous trying new things in school (Y/N)

22% GERMAN STUDENTS CONFIDENT IN STEAM
Feel nervous trying new things in school (Y/N)

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.
4. GERMANY STORYLINE

Hands-on learning is beneficial for many aspects of education

Hands-on learning helps students retain knowledge and build confidence

97% GERMAN TEACHERS

“Hands-on learning builds students' confidence.”
(Top 2 Box)

97% GERMAN TEACHERS

“Hands-on learning helps children retain knowledge for the future.”
(Top 2 Box)

97% GERMAN TEACHERS

“Hands-on learning makes my students want to learn new things.”
(Top 2 Box)

73% German teachers / 55% German parents / 36% German students agree that working on hands-on projects with other students can help build confidence when learning STEAM.

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.
Yet hands-on learning is not common in German classrooms

Teachers are hoping for more hands-on in their lessons

**ONLY**

46% GERMAN STUDENTS
Feel they have enough time to work on hands-on projects at school
(Top 2 Box)

32% GERMAN TEACHERS
“Hands-on learning is not typical at my school.”
(Top 2 Box)

90% GERMAN TEACHERS
Would like to integrate more hands-on lessons in their classroom
(Top 2 Box)

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.
4. GERMANY STORYLINE

Parents and teachers are concerned about the future of work

Hands-on tools can help build skills for an uncertain future workforce

66% GERMAN TEACHERS

“I worry about my students having practical skills to succeed in the world.”
(Top 2 Box)

75% GERMAN PARENTS

“I wish my child learned modern skills like computer programming at school.”
(Top 2 Box)

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.
SECTION 5

Russia
Findings
Lack of confidence hinders learning for students. Hands-on learning improves students’ confidence for better learning outcomes.
There are low levels of confidence in Russia

The lack of confidence is noted in STEAM subjects in particular

ONLY
11%
RUSSIAN STUDENTS
Are “very confident” when it comes to learning STEAM subjects.
(Top 1 Box)

ONLY
18%
RUSSIAN PARENTS
say their children are more confident than their peers.
(Top 2 Box)

90%
RUSSIAN TEACHERS
Student stress levels have some/high impact on their academic confidence.
(Top 2 Box)

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers. Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.
5. RUSSIA STORYLINE

As parents prepare their children for an uncertain future

Russian parents are especially concerned about ways schools can prepare their children for an unknown workforce

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Russian Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>73%</td>
<td>“Schools don't have enough resources today to adequately prepare students for the future.” (Top 2 Box)</td>
</tr>
<tr>
<td>84%</td>
<td>“My child will probably work in a job at some point that doesn't exist today.” (Top 2 Box)</td>
</tr>
<tr>
<td>91%</td>
<td>“I wish my child learned modern skills like computer programming at school.” (Top 2 Box)</td>
</tr>
</tbody>
</table>

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.
5. RUSSIA STORYLINE

Teachers believe hands-on learning is the solution

The #1 way global teachers believe students learn new information best is through hands-on projects in small groups, and half of global students would like more time for hands-on learning in the classroom.

88% RUSSIAN TEACHERS

Would like to integrate more hands-on lessons in their classroom

(Top 2 Box)

91% RUSSIAN TEACHERS

“Hands-on learning builds students' confidence.”

(Top 2 Box)

75% RUSSIAN TEACHERS

“Failure is part of my students' learning process.”

(Top 2 Box)

Better tools for hands-on learning are the #1 way to help Russian teachers integrate more hands-on learning in the classroom (62%)

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.
5. RUSSIA STORYLINE

Students confident in STEAM are less likely to be nervous to try new things

Russian students follow the global trend

65% RUSSIAN STUDENTS NOT CONFIDENT IN STEAM
Feel nervous trying new things in school
(Y/N)

48% RUSSIAN STUDENTS CONFIDENT IN STEAM
Feel nervous trying new things in school
(Y/N)

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.
Too few students in Japan feel very confident when learning STEAM subjects, and this impacts learning outcomes. Both students and teachers agree that hands-on projects are the #1 tool to help children students master STEAM and grow their confidence in those areas. Without the resilience that comes with high confidence, Japanese students are nervous about trying new things.
Japanese students are experiencing a lack of confidence today

Increasing pressure to do well every year may contribute to lack of confidence

ONLY
18%
JAPANESE STUDENTS

Are “very eager” when it comes to learning STEAM subjects.
(Top 1 Box)

ONLY
29%
JAPANESE PARENTS

say their children are more confident than their peers.
(Top 2 Box)

Lack of confidence hinders learning

84% Japanese teachers agree that anxiety and lack of confidence hinders learning among their students.
(Top 2 Box)

50% Japanese teachers agree that “Students are under more and more pressure to do well in school each year.”
(Top 2 Box)
6. JAPAN STORYLINE

Students who are not confident in STEAM are more nervous at school

72%
JAPANESE STUDENTS
NOT EAGER TO LEARN
STEAM
Feel nervous trying new
things in school
(Y/N)

52%
JAPANESE STUDENTS
EAGER TO LEARN
STEAM
Feel nervous trying new
things in school
(Y/N)

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.
Both teachers and students believe that hands-on learning is the best way to approach STEAM subjects

Tackling the issue of incorporating more hands-on experience is important for preparing students for the future.

64% JAPANESE STUDENTS
Believe hands-on experiences or tools are the #1 way to master a STEAM subject.
(Top 2 Box)

60% JAPANESE PARENTS
“My child will probably work in a job at some point that doesn't exist today.”
(Top 2 Box)
6. JAPAN STORYLINE

Despite valuing hands-on learning, time pressure is a barrier today

Most Japanese teachers are looking to incorporate more hands-on learning in their lesson plans

<table>
<thead>
<tr>
<th>91% JAPANESE TEACHERS</th>
<th>85% JAPANESE STUDENTS</th>
<th>ONLY 19% JAPANESE TEACHERS</th>
<th>86% JAPANESE TEACHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>“My students like working on hands-on projects at school.”</td>
<td>“Hands-on learning makes me want to continue to learn new things.”</td>
<td>“My students get substantial time for hands-on learning.”</td>
<td>“I would like to integrate more hands-on lessons in my classroom.”</td>
</tr>
</tbody>
</table>

75% Japanese teachers cite lack of time as their top obstacle to integrating more hands-on learning in their classroom

Source: The Harris Poll February 2019, n=5,002 students, n=5,001 parents, n=1,152 teachers, on behalf of LEGO Education.