# ELL – Coding and Technology

**Big Ideas**

* Exploring and sharing multiple perspectives extends our thinking
* Language and text can be a source of creativity and joy
* Meaning can be conveyed in multiple ways through language
* Developing computational fluency comes from understanding the basics of programming

**Students are expected to know the following:**

* Elements of computational vocabulary (algorithm, coding,etc.)
* Be able practice coding instructions with symbols
* Design and share information in innovative ways.

**Prior knowledge:**

BBC Learning English

1. You and Technology : multiple choice personality quiz

http://www.bbc.co.uk/learningenglish/english/course/lower-intermediate/unit-28/session-1

2. The great digital debate: watch video and answer T/F activities b: Listen to audio and anser comprehension questions

http://www.bbc.co.uk/learningenglish/english/course/lower-intermediate/unit-17/session-1

**Library lessons:**

**Lesson 1: Intro to technology and computational thinking**

 1. slide show about technology <https://docs.google.com/presentation/d/1J7BEGqlLznCn9AZgmnNG-yuuJtP5360sAGG-_TPSuRY/edit?usp=sharing>

 2. Barack Obama video from Code.org

3. Activity : Coding : unplugged “My Robotic Friends” <https://csedweek.org/files/CSEDrobotics.pdf>

**Lesson 2 – Coding using computers –Drawing on a canvas**

1. Watch video: Computational thinking https://studio.code.org/s/course3
2. Generate a computer science “mind map” : What is CS and why it matters





<https://www.wisecampaign.org.uk/uploads/wise/files/mobiletechnologymindmap.jpg>

3. Show intro video for Artist program. https://www.youtube.com/watch?v=MUavAHn-QUg

4. . Coding using Artist.

Let students know about options for continuing to code. Visit code.org/learn.

Ie: Star Wars: building a galaxy with code.

5. Assign summative task : Powerpoint presentation: The impact of technology on our lives.

# SUMMATIVE EVALUATION: The impact of technology on our lives

**Task:** Research these 8 areas of technology and find an example of innovation in this area.

Make 6 Powerpoint / Prezi / digital slides with an image and a short explanation.

Example: Virtual Reality

Short explanation: Virtual reality is when a computer artificially creates an experience. This is an example of a **flight simulator**. It is used to teach pilots how to fly planes and how to handle dangerous situations in a safe environment.



**Categories: Choose 6**

1. Virtual Reality
2. Buildings and homes (construction, design, appliances)
3. Medicine
4. Transportation (land, air, space)
5. Communication
6. Assistive technology (for people with physical disabilities)
7. Machines and robots
8. Military

# Evaluation Criteria

# Superior (4)

Clearly meets all criteria set in instructions

Interesting and also entertaining

Very clearly presents a message

Shows careful planning and organization of material

Interesting and relevant details

No,or minimal, errors in grammar, spelling, structure (written and oral)

Easily understood

Has examples, well presented with colourful visuals

# Good (3)

Meets the criteria set out in the instructions

Holds audience or reader interest

Shows evidence of planning and organization

Clearly presented ideas

Includes relevant detail

A few errors

Neatly completed

Visuals and valid examples

# SATISFACTORY (2)

 Meets most of the criteria set out in the instructions

Can be understood and followed

Evidence of some planning

Occasionally difficult to follow

Quite a few errors

Neatness needs attention

Lack of visuals or examples

# INCOMPLETE (1)

Has met few criteria set out in instructions

Many errors

Messy and lacks organization

Little or no specified content

No attempt to create interest