Fís Foghlaim Forbairt

Professional Development Service for Teachers | An tSeirbhís um Fhorbairt Ghairmiúil do Mhúinteoirí

www.pdst.ie

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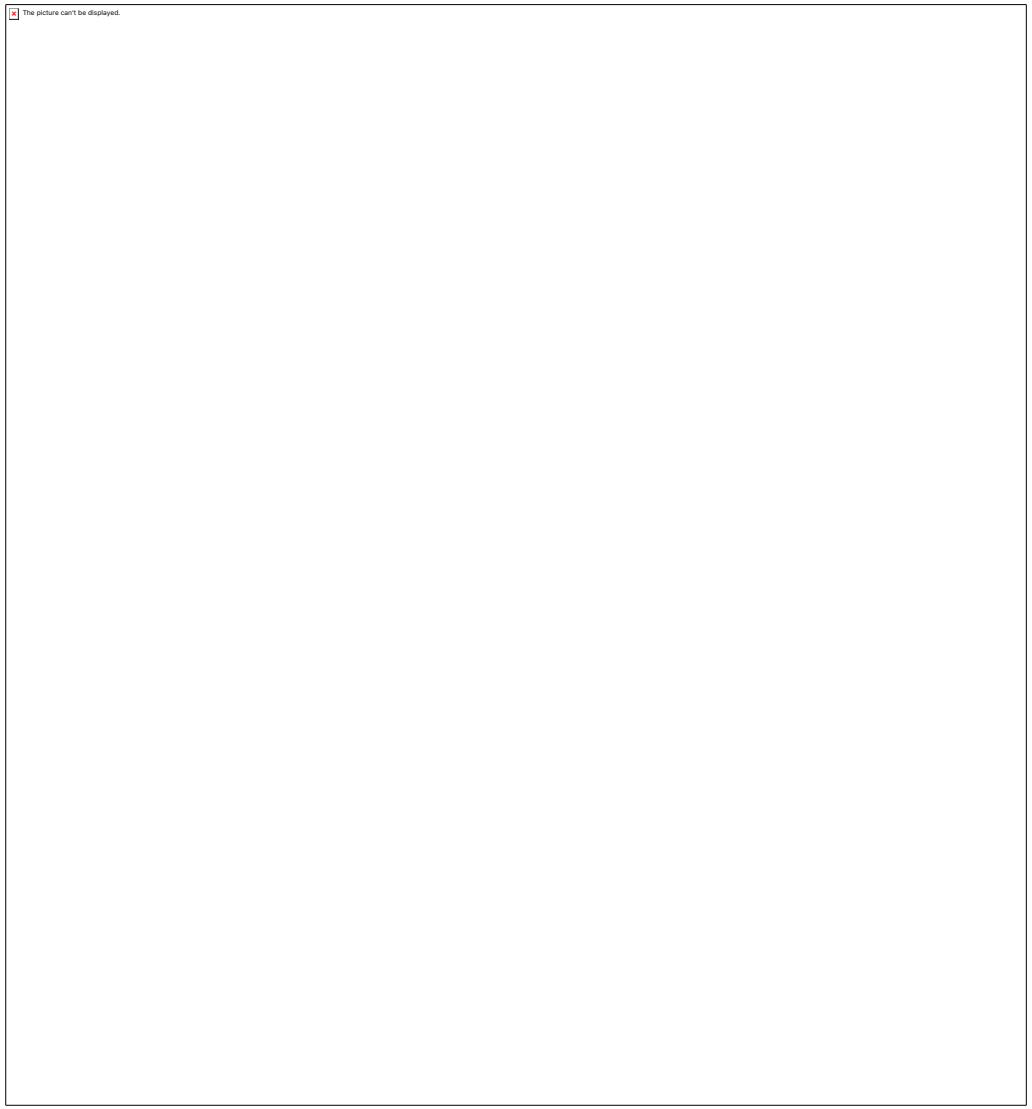

National Workshop 1

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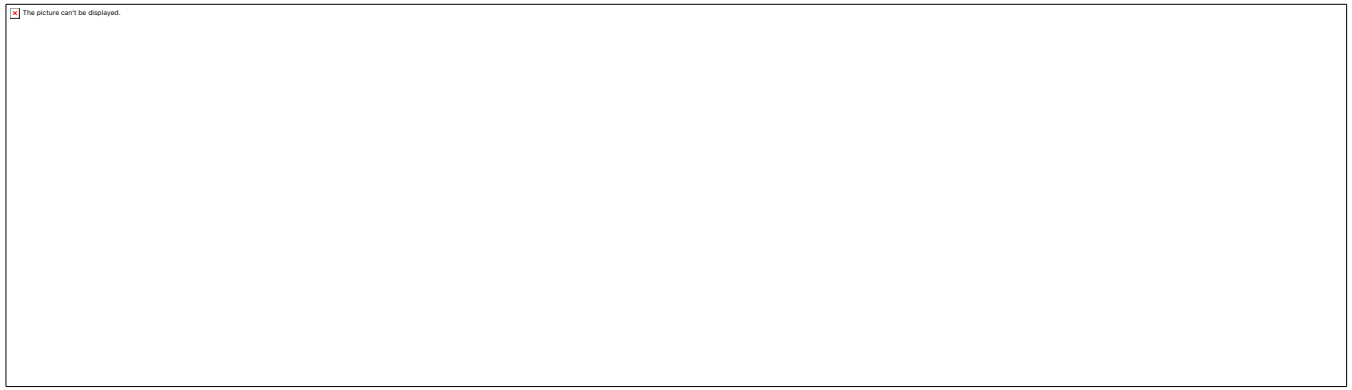
Today's Schedule

09.00am - 11.00am	Session 2 - Subject Specification
11.00am - 11.30am	Coffee & Stretch Break
11.30am - 1.00pm	Session 3 - Experiencing Problem Solving (Thru the lens of a learner)
1.00pm - 1.45pm	Lunch
1.45pm - 3.45pm	Session 4 - Pedagogy, Reflection and Resource Development
3.45pm - 4.00pm	Wrap up

Question Board



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Recap on Key Messages

- Computer Science is a subject for everybody.
- There are many ways to use the specification.
- All learning outcomes are interwoven and can be studied in any order.
- LCCS can be effectively mediated through the use of a constructivist pedagogical orientation.
- Digital technologies have the potential to enhance collaboration, learning and reflection.

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Session 2 – Specification

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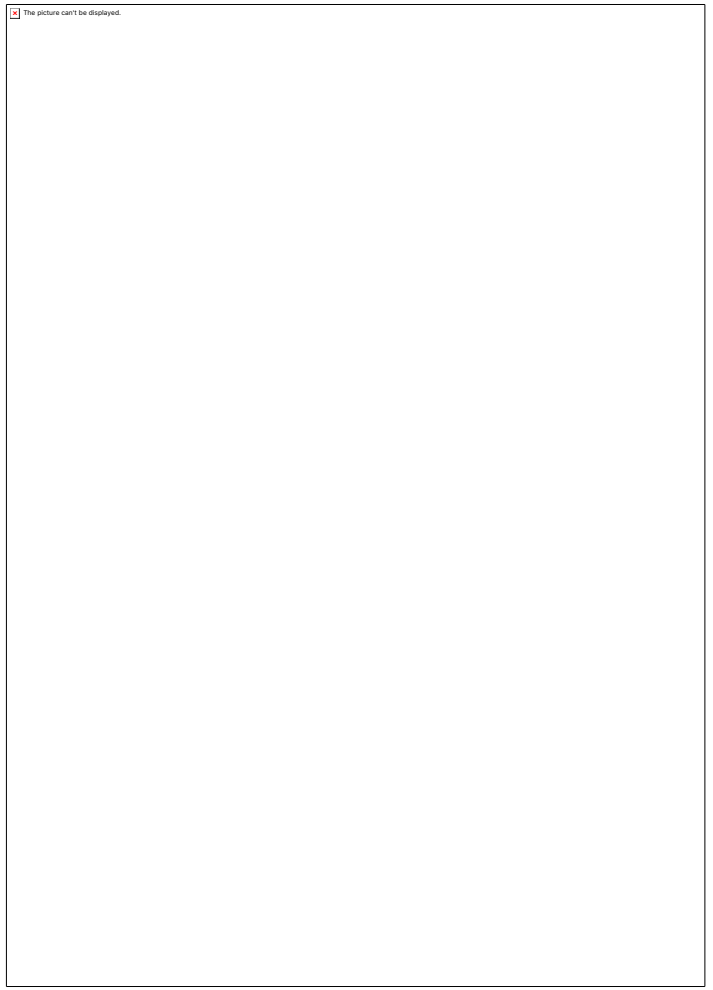
Leaving Certificate Computer Science Curriculum Specification



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'Learning outcomes can best be defined as statements of what a learner knows, understands and is able to do after completion of learning.'

CEDEFOP (2009)

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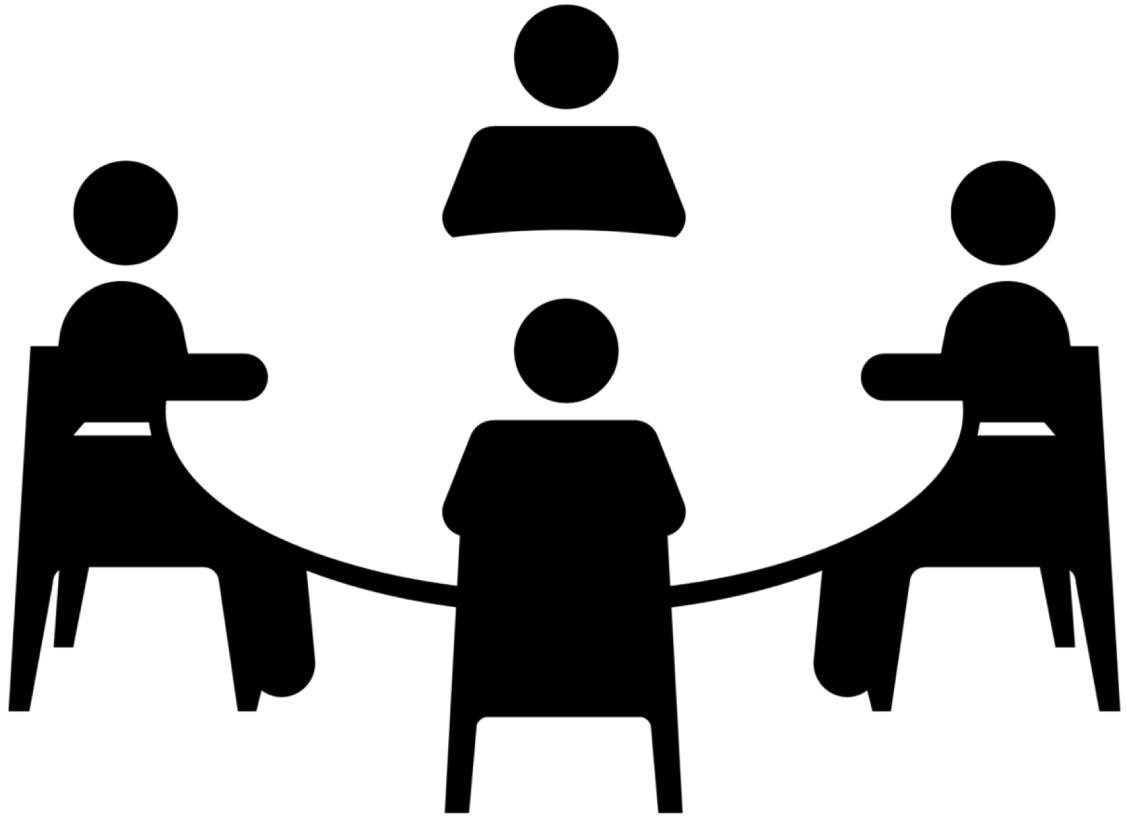
Group Activity



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Group Warmup Activity - Instructions

Log onto the shared document and examine the learning outcomes and how they are grouped by strands of the course and by lower and higher order thinking.

https://tinyurl.com/ybx9cjgw

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Group Activity A - Instructions

Each group should pick two different learning outcomes (one from Strand 3 and one from Strand 1 or 2).

Discuss and write down:

- *What would you teach to your class for this LO?*
- *What teaching & learning strategies could you use?*
- *How would you know this learning outcome has been achieved?*
- *Can it be linked to other parts of the course?*

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https:// pdstlccs.padlet.org/cpd/

Group 1 : 7710g7172nuy

Group 2 : qklzwqf6h9hx

Group 3 : bv1ntbl6arh9

Group 4 : ir6njapfd7k3

Group 5 : o4r1npyac4c6

Group 6 : 7i4lyjo08fee

Group 7 : 4pfmcsiwddd5

Group 8 : eu976w6thph2

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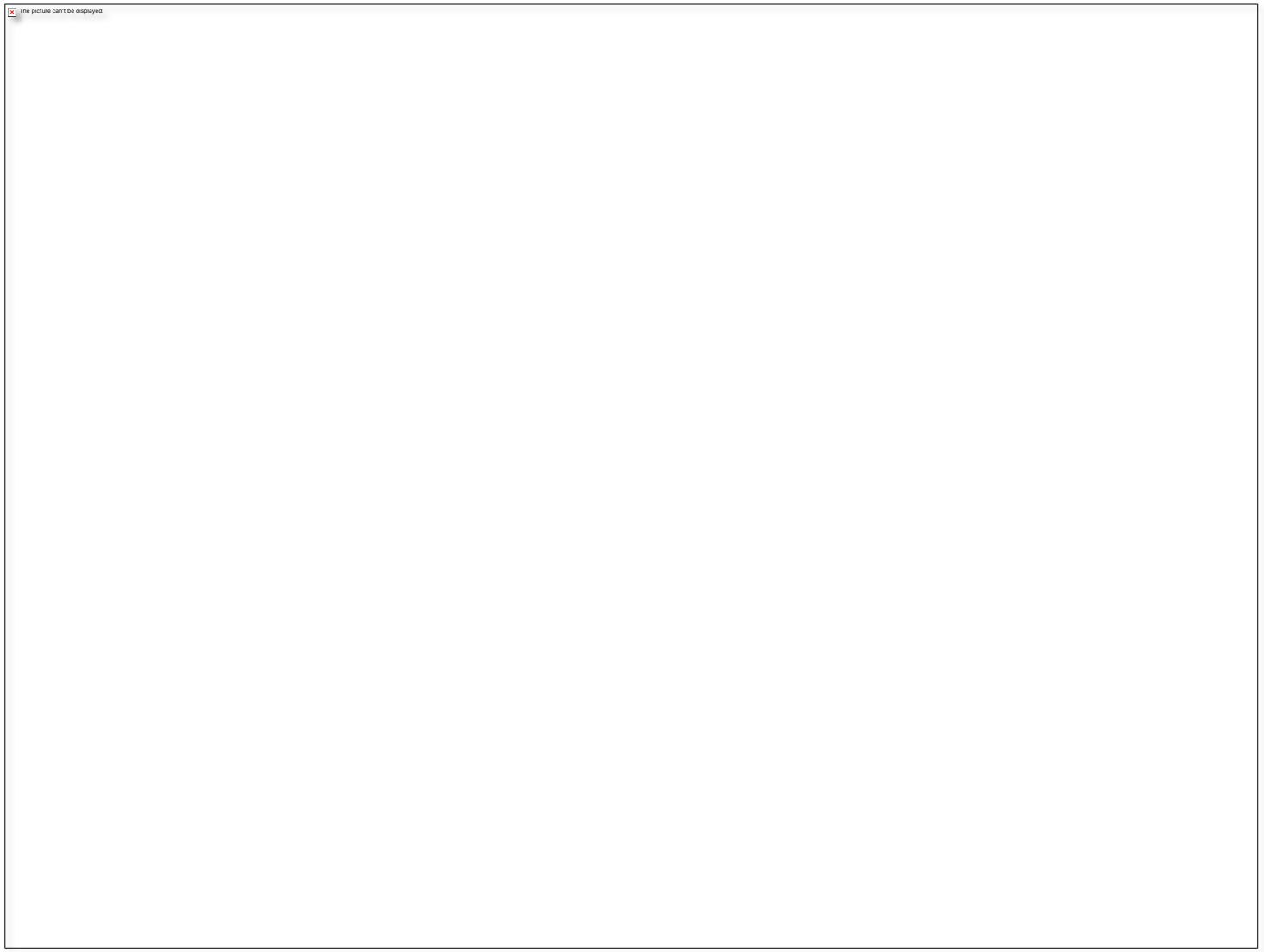

https://www.curriculumonline.ie

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Constructivist Pedagogical Orientation

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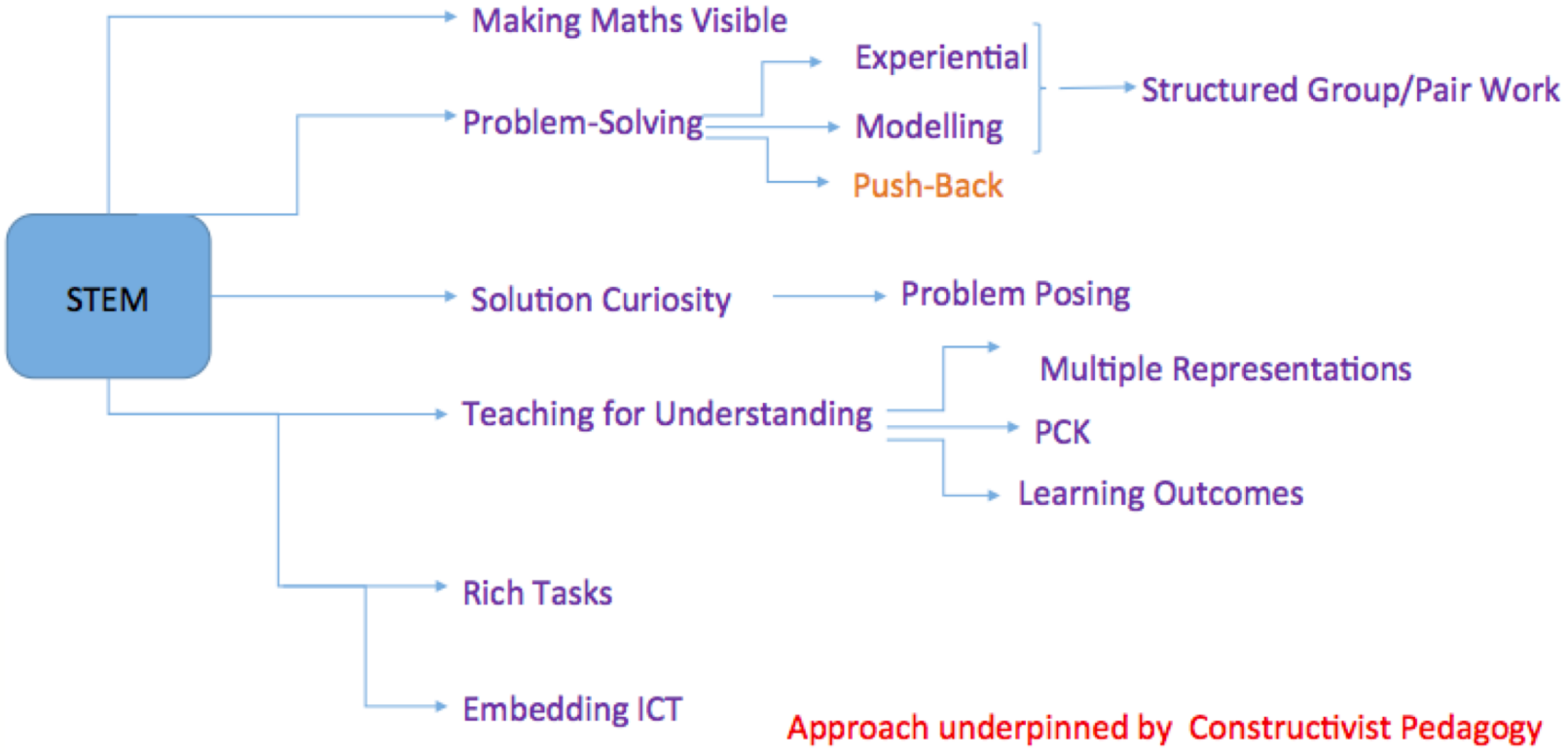
STEM CPD

STEM as a Connected Discipline



Approach underpinned by Constructivist Pedagogy

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Applied Learning Tasks

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Students work in teams to carry out four applied learning tasks over the duration of the course.

Each of which results in the creation of a real or virtual computational artefact.

These artefacts should relate to the students' lives and interests.

Where possible, the artefacts should be beneficial to the community and society in general.

Examples of computational artefacts include programs, games, web pages, simulations, visualisations, digital animations, robotic systems, and apps.

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The four applied learning tasks explore the four following contexts:

- Interactive information systems
- Analytics
- Modelling and simulation
- Embedded systems.

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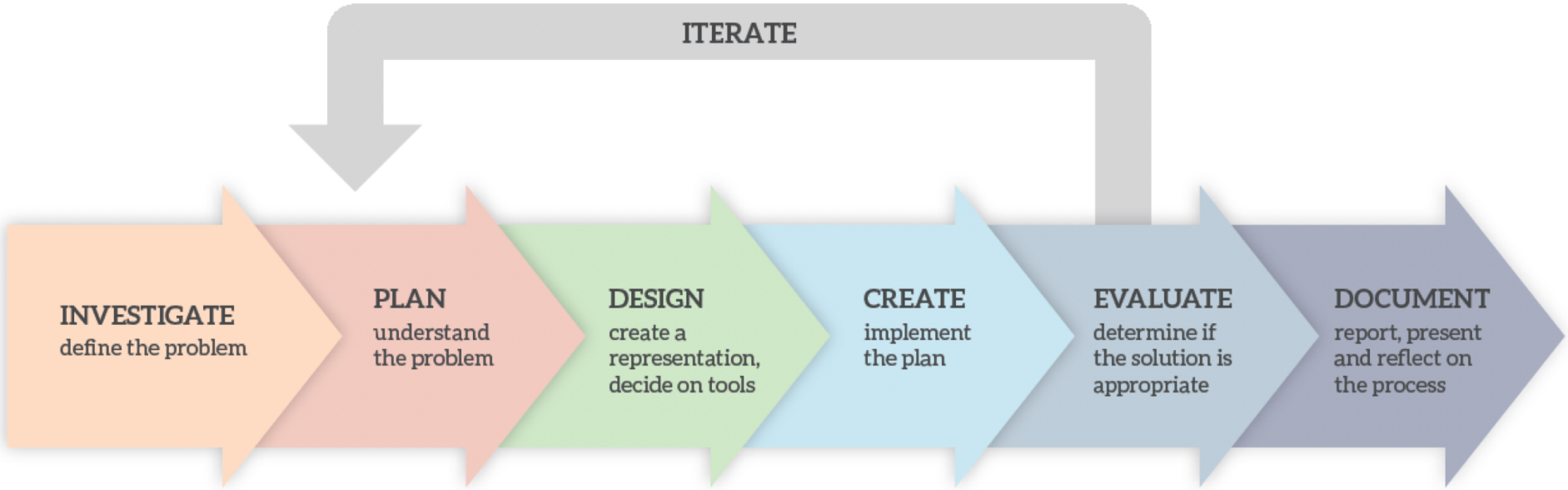

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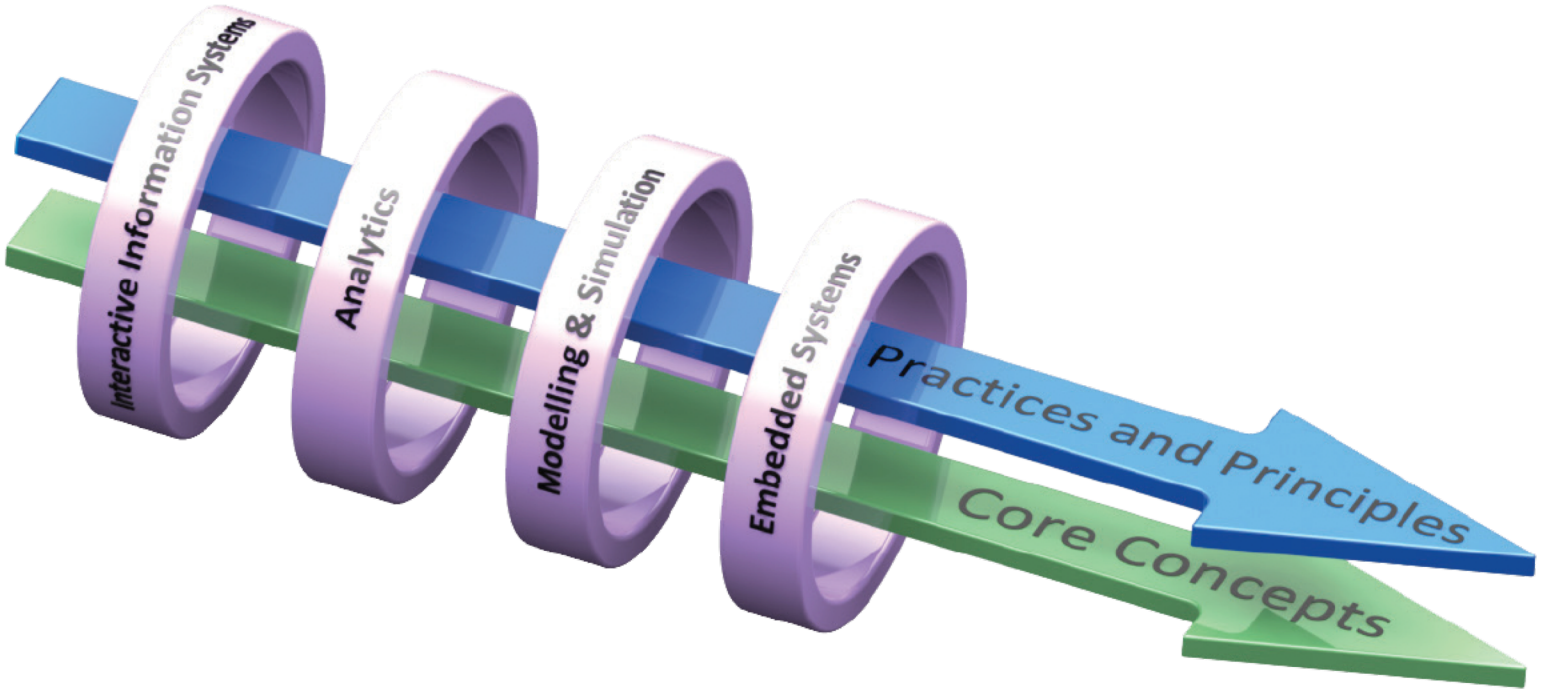
LCCS Interwoven



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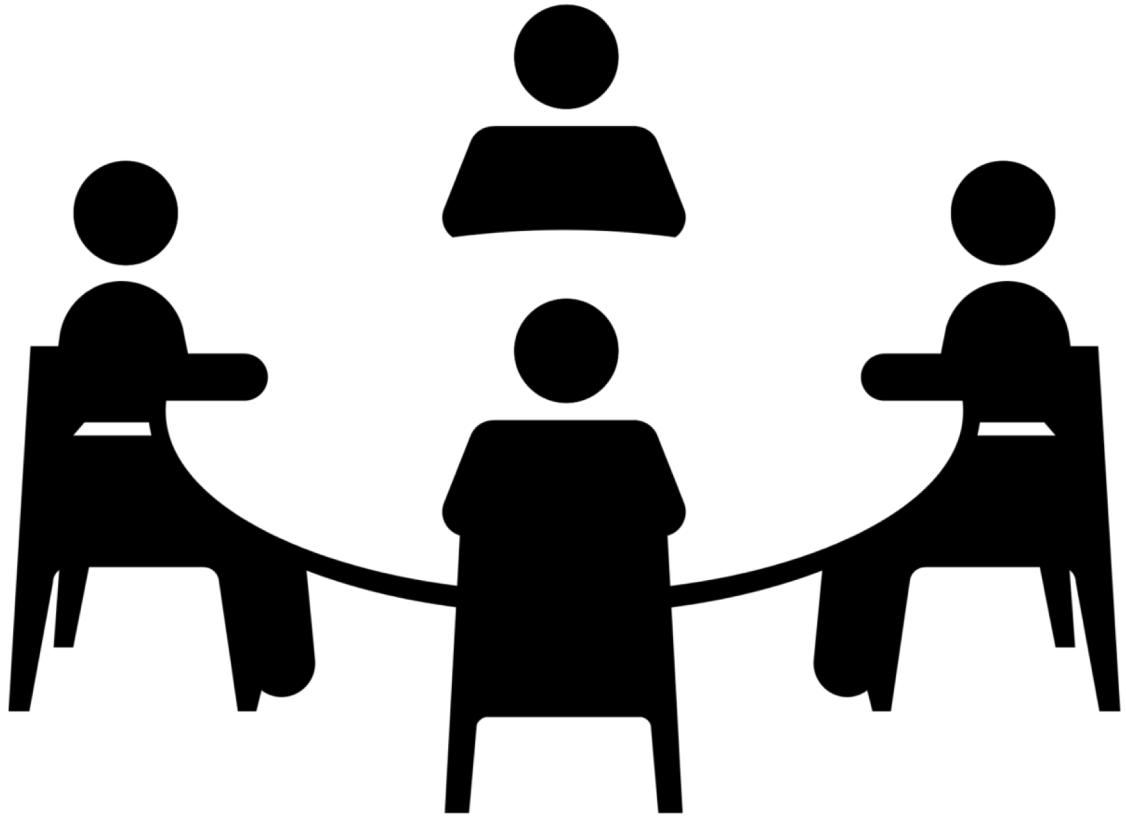
Group Activity



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Activity B

1. Each group will be given an online Padlet board and a particular ALT – e.g. Embedded System.
2. In groups start brainstorming as to possible project ideas for students. Aim for as many ideas as you can.
3. Fill in your ideas on your board – can be text / images etc.
4. Present ideas to the wider group.

https:// pdstlccs.padlet.org/cpd/

Group 1 :	**j937s0io4cn5**
Group 2 :	**53arxaktbfx5**
Group 3 :	**gjqw6kujq34m**
Group 4 :	**7ib54uihkgxq**
Group 5 :	**gfgybasv53z6**
Group 6 :	**4qgxb1unzx18**
Group 7 :	**rhqme64boani**
Group 8 :	**zb19lfnqsua5**

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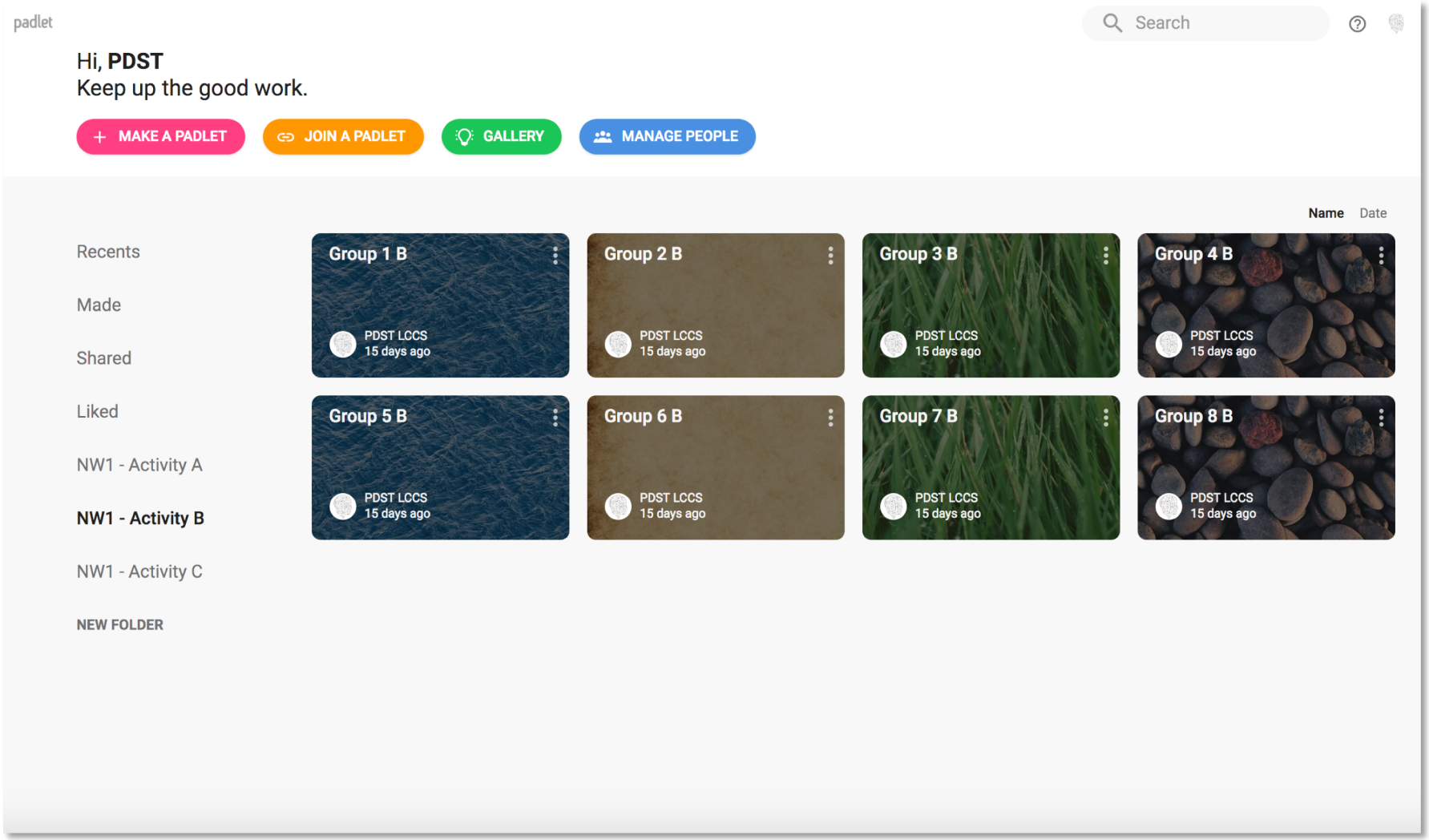

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Activity C

1. Each group will be given an additional Padlet board online.
2. Pick 1 - 2 different ideas from the previous brainstorm.
3. Look again at your idea - this time you will be given some prompt question to consider.
4. Present ideas to the wider group.

https:// pdstlccs.padlet.org/cpd/

Group 1 : **qk3h9ye4jie5**

Group 2 : **n9i73sqvq5nb**

Group 3 : **cklkkwexg3gt**

Group 4 : **mrir62jqkd14**

Group 5 : **mqlshc7tsmpm**

Group 6 : **58ef9fdyhy8g**

Group 7 : **w8zc0q5hwb2x**

Group 8 : **cfqgt3kwbyyr**

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- *What teaching & learning strategies could you use?*
- *How would you assess?*
- *Can it be linked to other parts of the course?*
- *In terms of planning where in the course do you see this ALT fitting in?*

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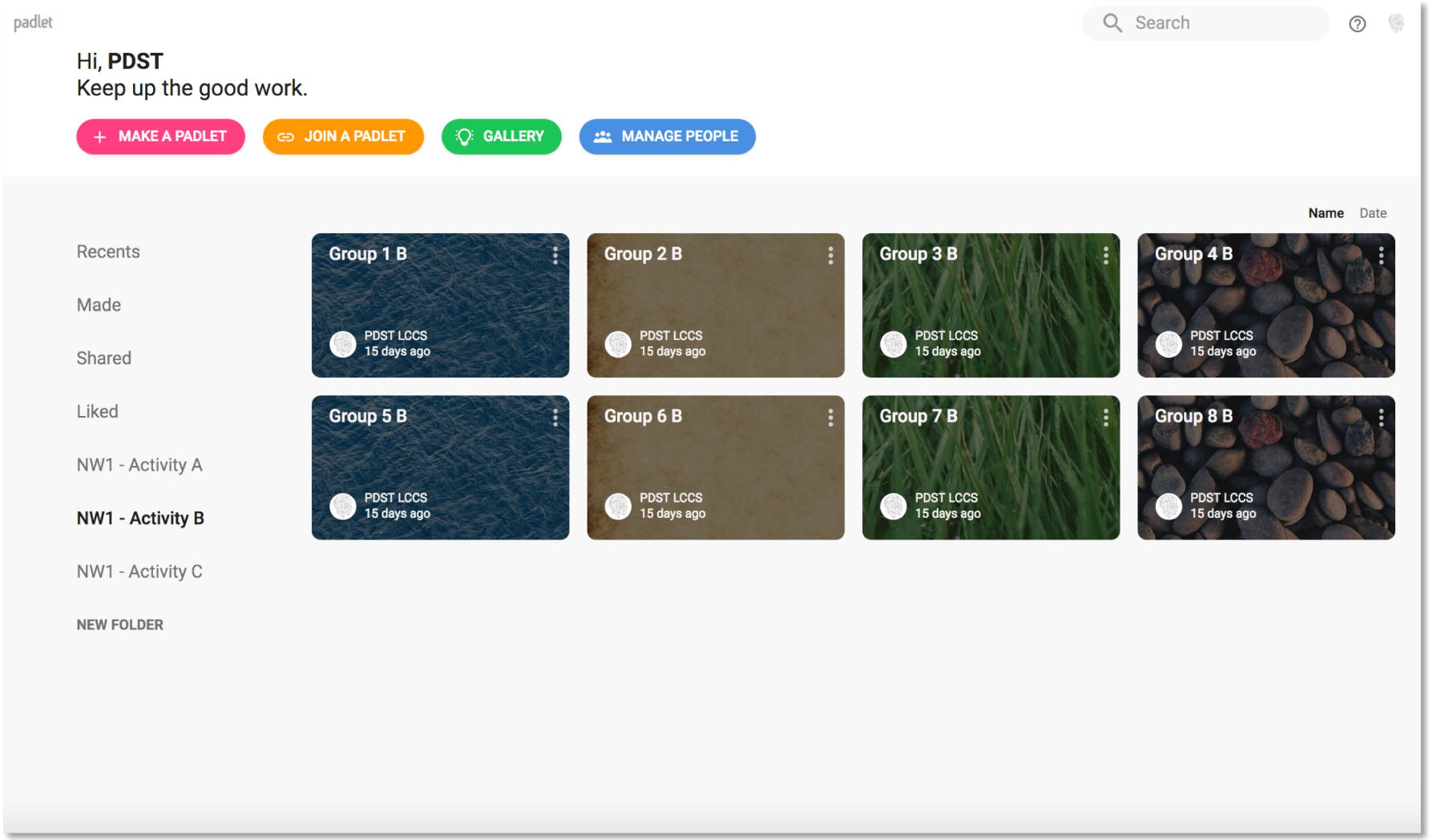

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11.00am - 11.30am
Coffee & Stretch Break

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