HOW DOES THE COMPUTING CURRICULUM SIT WITHIN THE WIDER DISCOURSE AROUND COMPUTATIONAL THINKING?

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CT & COMPUTING PROJECT TEACHING

Teach UX Led Web Design to Key Stage 2

Explainer Videos – Story Boarding

Animation – CT 2 2D Ipad Apps and 3D Xtranormal

Infographics – Visualisation, Vector Editing, Ipad and Apple TV Work Flow

Web Making – Mozilla Hack Kit

Creating Instructional Videos – Sharing Learning

CT DISPOSTIONS

CONFIDENCE IN DEALING WITH COMPLEXITY

PERSISTENCE IN DEALING WITH DIFFICULT
   PROBLEMS

THE ABILITY TO DEAL WITH OPEN ENDED
   PROBLEMS

THE ABILITY TO HANDLE AMIBUITY

THE ABILITY TO SET ASIDE DIFFERENCES TO ACHIEVE A
   COMMON GOAL

UNDERSTANDING OF ONE STRENGTHS AND
   WEAKENESSES

ABILITY TO WORK TOWARDS CONSENSUS

ACCEPTANCE OF FAILURE AS PATH TO FUTURE
   SUCCESSFUL OUTCOME

SUSTAIN FOCUS AND PERSEVERANCE

CT PROCESSES

ITERATIVE WORK FLOW

repeat a process to achieve a desired goal, target or result.

TEST AND DEBUG

identify and remove errors from (computer hardware or software).

DEVELOPING IDEAS

Develop ideas from an initial conception to a completed project

NEGOTIATION

Collaborate to merge parts of a solution

(derived through decomposition) into a whole.

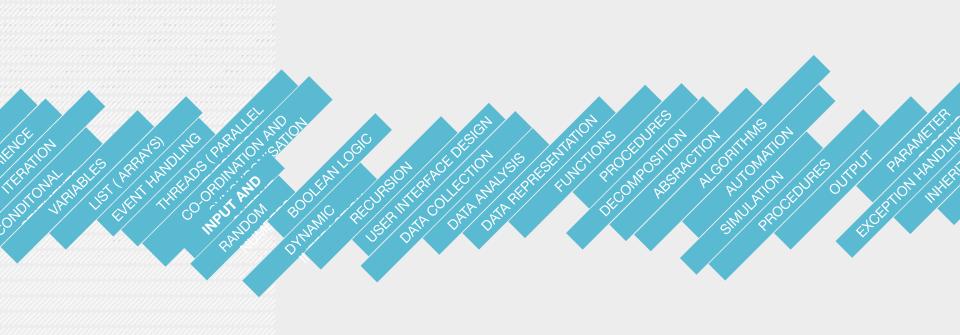## CONSENSUS BUILDING

Work together to create group soladarity behind one idea or solution.

USE OF CT VOCABULARY

Use vocabulary to reflect on goals, processes, skills and concepts to communicate with others

CT CONCEPTS

EXPERIENCE

ITERATION

CONDITONAL

VARIABLES

LIST (ARRAYS)

EVENT HANDLING

THREADS (PARALLEL

CO-ORDINATION AND
SYNCHRONISATION

INPUT AND

RANDOM

BOOLEAN LOGIC

DYNAMIC

RECURSION

USER INTERFACE DESIGN

DATA COLLECTION

DATA ANALYSIS

DATA REPRESENTATION

FUNCTIONS

PROCEDURES

DECOMPOSITION

ABSRACTION

ALGORITHMS

AUTOMATION

SIMULATION

PROCEDURES

OUTPUT

PARAMETER

EXCEPTION HANDLING

INHERIT

RESEARCH SOURCES

Centre for Computational Thinking at Carnegie Mellon University

International Society of Technology in Education

Computer Science Teacher Association

Massachusetts Institute of Technology

Computing at School (Sponsor)

Links to associations and papers to be published online @ http://sandboxeducation.co.uk