Task 3 – Reading into Writing:
Our Future with Robots

At a glance

> **Level**: ISE III
>
> **Focus**: Task 3 – Reading into writing
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> **Aims:** To familiarise students with the format of the reading questions of the ISE III Reading & Writing exam and to develop writing skills by writing a short summary based on four short reading texts about robots
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> **Objectives:** To write a summary of approximately 200-230 words by selecting relevant information from four texts
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> S**kill:** Selecting and summarising information from input texts
>
> **Topic:** Robots
>
> **Language functions:** Summarising information, hypothesising and expressing abstract ideas
>
> **Lexis**: Related to robots
>
> **Materials needed**: Student worksheet, model answer and board pens
>
> **Timing**: Approximately 90 minutes

Procedure

Preparation

1. Print and photocopy one student worksheet per student.

2. Print and photocopy the Model answer for the writing activity.

In class

1. Explain to the class that they will be doing a writing activity based on four articles and that this will help them to prepare for Task 3 - Reading into writing in the ISE III Reading & Writing exam.

2. Write "robots" on the board and ask students to discuss in pairs or groups of 3 all the things that robots do in our lives. Give them about four minutes to do this. Then ask a representative from each group to write their ideas on the board. It is likely that some students will know much more about this subject than others and they can explain accordingly.

3. Tell the class they are going to read four texts concerned with robots. Give out one student worksheet per student and ask half of the class to read Texts A & B **only** and the other half of the class to read Texts C & D **only**. (Text D is not fictional). Ask the students to discuss in pairs what they have read and to ensure they have understood the key points from each text (it may be better to pair weaker students with stronger ones).

4. Once the students have read their two texts and discussed them, pair each student with another student who has read the other two texts. Ask the new pair to Monitor and deal with any difficulties.

5. Now ask the students to complete questions 1-15 (which are exam type questions) on the student worksheet. Give the students 15 minutes to complete the questions. The students can carry out this task either in pairs or individually. Ask the students to discuss their answers with their partner once they have completed the questions.

6. Ask the students to write their answers on the board. Give feedback on how the students' answers compare to the actual answers. If necessary, look at each question indicating where the student can find the answer.

7. Ask students to discuss their reactions to what they have read either as a class or in groups of three or four. Ask the students the following questions (these can also be written on the board):

   • What were the most surprising things you read?
   • Do you think these texts are an accurate depiction of the future?
   • Do you find the future scary or exciting? Why?

8. Explain to the students that in section 3 of the ISE III paper there is a Reading into Writing section where the students have to write a summary of 200-230 words based on four texts they have read. To practise this, the students are going to answer the following question for a teenage science magazine.

   • What will the relationship between humans and robots be like in the future?

   Tell the students that they will have 30 minutes to complete this task.

9. At this stage (before answering the question), give the students the model answer and tell them that this is a summary based on the four texts they have read. Ask the students to read the summary quickly and find what the writer's main point about robots is.

10. Ask students to see how the text is structured. What is the point of each paragraph? Ask students to write which texts are referred to in

each paragraph. It is very important that students refer to all of the texts in their writing answers and not just one or two. It is of course important that they do not lift from the texts.

11. In pairs, ask students to plan the structure and body of their writing task.

12. Tell the students to complete the writing task (which should be 200-230 words long), using the model answer as an example. Monitor as the students complete this task. Give the students 30 minutes to complete this task.

Extension Activity

Ask the stronger students to swap their writing tasks with their partner or within their group. Ask them to comment on the organisation and structure of their partner's work.

Further support activity

1. Ask the weaker students to complete the reading into writing task collaboratively in small groups.

2. Weaker students can complete the writing task including only one or two of the texts.

3. Weaker students may need more time, and can finish this for homework if necessary.
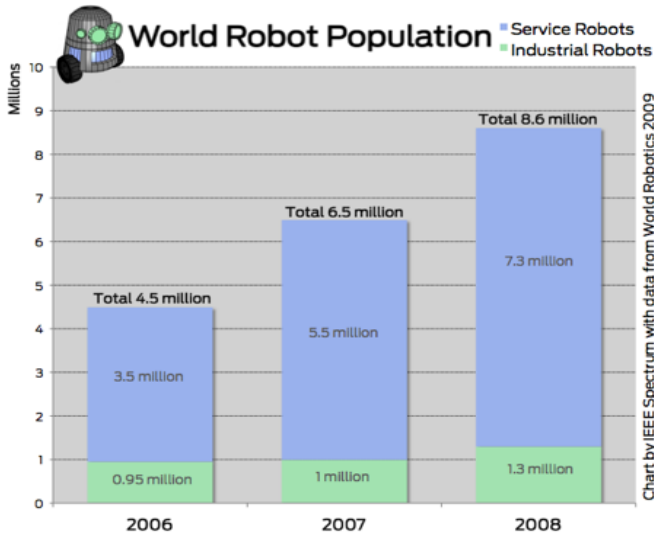
After class

Ask the students to look online for other new technological developments regarding robots and students can report back in the next class.

Student Worksheet
Task 3 – Reading into Writing:
Our Future with Robots

Read either Texts A & B or Texts C & D (your teacher will direct you).
Check with your partner that you have fully understood the texts by
explaining to each other what you have read.

Text A

Kids who want robots
38% to learn with
38% to play with
25% to help with chores

Text B

Increasingly Human Robots

Roboticist, Dr Alexander Lenz asks me to sit in front of his latest robot. I stare at a robot head on a table, and it looks me in the eye and expresses a variety of emotions, happiness, surprise, anger, and sadness. Although the head is clearly not human, I cannot help responding to its emotions as it were a real person. The study of this new scientific development is human-robot interaction.

Dr Lenz explains "we want to build a robotic face that can mimic all the muscles we have". This research is becoming increasingly important as many countries have rapidly ageing populations that will need the help of robots to look after them and they will need robots in which they can interact with easily. This is not easy.

Although we have had robots in car assembly plants since the 1950's, and developed robots that can dive the depth of the ocean, perform tasks on the moon, and more recently robots that can do housework such as vacuuming floors, none of these robots are good at interacting with humans. Dr Lenz clarifies "Non-verbal communication is far more accurate than verbal communication. We need to take into account different cultural rules. For example, the interpersonal space between different cultures determining how close we stand to each other. Building these kinds of social rules into a robot is extremely complex."

Would you be happy to have robots play a more important role in your life in the future?	
Jessica	I think it would be really cool to have a robot to do all the housework in my home. It could do all those jobs I hate like doing the washing up and tidying my room.
Steve	I find the idea of robots looking like, and even acting like humans, pretty scary. It is like one of those disturbing futuristic science fiction films.
Kim	It's like any new technology. You have to learn to use it wisely. We will soon get used to more robots in our lives. We will soon wonder how we ever lived without them.
Mahmoud	I have heard there is a robot you can send to school and that will even do your homework for you.
Roberta	@ Steve I read an article on the internet about people falling in love with their robot because it was so realistic.
Rebecca	@ Kim Yes, but aren't all these robots just taking jobs. The only winners will be companies who can save money from not having to employ real people.
Jake	@ Mahmoud I want one! Where can I buy one?

Text D

This week's student blog: What a blessing!
I have had my robot for 3 years now, and it has helped me enormously with my schoolwork. I was unable to go to school because I have a health condition. So the government has provided me with a small robot which I can send to school in my place. The robot transmits information to me in real time and I can ask it to perform a number of functions. It asks and responds to questions from teachers, can move freely around the school, and it even interacts with my classmates. I am really happy with it and my grades have improved dramatically since I have had it. Certainly if I hadn't had the use of my robot, I don't think this would have been the case.
Although it was pretty difficult to get used to using the robot at first, I realise I am really lucky to have him. I was reading in the paper the other day that a lot of kids want robots to learn or play with, or help them with their chores. I suppose a lot more people will have robots in the future as this type of technology continues to develop at a frightening pace.

Exam type questions

Questions 1-5

Read questions 1-5 first and then read Texts A, B, C and D.

As you read each text, decide which text each question refers to. Choose one letter - A, B, C or D - and write it in boxes 1-5. You can use any letter more than once.

Which text

1. finds the increasing sophisticated development of robots a worrying development?

2. describes how someone is being assisted by a robot in his studies?

3. is concerned about robots limiting employment opportunities?

4. investigates why robots are imitating facial expressions?

5. details the increasing numbers of robots in use in our society.

	Text
1.	
2.	
3.	
4.	
5.	

Questions 6-10

Choose the 5 statements from A-H below that are TRUE according to the information given in the texts. Write the letters of the TRUE statements in the boxes provided (in any order).

A. Some robots are so lifelike that people form a romantic attachment to them.

B. Robots are already able to understand differing cultural values.

C. Increasing life expectancy rates have helped to drive the demand for more sophisticated robots.

D. Many children are excited by the development of robots.

E. The number of industrial robots has risen at a faster rate than the demand for service robots.

F. Robots are still unable to interact effectively with teachers in an academic environment.

G. Some people believe that we must be careful about how we use new technology.

H. In future years we may find it difficult to imagine how we lived our lives without the use of robots

True Statement

Questions 11-15

The Summary Notes below contain information from the texts. Find a suitable word or a phrase **in the texts** to complete the missing information in gaps 11-15. Write your answers in the spaces provided and you can use **up to 3 words.**

Notes on the different uses of robots

Industrial robots:

- in use in car assembly plants (11) _____.

- for scientific purposes which have been utilised for such things as exploring the oceans and have been employed in space discovery in projects, e.g. (12) _____ .

Service robots:

- for doing household chores such as vacuuming and tidying up the home.

- for assisting students who are unable to attend school because they may have a   (13) _____.

- for aiding elderly people as societies struggle with (14) _____.

A great challenge for roboticists in future:

- programming robots so they learn to interpret human emotions, are able to interact naturally with humans, and even understand differing (15) _____.

Reading into writing

Use the information from the 4 texts you have read to write (**200-230** words) for a teenage science magazine. The title of your article is:

 What will the relationship between humans and robots be like in the future?

Plan your short article **before** you start writing. Think about what you want to say and make some notes to help you.

Answer Key:

1.	C
2.	D
3.	C
4.	B
5.	A
6.	A
7.	C
8.	D
9.	G
10.	H
11.	In the 1950's
12.	on the moon
13.	health condition
14.	(rapidly) ageing populations
15.	cultural rules

Model Answer:

As we are now living in an increasingly scientifically developed world so we must get used to the idea of having to interact with robots. By 2009 the robot population had risen to nearly 9 million so it must be even greater today.

Robots have helped drive our economy, especially when you think of industrial and manufacturing assembly plants, and have been employed in many scientific developments involving space and lunar exploration. However, these robots have largely been unable to interact with humans. The idea of interacting with a robot as you would with a human excites some people and scares others.

Imagine what it would be like to have a robot to assist you with your studies at school and that this robot could even interact with your teachers and classmates on your behalf? Imagine a robot being able to help look after us in our old age understanding our emotions and knowing when we are happy or sad. Even to know the correct distance to stand from us according to our cultural background?

Perhaps the highly sophisticated robots of the future will be so lifelike that we will have difficulty in differentiating between a robot and a human? Therefore, it is not surprising that is a frightening prospect for some, and yet for others it is another exciting challenge as we enter the brave new world of robots.

(words 230)

Original Sources

The Week 27/07/2013 The increasing development of robots

http://dailyinfographic.com/rise-of-the-machines-robots-as-teaching-aides-infographic