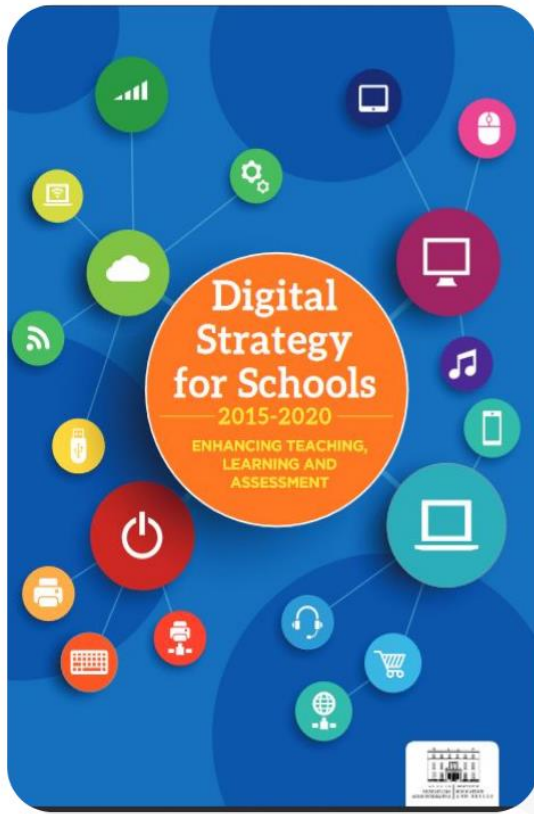


# DIGITAL STRATEGY for SCHOOLS 2015 - 2020

- **Theme 1** Teaching, Learning and Assessment using ICT
- **Theme 2** Teacher Professional Learning
- **Theme 3** Leadership, Research and Policy
- **Theme 4** ICT infrastructure



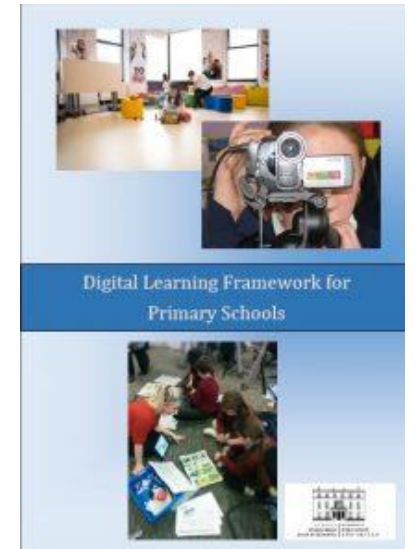
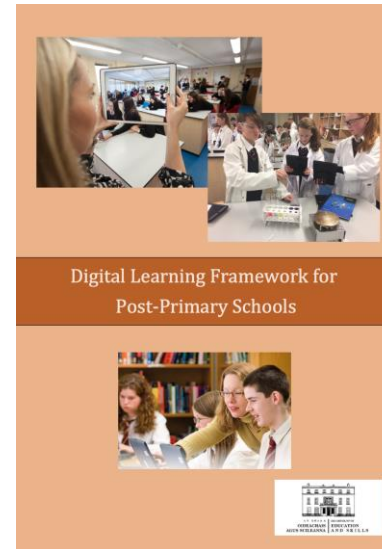
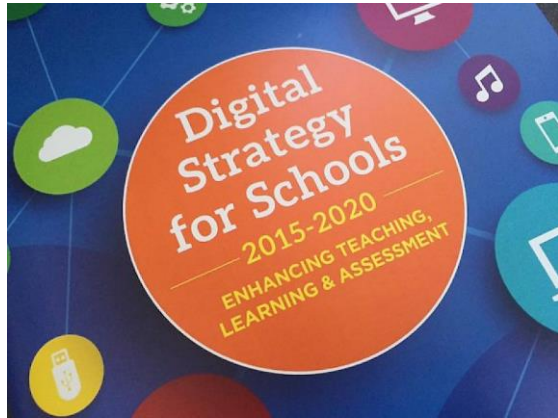
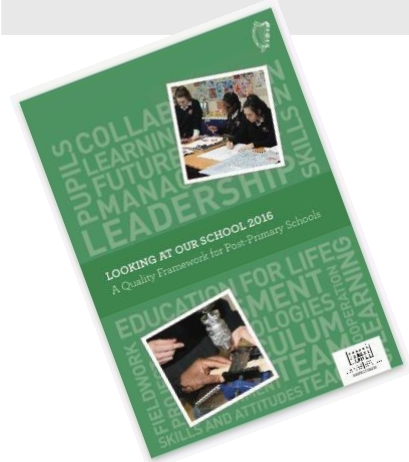
# Digital Strategy – Vision of the Dept of Education



*“Realise the **potential** of digital technologies to enhance teaching, learning and assessment so that Ireland’s young people become **engaged thinkers, active learners, knowledge constructors and global citizens to participate fully in society and the economy.**”*

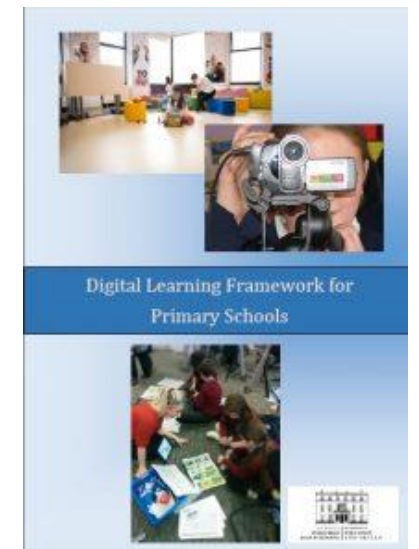
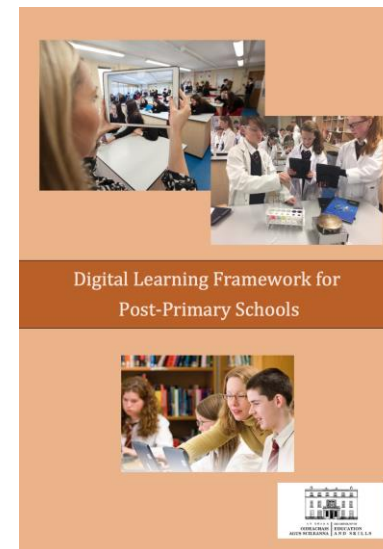
Digital Strategy 2015-2020 (P.5)

# Digital Learning Framework – Policy Formation



# Digital Learning Framework – Policy Formation

It is not enough for technologies to be merely available in the classroom – they should be deeply embedded in all classroom activities by supporting a constructivist approach to teaching and learning.



# Digital Learning Framework

## 2 dimensions : 4 domains



### Teaching and Learning

- Learner Outcomes.
- Learner Experiences.
- Teachers' Individual Practice.
- Teacher Collective/  
Collaborative Practice.

### Leadership and Management

- Leading Learning and Teaching.
- Managing the Organisation.
- Leading School Development.
- Developing Leadership Capacity.

# Digital Learning Framework



## DOMAIN 4: TEACHERS' COLLECTIVE/COLLABORATIVE PRACTICE

STANDARDS	STATEMENTS OF EFFECTIVE PRACTICE	STATEMENTS OF HIGHLY EFFECTIVE PRACTICE
<b>Teachers value and engage in professional development and professional collaboration</b>	<p>Teachers engage in professional development and work with colleagues to help them select and align digital technologies with effective teaching strategies to expand learning opportunities for all students.</p> <p>Teachers evaluate, demonstrate and reflect with peers on the use of digital technologies to innovate and improve educational practice.</p>	<p>Teachers engage in professional development, lead and support colleagues in selecting and aligning digital technologies with effective teaching strategies to expand learning opportunities for all students.</p> <p>Teachers collaboratively effect change at a whole-school level to innovate and improve educational practice, through the embedding of a range of digital technologies in teaching and learning.</p>

# Digital Learning Framework – Key messages

- Active student learning
- Realise potential of technology to support teaching and learning
- Identify and plan for CPD requirements
- Support other national policy initiatives

# Digital Strategy – ideas and actions of note

- Government strategy is promoting innovation “underpinned by constructivist principles”.
- All CPD must include some digital learning / constructivism
- ERC (research body) employing parallel longitudinal evaluation studies.



# Digital Strategy – ideas and actions of note

- CPD will include ERC surveys and research
- Schools must produce a Digital Learning Plan for funds and for inspection.
- Digital Excellence Awards are promoting cross-sectoral collaborations.

# Trial findings of ERC to successfully embed digital tech



## Collegialty

- School planning and leadership from school management
- Peer-led professional learning



## Engagement

- Opportunity for discussion, collaboration and professional development i.e Engagement of school staff

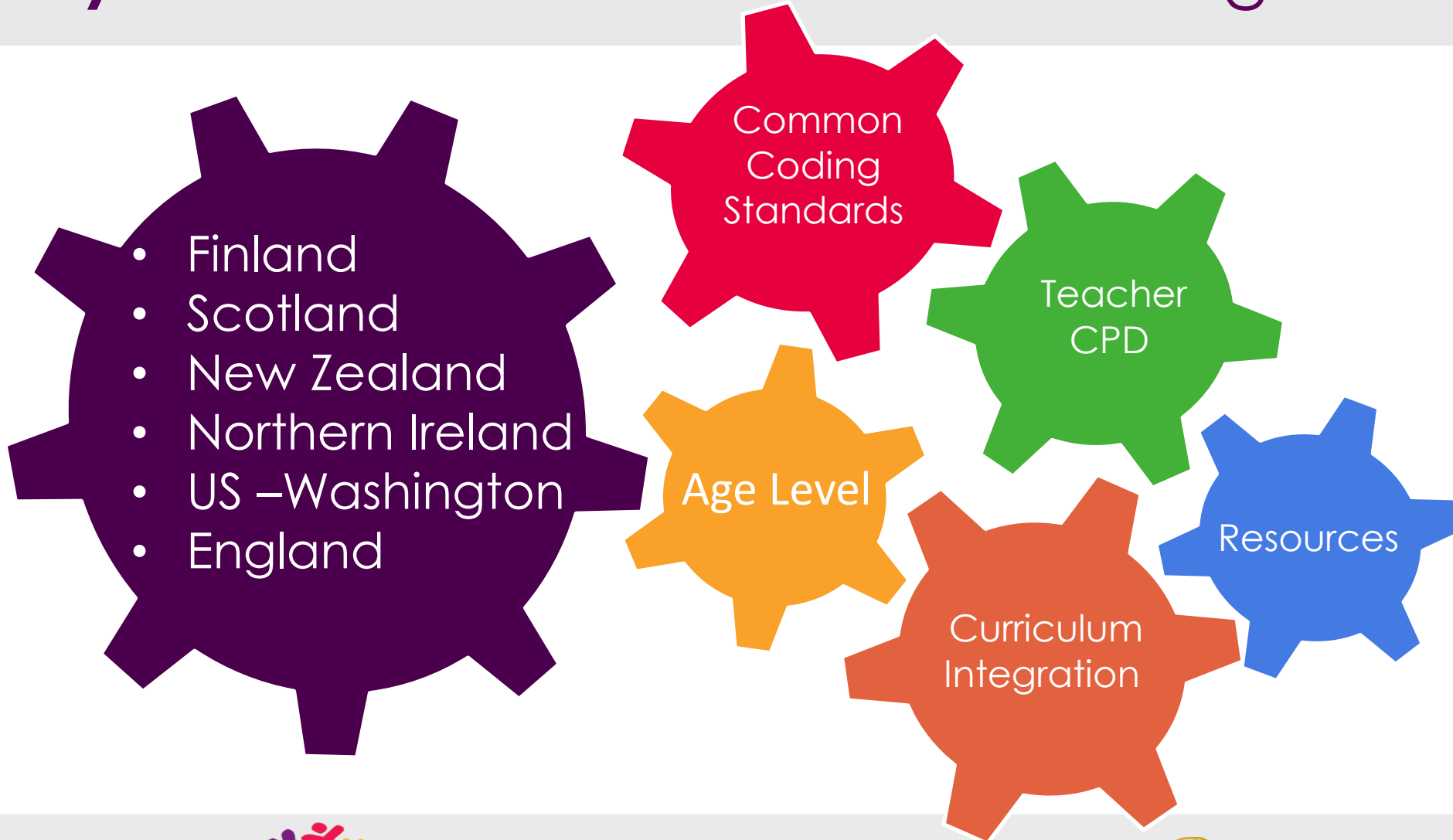


.Development of a clear vision and achievable targets

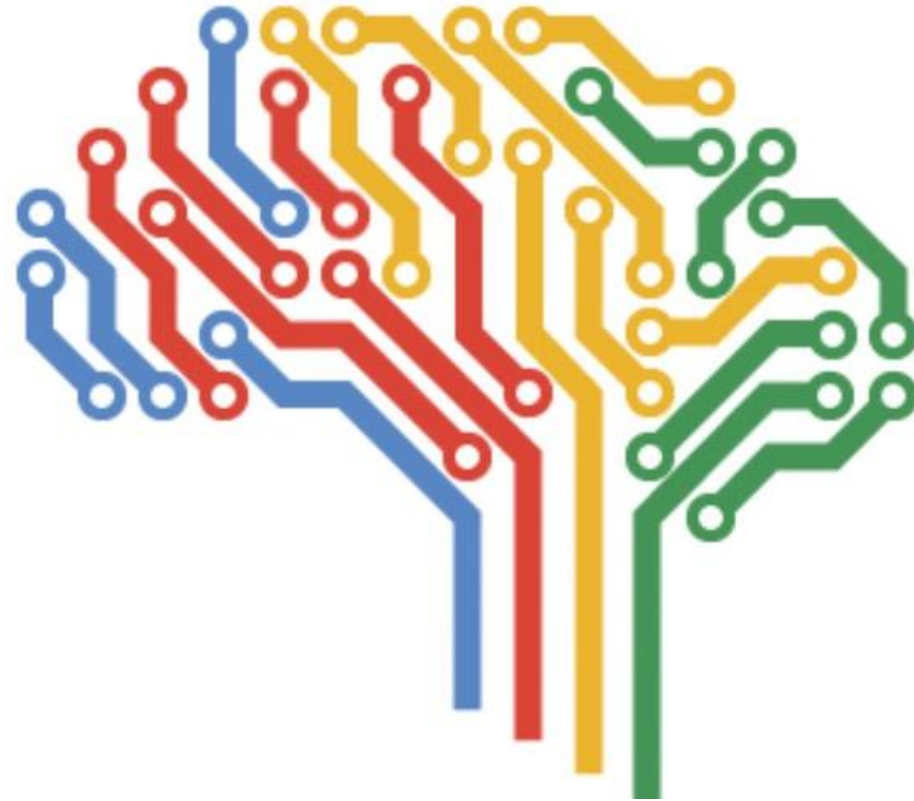
# Primary and Secondary Curriculum Developments

- **Coding in Primary schools' investigation**
- **Junior Cycle Coding short courses**
- **Senior Cycle Computer Science**

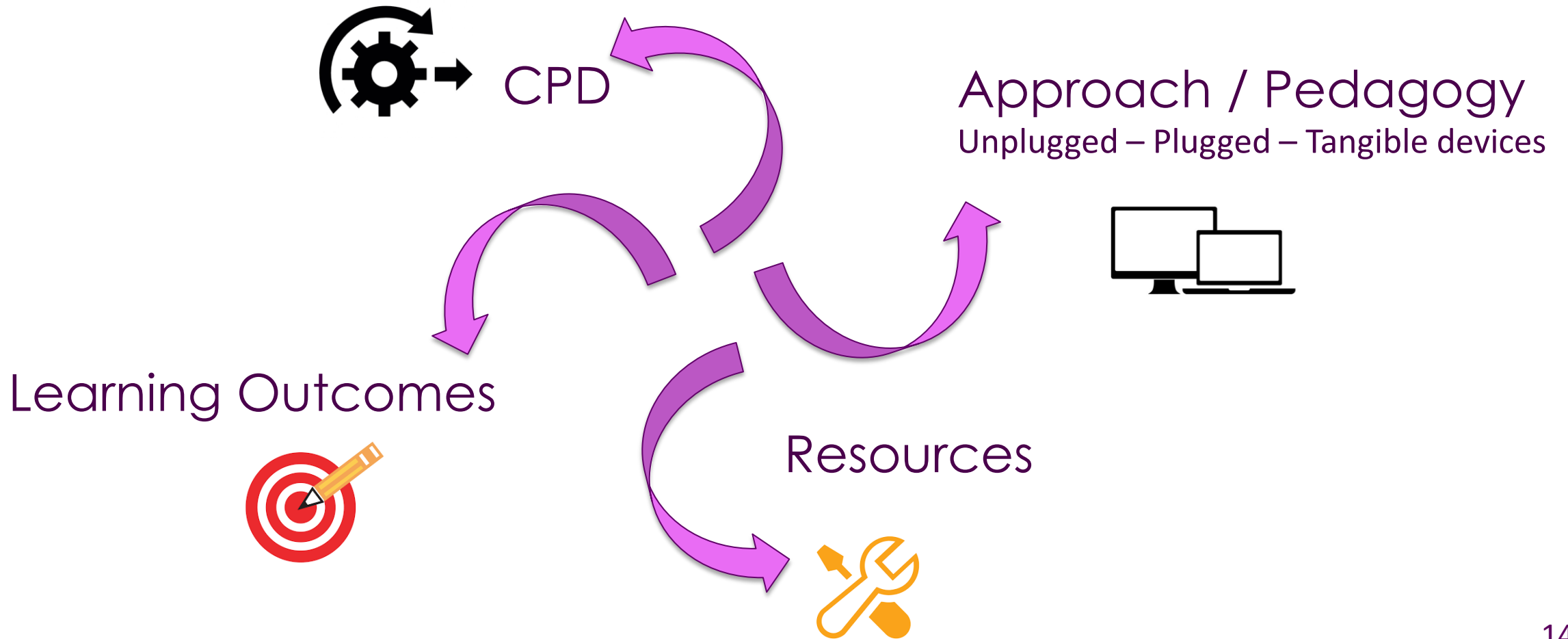
# Primary - International Curriculum Investigation



# Primary - Computational Thinking Paper



# Primary - Work with schools / Phase 1 and 2

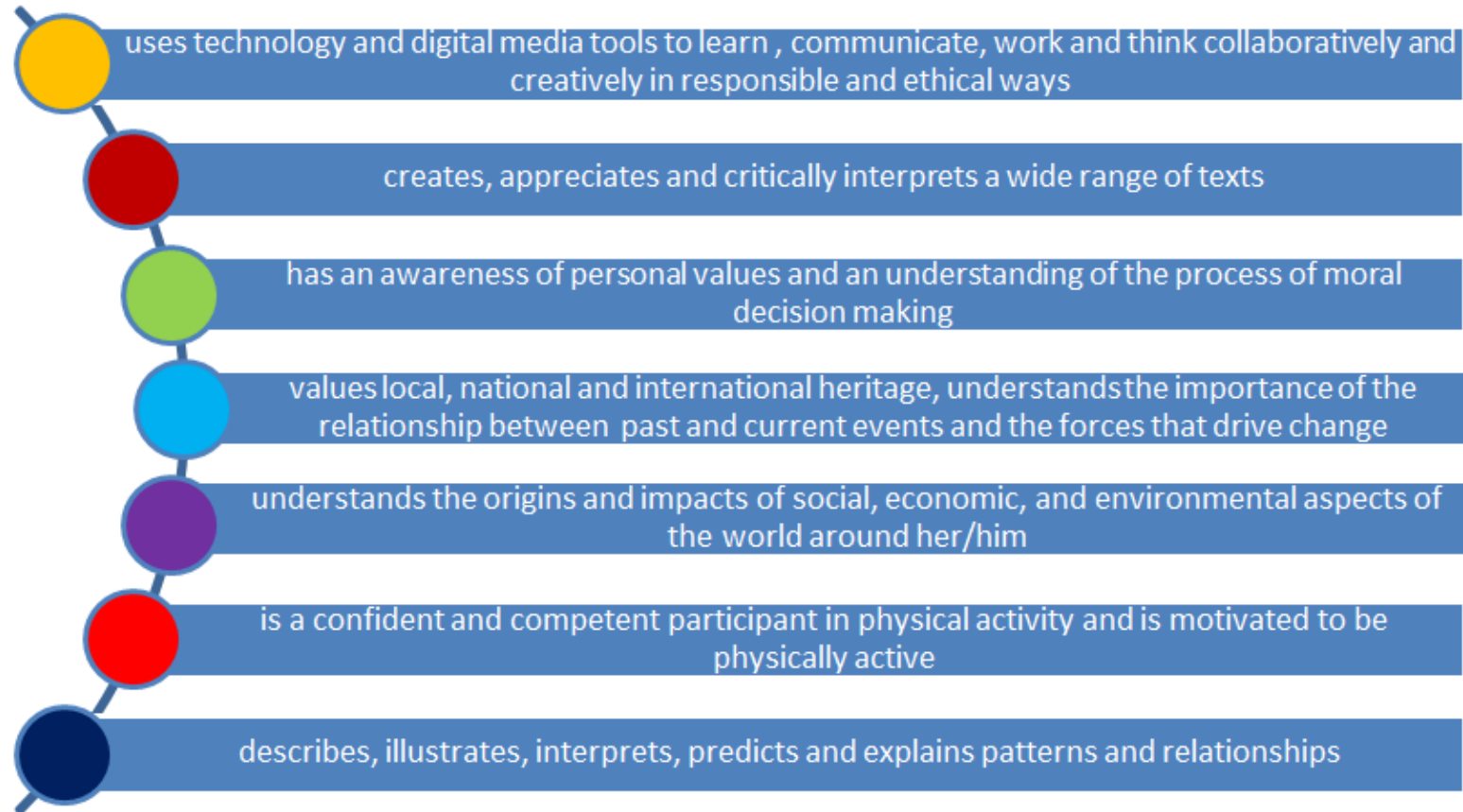


# Junior Cycle Framework



# Junior Cycle

**THE  
STUDENT**





# Junior Cycle – Key skills

- Using digital technology to communicate



- Being able to reflect on my own learning
- Using digital technology to manage myself and my learning

- Reflecting on and evaluating my learning
- Using digital technology to access, manage and share content

# Junior Cycle – Coding: Short Course

<http://curriculumonline.ie/Junior-cycle/Short-Courses/Coding>

Strand 1: Computer science introduction



Strand 2: Let's get connected



Strand 3: Coding at the next level



# Junior Cycle – Digital Media

<http://www.curriculumonline.ie/Junior-cycle/Short-Courses/Digital-Media-Literacy>

Strand 1: My digital world



Strand 2: Following my interests online



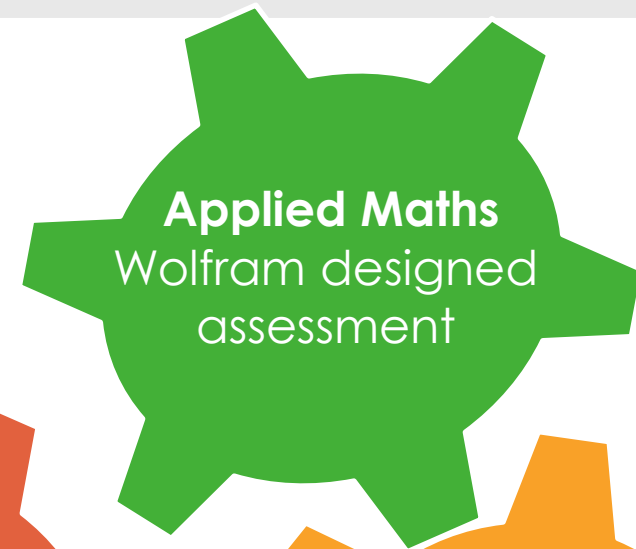
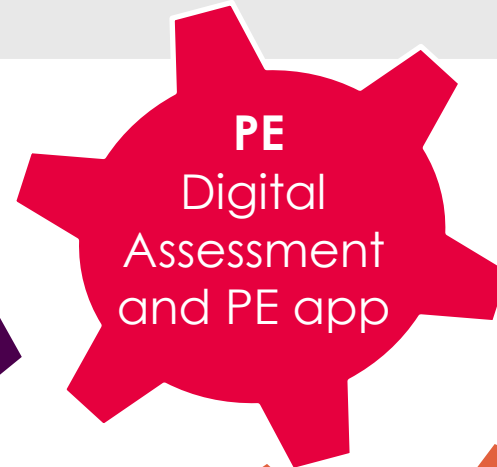
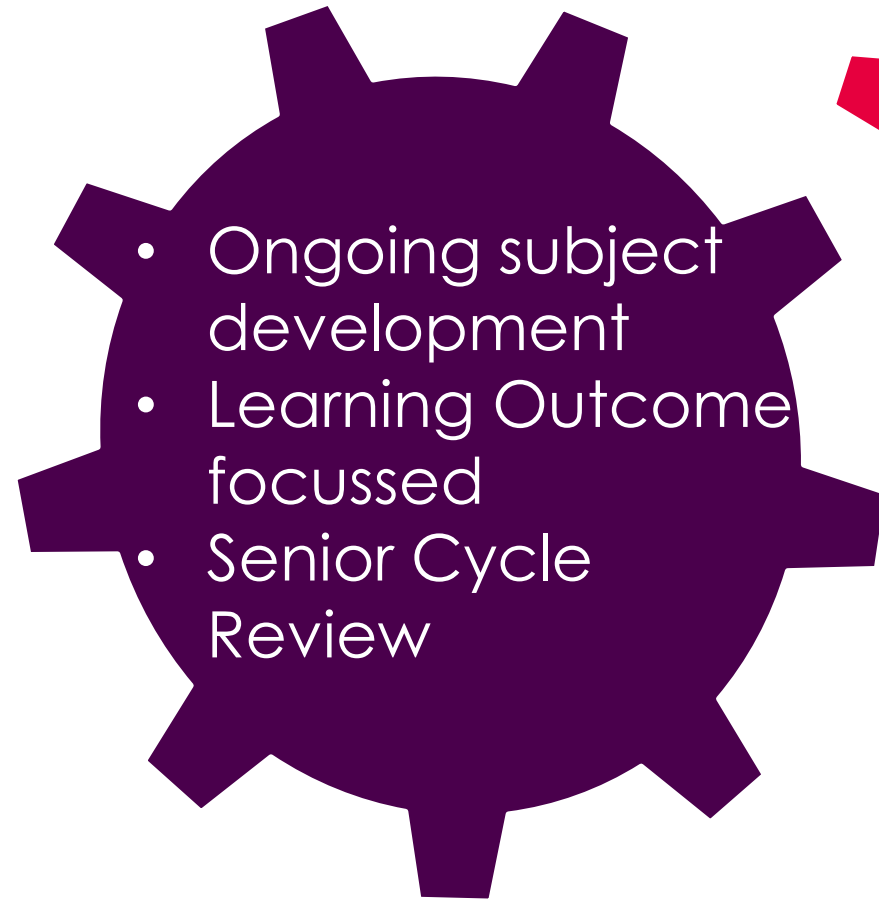
Strand 3: Checking the facts



Strand 4: Publishing myself



# Senior Cycle Developments 2017-2018

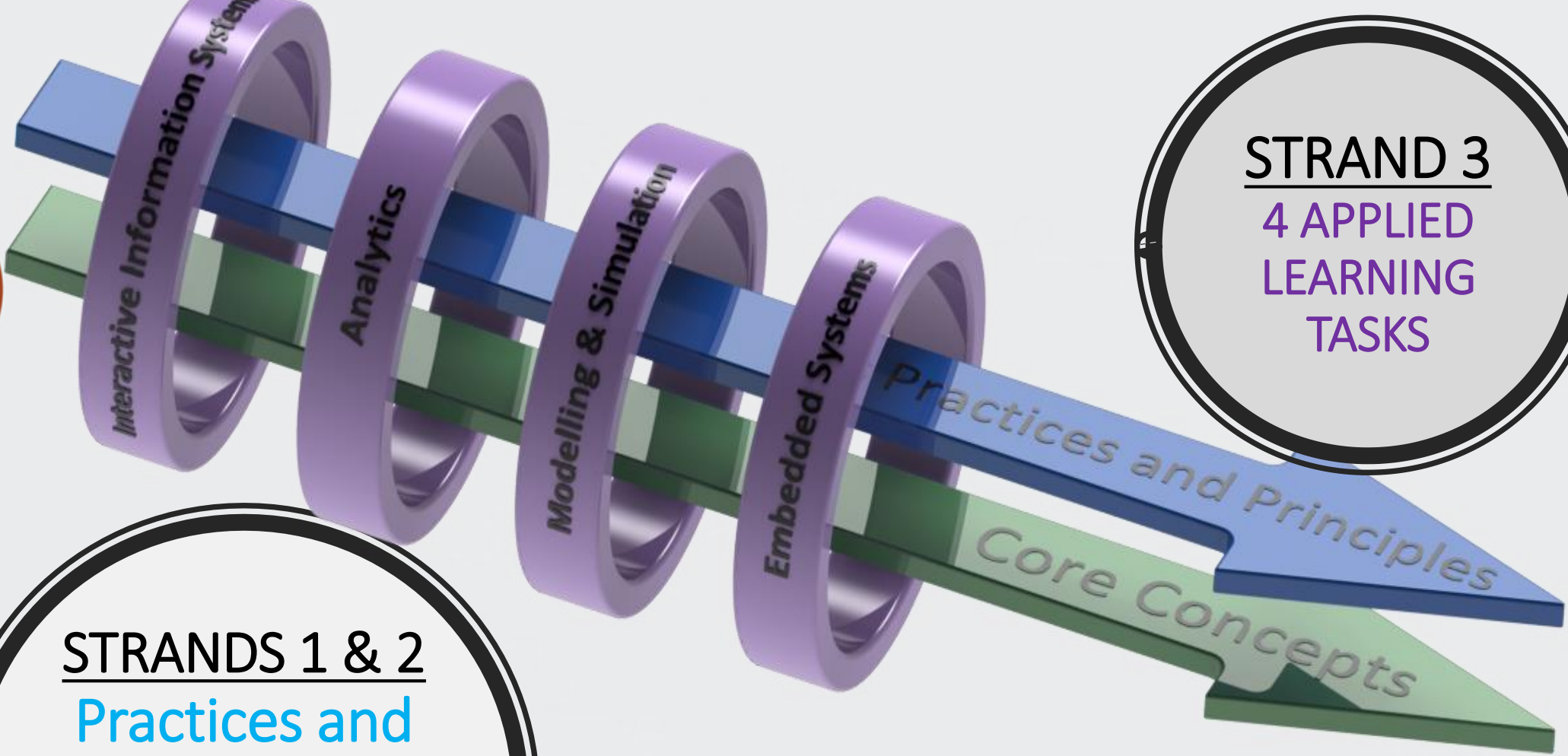


## PE App



- 6 Instructional Models of Framework
- Supports groupwork
- Connected ePortfolio
- Dashboard
- Data for national use

LCCS 2018



**STRAND 3**  
4 APPLIED  
LEARNING  
TASKS

**STRANDS 1 & 2**  
Practices and  
Principles  
Core  
Concepts



# One of the main ideas within Computer Science

LCCS 2018

“**Computational Thinking** involves solving problems, designing systems, and understanding human behaviour, by drawing on the concepts fundamental to computer science.” *Jeanette Wing*

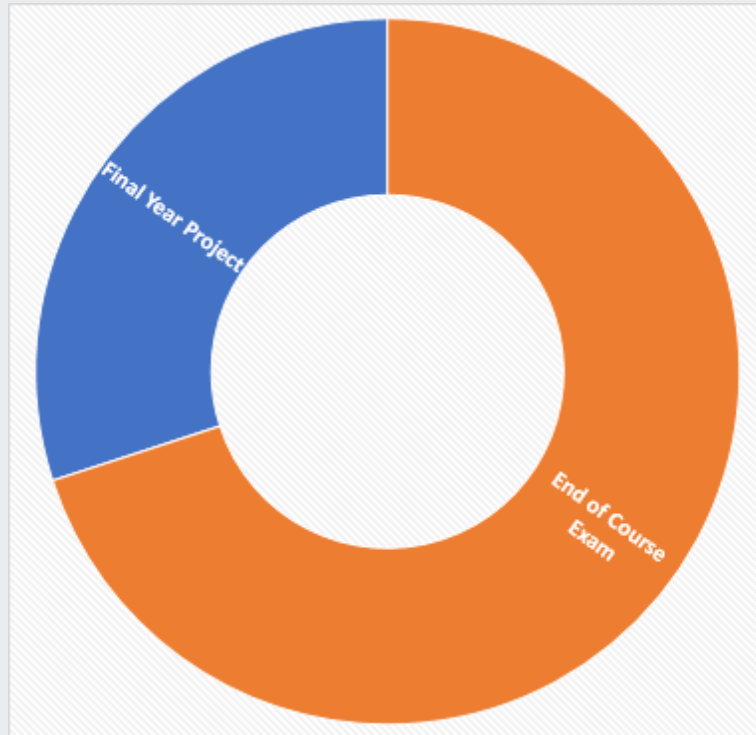
**Computational Thinking** is *not* thinking about computers or like computers. Computers don't think for themselves. Not yet, at least!



# Assessment Breakdown

LCCS 2018

**FINAL YEAR  
PROJECT  
(30%)**



**END OF COURSE  
EXAM  
(70%)**

**Python and Javascript**  
will be the programming  
languages for assessment  
purposes in Phase 1.

# Senior Cycle

# Schools Excellence Fund - Digital (April 2018)

- 200 schools in 32 clusters
- 20,000 euro funding for each cluster
- 3 year investigation

# Schools Excellence Fund - Digital (April 2018)

- Teaching, Learning and Assessment using Information and Communications Technology (ICT)
- Teachers' Professional learning
- Leadership, research and policy
- ICT Infrastructure

# Schools Excellence Fund – Cluster Case Study

- 4 Primary schools
- 1 Secondary school
- 1 Further Ed Centre (Vocational setting)

# Schools Excellence Fund - STEAMroom



## STEAM edu

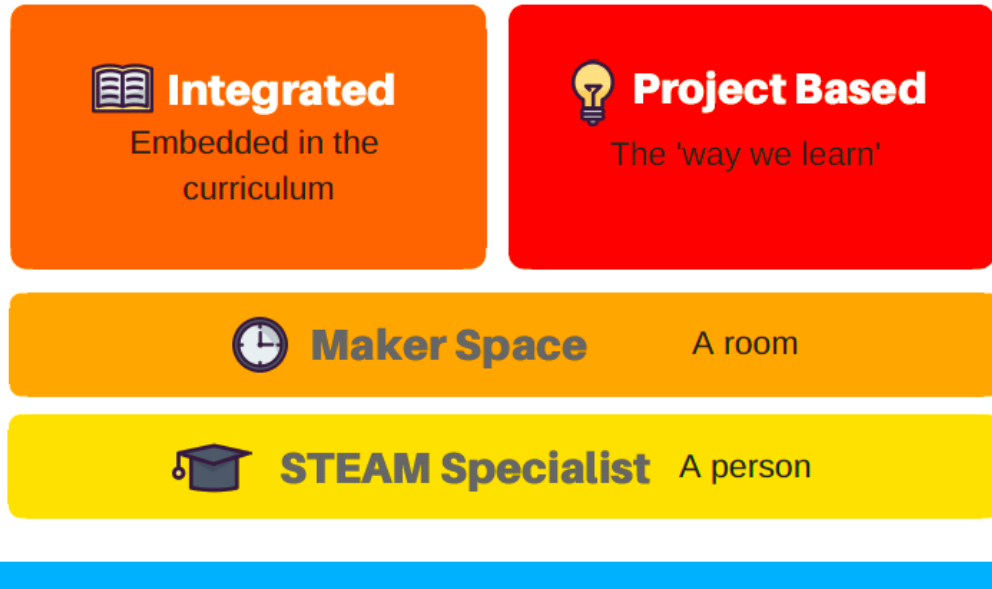
Formats of STEAM edu in schools



Across the School



In pockets



Teacher Led



Student Led

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# Schools Excellence Fund - STEAMroom



**STEAM Specialist** A person

## Pros:

- Go to person
- Promote STEAM in their schools

## Cons:

- Start and stop with that person

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# Schools Excellence Fund - STEAMroom



**Maker Space**

A room

## Pros:

- It's great space

## Cons:

- Momentum across the school limited

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# Schools Excellence Fund - STEAMroom



## Integrated

Embedded in the  
curriculum

### Pros:

- Deeper learning
- Develop higher order thinking skills

### Cons:

- Teacher lead

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# Schools Excellence Fund - STEAMroom



## Project Based

The 'way we learn'

### Pros:

- Higher retention
- Higher order thinking skills

### Cons:

- Mindshift
- Huge commitment

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