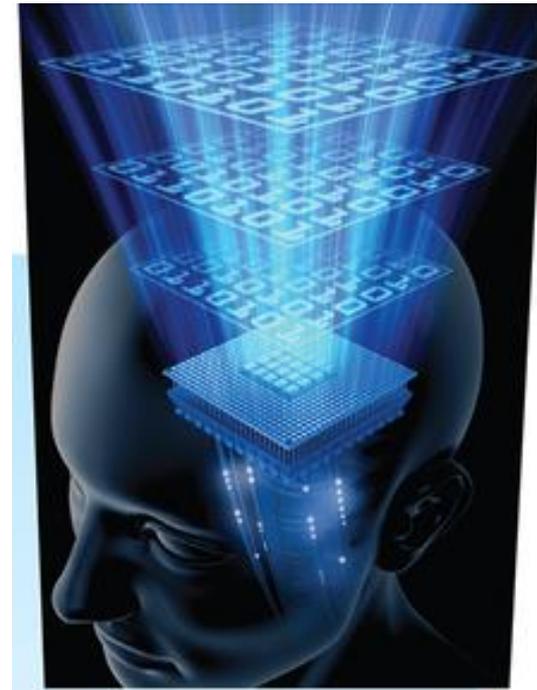

21st Century Skills in the Classroom

Edmund Dudley



21st Century Skills

What are they?



21st Century Skills

What are they?

The *21st Century Skills* are a set of abilities that students need to develop in order to succeed in the information age.

Partnership for 21st Century Skills

www.p21.org

21st Century Skills

Literacy Skills

Life Skills

Learning Skills

Literacy Skills

- Information Literacy
- Media Literacy
- Technology Literacy

Life Skills

- Flexibility
- Initiative
- Social Skills
- Productivity
- Leadership

Learning Skills

- C
- C
- C
- C

The Four Cs

What are they?



Communication

Sharing thoughts, questions, ideas, and solutions



Collaboration

Working together to reach a goal — putting talent, expertise, and smarts to work

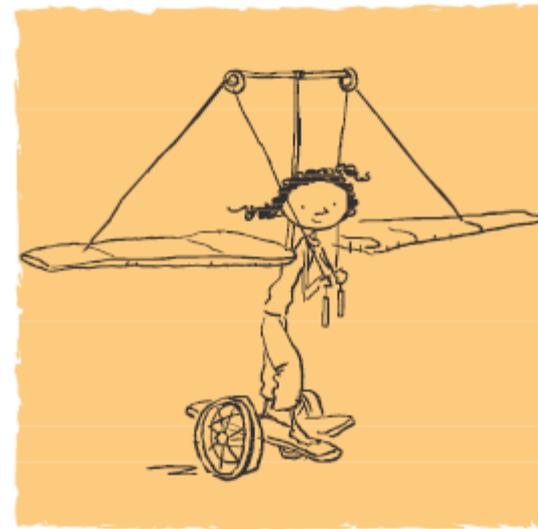
The Four Cs

What are they?



Critical Thinking

Looking at problems in a new way, linking learning across subjects & disciplines



Creativity

Trying new approaches to get things done equals innovation & invention

The Four Cs

- How often do we activate them in class?



Communication

Sharing thoughts, questions, ideas, and solutions



Collaboration

Working together to reach a goal — putting talent, expertise, and smarts to work



Critical Thinking

Looking at problems in a new way, linking learning across subjects & disciplines



Creativity

Trying new approaches to get things done equals innovation & invention

Communication



Communication

Sharing thoughts, questions,
ideas, and solutions

**25-YEAR-OLD
BUSINESSMAN
DISAPPEARS FROM
HOTEL IN MEXICO,
LEAVING \$100,000 IN
CASH IN SUITCASE**



8 **SPEAKING** Work in pairs. Read the headline below and think about possible explanations. Use the words below to help you or your own ideas.

drug-dealers in hiding kidnapped murdered
on the run robbers stolen

**25-YEAR-OLD
BUSINESSMAN
DISAPPEARS FROM
HOTEL IN MEXICO,
LEAVING \$100,000 IN
CASH IN SUITCASE**



What do you think happened?

What do you think happened?

He might have ...

He could have ...

What do you think happened to the businessman?

...

Choose the best explanation:

- *He might have left it there to collect later.*
- *He could have been kidnapped by somebody.*

Activities based on mediation

A Police interview



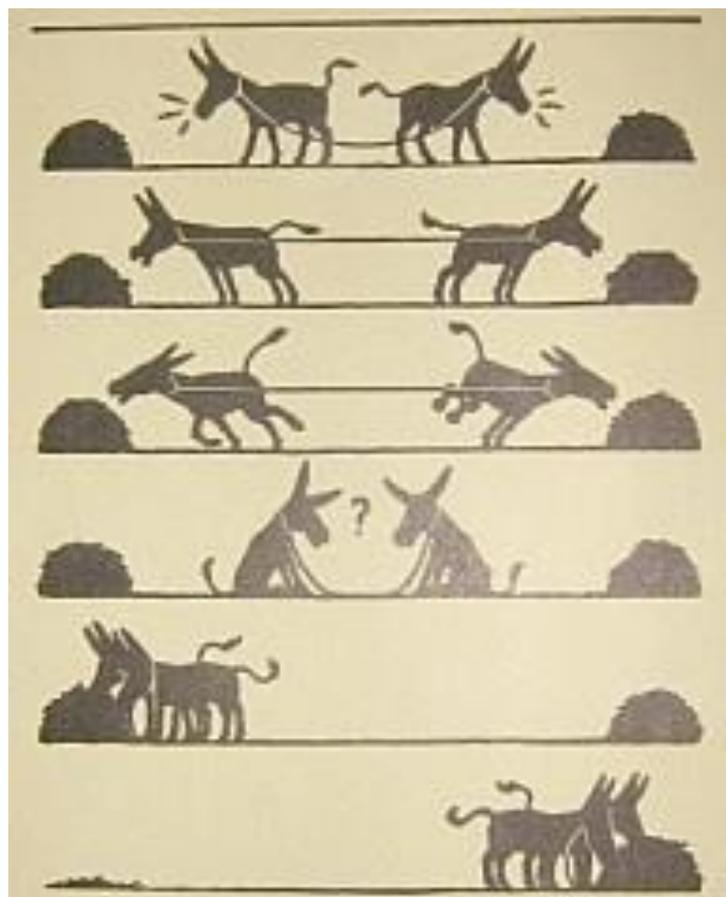
- Student A: The Businessman **speaks English**
- Student B: The Police Officer **speaks L1**
- Student C: The interpreter **speaks both**

Collaboration



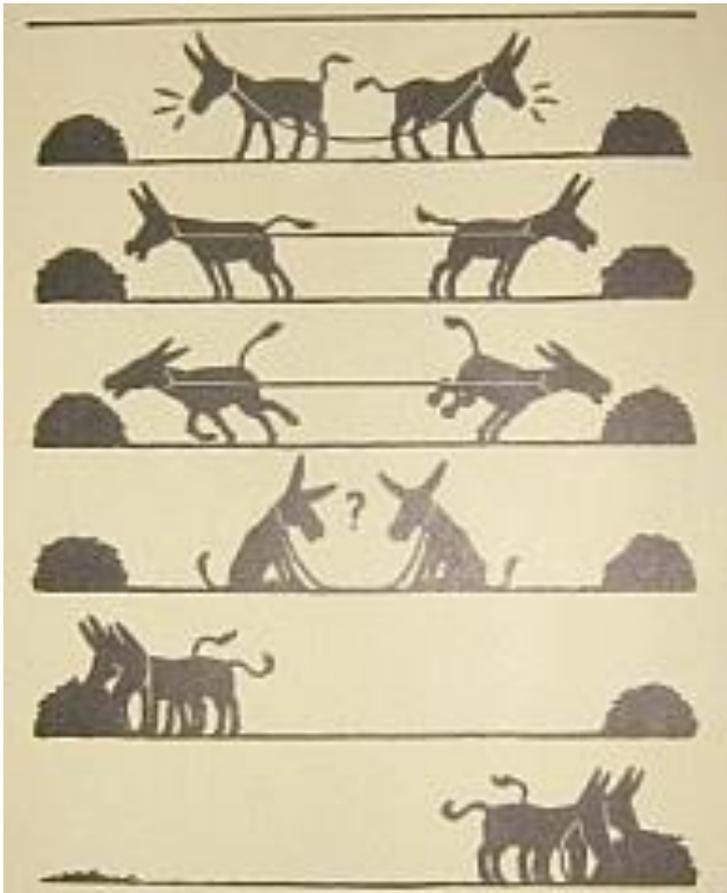
Collaboration

Working together to reach a goal — putting talent, expertise, and smarts to work



From picture to poem

Haiku

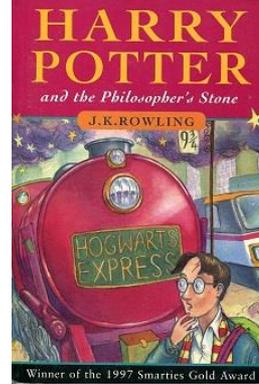


- A *haiku* is a short poem that has:
- three lines
 - 17 syllables in total (e.g. 5-7-5)

If we want to eat
We have to sit down and think
And work together

Paired task

-
- Follow the instructions...



‘I had a dream about a motorbike,’ said Harry, remembering suddenly. ‘It was flying.’

Uncle Vernon nearly crashed into the car in front. He turned right around in his seat and yelled at Harry, his face like a gigantic beetroot with a moustache, ‘MOTORBIKES DON’T FLY!’

Dudley and Piers sniggered.

‘I know they don’t,’ said Harry. ‘It was only a dream.’



Critical Thinking

OXFORD
UNIVERSITY PRESS



Critical Thinking

Looking at problems in
a new way, linking learning
across subjects & disciplines

An endangered species

Do you recognise it?

Lives in the temperate rainforests of the Olympic Peninsula, Washington State.

Amphibious – spends early life and mating season in the water.

Solitary cephalopod, 33-35cm from arm-tip to mantle tip

Can survive on land thanks to specialized skin adaptations and moistness of the rainforests.

Pacific Northwest Tree Octopus

<http://zapatopi.net/treeoctopus/>

OXFORD
UNIVERSITY PRESS

Help Save The **ENDANGERED**

PACIFIC NORTHWEST TREE OCTOPUS

From **EXTINCTION!**

[About](#) [FAQs](#) [Sightings](#) [Media](#) [Activities](#) [Links](#)

THE PACIFIC NORTHWEST TREE OCTOPUS

The Pacific Northwest tree octopus (*Octopus paxarbolis*) can be found in the **temperate rainforests** of the Olympic Peninsula on the west coast of North America. Their habitat lies on the Eastern side of the Olympic mountain range, adjacent to Hood Canal. These solitary cephalopods reach an average size (measured from arm-tip to mantle-tip,) of 30-33 cm. Unlike most other cephalopods, tree octopuses are amphibious, spending only their early life and the period of their mating season in their ancestral aquatic environment. Because of the moistness of the rainforests and specialized skin adaptations, they are able to keep from becoming desiccated for prolonged periods of time, but given the chance they would prefer resting in pooled water.

An intelligent and inquisitive being (it has the largest brain-to-body ratio for any mollusk), the tree octopus explores its arboreal world by both touch and sight. Adaptations its ancestors originally evolved in the three dimensional environment of the sea have been put to good use in the spatially complex maze of the **coniferous Olympic rainforests**. The challenges and richness of this environment (and the intimate way in which it interacts with it,) may account for the tree octopus's advanced behavioral development. (Some evolutionary theorists suppose that "arboreal adaptation" is what laid the groundwork in primates for the evolution of the human mind.)



Rare photo of the elusive tree octopus

Pacific Northwest Tree Octopus

<http://zapatopi.net/treeoctopus/>

OXFORD
UNIVERSITY PRESS

MORE TREE OCTOPUS INFORMATION

- **Tree Octopus FAQs** — Frequently asked questions, now with answers.
- **Tree Octopus Sightings** — Includes photos of and behavioral research on the Pacific Northwest Tree Octopus and other tree octopus species.
- **Tree Octopus In The Media** — appearances of tree octopuses, both real and fictional, in the media and popular culture.

RESEARCH ON OTHER TREE OCTOPUS SPECIES:

- **Pitch-Chewing Tree Octopuses Of British Columbia** — Octopuses in BC have long been reported chewing the pitch of Sitka spruce like gum, and will even go into the trees to forage for it.
- **Olive Loving Tree Octopuses Of Antiquity** — Octopuses in Greece were known since ancient times to climb olive trees to feast on the tasty fruit.
- **More On Old World Tree Octopuses** — Ancient writers, such as Aristotle and Pliny the Elder, tell of octopuses that venture onto land, including one that used a tree to commit burglary.
- **The Ara-Eaters: Tree Octopuses Of Polynesia** — Reports from the 1800s tell of island octopuses that are attracted to the fragrant flowers of the pandanus tree.
- **Nicharongorong: Tree Octopuses of Micronesia** — Reports of Palauan tree octopuses that give birth in mangrove trees and eat lizards.

About

FAQs

Sightings

Media

Activities

Links

The author of this article and its subsections is **Lyle Zapato**.

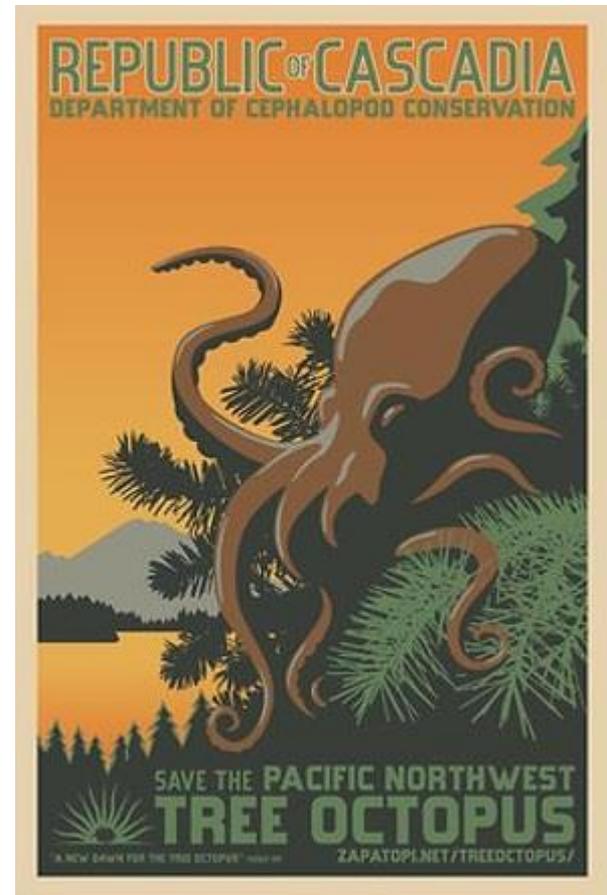
This site is not associated with any school or educational organization, other than the Kelvnic University branch of the Wild Haggis Conservation Society.

Not to be confused with the **Pacific Northwest Octopus Tree**.

Pacific NW Tree Octopus

Why don't we hear more about it?

It does not exist!



Lessons from the Octopus

Information is not the same as knowledge.

Comprehending a text is not the same as understanding it.

The key to understanding is **thinking** about what you read.

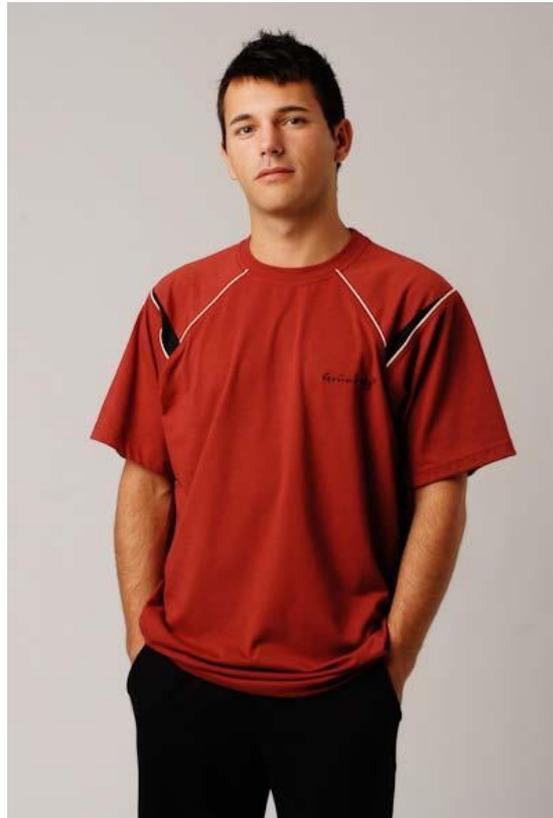
Make students **respond** to texts

Encourage them to think critically.

Steve

What is his job?

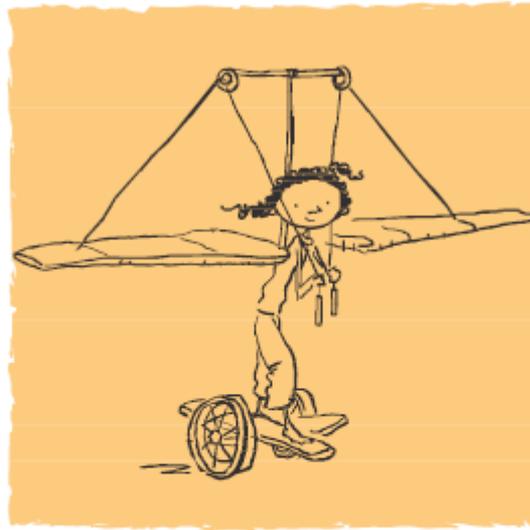
OXFORD
UNIVERSITY PRESS





- Steve was chosen at random from all the men in America of working age.
- A neighbour says: ‘He is very shy and withdrawn, but always very helpful.’
- A psychologist says: ‘A meek and tidy soul, he has little interest in people or in the world of reality.’
- A graphologist says: ‘He has a need for order and structure, and a passion for detail.’

Is Steve more likely to be a farmer or a librarian?



Creativity

Trying new approaches
to get things done equals
innovation & invention

Using phones



a giant beetroot
meek
To tell the truth...

Giving presentations

What I did at the weekend

Random Power Point Challenge
Level: Medium



1

The Four Cs

- How often do we activate them in class?



Communication

Sharing thoughts, questions, ideas, and solutions



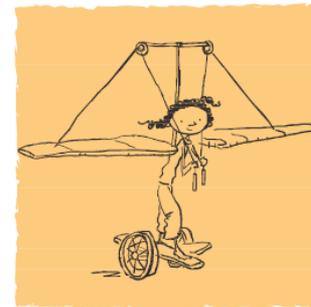
Collaboration

Working together to reach a goal — putting talent, expertise, and smarts to work



Critical Thinking

Looking at problems in a new way, linking learning across subjects & disciplines



Creativity

Trying new approaches to get things done equals innovation & invention

21st Century Skills in the Classroom

Edmund Dudley

legyened.edublogs.org

