UNIT 16 Progress

This Unit, in the furthest circle of relationships, looks at progress. This was the goal of the Enlightenment age and led to science being placed at the forefront of society. Since then great scientific developments have been made, but these have also been accompanied by problems such as pollution, global warming and weapons of mass destruction. This Unit therefore looks at the idea of progress in humanistic as well as scientific terms.

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Brainstorming (individuals)

- Individual students think of inventions and progress.

Task 1: Inventions (pairs)

- Students rank 10 important inventions and match them with their descriptions.

Task 2: Alphabetical Inventions (pairs)

- Students try to find an invention for every letter of the alphabet.

Solutions to Tasks 1 and 2 are in the Answer Section of the Students' Book.

This page gets students working with the learning schema and thinking about progress in terms of inventions. As the Unit progresses they will think about it in other terms as well.

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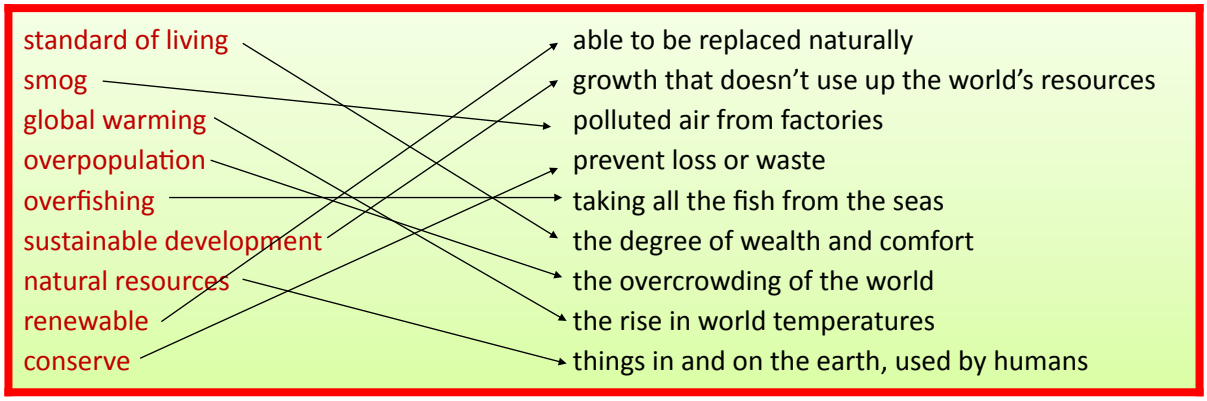
Save the World (pairs or groups)

- Students talk about the title.
- Teacher: Play the audio CD (Track 67) and ask students to read the four paragraphs silently while they listen.
- Ask students to read the passage again together and discuss any vocabulary or idioms they don't know.
- While they read, students should match the words and phrases at the bottom of the page.



This reading passage gives an overview of traditional ideas of progress, showing that it always comes with disadvantages as well as advantages. These disadvantages have become so serious that we now need to think of a new type of progress - sustainable development.

Further Reading: The note at the bottom of the page reminds students about the extra reading passages and other resources on the online site.

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Comprehension Check (pairs or groups)

- Students answer the questions to confirm their comprehension of the reading passage.
- Students should by now be able to check their answers with each other.

Answers

1. In the Age of the Enlightenment, great advances were made in mathematics, physics, astronomy, biology and chemistry.
2. The advantages of the Industrial Revolution were the development of water power, steam power and factory methods of manufacturing. These affected every aspect of daily life.
3. The disadvantages of the Industrial Revolution were that the coal used in the steam engines produced thick smog. What's more, poor children had to work in the factories, in terrible conditions.
4. The advantages of the Digital Revolution are satellite communication, computers, the Internet and other amazing inventions. Medical science has also helped people to live longer.
5. The disadvantages of the Digital Revolution are global warming, pollution and overpopulation. The world's water is being used up, deserts are getting bigger, forests are being cut down, and seas are being overfished.
6. I can find 5 natural resources in this passage: coal, water, forests, seas and fishes.
7. I can find 3 sources of renewable energy in the passage: sunlight, wind-power and wave-power.

Think for Yourself

Students think about progress-related issues. The question of whether we could live without computers, smartphones and SNSs is very relevant these days, especially for generations who have grown up with them.

Background Information

This information here is about inventions that have shaped the modern world. Students might like to follow these up and find out the origin of other inventions. They could then present their findings to the class.

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Discussion (groups)

- Students read the Conversation Strategies at the bottom of the page.
- Then they read and do the instructions.
- Students discuss the questions, using the Conversation Strategies: 'Agreeing' and 'Disagreeing.'

It can be helpful to ask students to use one conversation strategy phrase every time they speak.

Sample answers:

1. - In my opinion the best invention ever was the wheel. This started human beings on the path to civilization.
   - You have a point, but how about the printing press? Because of this, people could read and educate themselves. This invention empowered normal people. Humans could now write their knowledge down for future generations. This was a communication revolution.
2. - As far as I am concerned, the atom bomb was the worst invention ever. Because of it humans are now able to kill everyone on the planet. I hate to think of terrorists getting hold of one of these.
   - You have a point, but how about the gun? Thousands of people die every year through gunshot injuries.
3. - I know a story about Alexander Fleming. In 1928 he was experimenting with bacteria. Then he went on vacation. When he got back, the bacteria had grown all over the plate, except in one place. This led to the discovery of penicillin.
   - That's interesting. I have a story about potato chips. In 1853, a customer at the Moon Lake House in Saratoga Springs, New York, asked for crispier fried potatoes. The chef, George Crum, Crum sliced the potatoes paper-thin, baked them and fried them till they were crispy. The resulting 'Saratoga Chips' became popular and were a regular item on the menu. In 1860, Crum opened his own restaurant and placed potato chips on every table.
4. - Yes, I think time machines will be invented eventually. Then we will be able to visit the past and the future. Perhaps we will be able to travel to other galaxies as well.
   - I can't agree with you. I don't think time machines will ever be invented. After all, if they were invented some time in the future, then people would travel back in time and visit us. I don't think we will ever be able to go back in time or go forward in time.
5. - Well, in my opinion cloning can be good if it is used carefully. We can make healthy farm animals and we can clone body parts for people in hospital.
   - I disagree. I think cloning is wrong. It can lead to a society of people who all look the same. Furthermore, I think we need diversity. If everyone is the same, then a disease could wipe everyone out.
6. - I agree with genetically modified foods. We know that GM food is free from disease and pests. It comes from the healthiest animals and plants.
   - I think you're wrong. GM foods have not been tested enough. They might have dangerous side effects. They are not natural. In addition, we need lots of different types of plants and animals. If we focus on one type, there will be a danger of disease killing them all off.
7. - Yes, I think the world is a better place than it was 100 years ago. We now have digital technology which makes our lives much more convenient. We also have a better standard of living.
   - I'm afraid I can't agree with you. 100 years ago people did not have the stress that we now have. They didn't have to study for exams when young and they didn't have the stress of modern life and modern careers. I think they were much happier then.
8. - Yes, I think the world be a better place in 100 years' time. I think poverty will disappear, no-one will go hungry, cancer will be cured and everyone will get a good education for free.
   - I wish I could agree with you. However, I think the world will not be a better place in 100 years' time. I think wars will continue and the weapons in the wars will be worse and worse. I think hunger and poverty will continue, along with severe climate change. I feel sorry for my grandchildren.

9. - I think our quality of life can be improved in the future by solving the problem of pollution - air pollution, noise pollution and water pollution.
   - you have a point, but I think it will be more important to solve climate change. This will give us a better quality of life.
10. - I think that in order to get rid of poverty and hunger we need to have a world food program. This can be run by the United Nations. However, all the countries must help out.
    - I agree. I also think that all the billionaires in the world should give half their money to the fight against poverty and hunger.
11. - Yes, I think that science can solve every problem in the world. It has given us wonderful inventions that help us to live more comfortably. I am sure they can solve all the problems in the future.
    - I'm not sure I agree. Science has caused a lot of problems like pollution, climate change and the arms race. I don't think it can solve those problems. I think world governments must decide to solve them first.

Page 133

Dialogue (pairs)

- Students read the instructions.
- They read the dialogue together, checking the vocabulary in the Key Words and Expressions box.
- The teacher plays Track 68 (CD-Rom).
- Students read the dialog again, changing roles.
- Finally, they answer the questions in the Dialogue Quiz.

Answers:

1. Mr. Brown is reading a book about the industrial Revolution.
2. No, Jenny is not tired or sick.
3. No, Mr. Brown is not joking.
4. The average life expectancy during the Industrial Revolution was 40 years of age.
5. The disadvantages of progress are pollution, global warming and overpopulation.
6. Jenny does not think the topic is boring at the end of the dialogue.

As in other Units, the Dialogue can be an inspiration and stimulation to make a mini-drama about the main topic. In this case, students could make a drama about life in the Industrial Revolution. It could be for an assignment or a project. Students could perform before everyone, make a video and post it online.

Also as in other Units, it is not necessary for every student to do every activity. They can be chosen at the teacher's discretion or the students' preference. Teachers might like to focus on different pages in different Units.

Page 134

Debate Corner (groups)

- Students make groups of 4 or 5 for the debate.

- They check out the debating language on this page and make notes on the next page.

This is the final debate in the book.

The language is more functional now, showing students how to signpost their arguments. There has been a great deal of vocabulary to present for this genre (debating), so it is only now that longer phrases have been given. However, students should look at all the debate phrases in the book when performing the debate. The teacher should therefore remind students to look at pages 62, 70, 86, 102 and 118 as well as this page (134).

As always, students should be allowed to perform at their level. The activities in this book present various challenges and can be performed by all levels, from lower-intermediate to advanced. However, this does not mean that everyone has to perform at the same level. As well as helping the lower level students to achieve success we need to motivate and push the higher level students. Some activities have been designed to challenge higher-level students. However they can also be performed by lower level students if they wish. In this case they will gain different benefits from the activities. Students often want a challenge, so it is good to let them take something on and see what they can do with it.

Page 135

Let's Prepare! (groups)

- Students make notes for their debate.

This is the last debate in the book, so it is the final chance for students to try out this genre. It is good to let them choose the topic and prepare for it before class, writing out their arguments on this page. Then they can go straight into the debate.

Perhaps the teacher could video the debates given by different groups and post them online (on a safe site). This debate could even be used as a final assignment or even a final oral assessment. In this case it should have peer- and self-assessment as well as the teacher's assessment.

Let's Begin! (groups)

- Students perform the debate.

A checklist is provided, as in unit 14. The Timekeeper/Chairperson can follow this checklist, with reference to the debate sample on Page 72 and the phrases on page 134. Alternatively, the teacher could supply another format.

This is the last opportunity to have a debate, so students should be encouraged to show what they can do. It could even be a final oral performance assessment. In this case, the preparation for the debate should be taken into account, as well as the performance and the use of phrases on pages 62, 70, 86, 102, 118 and 134.

Page 136

Argument Samples (groups)

- Some samples are offered here for students to look at (tracks 69 and 70). They are about the fourth motion 'Humankind's best days are ahead of us'.

The samples are more structured now, in terms of signpost language. The speakers are telling us exactly what they think and what they are going to do.

Here are some more Argument Samples based the first motion: 'Tradition prevents progress'.

> **Pro Speaker 1**: In our opinion this motion is obviously true. Here are three reasons why this is the case. First, tradition always tries to keep things the same. It doesn't like change. However, progress is all about change. Second, traditional ideas are not good for the modern world. There is a proverb: 'You can't put new ideas in old bottles.' We have old ways of thinking and old institutions that are not able to adapt to the advances of the 21st century. Third, there are many stories of inventors and scientists who were persecuted by the establishment. Galileo was persecuted by the church when he said that the earth goes round the sun. So we can see clearly that tradition prevents progress because tradition is the opposite of progress. So please support this motion.
>
> **Con Speaker 1:** The other speaker has got things the wrong way round. On the contrary, I will show that tradition welcomes progress. But first, what do we mean by tradition? Do we mean traditional ideas or traditional ceremonies? First of all, when tradition means remembering the past through ceremonies, we are respecting the people who went before us. Second, when tradition means ideas that have lasted for centuries, then again we must respect those ideas. But this does not mean that we are against progress. Third, we now have a tradition of welcoming progress. These days progress can be seen everywhere, in science, society and the standard of living. Institutions that used to reject progress are all using the new ideas and inventions that are part of our daily life.

Here are some more Argument Samples based the second motion: 'Progress should help the rich and the poor'.

> **Pro Speaker 1**: We strongly believe the motion is true. Progress should not help just rich people. First I will talk about our reasons. Then the second speaker will explain why the Con speakers are wrong. To start with, progress up to now has only helped rich countries and rich people. For example, personal computers are too expensive for people in underdeveloped countries. Second, educational progress has only benefited developed countries. After all, in many poor countries there are few schools and many children do not get an education. Third, social progress in terms of women's rights and gay rights has been limited to developed countries. So we can see clearly that progress needs to be shared with the whole world. Everyone has the right to benefit from advances in science, education and social development.
>
> **Con Speaker 1:** We disagree. But first, let us define some terms. What do we mean by 'progress'? Are we talking about scientific development or financial and economic improvement? How about the standard of living? So we can see that the motion is too wide. Anyway, I will show that all progress is good. First, it might seem that progress has only helped rich countries. But wherever you go in the world you will see people using smart phones. The digital revolution has helped everyone. Second, when developed countries make progress, that affects every country in the world. Third, we are now in the global village. Developed countries are all giving aid to under-developed countries and the whole world is benefiting. Therefore we feel that progress is already helping the rich and the poor.

Here are some more Argument Samples based the third motion: 'Progress has many harmful side effects'.

> **Pro Speaker 1**: We are strongly in favor of this motion, for three reasons. First, we have got to the stage where scientific progress has given us the power us to destroy the world. This is a terrible situation. Second, progress has made our lives more stressful and competitive. We might have more money than our ancestors, but our quality of life is not better. Furthermore, many people say that modern society has lost its morals. People don't know the difference between right and wrong these days. Finally, progress has given us pollution, overpopulation, desertification and many other problems such as extreme weather. This is not to mention man-made disasters like Chernobyl and

Fukushima. Now, because of this, it is time to stop chasing progress for its own sake, before it destroys us all. So because of these reasons, I beg you to vote for this motion.

Con Speaker 1: We oppose this motion, because it is unrealistic. Let me give you three reasons for this. First, progress is not to blame. The problem is what people do with progress. Einstein discovered how to make an atom bomb, but he asked the US government not to use it. Second, many of the great steps forward in human progress have come from research into military development. An example of this is the Internet. Third, there are side effects to everything we do. However, science is able to find answers to those side effects. We should never try to stop progress, since this is the way we improve as human beings. To summarize our argument, all progress is good for humanity. Therefore, I ask you to vote against the motion.

Save the World Puzzle (pairs)

- Students rearrange the letters on the posters to make the appropriate slogans.

This is another thought-provoking puzzle in that it familiarizes students with slogans about ecology and conservation, thus reinforcing the suggestion in the reading passage that the next step in human progress is to look after this world.

Students might like to make their own posters about conservation and show them to everyone.