



## Problem-solving for Future-proofing

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Over to you

Identify the importance of problem solving

Explore problem solving in the classroom

Q & A



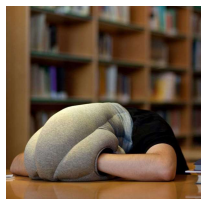
What can you see in the images?



What is the connection between these images?



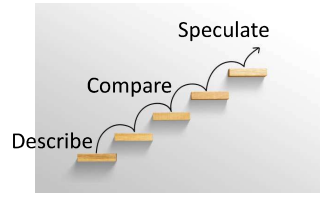
They all solve real-life problems...



Eh?! Excuse me Anna... but how on earth does this **link** to learning and teaching English?



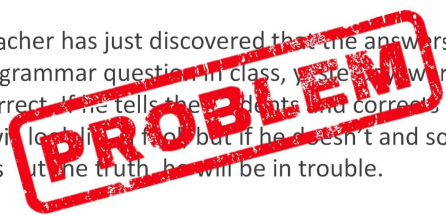
What **skills** did you use to answer my questions?



- Over to you
- Identify the importance of problem solving
- Explore problem solving in the classroom
- Q & A



A teacher has just discovered that the answers he gave to a grammar question in class, yesterday, were incorrect. If he tells the students and corrects himself he will lose his job, but if he doesn't and someone finds out the truth, he will be in trouble.



### True or False?

1. Everybody needs to solve problems every day.
2. Problem solving is one of the most important life skills
3. We are born with the skills we need to do this.



The earlier learners begin solving problems, the better placed they are to make good decisions on their own. The more ready they are to deal with **bigger challenges** in real-life.

When teenagers learn skills and strategies for problem-solving and **sorting out** conflicts by themselves, they feel good about themselves.

Typically, effective problem-solving skills result in happier, more confident and more **independent individuals**.

<https://raisingchildren.net.au/>



### We identified the problem

A teacher has just discovered that the answers he gave to a grammar question in class, yesterday was incorrect. If he tells the students and corrects himself he will look like a fool, but if he doesn't and someone finds out the truth, he will be in trouble.

*What should he say or do about this?*



# Generate solutions



WDYT?  
(What do you think?)



**A**

*Stick his head in the sand...*



**B**

*Shout it out!!*



# What makes you say that?



### Evaluating possible solutions

*The Why chain (adapted from Sakichi Toyoda)*

**Why** should his students know the right formation?

*Because they need to do well in their exams.*

**Why** do they need to do well in their exams?

*Because .....*

**Why....**



Over to you

Identify the importance of problem solving

Explore problem solving in the classroom

Q & A

WDYT?  
(What do you think?)



identify the problem

generate solutions  
choose & create

evaluate groups' solutions

**5 Project**

WDYT? (What do you think?)  
Does technology make the world better? How?

**TASK:** Design a robot to solve a problem.

**1** Watch a video of students pitching their ideas on projects. What problem does the robot solve?

**2** Consider the video. What problem does the robot solve? How does it work? What are its parts? How does it move? How does it think? How does it feel? How does it interact with the world? How does it communicate with the world?

**3** How does Luke solve the problem? Watch 1-4 with a friend. Discuss the video. How does Luke solve the problem? How does it work? What are its parts? How does it move? How does it think? How does it feel? How does it interact with the world? How does it communicate with the world?

**4** Think in groups of three. Think of a problem and how to solve it. Use the questions in exercise 2 to help you.

**5** Qualify your idea. Think of a problem and how to solve it. Use the questions in exercise 2 to help you.

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**13** Qualify your idea. Think of a problem and how to solve it. Use the questions in exercise 2 to help you.

**14** Think in groups of three. Think of a problem and how to solve it. Use the questions in exercise 2 to help you.

**15** Qualify your idea. Think of a problem and how to solve it. Use the questions in exercise 2 to help you.

**Model project**

**LONG ARM LUKE**

**EXTEND YOUR ARM!**

**15 FINAL REFLECTION**

**Get INVOLVED! A2**

WDYT?  
(What do you think?)

Which skills do our teens need to work on **problem solving together**?

**Project**

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**15 FINAL REFLECTION**

**macmillan education**

**Active Listening**

- not judging
- asking open questions
- asking for clarification
- paraphrasing ideas

**COMMUNICATION**

**Asking for help and giving suggestions**

**Tips**

Ask questions about your ideas. Say the things you like. Give alternative ideas.

**Key phrases**

What do you think of this?  
Is this a good idea?  
Do you agree?  
I like ... a lot.  
I'm not sure about ...  
What about ... ?

**SUPER SKILLS**

**Applying 'total thinking'**

- Critical thinking
- Creative thinking



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- Critical thinking
- Creative thinking

**CREATIVITY**

**CRITICAL THINKING**

**Thinking about things in different ways**

**Tips**

Don't choose your first idea. Write it down, but think about other people too. Ask: 'Is this true for me?' Think about why they are important to you (you see them often, you talk about things together, they help you, etc.)

**Key phrases**

What do you think?  
Are other people important?  
What about your classmates?  
Have you got any cousins/uncles/aunts ... ?  
Is/Are your ... important to you?  
Are you sure about that?

**SUPER SKILLS**

COLLABORATION

COMMUNICATION

Asking for help and giving suggestions

**Tips**  
Ask questions about your ideas.  
Say the things you like.  
Give alternative ideas.

**Key phrases**  
What do you think of this?  
Is this a good idea?  
Do you agree?  
I like ... a lot.  
I'm not sure about ...  
What about ... ?

- Respecting other opinions and considering options
- Negotiating to work towards a joint solution

WDYT?  
(What do you think?)

They develop:

- Language ☺
- Active listening
- Applying 'total thinking'
- Respecting other opinions and considering options
- Negotiating to work towards a joint solution



Enabling all learners

- Model the process (video)
- Feed in necessary language
- Ask Qs & give suggestions
- Provide structure
- Give it enough time!

1. Our problem is	Rating 1-10
2. Possible solutions	3. Positives (pros) and negatives (cons)
4. Our solution is	
5. What we plan to do	
6. Date for review	

**5 Project**

WDYT? (What do you think?)

**TASK:** Choose a green issue and design a leaflet for a campaign to raise awareness.

**Learning objectives:**

- 1 I can choose a leaflet to raise awareness of an important issue.
- 2 I can use appropriate language from the unit.
- 3 I can be flexible when collaborating with others.

**1** Watch a video of two students presenting their leaflet. What issue did they choose?

**2** Which of these features do you think the leaflet should contain to be effective? Explain your reasons.

- attractive photos
- statistics about the issue
- general information about the issue
- detailed history of the issue
- general practical advice on what people can do
- text in long paragraphs with headings
- bullet points to make easy to follow

**3** Choose the leaflet and prepare to talk about it. Use the tips and key phrases in the Paper Skills box.

**Model project**

**COULD YOUR FOOD WASTE FIND OUT HOW!**

**REDUCING FOOD WASTE TO FIGHT CLIMATE CHANGE!**

**STEP 1: PLAN**

- 1 Read the inside of the leaflet and find examples of the features in exercise 2.
- 2 **PLAN**
  - Decide who will do the writing cover these tips in their leaflet! (You'll put them in the order WDYT?)
  - Brainstorm ideas for the issue with some statistics
  - Research photos
  - Think of ideas for the leaflet that use:
    - An interesting title and photos to get people interested
- 3 **WORK IN PAIRS.** Read the How to ... tips on p10. Then choose and research an issue. Make notes for features in exercise 4.
- 4 **CREATE**
  - Decide on what information you need to use.
  - Write 10 different ideas for problems on your own.
  - Choose 10 different ideas for problems on your own.
  - Write 10 different ideas for problems on your own.
  - Write 10 different ideas for problems on your own.
  - Write 10 different ideas for problems on your own.
- 5 **PRESENT**
  - Present your presentation to the class.
  - Present your presentation to the class.
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  - Present your presentation to the class.
- 6 **FINAL REFLECTION**
  - The task
  - How well you and your partner worked together
  - What you learned
  - What you enjoyed
  - What you found difficult
  - What you will do next time
  - What you will do next time
  - What you will do next time
  - What you will do next time

Spoon feeding, in the long run teaches us nothing, but the shape of the spoon.

E.M. Forster



**Thank you for your time**

ADVANCING  
LEARNING



**[www.teachertrain.org](http://www.teachertrain.org)**

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