

A Soccer Ball that Gives You Energy

Difficulty:



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Discussion activities to be done after completing this EA lesson

Today's lesson was about the "sOccket". What is it? Who created it? For what applications?

Extension discussion topics

A. Talking about and going over the specific topic / idea / issue in listening text

Introduction = What is the "sOccket"? Who developed it? For what applications?

1. What is it and how does it work? What applications were mentioned in the report?
 - A high-tech portable generator in the shape of a football.
 - When used as a football it collects (harnesses) and stores all the energy transferred to it in the form of movement (kinetic energy) - "every kick, hit or throw of the ball".
 - It stores the energy in batteries.
 - When it is charged (after a game), people can plug electric devices into it and use it as a source of power.
 - Applications mentioned in the report: lamp, cell phone charger, water purifier (in development).
2. What do we learn in the report about its performances?
 - 15 min. of game play = 3 hours of power for a LED lamp.
 - Storage capacity = the equivalent of 24 hours of electric power.
3. What do we learn in the report about its inventors?
 - Julia Silverman and Jessica Matthews.
 - They studied engineering at Harvard University, where they developed the sOccket.
 - Both had experience in developing countries before they began their project.
 - They believe that the sOccket is one small solution to the global problem of power shortages.
 - They have started a nonprofit organization called Uncharted Play:
<http://www.unchartedplay.com/about>
4. What do we learn in the report the world's energy crisis?
 - It's a big problem. Nearly one and a half billion people do not have access to electricity. Most of them live in sub-Saharan Africa and in India and other countries in Asia.
 - One out of every five people in the global population has no electricity whatsoever.

B. Expanding on (one of) the topics / ideas / issues in listening text

Topic = Uncharted Play.

1. Use the link given above to find out more about the inventors' nonprofit organization. What are its goals, its philosophy, its motto or slogan?
 - A zero-profit social enterprise venturing into "uncharted" territory in its focused development of fun products and services that address real-world problems.
 - Mission: to encourage people around the world to rethink the purpose of play and keep joy at the forefront of their lives.
 - Motto or slogan: "reTHINK FUNction" (what does this mean to you?)
2. On the "Movements" page of UP's website, the sOccket is described as their "Flagship Movement". What does this mean? Using this page as a starting point (and being prepared to click), can you get more information on the sOccket than was given in the lesson? Exchange what you found with a partner or with your teacher.
<http://www.unchartedplay.com/movements>
3. What do you think about the work of Uncharted Play? Crazy? Useful? ... Explain your answer.

C. Extending discussion of (one of) the topics / ideas / issues in listening text

Topic = Power shortages.

1. We learn in the report that "one out of every five people in the global population don't have any electricity whatsoever". Could you live without electricity? Why? Why not?
2. What do you do if / when there is a power cut (no electricity)? Does this happen often where you live? Are you well-prepared for power cuts?
3. Have you ever visited places where there is no electricity? Recount your experiences.
4. What are the causes of power cuts? Why do they always occur "at the wrong time"? A famous power cut was the "New York City Blackout of 1977". If possible, use the Internet to research: its causes, its duration, its consequences. Exchange what you found with a partner or with your teacher.

Audioscript

"The sOccket is a cutting-edge portable generator in the form of a soccer ball."

Julia Silverman and Jessica Matthews developed the sOccket as part of a group project for an engineering class at Harvard University. To better understand what a sOccket is, you first need to understand how it works.

"When you play with the ball, there's all this energy being transferred to the ball - even any normal soccer ball. Basically, what we're trying to do is instead of letting that energy dissipate into the environment or just be lost, we're harnessing it inside using these mechanisms, this technology that essentially tries to capture everything with the movement. Everything that is harnessed is then stored in a battery of sorts."

The sOcket collects and stores this energy with every kick, hit or throw of the ball.

"Then the user can basically plug any accessory directly into the ball, like a lamp to study, or a cell phone charger. We're developing a water purifier and hopefully some other things that might be beneficial."

For every fifteen minutes of game play, the sOcket can provide enough electricity to power an LED lamp for up to three hours. The ball can store up to twenty-four hours' worth of power.

The International Energy Association reported last year that nearly one and a half billion people did not have access to electricity. Most of them live in sub-Saharan Africa and in India and other countries in Asia. Julia Silverman and Jessica Matthews both had experience in developing countries before they began the project. They knew that power shortages are a serious problem in many areas.

"There's an energy crisis in the world. One out of every five people in the global population don't have any electricity whatsoever. And beyond that, there are a lot of health issues because what people use instead of the electricity are harmful alternatives like kerosene lamps, which produce a lot of smoke."

Ms. Silverman says the sOcket is one small solution to a big problem.

"And so we knew that just a little bit of light would make a huge difference. And we also knew that soccer was the most popular sport, most loved sport in the world."

Jessica Matthews and Julia Silverman have started a nonprofit organization called Uncharted Play. They hope their sOcket ball will shine more light on the problem of power shortages. It offers people a chance to put their energy into the world's most popular sport and get some energy in return.

And that's the VOA Special English Technology Report.