

ELC / PRIMARY

Big Ideas - concepts

AESTHETICS
UI/UX
EFFICIENCY?

(2)

(3)

(4)

(5)

ACCREDITATIONS
+
GREEN WASHING

COMPUTING

coding
DB
web
AI

BUS ED
ADMIN

GIRFEC (my words)
UNCRC
Sustainability
Centropus

Agency
Evaluation
Risk-taking

CRITICAL SKILLS

Soft/Meta skills (SOs)

empathy
language

- read
- write
- speak

real models / visitors
Transition (Buddies etc)

emotions
actions
words

enable preverbal CYP a voice

family learning
community partnerships

PLAY
agency

PLAY

+ imagination
+ play

Computational
Thinking

Problem
solving

+ outdoors
+ unplugged
+ symbolic

Requires developed
technical skills
to be applied

real life /relatable
eg.
Medical (think of child with life size)
+
Practical eg weather, maps
measure, photo

PLAY-
BASED
models, apps, website.

ECONOMICS
+
MODELS

PLAY

SOLUTIONS.

(digital skills) effectively

Digital - using packages successfully
- applying the skills to work
- packages in a work context

Entrepreneurial Skills.

what are these?

Materials, Computer Aided Production
subjects to using real technical
products and devices to try and create
new and designs to life

Cyber - expert the

IN A REAL WORLD CONTEXT,

DECIDING EFFECTIVE METHODS.

purpose of a solution or prototype/model

EVALUATE / REFLECT / VIABILITY

ITERATE

MARKET IT

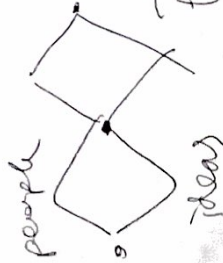
action
(practice)

DELIVERING SOLUTIONS
REFLECTIONS

programming

Computational Thinking

Key & Evaluation



PROJECT?

ASSESS?

APPLY?

5

DEVELOPING Creating Purpose-Driven solutions EXPLORE

Ideas into Action
5

Children and young people will design and develop solutions that are purposeful, user-focused, and sustainable. They will learn to identify needs, define problems, and create outcomes ^{or products/artifacts} that have a positive impact on individuals, communities and the wider world.

Interpreting financial information and data ~~using~~ with a view to making suggestions to improve performance (business) / making recommendations

RECOMMENDATIONS
TO MEET
A NEED, ISSUE OR
PROBLEM

DIGITAL SKILLS
↓
Advanced

Spreadsheets / Python /
Power BI - using

data and developing means
of interpretation using the
above software to change the
data to analyse predictions

Design a solution.
Create a solution

Develop digital or physical
solutions

communicate
and
concepts.

SIMULATED
WORKPLACE
CHALLENGES +
EXPERIENCE
SUSTAINABLE
PRACTICES

(CASE)

5
Solutions.
• Final Accounts
• Projects
• Business Plans
• Design & prototypes
• Modelling using own choice
of tools.
• Current events.
- teacher awareness.
• Demonstrate effective, profitable business
solutions.

Developing solutions

MASTERY?
(skilled/
competent)

very complex

Economic concepts: inflation
- tariffs
- employment
- globalisation

- workforce
- skills / pay /
- digital.

4)

Effective Collaborating & Communicating effectively

^{CYP} ~~Learners~~ will ^{understand how to} ~~develop the ability~~ ^{in virtual + physical spaces} to work with others, share ideas, and communicate clearly, using a range of tools and platforms. They will understand the value of diverse perspectives and the importance of collaboration ^{in solving} complex challenges/problems.

~~Collaboration~~

approaching
meeting
addressing

Children & young people understand how to work with others effectively and communicate clearly...

Shared goals + purpose

Mutual Respect + Trust

Accountability + Contribution

Tools ^{technological} & Platforms
(for collaboration & communication)

~~Communication~~

Reflection + Improvement

Active listening/
oracy

Appropriateness + Tone and clarity

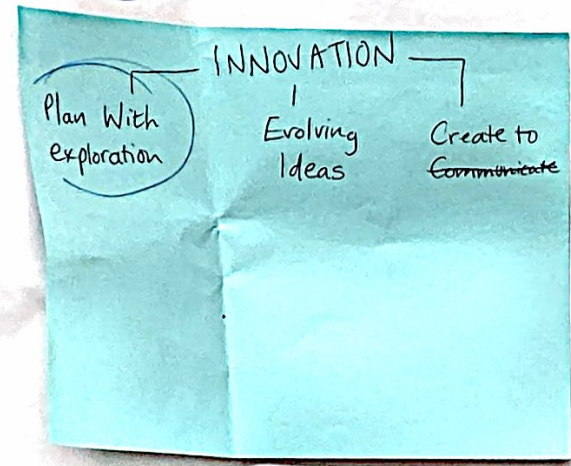
Exploring through experimentation & innovation

Children and young people will embrace curiosity, creativity, and critical thinking to explore, test and refine ideas. They will understand that innovation is a process of learning from failure and success, and that new solutions often emerge through experimentations.

Issue
explore, solve, challenge + plan

PLAN TO SOLVE
A CHALLENGE &
PREPARE A SOLUTION

Using
KNOWLEDGE OF TOOLS
& MATERIALS & THEIR
PURPOSE.
towards



Create and visualise a possible solution...
adapting from our ideas; refining to a better concept??
change used?

Evolving ideas through using feedback, system's approaches to create a next steps with
.....

ITERATIVE
PROCESS

PLAY !!!

Future-Focus?
WHERE IS INNOVATION?
EMERGING CONCEPTS.

RAPID PROCESS
Generate, Analyse, Prototype, Test, Adjust, Produce.

CRITICAL
THINKING

SOCIETAL
IMPACT

TECHNOLOGIES

APPLIED
LEARNING

INNOVATION

① Computational Thinking

② Innovation

③ Sustainability

④ Citizens in a Digital World

⑤ Consumption

(2)

Developing contextual & transferable skills.

CYP ~~Learners~~ will build adaptable skills that are relevant to their lives, communities, and future pathways. They will apply these skills in meaningful contexts, recognising how technologies can solve real-world challenges across disciplines and industries.

USING
DATA / DATA
Science.

KNOWLEDGE OF
PROCESSES TO
ESTABLISH MOST
EFFICIENT METHODS
Appropriate

Collaborating
&
Responding

Measuring
(Success/
progress)
evaluate
judgement

Project
Management

Analysis
(Brief)

RESEARCH
SKILLS

Investigate

PRACTICAL
SKILLS

DIGIT
CITIZE

E4/Priny - Open-ended
Secondary - End product

Young Enterprise - Innovation
Product design - finance
supporting each stage of
product development - and the
business cycle.

2
Skills.

- Enhanced digital skills
- Budgets & Accounting.
- Developing independent digital skills
⇒ Develop confidence to try before asking
- Analytical & evaluation.
- ~~Independent~~ ~~Value for money~~

Value for money

Concepts.

Methods

Effective communication / choices / applic

Connection, language & meaning.

Oracy - Teamwork Behaviour.

compa / accessibility / inclusion

purpose

E-SPORTS / GAMING

Types of text / media

audience of voice

CYBERSTILLS

IT INFRASTRUCTURE

Digital media

Communication Techniques & Methodologies.

Create / co

NAVIGATING LIFE ONLINE
- Job seeking, banking.

LEADERSHIP STYLES

DIGITAL FOOTPRINT

SOCIAL MEDIA

- Commerce.
- Influence

ASSISTIVE TECHNOLOGIES

REMOTEWORKING

laboratory -
technology -
document

NETWORKS & PROTOCOL

da
To ADDING
SOLVE PROBLE.
TOOLS / PROBLESES
SYSTEMS THAT
FLOW LIVES OUR LIVES
IN FACILITATE VALUE
- 121
- PARTNERSHIP WORKING,
- NETWORKING +
- ENGAGEMENT

INDEX

AI

MOBILE TECHNOLOGY

Clarity + Purpose.

DATA
COMMUNICATION

Workplace
Open innovation, regulation & Curiosity,
Exploring opportunities & creating solutions

TI
MUR
learn...
ever-changing world, giving them the
tools, confidence and skills to make
conscious informed ethical decisions. Tech
encourages critical thinking & problem solving skills.
In 1914, Scotland they develop their
innovation muscle & force their path.

①

Understanding Impact & Responsibility

Children and young people will develop an awareness of how technologies influence and are influenced by societal, ethical, environmental, and economic factors. They will learn to make responsible decisions, considering the broader implications of their actions in a connected world.

reviewing
reflecting
ideas
before
on to
implement
concepts

RESOURCES

INDUSTRY

CONSUMERS

DATA + INFORMATION

PROTECTING

Automatic

Automation

deciding
ethically
about
decisions?

RIGHTS AS A
CONSUMER/
EMPLOYEE/
EMPLOYER.

DISCOVERY
AND
CHALLENGES
IN
SOCIETY

Data storage
& processing
& comms.

AI

Ethical use of data
access to
ethical use of data

Protecting
systems

USING DATA
TO INFORM
DECISIONS

RESEARCH
USERS
MARKETS OR
SYSTEMS

Computational system
measures to ensure
issues are covered
protected

Health
+ Science

Cyber resilience

PURPOSE

of Series of Indus.
By SCOTTISH
SOCIETY

SCOTLAND,

Scotland's
place in a
global economy?

GLOBALISATION

Global
local/school
on life?
context's
impacts

ETHICAL
PRACTICES

IDENTIFY A NEED
WANT, CHALLENGE
OR PROBLEM

Financial - budgeting/mortgages/pensions
- role of banking
- borrowing (BRIEF/loans)
- financial modelling
- generating accounts/interpretation/
analysis/solutions

Ethical use of
digital services

Social Enterprise

Fair Trade

Resources/Raw
materials.

Globalisation -
where do bananas
come from?

cycle of
materials

Energy

Circular

SCARCITY
CHOICE

ENTREPRENEURIAL
EDUCATION.
- Mindset
- Leadership

ACCURACY

CONSIDER USER NEEDS
FUNCTION, RESTRICTIONS

DATA
DRIVEN
BUILD MODELS, SIMULATIONS
OR SYSTEMS

GENERATE & COMBINE
IDEAS OR STRATEGIES

CREATE DESIGN
PROPOSALS, BUSINESS
IDEAS, ALGORITHMS
GRAPHIC RESPONSE

Evaluation
modifications
+ adapting
Reflection

Programming

Abstraction

Communicate
in a
variety of
ways...
Creative
thinking
approaches

Decomposition

Connections

using
research to
inform
decision
making

Analysis of
Problem.

LOGIC

TEST, FIX, REFINED

Design Thinking and Iteration

Develops iteratively deliver
improved solutions with measurable
performance gains by learning from
cycles of creative ideation
prototyping, testing, failing and feedback

Critique

Computational Thinking

INNOVATION?

APPLY COMPUTATIONAL
THINKING & PROBLEM
SOLVING

Act
Taking
action
from
Feedback.

VISUALISATION

SKETCHES, WIREFRAMES
FLOW CHARTS TO VISUALISE
SOLUTIONS

USING TOOLS
PROGRAMMING LANGUAGES
OR PHYSICAL MODELS

Collaboration
to share
and refine
ideas

Don't want to use
the words "present"
or "presentation" as it
leads to powerpoint

Play?

Agency for

PLAN RESOURCES
& TOOLS

APPLY KNOWLEDGE
BUSINESS, MARKETING,
DESIGN, COMPUTING
SYSTEM

Plan with exploration &
play to apply knowledge of
(Business, Branding, design &
computing systems) and use resources to
create ideas.
(planning to create)

system approach

feedback loop

PROUD TO SOLVE
WITH
EXPERIMENTATION
& INNOVATION

THINK &
ALGORITHMICALLY

Experimenting?
applying
knowledge?
apply feedback?

share? convey?
visualisation?
Bring to life?
Communicate...?

PRODUCTION
PROCESS

Production process