

13-year-old invents new Braille printer

18th February, 2015



A 13-year-old American has made a cheap machine that can help blind people read. People who cannot see can read by using Braille – a

system of small bumps that people touch to read the letters. Machines that make these small bumps into words, sentences and paragraphs are very expensive. They are called Braille embossers and usually cost at least \$2,000. The American teenager, Shubham Banerjee, made a new Braille embosser from a Lego kit that lets people create robots. It costs just \$350. Banerjee has called his new device the Braigo – a combination of the words Braille and Lego. It works by translating electronic text into Braille and then printing it using a computer or mobile device.

Banerjee designed his Braigo last year for a school science fair. Since then, he has caught the interest of Silicon Valley in the USA. The technology giant Intel invested in Banerjee's machine last November, but they did not say how much money they put in. Banerjee also got \$35,000 from his father to help him start the project. His father works as a computer engineer at Intel. He spoke about his why he gave so much money to his son, saying: "We as parents started to get involved more, thinking that he's on to something and this innovation process has to continue." Banerjee told the AP news agency that: "My end goal would probably be having most of the blind people...using my Braille printer."

Sources: *entrepreneur.com / dailymail.com / huffingtonpost*

Writing

Teenagers should be given jobs in technology companies. Discuss.

Chat

Talk about these words from the article.

13-year-old / cheap / machine / Braille / paragraphs / teenager / device / text / printing / science / technology / money / engineer / innovation / continue / news agency

True / False

- a) A 13-year-old British kid has made a machine to help the blind. T / F
- b) Traditional machines that print Braille are very expensive. T / F
- c) The machine the teenager made costs just \$350. T / F
- d) People can use the new machine and print Braille from a computer. T / F
- e) The teenager made his machine for his school science fair. T / F
- f) The tech giant Intel wanted to invest in the machine, but didn't. T / F
- g) The teenager's father refused to give him any money to help him. T / F
- h) The teen's parents wanted their son to stop working on the machine. T / F

Synonym Match

- | | |
|----------------|-----------------|
| 1. cheap | a. invented |
| 2. touch | b. make |
| 3. at least | c. attention |
| 4. create | d. feel |
| 5. combination | e. method |
| 6. designed | f. inexpensive |
| 7. interest | g. aim |
| 8. involved | h. mixture |
| 9. process | i. no less than |
| 10. goal | j. interested |

Discussion – Student A

- a) What opportunities are there today for kids who are good with technology?
- b) How do you think Banerjee felt when Intel invested in him?
- c) What do you think of his father for helping him with money?
- d) Did you have any business ideas when you were at school?
- e) How much potential do children have to innovate?
- f) What do you think the next 10 years will be like for Banerjee?
- g) What is your goal in life?
- h) What questions would you like to ask Mr Banerjee?

BreakingNewsEnglish - The Mini Lesson

Phrase Match

- | | |
|-----------------------------------|----------------------|
| 1. a cheap machine that can | a. of Silicon Valley |
| 2. read by | b. that people touch |
| 3. a system of small bumps | c. science fair |
| 4. Machines that make these small | d. involved more |
| 5. translating electronic | e. help blind people |
| 6. a school | f. text into Braille |
| 7. he has caught the interest | g. goal |
| 8. they did not say how much | h. using Braille |
| 9. parents started to get | i. money they put in |
| 10. My end | j. bumps into words |

Discussion – Student B

- What do you think about what you read?
- What do you think about Braille?
- What do you think about a 13-year-old inventing this?
- What do you think of the name Braigo?
- Would you like a translating device?
- How difficult do you think it is to learn Braille?
- How do you think you start learning to use Braille?
- How might this device change the lives of blind people?

Spelling

- a cheap enimhac
- words, neecnesst and paragraphs
- a Lego kit that lets people etarec robots
- a ciboonanmti of the words
- translating oilcret nec text into Braille
- using a computer or mobile civdee
- Banerjee sgedenid his Braigo last year
- he has caught the nsereitt of Silicon Valley
- help him start the cjrepto
- a computer gnieenre
- innovation scsrpo
- the AP news ngaecy

Answers – Synonym Match

1. f	2. d	3. i	4. b	5. h
6. a	7. c	8. j	9. e	10. g

Role Play

Role A – Laptop computer

You think a laptop computer is the best device ever. Tell the others three reasons why. Tell them why their devices aren't so good. Also, tell the others which is the least useful of these (and why): a gaming console, a food processor or a mobile phone.

Role B – Gaming console

You think a gaming console is the best device ever. Tell the others three reasons why. Tell them why their devices aren't so good. Also, tell the others which is the least useful of these (and why): a laptop computer, a food processor or a mobile phone.

Role C – Food processor

You think a food processor is the best device ever. Tell the others three reasons why. Tell them why their devices aren't so good. Also, tell the others which is the least useful of these (and why): a gaming console, a laptop computer or a mobile phone.

Role D – Mobile phone

You think a mobile phone is the best device ever. Tell the others three reasons why. Tell them why their devices aren't so good. Also, tell the others which is the least useful of these (and why): a gaming console, a food processor or a laptop computer.

Speaking – Devices

Rank these with your partner. Put the most useful at the top. Change partners often and share your rankings.

- | | |
|-------------------|-------------------|
| • car GPS | • laptop computer |
| • food processor | • smart watch |
| • coffee maker | • mobile phone |
| • barcode scanner | • gaming console |

Answers – True False

a	F	b	T	c	T	d	T	e	T	f	F	g	F	h	F
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Answers to Phrase Match and Spelling are in the text.