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## Tsunami Family Saved by Schoolgirl's Geography Lesson

James Owen in London  
for [National Geographic News](#)

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On December 26 British schoolgirl Tilly Smith, ten, sensed something was wrong while on the beach with her family. Her mind kept going back to the geography lesson Mr. Kearney gave just two weeks before she flew out to a Thai resort with her family.

"The water was swelling and kept coming in," recalled Penny Smith, Tilly's mother. "There was froth on it like you get on the top of a beer. The sea was like a millpond before [the swelling began]."

The Smiths, from southeast England, were celebrating Christmas at Maikhao Beach in Phuket, southern Thailand. Deadly [tsunami](#) waves were already on their way—triggered by a massive [earthquake](#) off northern Sumatra earlier that morning.

"The beach was getting smaller and smaller," said Penny Smith, 43. "I felt compelled to look, but I didn't know what was happening. Then Tilly said she'd just studied this at school—she talked about tectonic plates and an earthquake under the sea. She got more and more hysterical. In the end she was screaming at us to get off the beach."

Tilly's father, Colin Smith, 46, said other tourists on the beach were alerted by his daughter's concerns as he took Tilly and her seven-year-old sister back to the hotel swimming pool.

Penny Smith added, "I didn't know what a tsunami was, but seeing your daughter so frightened made you think something serious must be going on."

She remembers seeing a yacht being tipped vertically in the bay. "Then it was as if the entire sea came out of the water. I was screaming, 'Run!'"

The family took refuge on the third floor of their hotel. Set well back from the shore, it withstood the surge of three tsunami waves.

"Everything went in the swimming pool—beds, palm trees, the lot," Penny Smith said. "Even if you hadn't drowned, you would have been hit by something."

If they had stayed on the beach, she believes they wouldn't have made it to safety.

In the disaster's aftermath, the Smiths said, they met people from nearby resorts who had lost whole families.

### Safely Home

Tilly Smith is now back safely at Danes Hill School in Oxshott, Surrey, England. Last week she told her geography class how the sea slowly rose and started to foam, bubble, and form whirlpools before the big waves

came.

"What Tilly described as happening was exactly the same as I'd shown on a video of a tsunami that hit the Hawaiian islands [in 1946]," said Andrew F. Kearney, Tilly's geography teacher. "She saw the consequences of not acting when something strange happens."

Kearney said topics for year-six pupils (age 10 to 11) include tectonic plates, earthquakes, and volcanoes.

"We covered tsunamis because they can be caused by earthquakes, volcanoes, or landslides," he added. "I've taught this particular course for at least 11 years."

Kearney uses audiovisual teaching aids such as interactive white boards to harness geographic information online (his class often visits [nationalgeographic.com](http://nationalgeographic.com)). Tilly's class had looked up U.S. Web sites about tsunami early-warning systems.

"The teacher has a computer on the desk and can project different Web pages onto the whiteboard," Kearney said. "It's helped make great strides in teaching geography—it really brings it into the classroom."

Children are also given practical tasks. One of these was to build models of an earthquake-proof house out of balsa wood. "I put [the models] on a box and shake it to see which model remains intact the longest," Kearney added.

He's had many hundreds of supportive e-mails from teachers around the world since Tilly's story was first reported in Britain.

"People often underrate teaching and teachers and they feel it's important to show we can make a difference," Kearney said.

"Any subject can be dull if it's taught that way," he continued. "You've got to get the children involved and interested—that's the challenge. If they're just given a dusty old book and asked to answer some questions, then they're not going to learn much."

While geography remains a popular subject with pupils at Danes Hill, it's a different picture nationally, according to David Bell, chief inspector of schools in England.

Last November he stated that geography is on the decline in primary and secondary schools, adding that the subject has become neglected and marginalized.

### **Worst Taught Subject**

Inspectors found that geography is the worst taught subject in primary schools.

Bell said educators need to engage pupils more purposefully by making them realize the relevance and value of the subject and, most important, by ensuring they enjoy it.

"Water shortages, famine, migrations of people, disputes over oil, globalization, and debt are all major issues with which our world is grappling, and this is the geography of today," he added.

David Lambert, chief executive of the Geographical Association in Sheffield, England, agreed with Bell.

Lambert said, "Geography concerns real-world learning. There is nothing more mind-expanding, more fulfilling physically, emotionally, and intellectually than making sense of the world firsthand."

He suggests the problem in schools is linked to difficulties teachers have in integrating the subject into the weekly curriculum.

"Being about the contemporary world, and the world in the outdoor classroom, designing geography can seem a

little more daunting, particularly to those without any training or inspiration to do so," he added.

And it's a challenge teachers appear to be struggling with in many countries.

In 2002 the National Geographic Society commissioned a [survey](#) to test the geographic knowledge of 18- to 24-year-olds in Canada, France, Germany, Italy, Japan, Mexico, Sweden, Britain, and the U.S.

It found, for instance, that only 31 percent of young U.S. adults could correctly identify Britain on a world map. And, on average, fewer than 25 percent of young people worldwide could locate Israel.

The Indian Ocean tsunami disaster has sparked calls for levels of geographic knowledge to be improved in affected regions. In countries such as Thailand and Indonesia, very few people understood the risks posed by the undersea earthquake, or were able to read warning signs in the sea.

Thanks to Andrew Kearney, Tilly Smith had been forewarned. She remembered the lesson and survived to tell her classmates her terrifying tale.

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