HOW SMART IS YOUR HOME? ПЛАН-КОНСПЕКТ УРОКА В 10 КЛАССЕ

И. Н. Левоцкая,

учитель английского языка Лошницкой СШ Пинского района

Unit 6 (Наука и техника), Lesson 7 (Дом будущего)

GOAL: to find out what smart home is and discuss the latest technologies

OBJECTIVES:

To practice listening skills

To practice describing smart home technologies

To develop analytical and logical thinking (to find advantages and disadvantages)

To boost interest in science and new technologies

Materials: videos, slides (Power Point Presentation), article, worksheets, cards.

LESSON BRIEF

1. INTRODUCTION

A. Warm-up

A house is made with walls and beams, a home is made with love and dreams.

The man's castle is in his home. (slide 1) [2, c.51]

Answer the following questions:

- 1. Have you ever heard these English proverbs?
- 2. What is the difference between a home and a house?
- 3. Why does home mean so much for people?

B. Goal-setting

Today we will try to answer the question "How smart is your home". Moreover, we will revise different modern household appliances and discuss their functions.

Why do young people need such knowledge? What should you know in order to use modern technologies properly?

2. MAIN PART

Vocabulary revision.

Look through the main functions of the smart appliances . Match the names of the appliances with their functions. Discuss your ideas in pairs.[1, c.152]

Appliances	functions
a)Automatic lights	1. starts warming the bedroom before you
b)Climate control	get out; rooms can be heated or cooled based
c)Outside cameras	on who's there at any given moment.
d)Video door phone	2. provides help in an emergency: a resident
e)Motion sensors	will be woken with a fire alarm, the smart
f)Door handles	home will also unlock doors, dial the fire
g)Trash cans	department and light the way to safety.
h)Refrigerators	3. monitor what you throw away and
i)Security system	generate online orders for replacement
	4. create dinner recipes based on the
	ingredients stored inside
	5. open with scanned fingerprints or a four-
	digit code, no need to look for house keys.
	6. turn off automatically when a person
	leaves the room.
	7. track your home's exterior even if it's
	pitch-black outside
	8. send an alert when there's movement
	around your house, and they can even tell the
	difference between pets and people.
	9. you get a picture of who's at the door.

LISTENING

A. pre-listening stage

a. Can you give any examples of changes in our homes under the influence of scientific and technical development?

Will our homes change in the next 10-20 years?

b. Pay attention to the meaning of the following words (slide 2)

B. listening

The first listening: Watch the video "Predictions: the intelligent home and the internet of things" [4] and answer the following question: Would you like to live in such a house?

The second listening: Describe particular qualities of the modern kitchen, bathroom and bedroom (some students can use the tapescript, Annex 1),

C.post-listening stage

1. Reproduce the sentences in which the following phrases are used:

(Worksheet 1)

a couple of decades from now, the Internet of things is already happening, increasingly intuitive, our facial expressions and body language, at just the right time, measure your blood pressure, interactive touch screens and suggest recipes to avoid wasting them, problems with mobility and memory, unprecedented independence and comfort.

2. Use prepositions where necessary:

(Worksheet 2)

```
to look ... the inside ... your home
a couple ... decades ... now
capable ... sharing information ... each other
imagine your bedroom waking you ... just the right time ... the right way ...
you
```

when you get... home

but think ... this

3. The Game "Let's talk" [6]

The teacher assigns each student a partner. Each pair is given a card with 5 words/expressions connected to smart home. When the teacher says go, the students stand up and have a specific amount of time to talk with their partners on the topic of smart home. They must use 5 vocabulary words/expressions in their conversation and check them off as they use them. When they've used all 5, they sit down. The teacher should circulate the classroom during the activity to engage students in conversation and keep them on task. (Annex 2)

4. Answer the following questions:

Why do people have the necessity of changing their homes?

How do you think the living in a smart home is more convenient? Why?

Is "the Internet of Things" our future or present?

Which of the new home technologies do you like the most?

ENERGISER:

Charades:

Before the lesson the teacher writes vocabulary words on small pieces of paper and puts them in the basket. [6]

Vocabulary: interactive touch screens, climate control, intelligent kitchen, motion sensors, automatic lights, automatic doors, automatic windows, intelligent refrigerator. (While playing students can add new words)

The teacher divides students into two teams. One student from one team comes to the front of the class, chooses a word from the basket, and acts out the word without speaking. Whichever team yells out the correct word first earns a point. The next student to act out a word comes from the other team, and so on. Whichever team has the most points when time is called wins.

GROUP WORK

Teacher: Due to the increasing popularity of smart homes, many companies have been able to advance the technology necessary to bring affordably priced smart home products to the market.

People are investing in smart home products every day. Whether it's an automatic coffee maker, a thermostat, or an entire home security system, many families are making their homes a little bit smarter, and a lot more convenient.

Unfortunately, as with most things, a smart home has its advantages and disadvantages. Look through the following information.[3]

A) Work in groups. The first group presents advantages, the second group - disadvantages. While discussing ask questions, give more arguments.) (slide 3)

The teacher hands out the cards. (Each card contains the description of an advantage or disadvantage, Annex 3)

- B) We have talked about different smart appliances, discussed their pros and cons. Use the prompts to act out dialogues in pairs.
- 1) Convince your grandmother to install an intelligent kitchen
- 2) A company manager suggest his/her colleagues installing a smart home security system
- 3) Your neighbour does not know how to use a video door phone. He asks you for help.

DISCUSSION

Today we have discussed smart home technologies and comfort they bring into our lives. However, they can also make our lives more challenging. We all tried to envisage some changes we would like to make in our homes. But we have forgotten that smart home provides a safe haven for the elderly and people with special needs. What do you think about this? Feel free to share your ideas.

ROUND-UP

To sum up let's answer our question "HOW SMART IS YOUR HOME?"

What household appliances do you like the most? What would you like to change in your house? What are the main advantage and disadvantage of smart homes? Feel free to share your ideas.

Hometask

Watch the video "Future homes" and share your ideas about smart homes. Work in pairs (work in groups of 3). [5]

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Annex 1

Predictions: the intelligent home and the internet of things (Tapescript)

Hello, I am Sunita Shroff and welcome to the first episode of predictions by "Innovate UK". Today we are going to look at the inside of your home and how it might look a couple of decades from now. Most of the developments we will look at will depend on the Internet of things where devices are capable of sharing information with each other. The Internet of things is already happening, it is possible to control your thermostat or home lighting using your phone and a voice command can have you booking a doctor's appointment, so what's next in our ever-changing relationship with technology? While I am here with Johnny Voon from "Innovate UK" to help answer this question.

Well, domestic technology will become increasingly intuitive, you could say intelligent. Homes will learn about our habits and patterns, analyze the rhythms of our lives and will be able to read our facial expressions and body language. Walls and surfaces will become interactive touch screens so we can seamlessly engage with the world without needing a dedicated computer or device.

I mean I find that all rather amazing, to be honest. Tell me about a normal day in 2036.

Imagine your bedroom waking you up at just the right time in the right way for you. Your wardrobe will cross-reference the weather forecasts and latest travel information and present you with a suitable outfit to wear and journey to take. In the bathroom sensors measure your blood pressure, heart rate and scan your retina to check your health and sending the concerning results to your GP. When you get home, you kitchen will tell you which food items are about to go off and suggest recipes to avoid wasting them. If you were running low this morning, your fridge will place an order to replenish your stock for you to collect at the most convenient place on your way home. The hob's interactive surface will guide you through your recipes as you cook. If you are hosting a party, it will sync with the your guest list and adapt the quantities as people confirm or cancel.

How do you think people will react having their lives managed like this?

Obviously, information protection will also evolve. But think about this. People are living longer and problems with mobility and memory are only going to increase. Soon mirrors and walls can become screens through which to speak to our doctors. Our homes can give people prompts to look after themselves, monitor vital signs and alert emergency services if necessary. This will give vulnerable people unprecedented independence and comfort and relieve pressure on families and carers.

Now if you want more information, check out the website "Innovate UK" and of course do stay tuned because we will bring you more videos soon.

Annex 2

Card 1:

Modern technology

Climate control

Expensive

Automatic lights

To install

Card 2:

Intelligent kitchen **Future** Convenient Home security system To share information *Card 3:* Smart home products Specific needs Motion sensors The Internet of things affordable Card 4: Smart gadgets Hi-tech home Living alone To help elderly people Contact the hospital Card 5 **Energy savings** Go to "sleep" Wireless internet Thermostat Forgetful person Annex 3

Adding Convenience to your Daily Life (card 1)

When you convert your home into a smart home, you'll have all of your products programmed to your specific needs. Additionally being able to control your home, no matter where you are, can be extremely beneficial.

Customization (card 2)

There are many smart products on the market right now and you certainly don't need to buy all of them at once. As the consumer it's up to you to decide which product you want most, determine if you like it, and then add on to your collection of smart home products as you go.

A good product to start with would be a thermostat or home security system if you're in the market for either of those.

Security(card 3)

Smart home security systems allow you to view your home no matter where you are. You can have cameras installed, motion detectors, locks, etc, and you will be notified immediately if something is out of the ordinary. Many of these systems will even let you know of any unexpected temperature changes so that you're alerted if there is a possible fire.

Ease of Use (card 4)

Almost all smart home products can be installed without much hustle, many of them don't even require you to bring someone into your home. Additionally, if you're already someone who's tech savvy, learning how to use most of these products is a breeze.

Save Money and the Environment (card 5)

Smart homes feature products like thermostats, air conditioners, and lighting. Having the ability to put these things on a timer, or turn them on and off when you're away from home will likely help you save money on your electricity bills. Many of these products allow you to track your energy usage and expenditures.

Cost (card 6)

Most families are able to purchase smart home products, but that doesn't mean it won't leave a dent in your wallet. You can purchase the products one at a time and it won't seem like too much, \$50 here, \$300 there, but by the time you have the smart home system you want, you will likely have spent a larger sum than you would have if you had purchased non-smart products.

Slight Learning Curve (card 7)

For anyone already immersed in technology, converting your smart home will be a breeze, but for anyone not so tech savvy, it may make for a lot of time spent reading manuals.

If you think you might have trouble learning how to use a smart home device, the answer may be simple. Ask for help! Asking someone to show you how to run your smart home can be far less confusing than trying to make heads or tails of an instruction manual.

Reliability (card 8)

A smart home will be extremely reliant on your internet connection. If your connection drops you'll be left with a lot of smart products that won't work. Additionally, wireless signals can possibly be interrupted by other electronics in your home and cause some of your smart products to function slowly or not at all.

Annex 1

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A HOUSE IS MADE WITH WALLS AND BEAMS, A HOME IS MADE WITH LOVE AND DREAMS.

THE MAN'S CASTLE IS IN HIS HOME.

FALSE FRIENDS OF TRANSLATOR

INTELLIGENT = INTELLECTUAL

Having good understanding or a high mental capacity

CULTURED=
WELL-EDUCATED

Characterized by or displaying qualities of culture and learning

Intelligent home

Cultured person

SMART HOME

- ADVANTAGES
- Adding Convenience to your Daily Life
- Customization
- Security
- Ease of Use
- Save Money and the Environment

- O DISADVANTAGES
- Cost
- Slight Learning Curve
- Reliability