

CHILDREN CAN LEARN

more effectively through stories than activities

PHOTO: GETTY IMAGES



When making children learn about evolution, the oldest form of teaching - storytelling - is the most effective way of teaching primary school, suggest the findings of new research. The study was led by researchers at the Milner Centre for Evolution at the University of Bath

than the somewhat abstract example of trilobites, but in fact the opposite was true. "This is the first large randomised controlled trial that is evaluating the effectiveness of different methods of teaching, using similar scientific methods to those used in drug interaction trials to test whether a new treatment works. "Our results show that we should be careful about our preconceptions about what works best. We only tested the teaching of evolution in this way - it would be interesting to see if these findings also applied to other subjects of the curriculum."

Professor Momna Hejmadi, Associate Dean of the University's Faculty of Science, helped to design the study and co-authored the paper. She said: "Evolution was introduced to the national curriculum for primary schools in 2014.

"It's a really important subject as it forms the foundation for biology. However, many primary school teachers, if they don't have a science background, are less confident about teaching it.

The story-based approach combined with abstract examples of evolution were the most effective lessons. The study recruited 2,500 primary school students who were tested for the understanding of evolutionary concepts

It is important for schools to make available free online course for teachers to help them effectively engage their pupils with this important subject.

THE METHOD

While all teaching methods improved the pupils' understanding of evolution, a study published in the journal 'Science of Learning' found that the story-based approach combined with abstract examples of evolution were the most effective lessons.

A randomised controlled trial found that children learn about evolution more effectively when engaged through stories read by the teacher, than through doing tasks to demonstrate the same concept. The scientists investigated several different methods of teaching evolution in primary schools, to test whether a pupil-centred approach (where

pupils took part in an activity) or a teacher-centred approach (where pupils were read a story by the teacher), led to a greater improvement in understanding of the topic. The study recruited 2,500 primary school students who were tested for the understanding of evolutionary concepts before and after the lessons. Professor Laurence Hurst, Director of the Milner Centre for Evolution at the University of Bath, led the study.

THE FINDINGS

He said: "We were surprised by the results - we expected that pupils would be more engaged with an activity rather than listening to a story and that children would identify more strongly with the human-based examples of evolution



Do You Agree with this study?
Teachers and educators, please tell us your thoughts on this study. Write to us at timesnie175@gmail.com

Best of the Christmas movies

EDWARD SCISSORHANDS

A reclusive genius creates a boy but dies before completing him, leaving his brainchild with scissor-like blades in place of hands. A kindly woman from a nearby suburb takes pity on the lonely figure and welcomes him into her home. Tim Burton's fantasy, starring Johnny Depp.



THE SOUND OF MUSIC

A cheerful novice nun is employed as governess to the seven children of an austere widower. As she brings light, laughter and a love of all things harmonious to a family previously beset by grief, she also falls in love with her employer. Oscar-winning musical with Julie Andrews.



INSIDEOUT

Inside 11-year-old Riley's head lives a team of five that control her emotions. Led by the eternally upbeat Joy, they have always ensured she lived a happy life - but when Riley's parents move to a new city, she is plunged into depression. It's a Pixar fantasy, with the voice of Amy Poehler.

EDDIE THE EAGLE

Biopic of British Eddie Edwards. Determined to fulfil his dreams of becoming an Olympic athlete, Edwards trains as a ski jumper - a field in which Britain had no other competitors - and secures a place in the Olympics. Starring Taron Egerton.



JURASSIC WORLD

Decades on from the creation of Jurassic Park, an attraction filled with genetically engineered dinosaurs has been opened on the island. In need of a new attraction, the company behind the park creates a new species - only for it to escape. It's an adventure sequel starring Chris Pratt.



NEW ON THE BLOCK

NEW BATMAN WILL BE BLACK

Tim (Jace) Fox will follow Bruce Wayne as Batman in the upcoming miniseries. A surprise variant cover to issue #2 of the four-issue January/February miniseries was revealed and Tim Fox as Batman was in it. Tim is the estranged son of Lucius Fox and brother to the former Batwing Luke Fox. He first appeared in Batman #313, April 10, 1979. More

recently, in October's Batman #101, he was in a conversation between Batman and Lucius Fox, who has since acquired the Wayne fortune and technology as a result of The Joker War. The story is written by John Ridley, Nick Derington and Laura Braga, and the art is by Doug Braithwaite and Diego Rodriguez 'Future State: The Next Batman' will debut on January 5, 2021, with new

issues available every other week. Every 64-page oversized issue will include stories of other Gotham City heroes and villains. On February 23, 2021, another story of The Next Batman will give him a sidekick as part of DC's 'Batman: Black & White' anthology series.



MIND TEASERS (MATHS QUIZ)

Medha Bhavani Girish, class IX, National Public School HSR Layout, Bengaluru

- Q.1) If the price of salt increases by 20%, by how much per cent should a family reduce their consumption to maintain their expenditure on salt?
A. 16.66 B. 20 C. 18 D. 40
- Q.2) If Raju's dad is 4 times Raju's age, and in 5 years, Raju's dad will be thrice his age, find Raju and his father's present age.
A. 8 and 32 B. 9 and 36 C. 10 and 40 D. 5 and 20
- Q.3) If the area of a rectangle is equal to its perimeter, and the length is 3 less than the breadth, find the length and breadth.
A. 12 - b5 B. 13 - b6 C. 15-b18 D. 15-b8
- Q.4) If 3 consecutive multiples of 7 add up to 84, find the multiples.
A. 14, 21, 28 B. 42, 49, 56 C. 7 14, 21 D. 21, 28, 35
- Q.5) The digits of a 2 digit number add up to 7. When reversed, the number is increased by 27. Find the number.
A.16 B. 34 C. 25 D. 61

ANSWERS

- (1) A) 16.66% (2) C) Raju 10, dad 40 (3) B) L3 - b6 (4) D) 21, 28, 35 (5) C) 25

STAY HEALTHY

4 fruits for maintaining weight in pandemic

Rich in fibre, vitamins and essential nutrients, fruits are one of the best foods that you can include in your diet for maintaining weight. The fibre keeps you fuller for a longer time and the fructose content helps to satiate your sweet tooth. Here are 5 fruits you can eat regularly if you are trying to lose weight.



APPLES

1 With just 4 grams of fibre and only 95 calories per serving, apples are one of the best fruits for weight loss. They are more satisfying than other snacks because it takes longer to consume an apple due to its high fibre content. Studies suggest that apples can support weight loss and reduce the risk of high cholesterol.



BANANAS

2 Contrary to popular belief, bananas are not fattening. It is certainly more calorie-dense than many other fruits, but the yellow fruit is also rich in nutrients. Bananas are packed with potassium, magnesium, manganese, fibre, vitamins and many antioxidants. Eating a banana every day can help reduce the risk of high cholesterol and help in maintaining weight.



BERRIES

3 Berries are considered nutritional powerhouses. They are low in calories, packed with different kinds of vitamins and antioxidants. One serving of (152 grams) strawberries contains just 50 calories, while 148 grams of blueberries contains just 84 calories. They can be enjoyed with cereal or yogurt for breakfast or blended in a healthy smoothie.



ORANGES

4 Include oranges in winter to maintain weight. This fruit is rich in vitamin C, fibre and low in calories. It is four times more filling than a croissant and twice as filling as a muesli bar. One orange contains just 45 calories, so you can enjoy this fruit without worrying about your calories intake.

3 POSITIVES BEFORE THE TESTS

Kohli-less Team India ticked all the right boxes in the 2nd and final practice match against the Men from Down Under in the build-up to the four-match Test series

1 Shami & Bumrah working in tandem

Premier pacers Mohammed Shami and Jasprit Bumrah received a heavy bashing after their no-show in the white-ball series against the mighty Aussies. Though India avenged the One Day International (ODI) series by winning the T20Is, it was the batch of make-shift pacers (Shardul Thakur and Thangarasu Natarajan) that forced the premier bowlers to take the back seat. However, both Bumrah and Shami have bounced back by running rings around the Aussie batsmen in the practice matches. While Shami was the pick of the bowlers in the 2nd practice match with five wickets, Bumrah scored a gritty half-century and also secured a brace of wickets in the same match.

3 Pant puts himself on the map

With a strike rate of 141 plus and an innings laced by six sixes and nine fours, it's fair to say that Rishabh Pant was only toying with the Aussie bowlers in the build up to the first Test between India and Australia at Sydney. The out-of-favour batsman has remained behind Wriddhiman Saha in the pecking order but Pant's quick-fire century against Australia A has created the right noise prior to India's first pink-ball Test against Australia. In the previous match where Saha perished for a duck, Pant staged his return-to-form act in the second game. There is no denying that the India southpaw has put himself on the map.

2 Hanuma, Shubman give fresh headaches

At a time when Ravindra Jadeja is recovering from a concussion, middle-order batsman Hanuman Vihari is keen on cementing his place in the playing XI for the Adelaide Test. Vihari not only slammed a crucial century against Australia A, but the all-rounder also chipped in with tidy spells and was rewarded with the prized wicket of Australia A skipper Alex Carey. Meanwhile, Indian opener Shubman Gill has also strengthened his selection case with his elegant batsmanship and consistency. The promising young talent is already heavily tipped to spearhead India's batting order when Kohli leaves the Indian contingent post the series opener. Gill is also likely to receive a surprise start in the Adelaide Test as the Indian think tank continues to deal with the selection dilemma. Gill scored a patient 43 in the first innings before scoring a sublime 65 in the second.

India will miss Ishant badly: Manjrekar

Former Indian cricketer-turned-commentator Sanjay Manjrekar feels India will miss Ishant's presence in the Border-Gavaskar Trophy 2020-21 edition. "India will miss Ishant Sharma very, very, badly because he was the third support bowler. He ensured that the pressure wasn't off. In many ways Mohammed Shami and Bumrah are your seam bowlers and you needed somebody to just keep that line outside the off-stump, be economical, keep the pressure on," Sanjay Manjrekar said on Sony Network. Ishant was one of the key performers for Team India in the maiden Test series win on Australian soil. He played the senior pacer's role to perfection and returned with 11 scalps in the last India-Australia Test series. Hence, his overall experience and presence will be a big loss to Kohli & Co.

Shami bowled noteworthy spells in the pink-ball warm-up against Australia A

Photo: GETTY IMAGES

There will be no pressure of captaincy on Rahane: Gavaskar

Legendary batsman Sunil Gavaskar feels Ajinkya Rahane won't be under any pressure to lead Team India in the last three Tests of the upcoming series against Australia once regular skipper Virat Kohli leaves after the Adelaide match. After the culmination of the first Test, which will be played under lights at the Adelaide Oval from Thursday, Kohli will return to India to be with his wife Anushka Sharma who is expecting their first child.

There is no real pressure on Ajinkya Rahane because both the times that he has led the team, he has won. He led against Australia at Dharamshala and India won. He led against Afghanistan and India won.

Sunil Gavaskar, former Indian captain



Photo: GETTY IMAGES

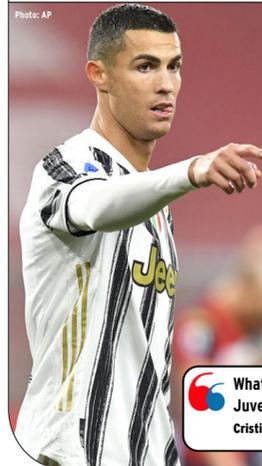
Kuldeep to be game changer in D/N Test



Pragyan Ojha

Photo: GETTY IMAGES

Ronaldo scores twice on 100th Juventus appearance



Cristiano Ronaldo marked his 100th game for Juventus with a pair of penalties in a 3-1 success over Genoa, as the champions closed the gap on Serie A leaders AC Milan. Paulo Dybala got his first league goal of the season in the 57th minute and Ronaldo sealed the points with two late strikes from the spot after Stefano Sturaro had levelled for the hosts after an hour. The Portuguese forward's strikes have taken him level with AC Milan star Zlatan Ibrahimovic as leading scorer in Serie A with 10 goals.

What better way to celebrate my 100th game for Juventus, than scoring two more goals for the team?
Cristiano Ronaldo

TEST YOUR KNOWLEDGE

Q1: In which tournament did Australian tennis player Ashleigh Barty win her maiden Grand Slam title?

- a) Australian Open b) The French Open
c) Wimbledon d) US Open

Q2: Who is the first Indian woman to win a gold medal at the AIBA Women's World Boxing Championship?

- a) Nikhat Zareen b) Sarita Devi
c) Lovlina Borgohain d) MC Mary Kom

Q3: In which year did Neeraj Chopra win a gold medal at

the Asian Athletic Championships?

- a) 2016 b) 2017 c) 2018 d) 2019

Q4: Which country clinched a gold medal at the 2020 European Rhythmic Gymnastics Championships in Kyiv with victory in the group mixed apparatus final?

- a) France b) Turkey c) Greece
d) Italy

Q5: Which player holds the record of most catches in the history of IPL?

- a) AB de Villiers b) Suresh Raina
c) Rohit Sharma d) Kieron Pollard

Q6: In which year did Ravichandran Ashwin win the Sir Garfield Sobers Trophy after being named ICC Cricketer of the Year?

- a) 2015 b) 2016 c) 2017 d) 2018



Ravichandran Ashwin

Q7: Who is the only Indian athlete to have won at a World Athletics Championships, with a bronze in long jump at the 2003 World Athletics Championships in Paris.

- a) Mercy Kuttan b) Anju Bobby George
c) Nayana James d) Reeth Abraham

Q8: Which cricketer has captained the most matches in all seasons of IPL?

- a) Virat Kohli b) Rohit Sharma
c) Gautam Gambhir d) Mahendra Singh Dhoni

Q9: Who has officiated the most number of matches as an umpire in the history of IPL?

- a) Asad Rauf b) Nitin Menon
c) Kumar Dharmasena d) Sundaram Ravi

Q10: In which year was Maradona crowned world champion with Argentina?

- a) 1986 b) 1987 c) 1988 d) 1989

Q11: Which Indian player has the record of most runs in T20 Internationals?

- a) MS Dhoni b) Shikhar Dhawan
c) Rohit Sharma d) Virat Kohli

Q12: Who is the present coach of FC Barcelona?

- a) Pep Guardiola b) Ernesto Valverde
c) Ronald Koeman d) Quique Setien

ANSWERS: 1 b) The French Open 2 d) MC Mary Kom 3 b) 2017 4 b) Turkey 5 b) Suresh Raina 6 b) 2016 7 b) Anju Bobby George 8 d) Mahendra Singh Dhoni 9 d) Sundaram Ravi 10 a) 1986 11 d) Virat Kohli 12 c) Ronald Koeman