Leaving Certificate Applied LCA
ICT Module Descriptors

Participant Workbook - Day 4

LCA

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

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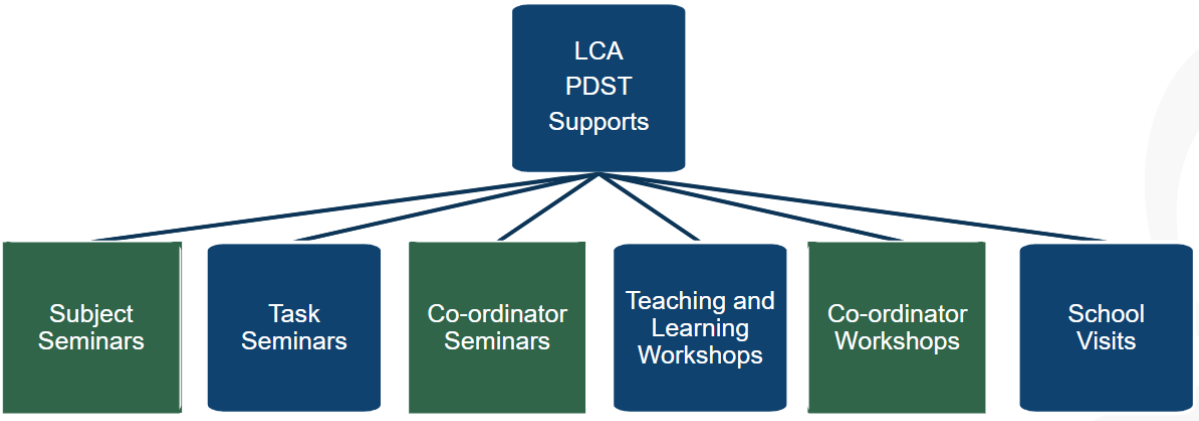
LCA Supports provided by PDST



Key messages

Subjects in LCA are inherently transdisciplinary, authentic and relevant to the current and future needs of all students

LCA courses support the use of a wide range of inclusive, differentiated, experiential teaching and learning approaches

LCA ICT, Mathematical Applications, and English and Communications modules are strategically designed to support one another providing opportunities for rich and integrated learning experiences

Student centred activities should be used to highlight and develop the interdisciplinary nature and functionality of spreadsheets created in ICT with relevance to daily life and throughout other subjects in the the LCA programme

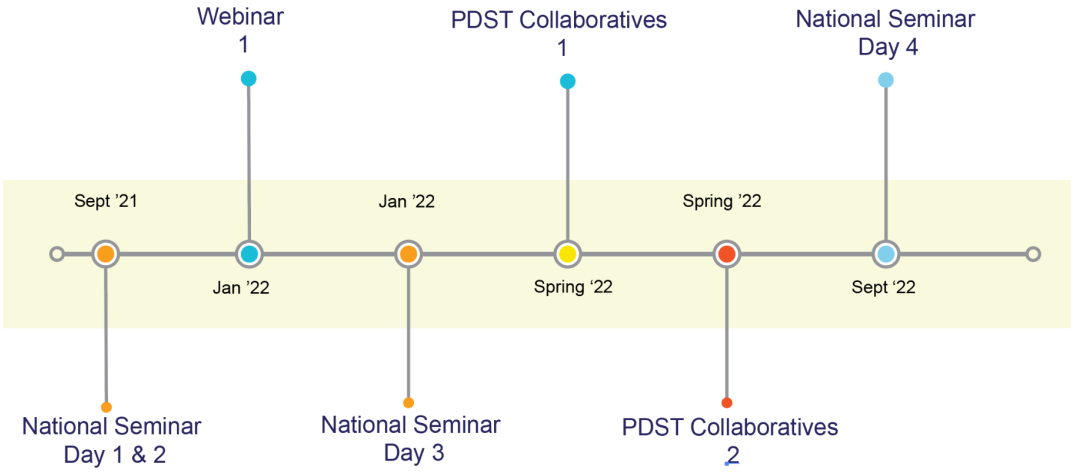
Seminar resources

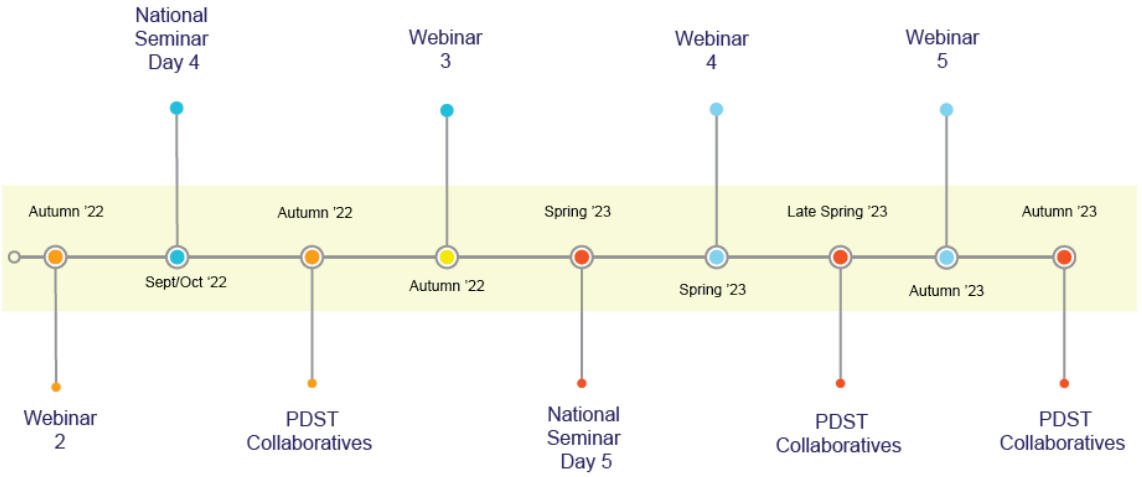
ICT Seminar Day 4 resource page
https://www.pdst.ie/post-primary/lca-day4-ict

ICT Seminar Days 1 - 3 resources
https://www.scoilnet.ie/go-to-post-primary/lca/cpd/

LCA ICT Padlet of resources
https://padlet.com/jasoncotter/emb1guwzcx7ebrlj

CPD for the revised module descriptors

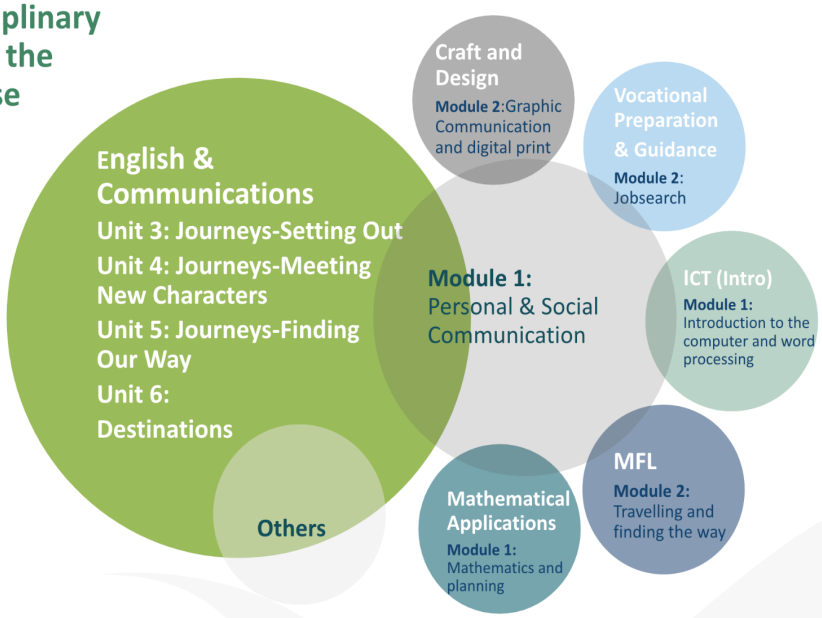




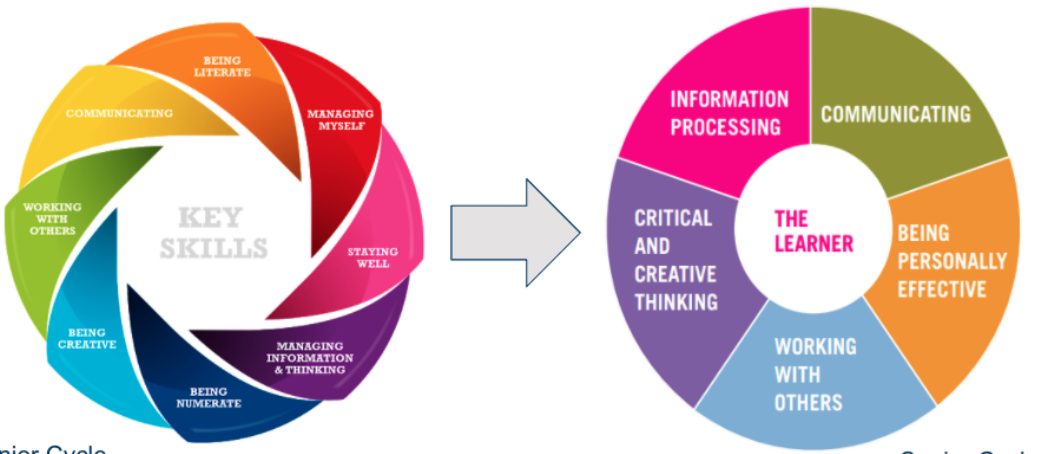
Session 1: 9.30 - 11.00

Reflecting on our learning

Transdisciplinary Nature of the LCA Course



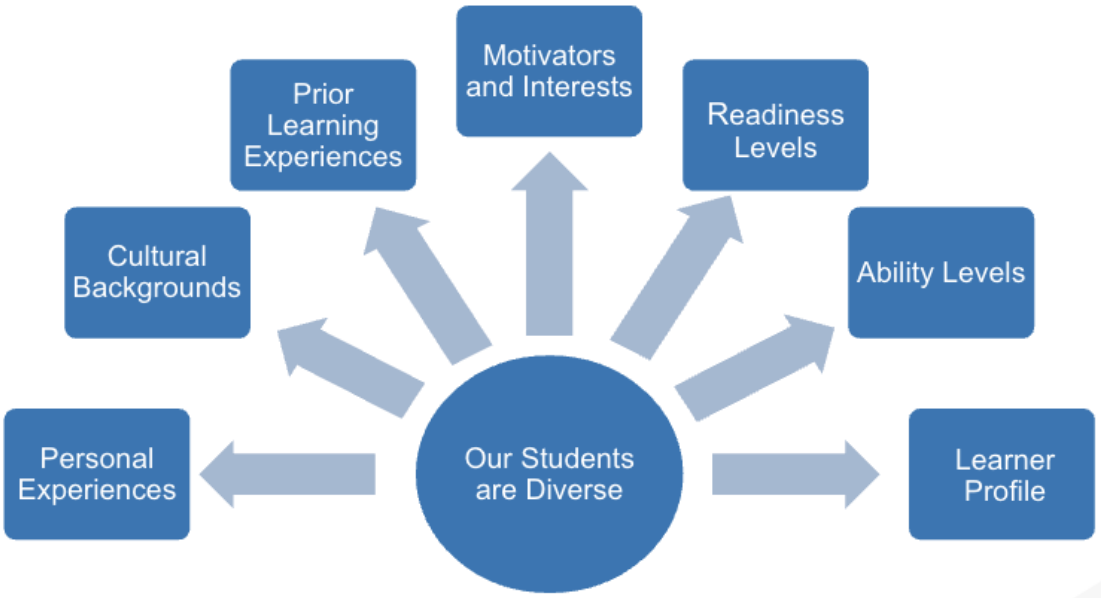
Key Skill Acquisition in ICT Learning Outcomes



Junior Cycle Key Skills

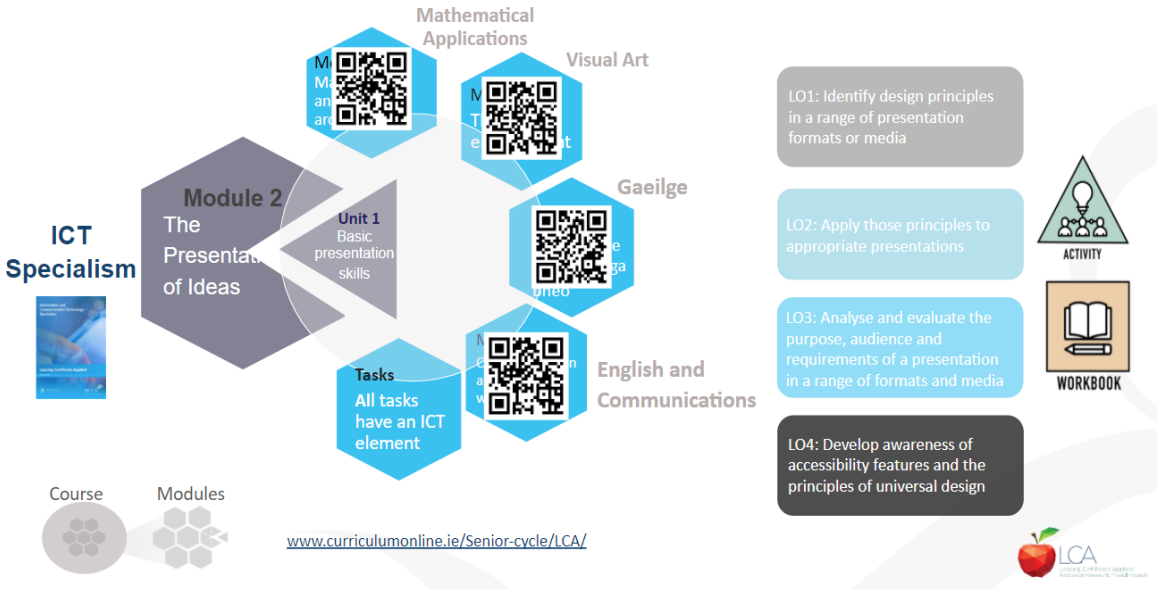
Senior Cycle Key Skills

Differentiation - Consider your Students



Adapted from Tomlinson (2014)

Transdisciplinary Nature of the Learning Outcomes



Designing For All Learners

Podcast

Youtube

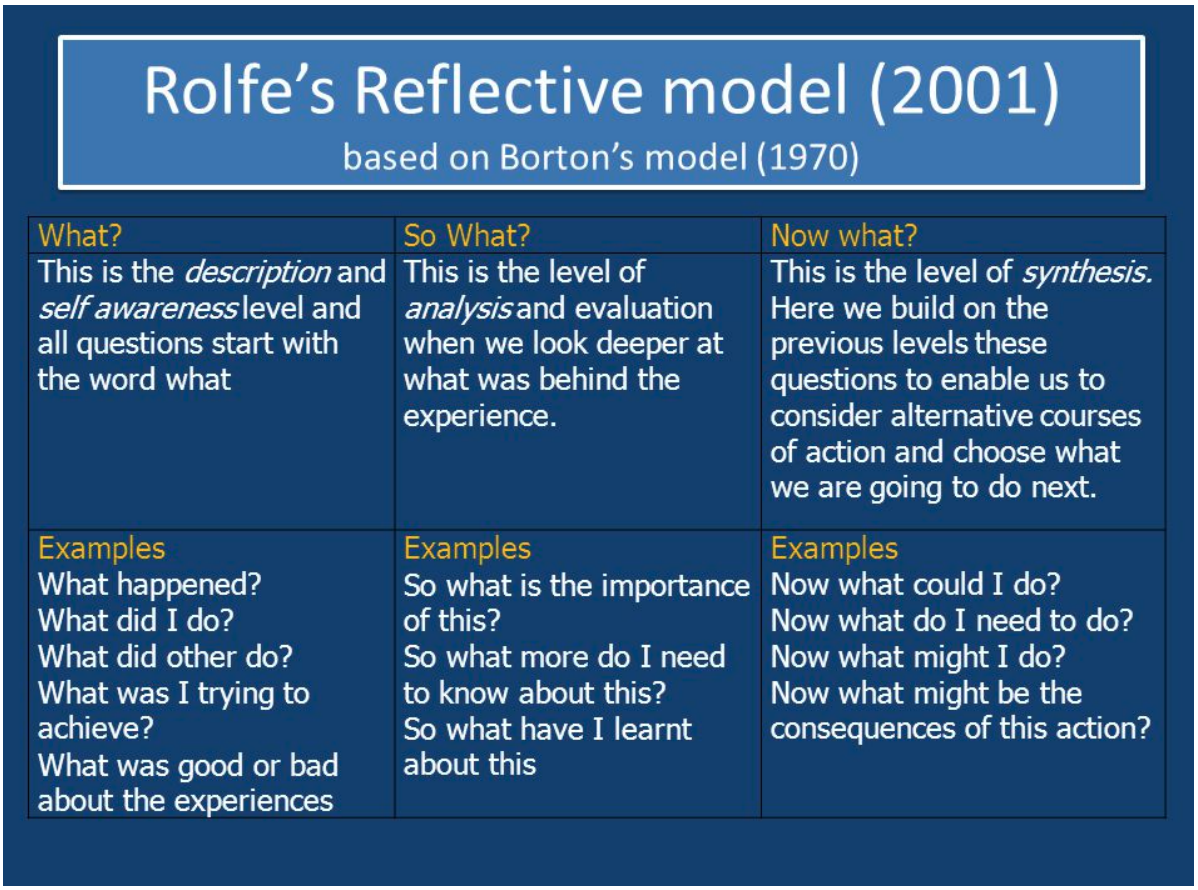
Text document

Five Dimensional Model of Creative Thinking

OECD Publishing

Consider how this model could support your three LCA students achieving the learning outcomes for module two.

Rolfe's Reflective Model



Rolfe's Reflective model (2001)

based on Borton's model (1970)

What?	So What?	Now what?
This is the *description* and *self awareness* level and all questions start with the word what	This is the level of *analysis* and evaluation when we look deeper at what was behind the experience.	This is the level of *synthesis.* Here we build on the previous levels these questions to enable us to consider alternative courses of action and choose what we are going to do next.
Examples What happened? What did I do? What did other do? What was I trying to achieve? What was good or bad about the experiences	Examples So what is the importance of this? So what more do I need to know about this? So what have I learnt about this	Examples Now what could I do? Now what do I need to do? Now what might I do? Now what might be the consequences of this action?

Rolfe, 2001

What

How did this knowledge affect my practice?

What did I do differently in my ICT classroom practice?

What did others do?

What was I trying to achieve?

What was good or bad about the experiences?

So what

So what is the importance of this in my ICT classroom?

So what more do I need to know about this?

So what have I learnt about this?

Now what

Now what could I do in my ICT classroom?

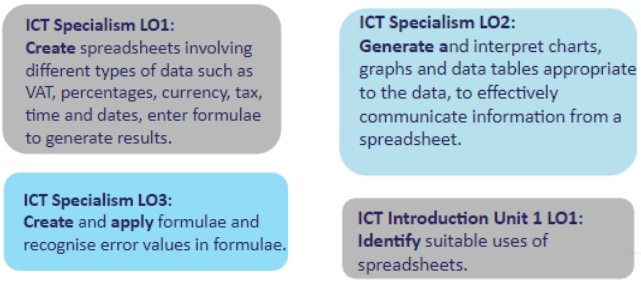
Now what do I need to do?

Now what might I do?

Now what might be the consequences of this action?

Student-centred approach to teaching, learning and assessment

Circle your selected learning outcome(s):



What are the skills needed?

How will you support those skills?

Discuss what are the roles/objectives of the ICT and Mathematical applications teacher.

Who is responsible for which aspects?

Session 2: 11:30 - 1:00

Developing spreadsheet skills

Before exploring your chosen spreadsheet tutorial, circle what you feel is your current level of spreadsheet skills?

Beginner	Intermediate	Advanced

Why?

What did you learn from exploring your chosen spreadsheet tutorial?

Would you consider exploring this tutorial further in the future?

After exploring your chosen spreadsheet tutorial, circle what you feel is your current level of spreadsheet skills?

Beginner	Intermediate	Advanced

Why?

Can you identify opportunities to further develop your spreadsheet skills?

Supporting spreadsheet skill development

What prior knowledge, skills and dispositions from junior cycle could be progressed through the students' engagement with spreadsheets?
What skills do students need to manipulate the tools on spreadsheets?
How do you approach developing your students' spreadsheet skills further?

How will I know my students are developing the necessary skills?
What resources could you use to develop your students' spreadsheet skills and competencies?
Which resources would best suit your LCA students?

Spreadsheet terminology

Key Term	Definition

Using your LCA students life experience to engage with spreadsheets

What profile of students did you focus on?
How would you support your student to effectively engage with the data as a spreadsheet?
How will you approach a spreadsheet as a tool to identify and consider variables?
What are your key takeaways from how your group and groups would approach this activity?

Session 3: 2:00 - 3:30

The backward design process

What do I want the students to know and be able to do?

How do I check what they have learned?

Which learning activites will lead students to the desired result?

Wiggins and McTighe (1998)

By exploring the skills, competencies and prior knowledge needed for students to manipulate and use spreadsheets, we also considered the importance of a student-centred authentic real life approach to learning which encompasses transdisciplinary links to other LCA subjects.

What opportunities does this present for planning for your students?

Planning a unit of learning: Spreadsheets

Before you begin your plan, consider:

Are there links to other LCA subjects?

What do you want your ICT students to learn at this point?

How can you connect this learning to previous key learning?

What skills, values, knowledge and dispositions would you like your ICT students to demonstrate having engaged with these learning outcomes?

This activity can be recorded in images, text, orally or blended

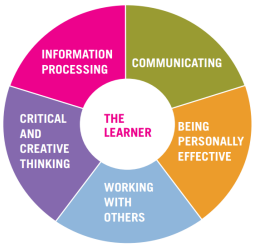
Unit learning outcome(s):
Your three LCA students and class profile
Prior knowledge
Learning activity/activities:

Success criteria:

Transdisciplinary links to other LCA subjects:

Opportunities for effective use of questioning:

Skills activated:



Additional space to record your plan or observations about others plans

Reflecting on today's learning

Key Message 1,
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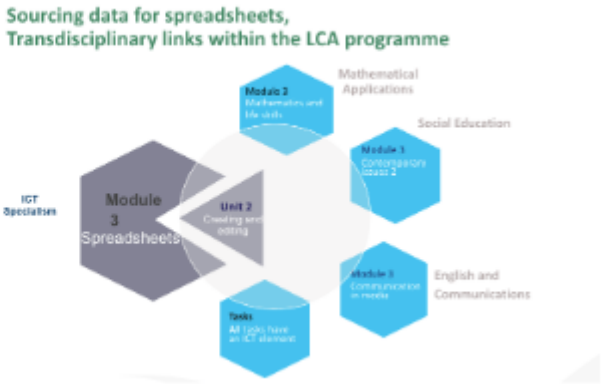

What new learning have I come to?
What are the implications for my teaching?
What will I do differently to maximise learning for ALL learners in my class?

Key message 2

LCA courses support the use of a wide range of inclusive, differentiated, experiential teaching and learning approaches.

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Key message 3

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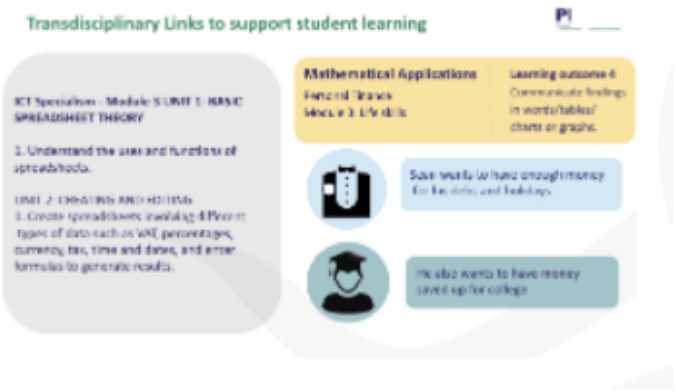

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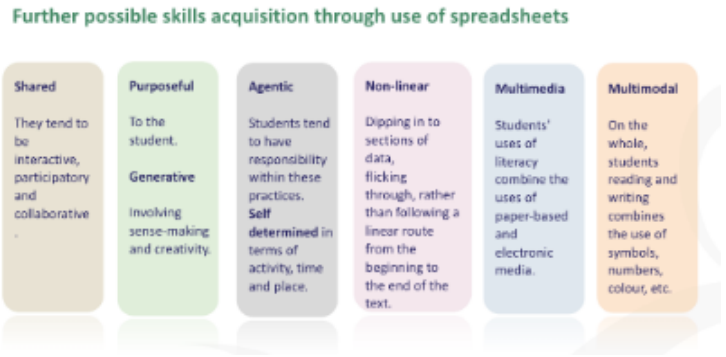
Key message 4
Students centred activities should be used to highlight and develop the interdisciplinary nature and functionality of spreadsheets created in ICT with relevance to daily life and throughout other subjects in the the LCA programme.



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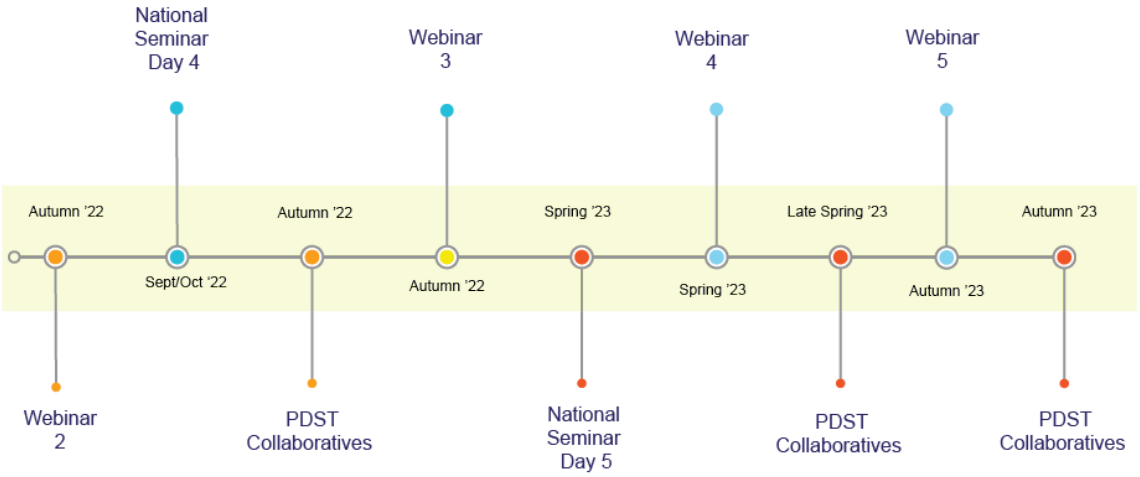

Useful websites

https://tinyurl.com/LCAICTRESOURCES

https://teachercpd.ie/

https://www.pdsttechnologyineducation.ie/en/Training/Courses/Introduction-to-Digital-Portfolios-Post-Primary.html

https://www.pdst.ie/DistanceLearning/DigTech

https://events-emea4.adobeconnect.com/content/connect/c1/4712923634/en/events/catalog.html?folder-id=5858033856&from-origin=ncse.adobeconnect.com

https://www.w3schools.com/EXCEL/index.php

https://www.analyticsvidhya.com/blog/2016/12/cheatsheet-excel-functions-keyboard-shortcuts/

https://www.sli.do/

https://www.mentimeter.com/

https://education.ec.europa.eu/focus-topics/digital-education/about/digital-education-action-plan

https://www.scoilnet.ie/

http://www.teach-ict.com/gcse_new/spreadsheets/spreadsheets/home_spreadsheets.htm

http://www.teach-ict.com/gcse_new/spreadsheets/formula_function/home_formula_functions.htm

https://sites.google.com/pdst.ie/digitalportfolios/home?authuser=0

https://www.digitaltechnologieshub.edu.au/search/?keywords=spreadsheets&p=1&items=8

Notes

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

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An Roinn Oideachais
Department of Education

Dublin West Education Centre
Ionad Oideachais Bhaile Átha Cliath Thiar

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