

Smart clothes (teacher's notes)

1. Warm-up (Activity 1) 5 mins

Aims: to break the ice and foster a safe environment for learning.

Procedure: introduce the topic. Ask students or have them discuss the questions in pairs. Ask them what smart clothes are and if people really need them.

Key:

Clothing that monitors the wearer's physical condition. Smart shirts and body suits provide biometric data, such as pulse rate, temperature, muscle stretch, heart rhythm and physical movement, and the data are transmitted via Bluetooth to an app in real time. Although prototypes of electronic textiles date back to the 1980s, it took more than three decades before products began to emerge.

2. 3D clothes (Activity 2) 10 mins

Aims: to provide students with listening practice.

Procedure: ask students to look through the questions and predict the answers. Then students watch the video and answer the questions

Key:

1. How are these items different from normal clothes?

All the items have been created in a 3D printing lab.

2. What challenge did the designer have to overcome?

The printing plate was very small so the designer had to print everything in A4 size and then connect or glue the parts.

3. How are the clothes made?

A printer is loaded with special material. The printer creates a pattern and transfers it onto a plate.

4. Why are the clothes expensive?

It takes a lot of time to print them.

5. What is the future of designing clothes on 3D printers?

More and more people will be able to buy them and design their own clothes.

6. Would you wear these clothes?

3. Smart clothes (Activity 3) 10 mins

Aims: to provide vocabulary practice.

Procedure: ask students to look through the feature, pre-teach blocking vocabulary if necessary. Students match the products and their features, then discuss which one they would like to wear.

Key:

Levi's Commuter Trucker Jacket:

- has touch and gesture sensitive areas on the sleeve;
- is able to interact with a variety of services including music and map apps;
- has detachable solar panels with which you can charge phones or a GPS system in your pocket;
- provides a wearer with instant sustainable energy;
- has a power-bank placed directly in the lining.

Nadi X yoga pants:

- comes with built-in haptic vibrations;
- encourages you to move and/or hold positions;
- syncs up via Bluetooth to your phone and gives you feedback on your performance.

Digitsole Smartshoe:

- does walking pattern analysis,
- includes auto-lacing.

Welt - a smart belt:

- can track waist size, activity, and overeating.

4. The ultimate smart travel jacket (Activity 4) 20 mins

Aims: to provide students with free speaking practice.

Procedure: students design in pairs the concept of the ultimate smart travel jacket then present it to the group. The teacher decides/ the group votes on whose presentation was the best.

5. Sum up 3-5 mins

Summarise the lesson and tell students what results they have achieved (Now you can ... After our reading and speaking lesson you will be able to....). Ask them if they have any questions. Conduct delayed error correction if needed.