

Methodology module: Multiple Intelligences



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“We are all different. We are all intelligent in different ways. The more time you spend with your learners, the more you will notice their particular talents, interests and abilities. Think of a group of learners you know well. Is there a child who shows particular ability with numbers? One who is physically well co-ordinated? Are there any who show a particular talent with music, or who have a gift for communication? According to Howard Gardner, a professor of cognition and education at Harvard University, all of these learners exhibit one (or more) of a set of ‘multiple intelligences’.”

What are Multiple Intelligences?

The theory of Multiple Intelligences was developed by Howard Gardner at Harvard University in the 1980s. It aims to explain the different strengths and abilities seen in groups of people.

In his original theory, Gardner named seven types of intelligence and has since added another three. These types of intelligence show the different skills and competences we have and also how they influence the way we approach new information and skills. Everyone possesses all the intelligences, but in each of us some are more highly developed than others. We can use activities in the classroom to work on our strengths and weaknesses and to give our pupils the stimulus to learn and produce language.

Let's look at a table showing what Gardner identified as the key intelligences on page 2.

Methodology module: Multiple Intelligences

Table of Gardner's key intelligences

<i>Intelligence</i>	<i>People with this intelligence ...</i>
 Logical-Mathematical	like to experiment and investigate. They like to solve problems and puzzles, and work with numbers.
 Visual-Spatial	recognise dimensions, distances and details in wide spaces and small spaces. They are good at creating visual pictures to help them memorise information and can understand maps, graphs and tables.
 Linguistic	are good with words and are sensitive to written and spoken language. They are confident at learning languages and having language as a goal.
 Bodily-Kinaesthetic	use their whole body or parts of their body to solve problems or make products.
 Musical	show skill in the appreciation, composition and performance of music.
 Interpersonal	are able to understand the intentions, desires and motivations of other people.
 Intrapersonal	are able to understand themselves well and can relate another person's experiences to their own.
 Naturalistic	have a talent for caring for and interacting with living creatures.

Spiritual intelligence and existential intelligence were also added to the list by Gardner. These two intelligences are concerned with the larger questions of life, death, the human condition and the supernatural.

Teacher Activity:

Test yourself by covering the left-hand column and seeing if you can identify the intelligence!

Methodology module: Multiple Intelligences

Multiple Intelligences in *English World*

Throughout *English World* you will find topics, exercises and activities that are designed to stimulate the full range of intelligences.

Logical-Mathematical intelligence

Throughout *English World* there are a variety of quizzes and puzzles that appeal to pupils with logical-mathematical intelligence as well as topic-based CLIL lessons on Maths and Science.

Pupil's Book 6, Unit 2

Class composition

Do you remember Andy's visit to Iceland?

Natural energy in Iceland

Geothermal power

Iceland has many geothermal power stations

Geothermal power in houses

1 Look at the diagrams and photos. Read the questions and make notes.

- 1 What do you know about the rocks under Iceland? Look at the diagram. Write notes.
- 2 Look at the photo. Does the power station look clean or dirty? Write notes.
- 3 Look at the diagram and read the labels. How does the power station work? Write notes.
- 4 Look at the picture. How do people use geothermal energy in their homes? Write notes.

2 Write four paragraphs about renewable energy in Iceland.

Unit 2 Writing: information and explanation of a process

Visual-Spatial intelligence

English World makes constant use of posters, diagrams, maps and pictures to encourage learners to use visuals to support meaning.

Pupil's Book 5, Unit 12

12 Saving other people

Reading

The great race of mercy

This is the true story of how twenty mushers and one hundred and fifty dogs saved the lives of 10,000 people in the winter of 1925.

Nome is a small town in the north of Alaska. In January 1925 some children in the town became ill and died. The doctor realised it was a terrible disease. It could quickly infect and kill everybody in the town. Immediately, he sent for medicine. A plane was ready to fly the medicine more than 1,000 km to Nome but the weather was too cold and it could not take off. Only a dog-sledge could take the medicine but everyone asked, "Can the dogs reach Nome in time?"

Twenty teams of husky dogs and mushers ran as a relay. The first team left Nenana on 27 January in a blizzard and a snowstorm. The dogs raced through the night in -52°C. The next day a new team carried on. The relay continued for four days and nights through thick snow and ice. The newspapers and radio carried the story. They called it The Great Race of Mercy. Everyone wanted the dogs to succeed.

On 11 January the medicine arrived at the coast. The quickest route to Nome was across the bay. It was a vast expanse of frozen sea more than 50 km across. Henry Ivanoff set off with his team but almost at once they ran into a sledge and got tangled up. Just then Leonard Seppala arrived from the north. He was the most famous and fastest musher. "I have the medicine!" Ivanoff shouted. Seppala took the medicine and turned back towards the north into a raging blizzard.

Unit 12 Reading: a true life story

Linguistic intelligence

English World gives pupils every opportunity to use words in both controlled activities and activities designed for fluency practice, from word searches, crosswords, anagrams, unscrambling and gap-filling, as well as controlled sentence writing and poetry.

Class composition

Do you remember?

You read an acrostic poem about Odysseus on page 67.

The lines of an acrostic poem do not have to rhyme. The first letter of the first word in each line is important. All the first letters spell a word.

1 Read this acrostic poem.

*Moving forwards,
Old and angry,
Nose twitching,
Smoke rising,
Terrifying!
Everyone,
Run!*

Look carefully at the lines. Notice the words in the lines.

Lines are not complete sentences. Some lines have several words. Some lines are one word only.

2 Write an acrostic poem about sailors.

Think of ideas. Write your poem.

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Unit 6 Class composition: writing an acrostic poem

Pupil's Book 5, Unit 6

1 Read this acrostic poem.

*Moving forwards,
Old and angry,
Nose twitching,
Smoke rising,
Terrifying!
Everyone,
Run!*

Look carefully at the lines. Notice the words in the lines.

Lines are not complete sentences. Some lines have several words. Some lines are one word only.

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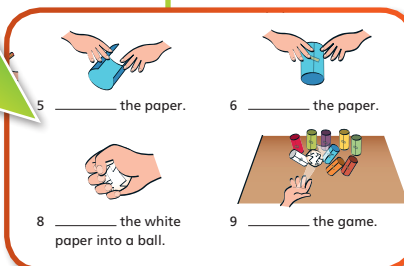
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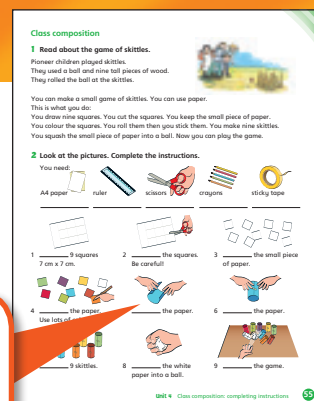
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Bodily-Kinaesthetic intelligence

Of course children want and need to move around. That's why *English World* ensures a variety of techniques and activities to both activate and calm them.



Pupil's Book 3, Unit 1



Pupil's Book 3, Unit 4



Musical intelligence

English World contains a variety of songs, rhymes and chants, which are a dynamic way to build vocabulary. Words and structures are often more easily remembered when put to music and rhythm. Music-based activities motivate children to experience and practise the natural rhythms and stresses of English.



What's the time?
Half past eight.
Oh, no! I'm late, I'm late!
Where's my book?
Where's my pen?
Oh, no! I'm late again.
Run, run, run,
Through the gate,
Never early, always late!



Interpersonal intelligence

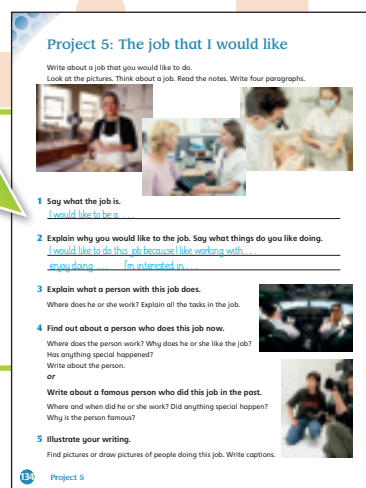
At every opportunity *English World* encourages pupils to put themselves in somebody else's shoes, to infer meaning and often to relate these conclusions to a moral framework. Many of the reading texts and discussion questions encourage the pupils to think and behave in appropriate ways and make them aware of the environment around them.



Pupil's Book 5, Unit 3

Intrapersonal intelligence

As with interpersonal learners, in *English World* pupils are encouraged to give their own opinions and to relate another person's experience to their own through activities and discussion questions.



Pupil's Book 5, Project 5

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Naturalistic intelligence

Many of the topics in *English World* encourage an interest in animals and the natural world. Pupils with a naturalistic intelligence will respond well to stimulating lessons such as Pupil's Book 6, the 'Plants in medicine' CLIL lesson on page 102. The material takes the pupils into different subject areas, expanding their vocabulary and prepares them for studying other school subjects in English.

10 Forest plants and trees

Reading A

Plants in medicine

Cures from around the world

We have been using plants to make medicines for thousands of years. Modern scientists still use plants to make medicines. Some medicines can cure very serious illnesses. Many plants for new medicines are found in rainforests. Unfortunately, forests are destroyed so fast that some plants might disappear before we discover them. Many people wish that the forests could be better protected.

This plant grows in the rainforest. All parts of the plant are used.

Nigeria and West Africa
Water hellebore
The seed is inside the fruit. The tree grows up to 30 metres tall in warm, damp rain forests.

North East India
argemone root
It grows in forest clearings. The roots and leaves are used.

North America, Europe, Asia
willow
Its favourite habitat is near rivers and streams. The bark from the trunk is used.

The rosy periwinkle is used to treat a serious fever that can kill. It is also used to treat a disease of the blood which some children have.

These are the leaves and fruit of the bitter melon tree. The seeds can be used to treat sore throats. Recently they have been used to treat very dangerous fevers.

This plant is used to treat pain in the bones. It is also used to treat a person who is anxious and nervous.

The bark is used to make tablets. Some people with heart disease take one tablet a day. This helps their hearts to work well and to keep their blood flowing normally.

South America

Cinchona tree

It grows on slopes of the Andes mountains in the Amazon rainforest. It has white, pink or yellow flowers.

Europe, Asia

Poppy

This plant is grown in large fields.

The wood of this tree and bark from the trunk are used to treat fever and pain, to calm nervous people and to kill germs.

Poppies are grown to make a very strong painkiller. Immediately after an operation, patients are given this painkiller to help them feel better and to get stronger.

The life cycle of a plant

The seed lies on the earth.

The seed cracks open. Tiny shoots appear.

One shoot grows up to the light. One shoot goes down.

The first leaves appear. The roots grow.

The stem grows longer and stronger.

A bud begins to grow on the stem.

The petals unfold and the flower opens.

The seeds form in the flower. The flower dies.

The seeds drop down onto the earth.

Unit 10 Reading: information with a description of a natural process

Unit 10 Reading: information with a description of a natural process

Pupil's Book 6, Unit 10

Engage

English World provides lots of topics to engage and interest children across a wide range of intelligences.

Process

Children need time to make sense of the language. The opportunity to use different intelligences to do this by moving, reflecting, reasoning and sharing are ways *English World* helps this happen.

Multiple Intelligences in English World

Produce

English World stimulates the children to use English in ways that appeal to them by communicating on an interpersonal level, e.g. documenting a nature project. These all draw on different intelligences which enable the children to produce language.

English
World

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5

Methodology module: Multiple Intelligences

Classroom-based task

A three-part task for teachers:

- 1 Know yourself! Recognising your own strengths and preferences can help you provide balance in the way you teach.

Take a test to assess your own levels of the different intelligences. There are many tests available online. Simply type 'Multiple Intelligence test' into your browser and choose one you like.

- 2 Include activities that promote and develop a balance of all the intelligences in your classes. This is almost impossible in one lesson, but over a period of a month (approximately one unit), working with the varied material that *English World* provides, you can work on approaches in the classroom that stimulate your pupils in many ways. This will allow them to **engage**, **process** and **produce** language in different ways.

Use the description of intelligences in the section table on page 2 as a checklist, and put a tick next to each one every time you recognise that you are helping exploit or encouraging it.

- 3 Know your pupils! Observing your pupils and their reaction to different approaches is important in understanding what works best for individuals, small groups and the class as a whole.

A learning/teaching journal is an excellent way to reflect on this and to start to see patterns. After each day of teaching with one particular group, write a reflection of the day's lesson(s), focusing on how the group, individual pupils and also you reacted to the different approaches.

Methodology module: Multiple Intelligences

Teacher observation and reflection notes

Start up a journal for a one-month trial period. Write regular entries and review them against the previous entries. At the end of your one-month period of experimentation and reflection, complete these notes for yourself.

● I have included in my classes activities which draw upon all the following intelligences:

Logical-Mathematical	Y / N
Linguistic	Y / N
Visual-Spatial	Y / N
Interpersonal	Y / N
Intrapersonal	Y / N
Naturalistic	Y / N
Bodily-Kinaesthetic	Y / N
Musical	Y / N

● My learners as a group responded particularly well to activities which exploited these types of intelligence:

● As a teacher I particularly enjoy activities which exploit these types of intelligence:

● I am still less confident about planning activities which exploit these types of intelligence:

Methodology module: Multiple Intelligences

Action points

Your action points for this area grow out of your answers in the previous section:

- Continue to plan activities using intelligences that the individual/group responds well to.
- Find ways to incorporate activities which use a variety of intelligences with those that you find more difficult to engage with.
- Continue to include activities to which you respond particularly well – your enthusiasm will help the children develop this area of intelligence, too.
- Share your journal with an interested colleague/trainer/manager. If you have good interpersonal intelligence, sharing will help you understand and learn better!
- Open *English World* at a unit and identify the different opportunities the children have to exploit and develop different intelligences. Each time consider whether they are being encouraged to engage, process or produce.

References:

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Thornbury, S. (Macmillan, 2006)