

## More School May Mean Higher IQ Scores



**AP**

Seventh-graders in Norway, where an IQ study took place, set a Guinness world record in 2008 for simultaneously performed resuscitation attempts

This is the VOA Special English Education Report.

A study in Norway has found that students who stayed in school longer than others their same age scored higher on intelligence tests.

In the middle of the nineteen fifties, the government began requiring students to attend school until the age of sixteen instead of fourteen. Communities had almost twenty years to make the change. So some students went to school for seven years while others went for at least nine years.

This difference gave researchers the chance to see if the additional schooling had any effect on intellectual development.

All young men in Norway must take a test of their cognitive ability at age nineteen in preparation for required military service. This is commonly called an IQ, or intelligence quotient, test.

The researchers compared the test results of one hundred seven thousand young men to their years of school. Taryn Ann Galloway is a researcher at the University of Oslo.

TARYN ANN GALLOWAY: "The young men who were basically forced to stay in school for two years longer actually did have higher IQs. So, based on that, we were able to say that increasing compulsory schooling did actually have an effect on their cognitive abilities as measured at nineteen years of age."

An average IQ is one hundred. Most people score between eighty-five and one hundred fifteen.

Ms. Galloway says students who attended school for nine years scored seven points higher than those who attended for seven years. Those who went for eight years scored about four points higher.

TARYN ANN GALLOWAY: "So that's still quite large."

Experts have debated for years about the extent to which people are born with intelligence or develop it later. This is the nature versus nurture argument -- the influence of biology compared to the environment in which people are raised and educated. This study seems to support the nurture side.

TARYN ANN GALLOWAY: "I think it's because you do learn general thinking skills at school and you are able to practice them, and you have lots of opportunity to practice them. So this is a two year, you know, extension of compulsory schooling for two years, so they were able to simply improve their skills."

The findings appear in the Proceedings of the National Academy of Sciences.

Another recent study, in the journal Nature, found that IQ scores can rise or fall during the teenage years. In two thousand four, researchers from University College London tested thirty-three young people ages twelve to sixteen. They repeated the tests four years later. They found increases or decreases of as much as twenty points.

Both times, they also took structural brain scans using MRI, magnetic resonance imaging. The study found that as IQ scores increased, so did the density of gray matter in some areas of the students' brains.

Professor Cathy Price says the differences in performance could be the result of some teens being early or late developers. But she says it is equally possible that education played a part. She sees a lesson for educators: "We have to be careful not to write off poorer performers at an early stage when in fact their IQ may improve significantly given a few more years."

*Now do the worksheet ...*

**Level: beginner - intermediate**

**Time: 20-30 minutes**

**This worksheet will help you learn new vocabulary about intelligence. You will answer questions about intelligence research, and write a short paragraph about whether an IQ test is a good measure of how smart you are.**

1. Match the words on the left with the words on the right to make four phrases. Write the phrase on the line. The phrases are in the article.

- |                 |              |       |
|-----------------|--------------|-------|
| a. intelligence | 1. nurture   | _____ |
| b. cognitive    | 2. tests     | _____ |
| c. compulsory   | 3. ability   | _____ |
| d. nature vs.   | 4. schooling | _____ |

2. What is *intelligence*?

- the ability to forget things
- the ability to learn or understand things
- the ability to write your name

3. What is this article about?

- a study that measured intelligence
- a study that measured how long students stayed in school

4. Correct the following sentence.

A study in Norway has found that students who stayed in school longer than others their same age scored lower on intelligence tests.

\_\_\_\_\_

5. What do all young men in Norway have to take at age 19?

\_\_\_\_\_

6. What is an average IQ? What do most people score?

\_\_\_\_\_

7. Describe the results of the study.

\_\_\_\_\_

8. Read what Taryn Galloway says below about the results. Complete the sentence with the correct two words.

"I think it's because you do learn \_\_\_\_\_ skills at school and you are able to practice them, and you have lots of opportunity to practice them.

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9. Describe the second study mentioned in the article, in the journal *Nature*.

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10. What did Professor Cathy Price say? Complete the following sentence with the correct word.

"We have to be careful not to write off poorer performers at an early stage when in fact their IQ may \_\_\_\_\_ significantly given a few more years."

### OVER TO YOU

Do you think IQ tests are a good measure of how smart you are?

Write 5-8 sentences explaining your answer.

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## ANSWER KEY

1. intelligence tests, cognitive ability, compulsory schooling, nature vs. nurture
2. the ability to learn or understand things
3. a study that measured intelligence
4. A study in Norway has found that students who stayed in school longer than others their same age scored **higher** on intelligence tests.
5. They have to take a test of their cognitive ability in preparation for required military service. This is commonly called an IQ, or intelligence quotient, test.
6. 100; between 85 and 115
7. Ms. Galloway says students who attended school for 9 years scored 7 points higher than those who attended for 7 years. Those who went for 8 years scored about 4 points higher.
8. "I think it's because you do learn general thinking skills at school and you are able to practice them, and you have lots of opportunity to practice them.
9. students' own answers [Another recent study, in the journal Nature, found that IQ scores can rise or fall during the teenage years. In 2004, researchers from University College London tested 33 young people ages 12 to 16. They repeated the tests four years later. They found increases or decreases of as much as twenty points.]
10. increase