Oide

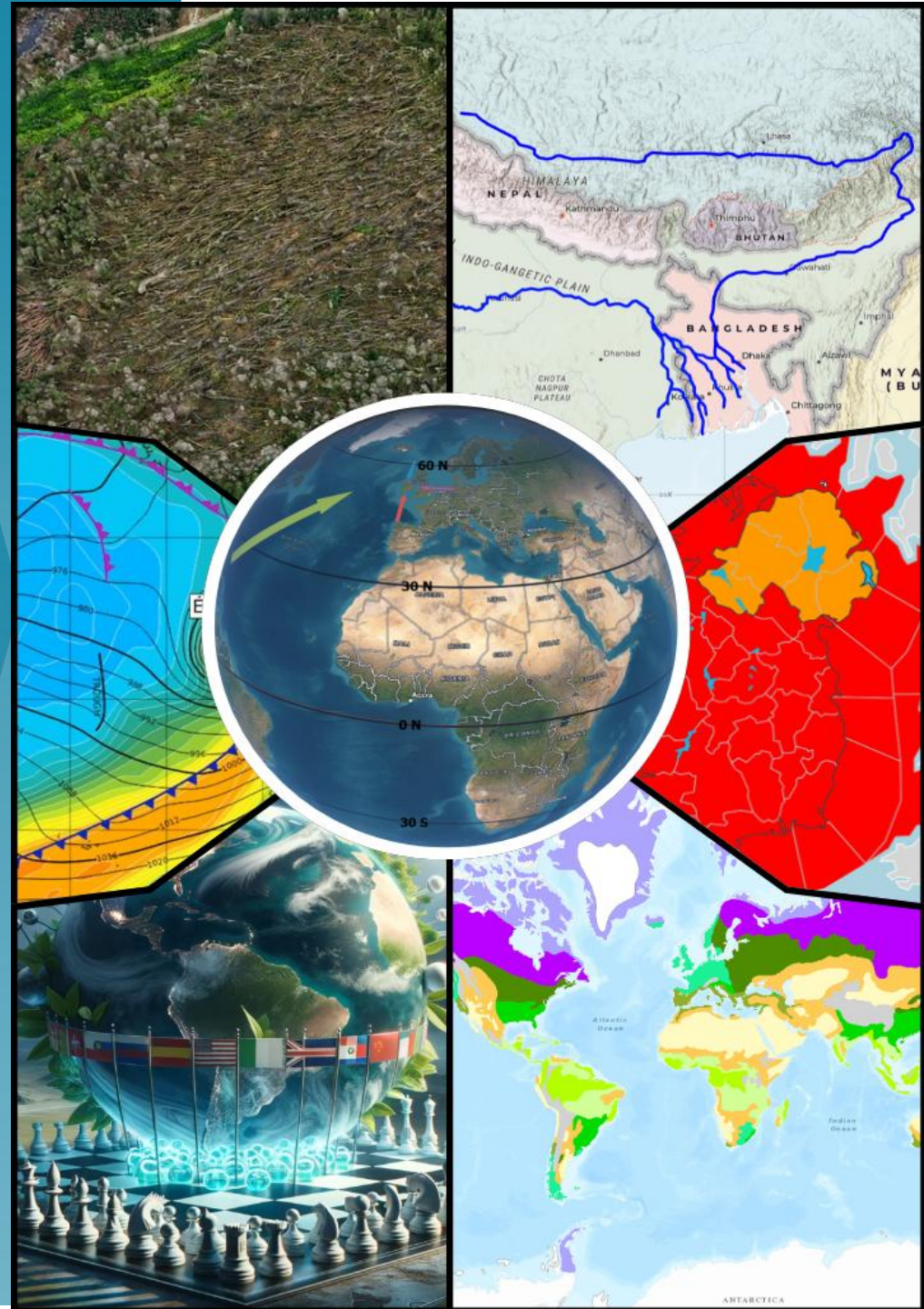
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Supporting the Professional Learning of School Leaders and Teachers

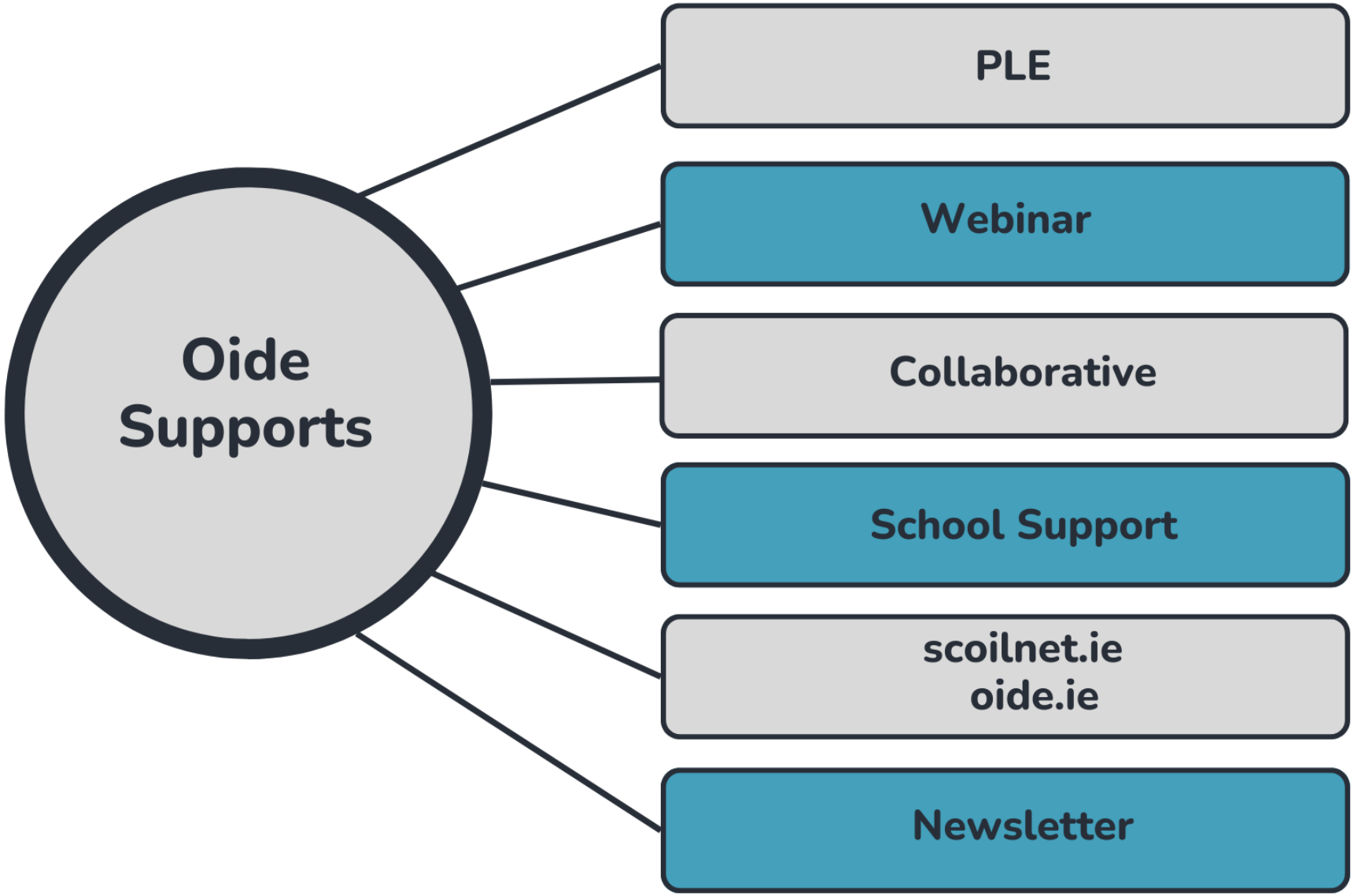
Ask, Explore, Discover inquiry-based Learning

Leaving Certificate Geography PLE 2

2026-2027



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Oide Supports
PLE
Webinar
Collaborative
School Support
scoilnet.ie
oide.ie
Newsletter



Activity



Watch/Observe



Feedback



Reflection



Modelling

Overview of the Day

Session	Time	Content
Session 1	**09:15 – 11:00**	• Using practical, hands-on stations to model inquiry-based learning that inspires curiosity and supports student-driven thinking
Break	**11:00 – 11:15**	
Session 2	**11:20 – 13:00**	• Supporting students in developing effective inquiry questions and research skills to deepen geographical thinking • Investigating the impacts of and responses to climate change through inquiry-based learning
Lunch	**13:00 – 14:00**	
Session 3	**14:00 – 15:45**	• Fieldwork • Collaboratively planning a Unit of Learning

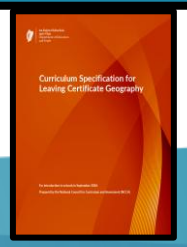
Key Messages

"Developing students' skills and competencies in class deepens their engagement with the Applied Geography Project (AAC) and supports successful completion."

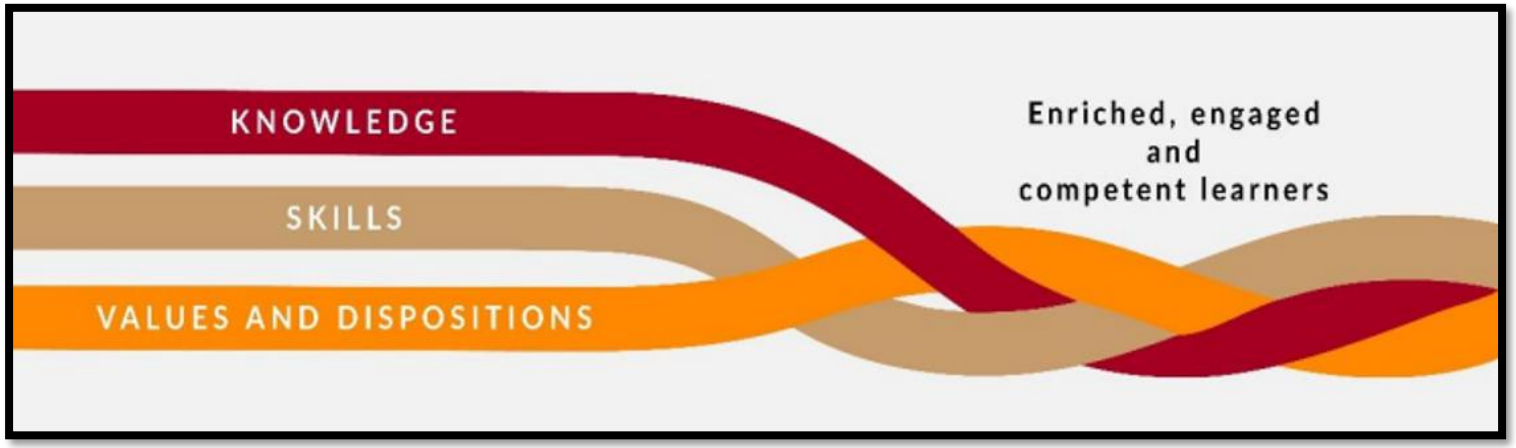
"Learning and teaching approaches that support students to plan, carry out, analyse, evaluate and communicate geographical inquiries will be utilised throughout."

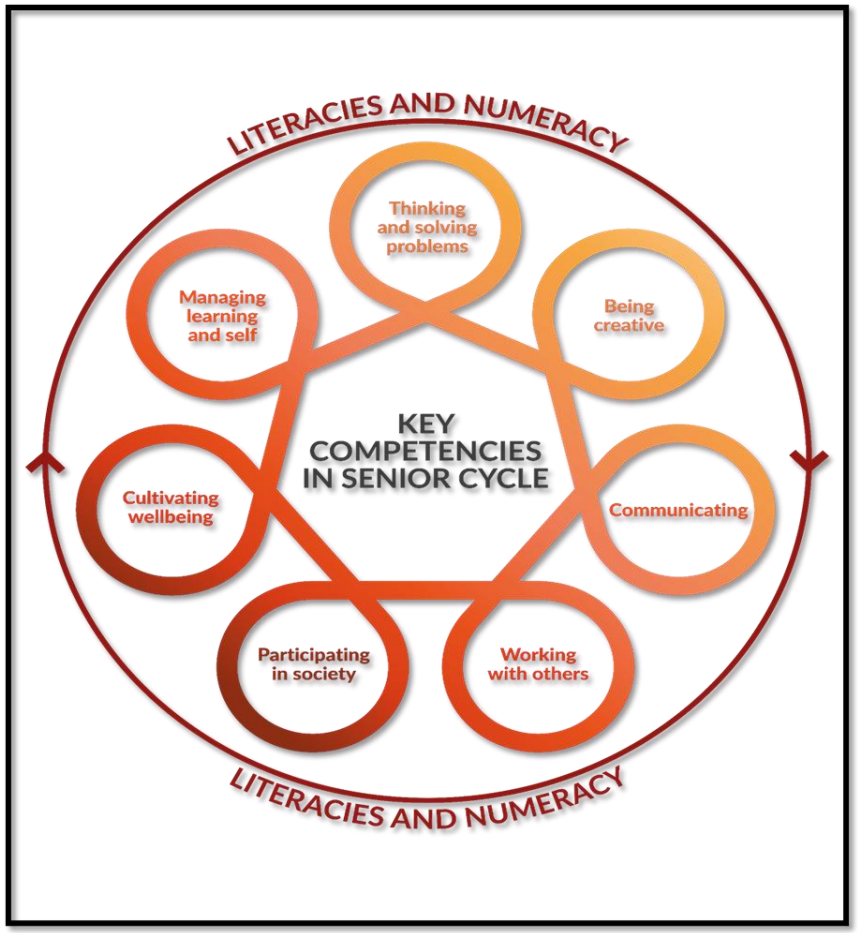
"through these practical experiences, abstract concepts will become more tangible, and students will deepen their capacity to employ geographical thinking and skills when considering geographical challenges and responses."

P.21

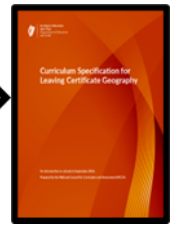


Senior Cycle Key Competencies





P. 7&8



Oide

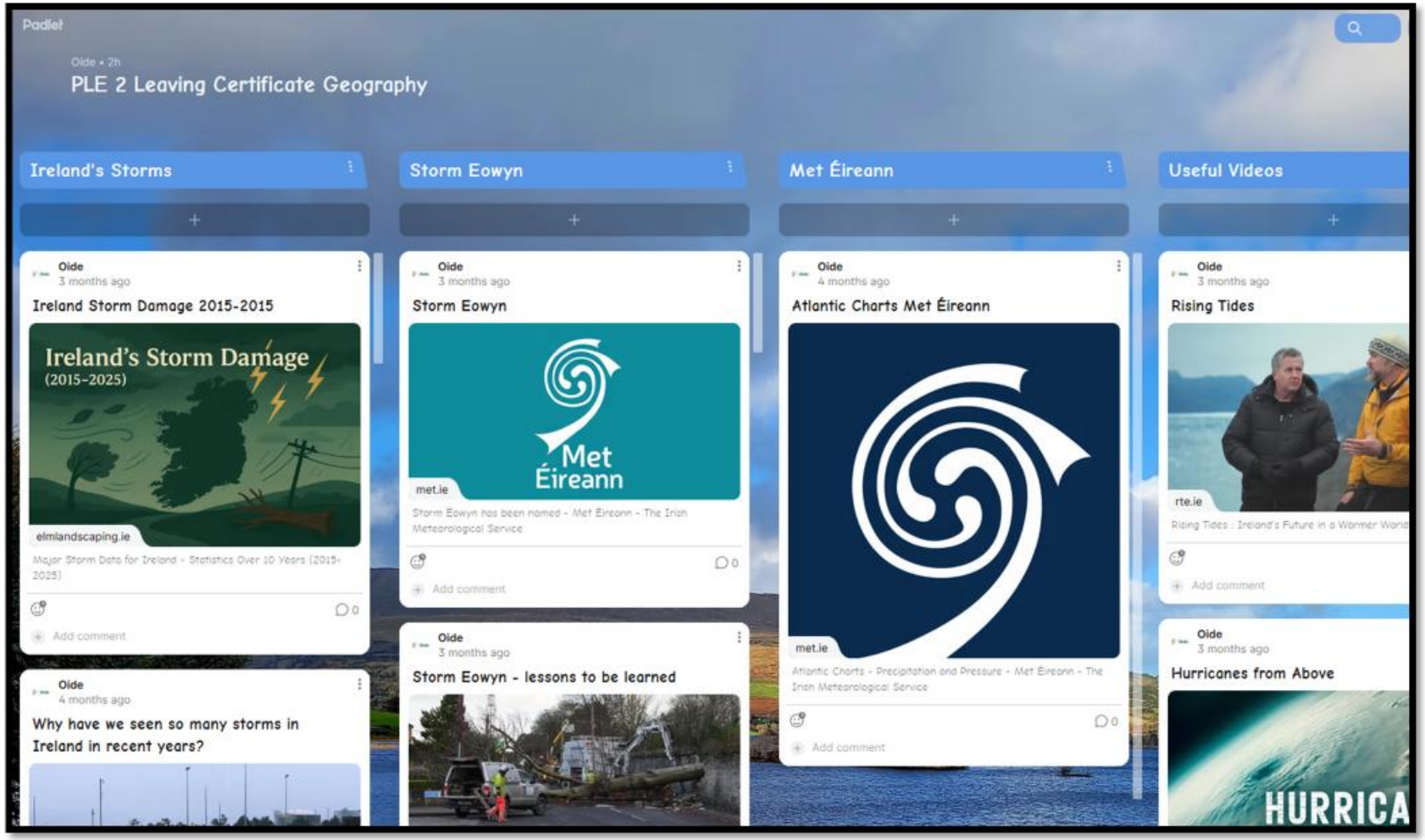
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Supporting the Professional Learning of School Leaders and Teachers

Session 1

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Padlet of Resources



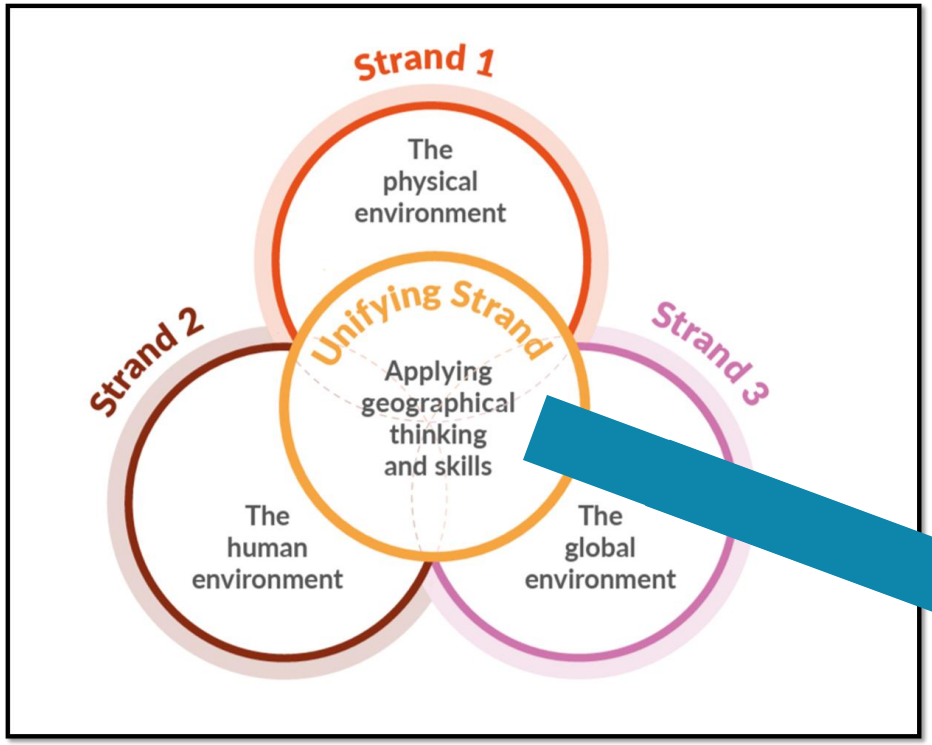
https://tinyurl.com/Padlet-PLE-2

The integration and application of the learning outlined in the Unifying Strand throughout their study of Leaving Certificate Geography means that students have frequent opportunities to develop knowledge, skills, values and dispositions relevant for the completion of the Applied Geography Project.

(Guidelines to support the Applied Geography Project, 2025, pg. 3)

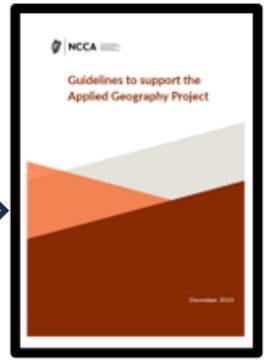


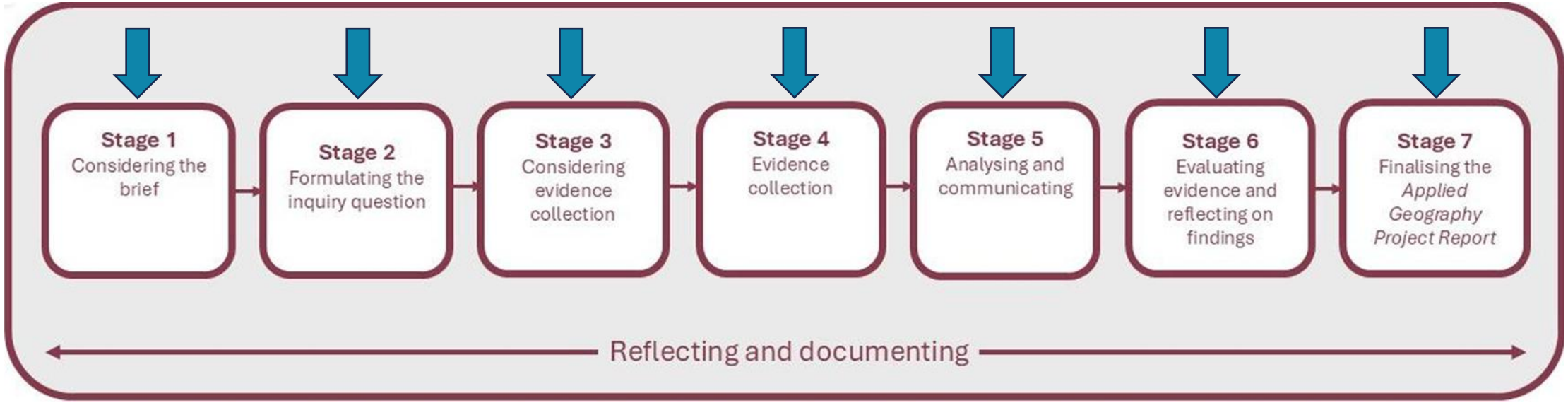
Stages of the Applied Geography Project



Unifying strand

P. 2





Oide

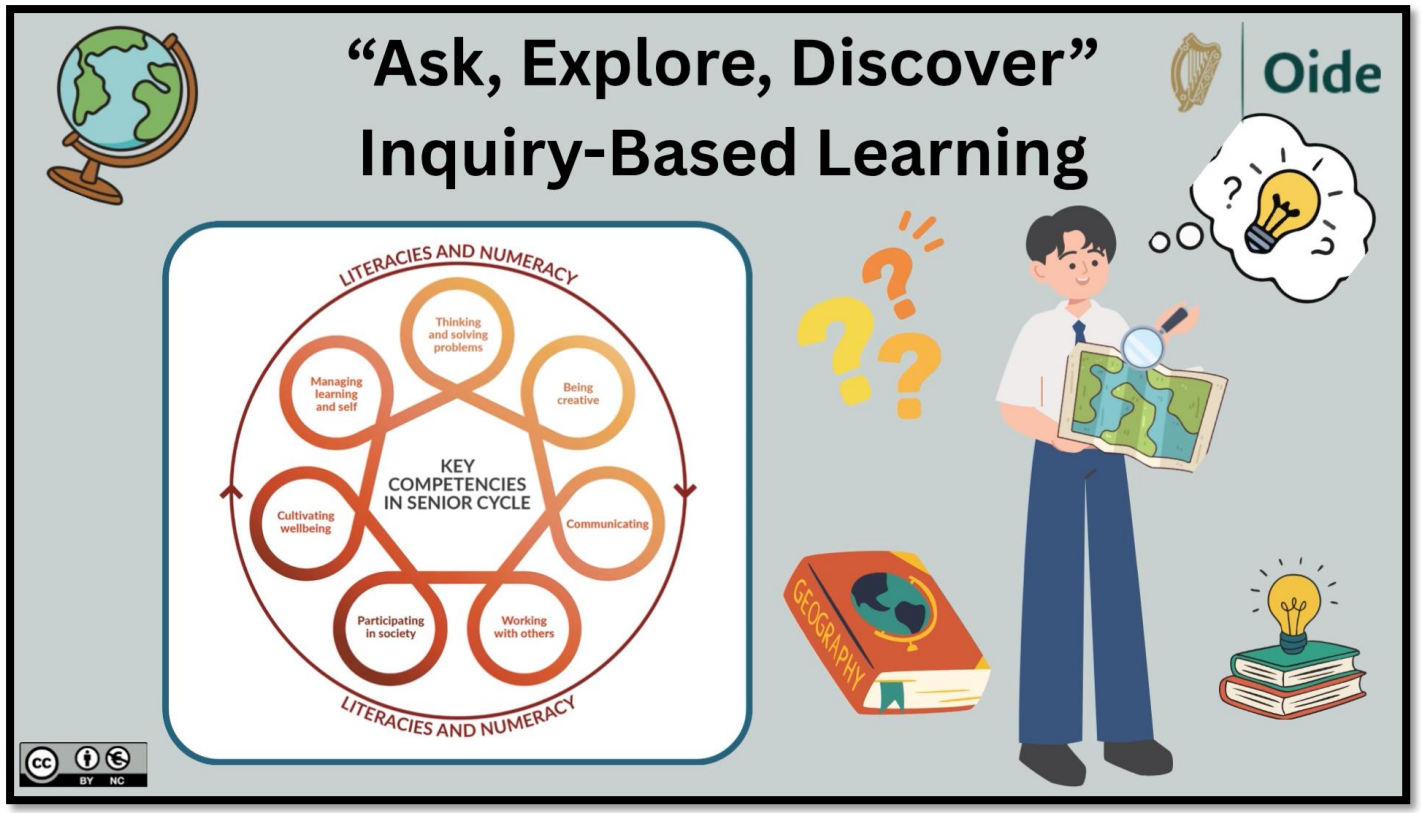
"Inquiry is question driven. It encourages curiosity and a questioning approach to knowledge."



Margaret Roberts

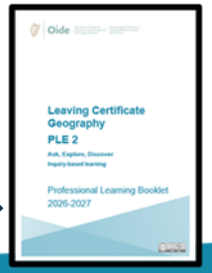
Geographical Association

Consider the question as you watch the Video



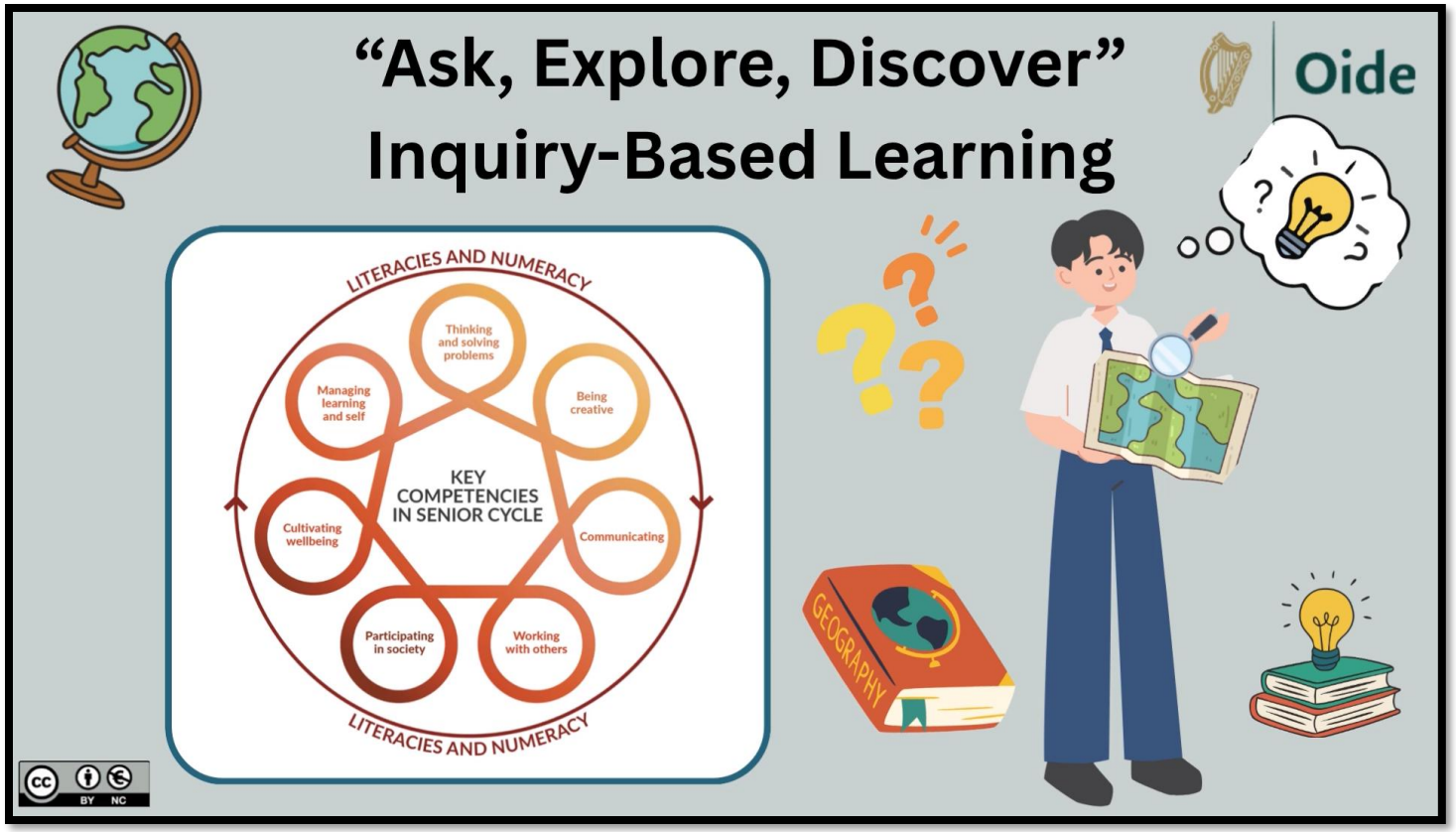


How does an inquiry-based approach shift the role of the teacher and the learner in the geography classroom?



P.4

“Ask, Explore, Discover”
Inquiry-Based Learning





How does an inquiry-based approach shift the role of the teacher and the learner in the geography classroom?

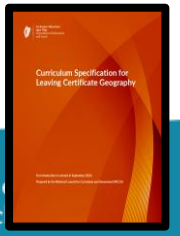


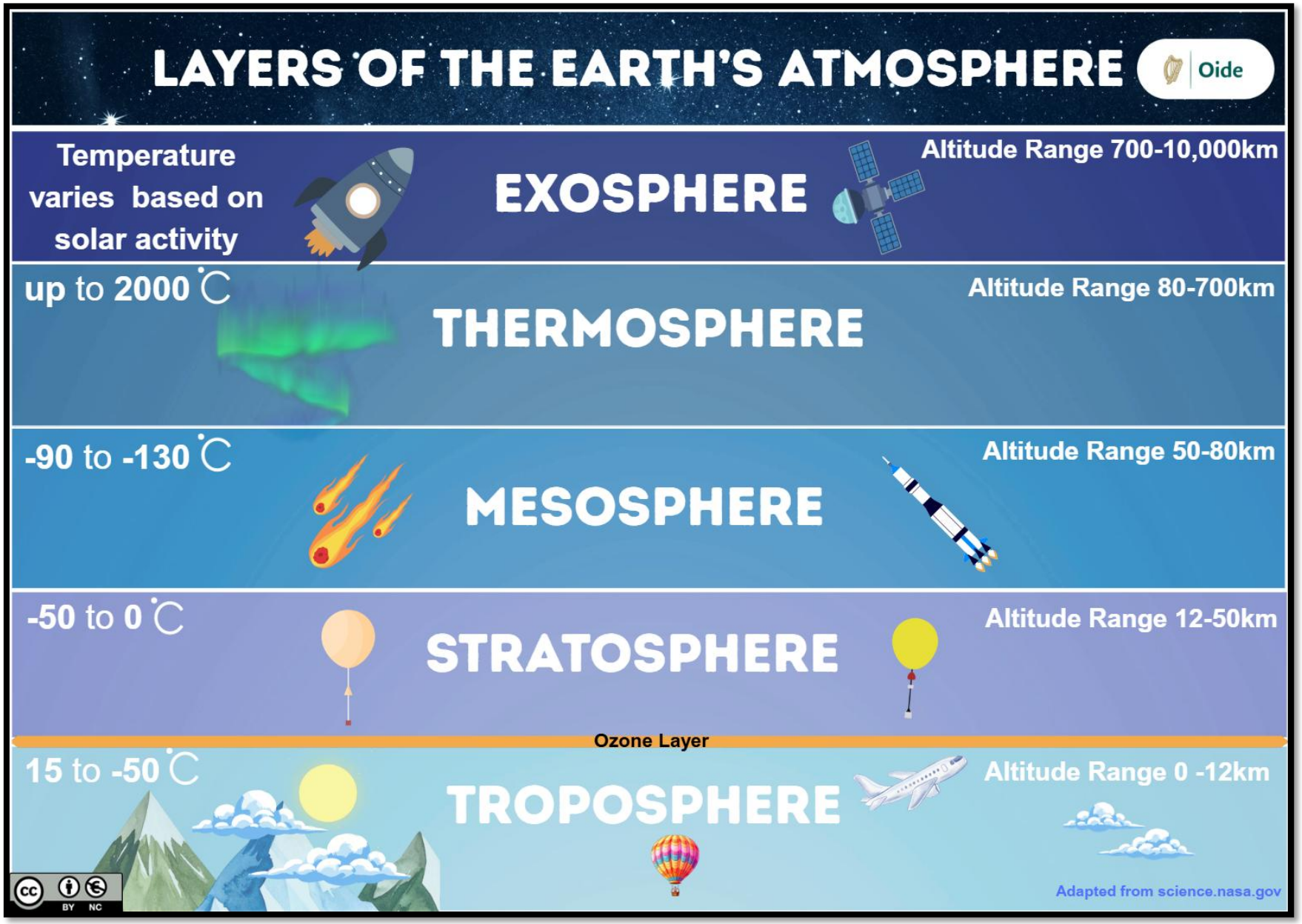
Learning outcome 1.10

Students learn about	Students should be able to
Atmosphere and weather • the five layers (troposphere, stratosphere, mesosphere, thermosphere, exosphere)	1.10 describe the layered structure of the Earth's atmosphere

Describe	develop a detailed picture or image of, for example, a structure or a process, using words or diagrams where appropriate; produce a plan, simulation or model

P.15





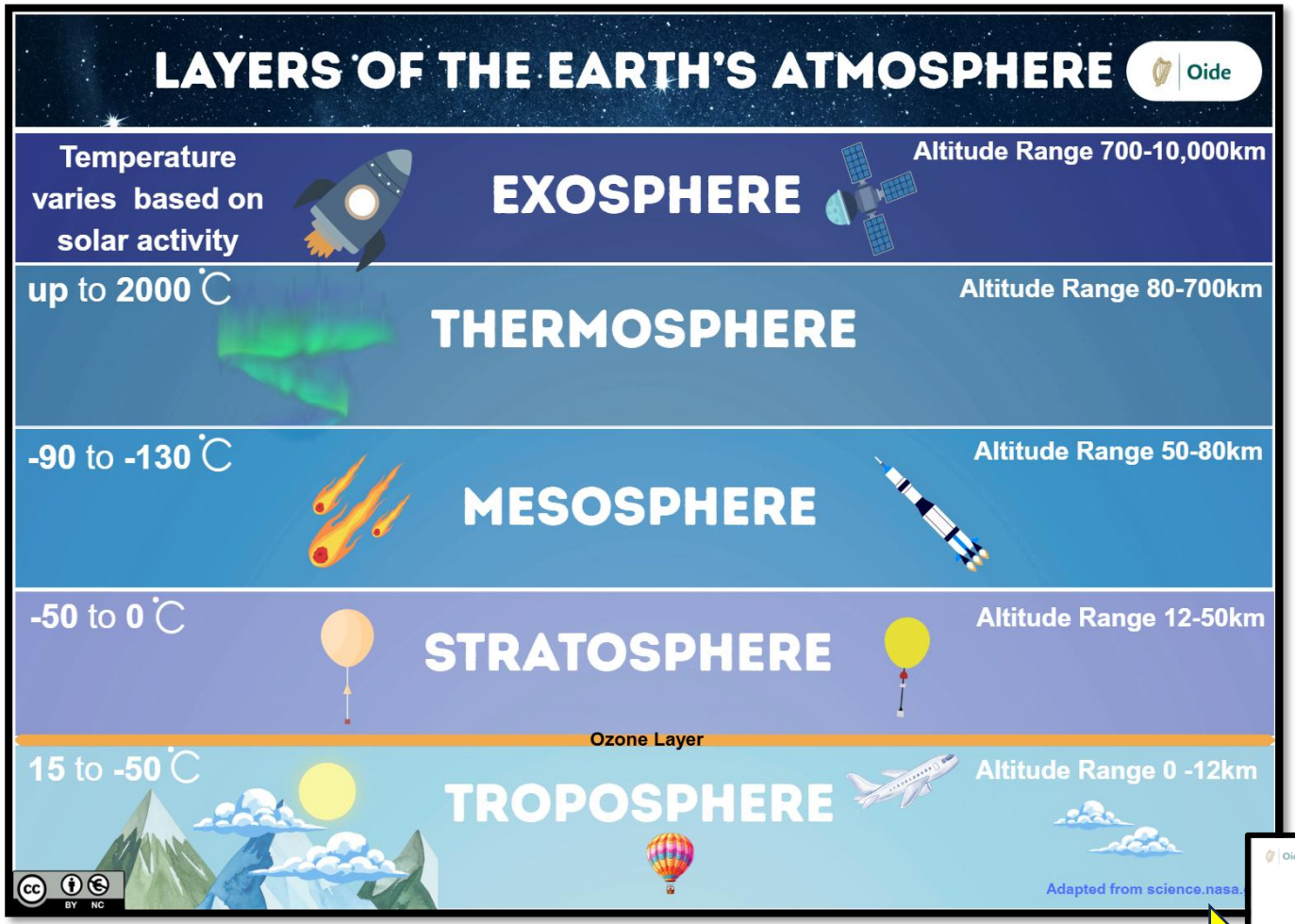
Oide

LO 1.10

Describe the layered structure of the Earth's atmosphere

U7

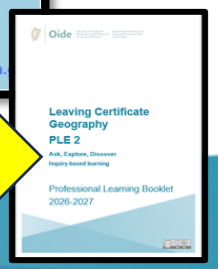
Activity 1:
Consider, Collaborate & Communicate



Consider five key points or statements that best describe the troposphere, using the on-screen image and the following prompts:

1. Troposphere location
2. Temperature range
3. Altitude range





P.17



Describe the Troposphere

Consider:

- **Position in relation to other layers**
- **Altitude**
- Substances, Contents
- **Temperature**
- Air density
- High and low pressure systems



Geographical data and information including

- primary and secondary data
- qualitative and quantitative data
- different types of images
- aerial photographs and satellite imagery
- different types of maps at a variety of scales
- geospatial datasets
- graphs, charts and statistics

U7

Analyse and synthesise geographical data and information from a range of appropriate sources

Follow-on Activity



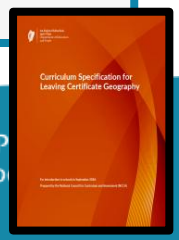
Learning Outcome 1.11

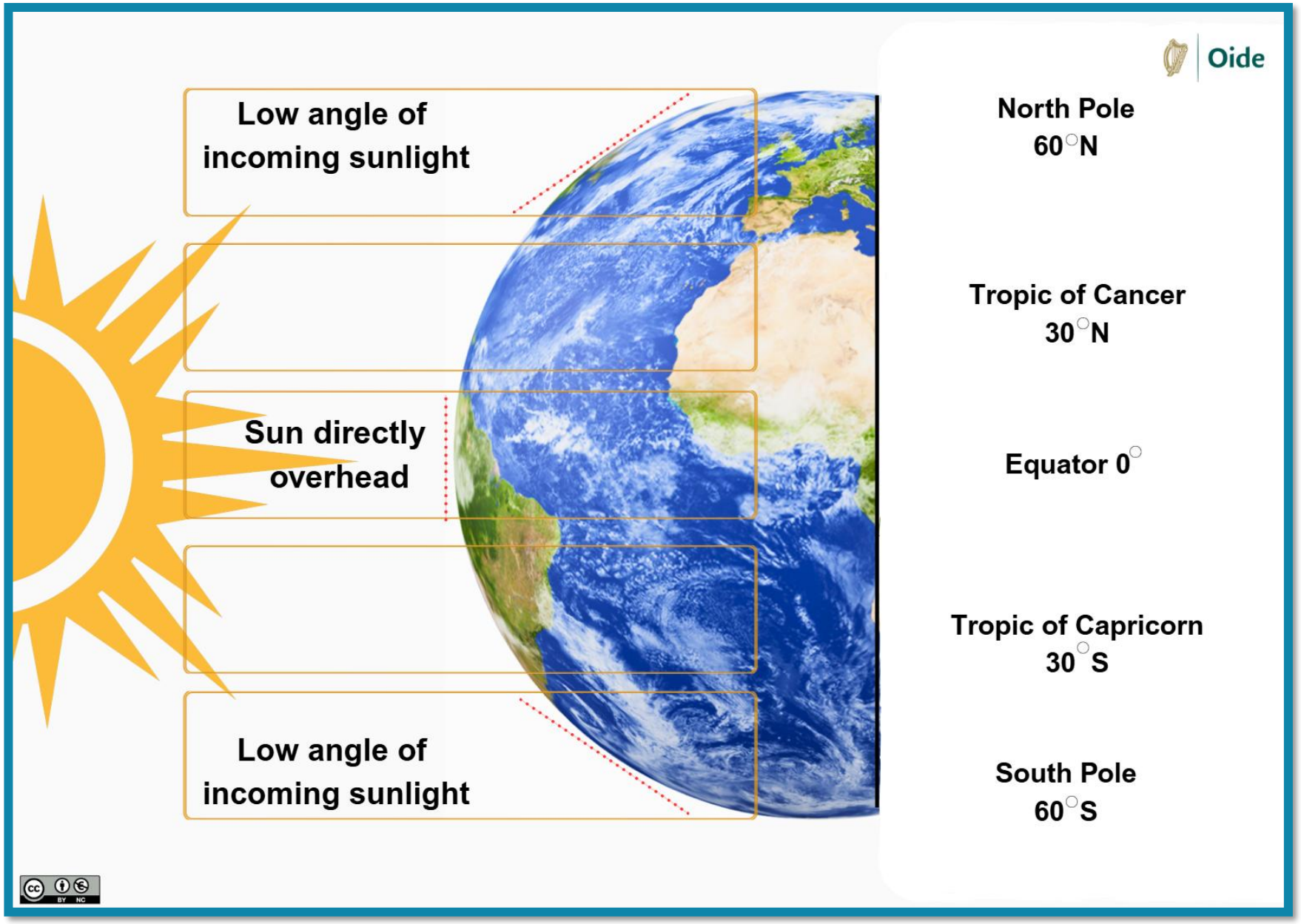
Students learn about	Students should be able to

• the formation of high- and low-pressure systems (including storms):
  • uneven distribution of solar radiation
  • global atmospheric circulation and Coriolis effect
• the characteristics of high- and low-pressure systems: temperature, precipitation, and wind
	1.11 analyse the formation and characteristics of high- and low-pressure systems impacting on Ireland

Analyse	study or examine something in detail, break down in order to bring out the essential elements or structure; identify parts and relationships, and to interpret information to reach conclusions

P.15

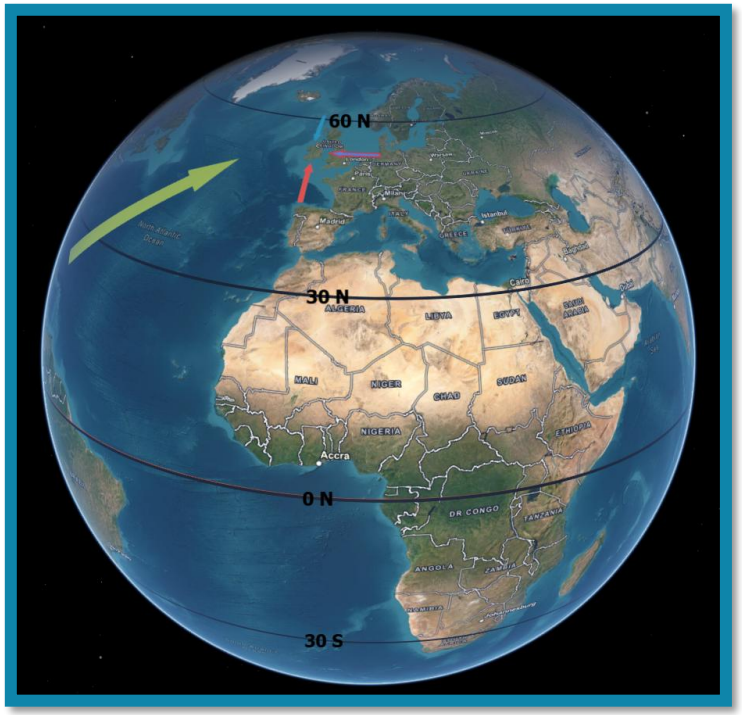




Uneven Distribution of Solar Radiation

Individual Activity

Atmosphere, Weather and Climate 3D Globe



Analyse the formation and characteristics of high and low-pressure systems impacting on Ireland, using the 3D ArcGIS Globe

U9

https://tinyurl.com/Weather-and-Climate-3d-Globe

U9

- Communication formats including maps, charts, sketches, diagrams, statistics, geospatial datasets
- Ethical considerations including cultural awareness

Communicate geographical understandings results, conclusions and recommendations effectively and ethically.

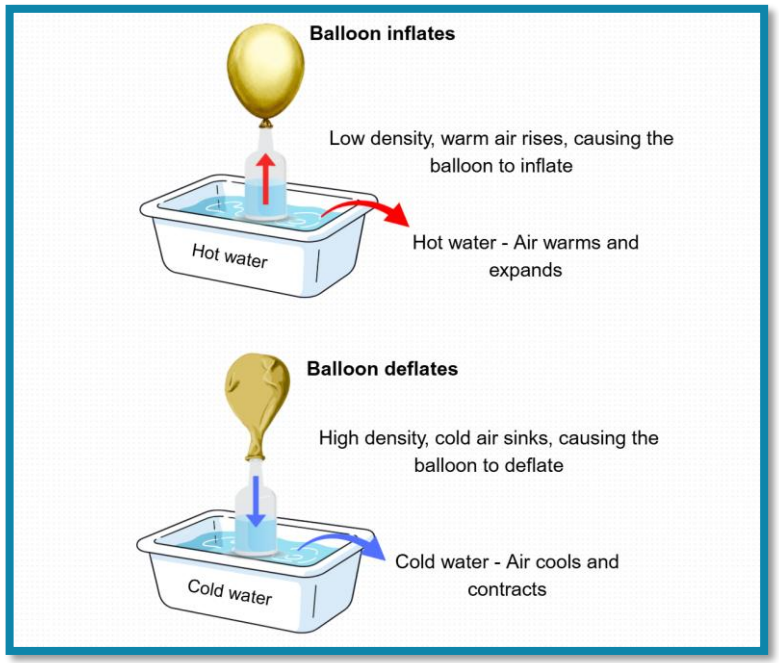
Follow-on Activity



Activity 2

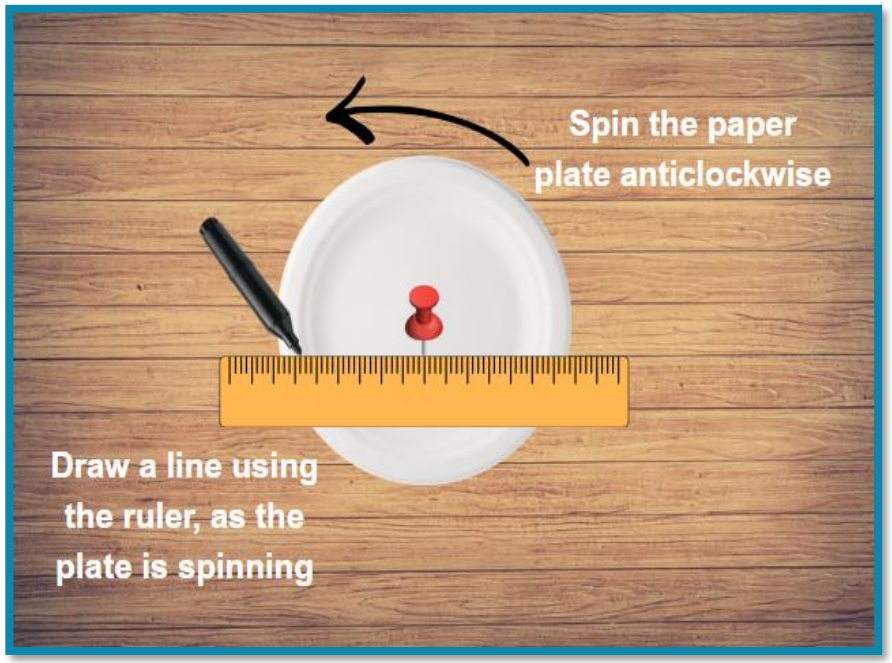
Station 1

Atmospheric Pressure



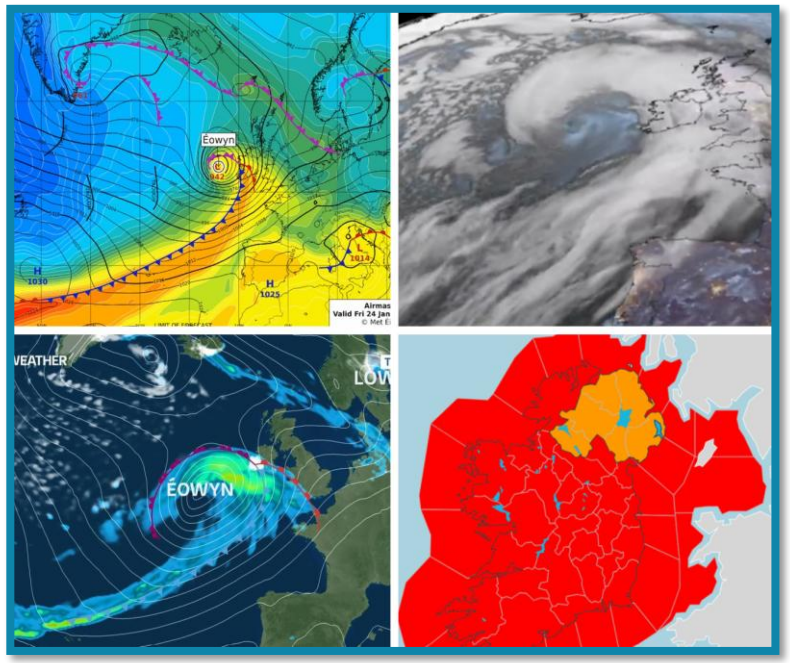
Station 2

Coriolis Effect



Station 3

Storm Éowyn



Station 1

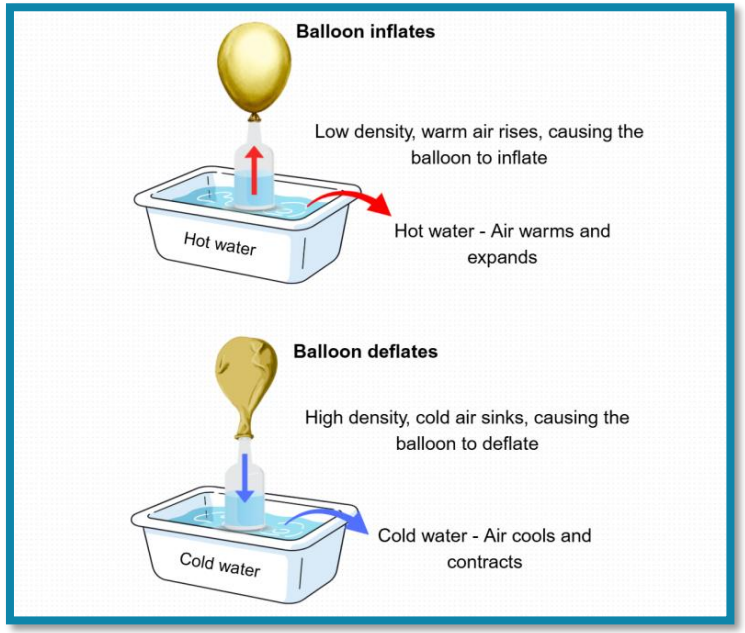
Explore how temperature influences air density and atmospheric pressure systems.

Observe → Ask → Explore→ Discover

Unifying Strand Focus

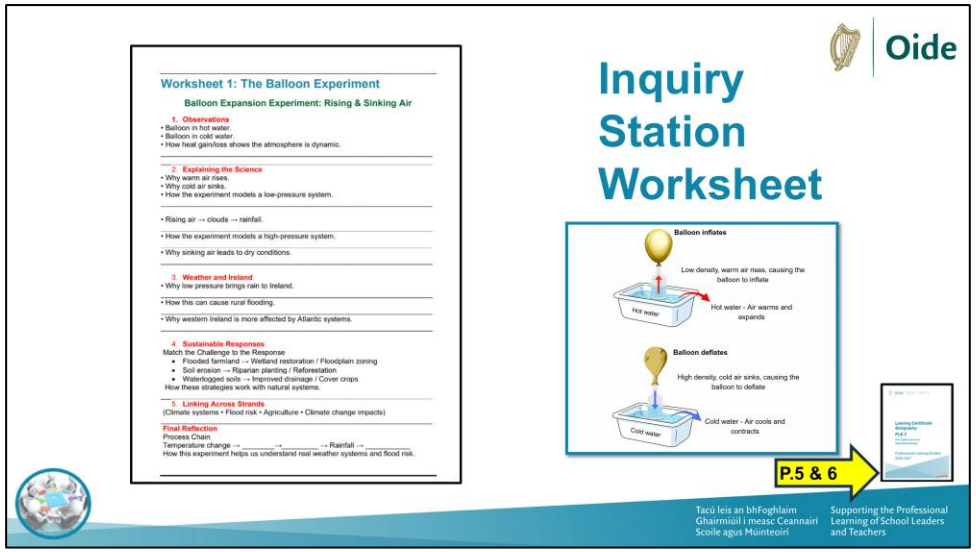
U3

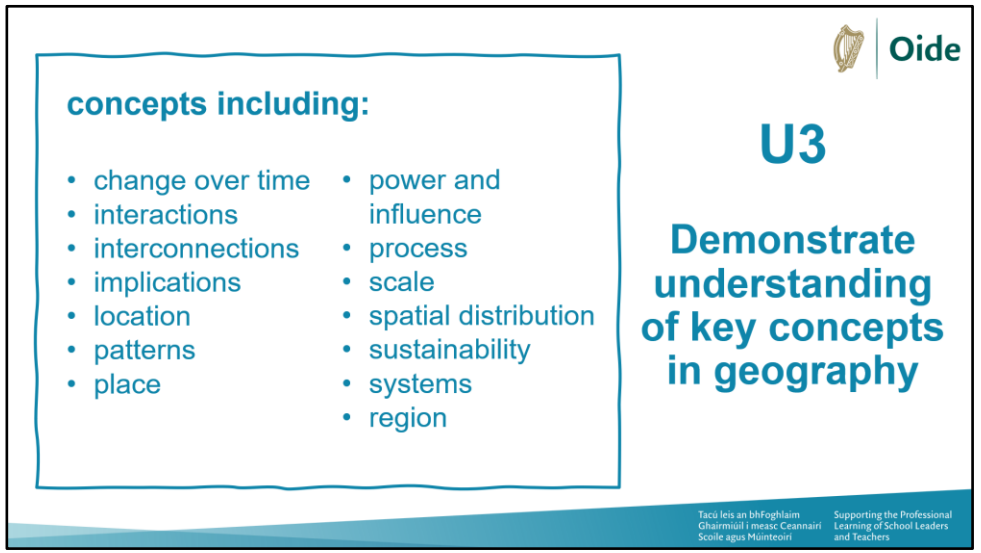


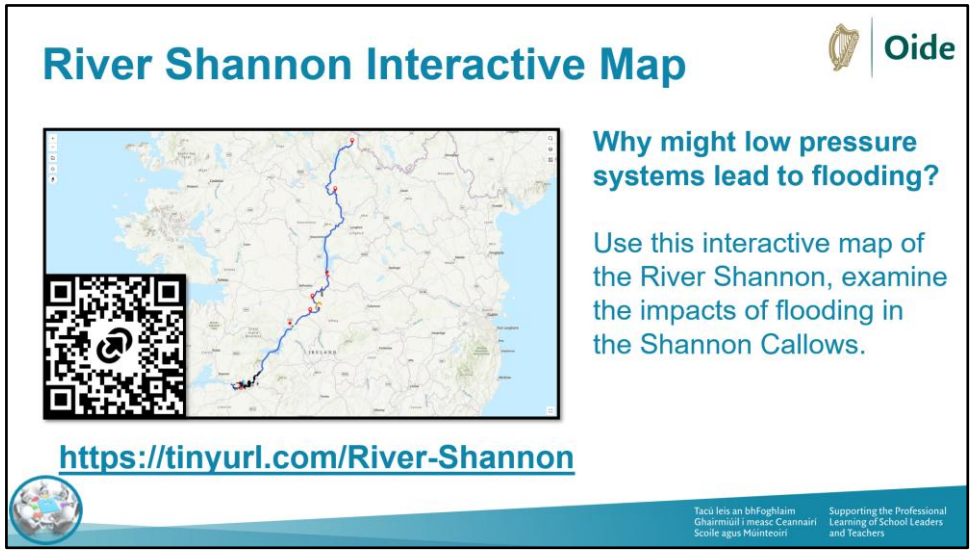




Station 1 Layout









Station 2

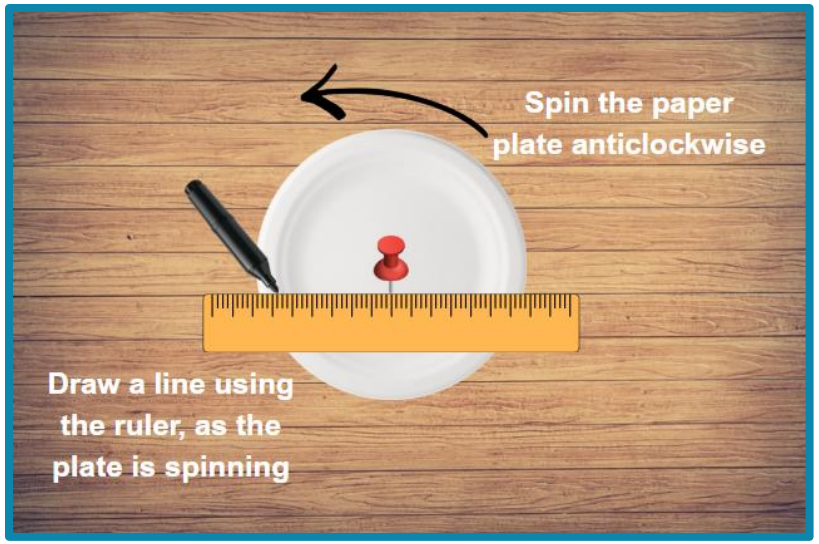
Oide

Explore how the Earth's rotation affects the movement of air masses and weather systems – The Coriolis Effect

Observe → Ask → Explore→ Discover

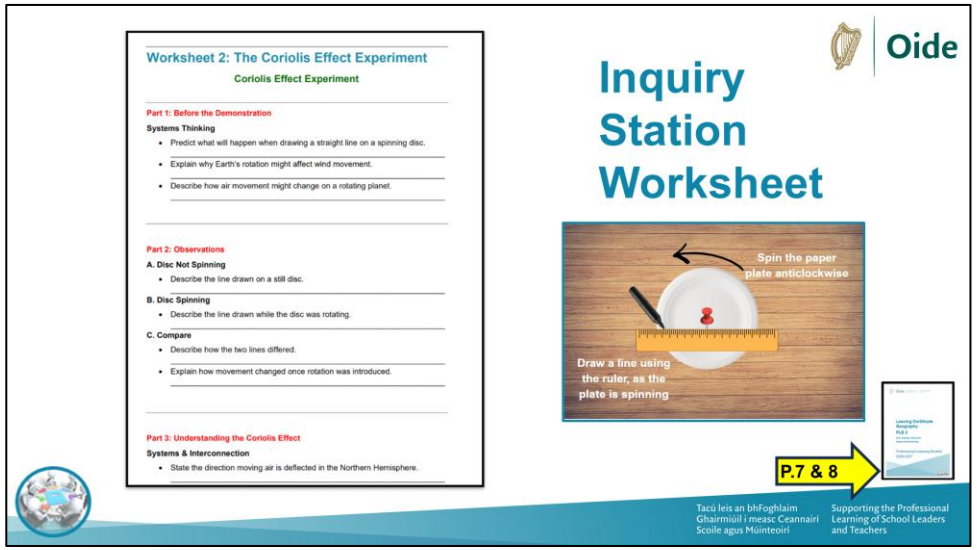
Unifying Strand Focus → **U3**

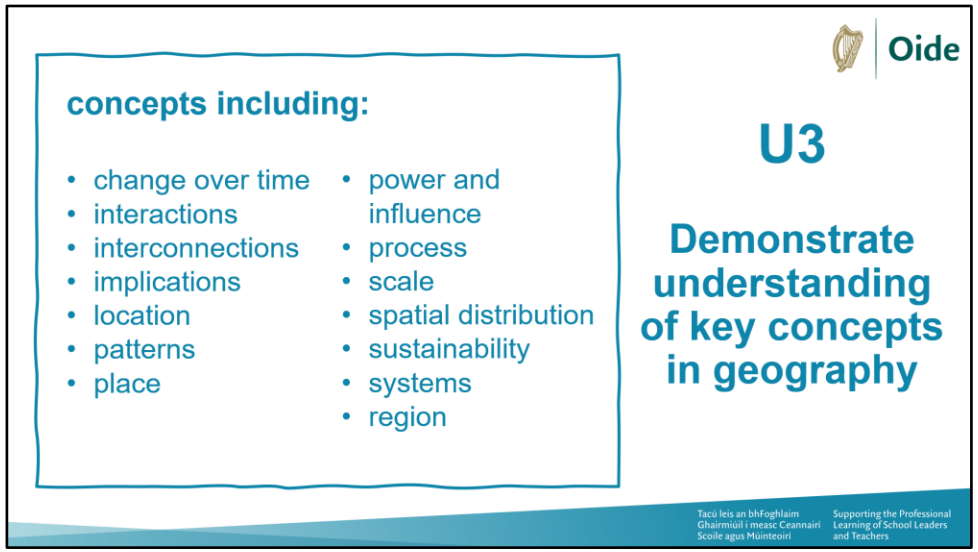






Station 2 Layout







Station 3

Oide

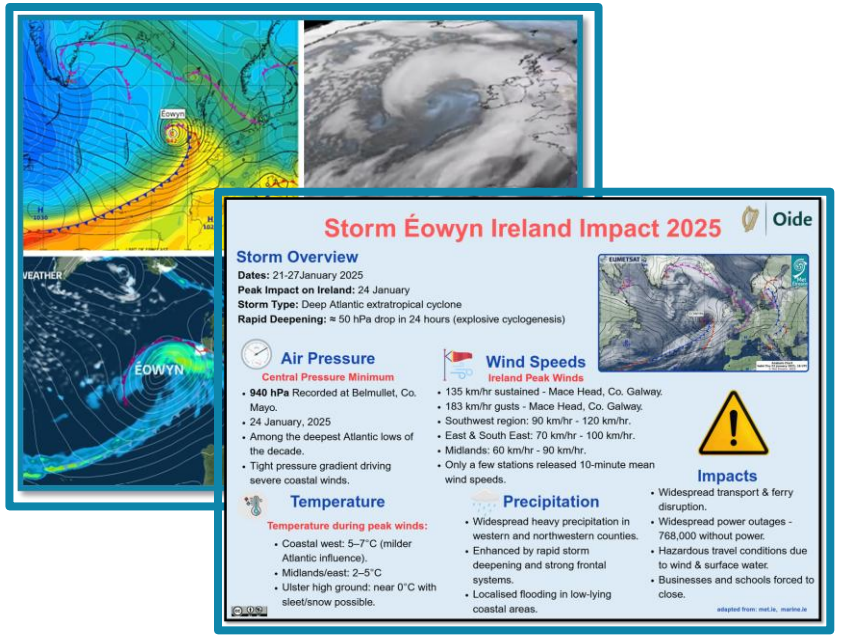
Explore how air pressure, wind speeds, temperature and precipitation interact during severe Atlantic storms, using Storm Éowyn (January 2025) as a case study

Observe → Ask→ Explore → Discover

Unifying Strand Focus

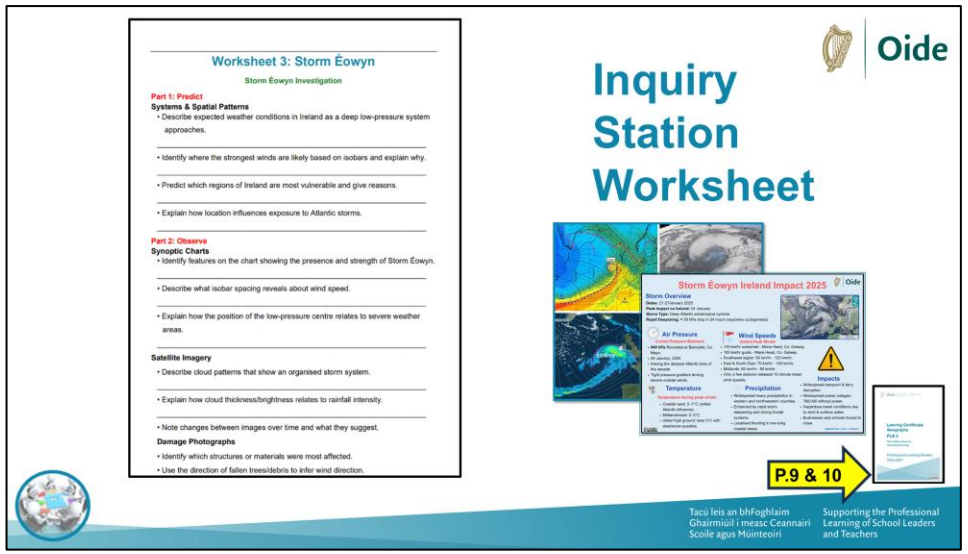
U7

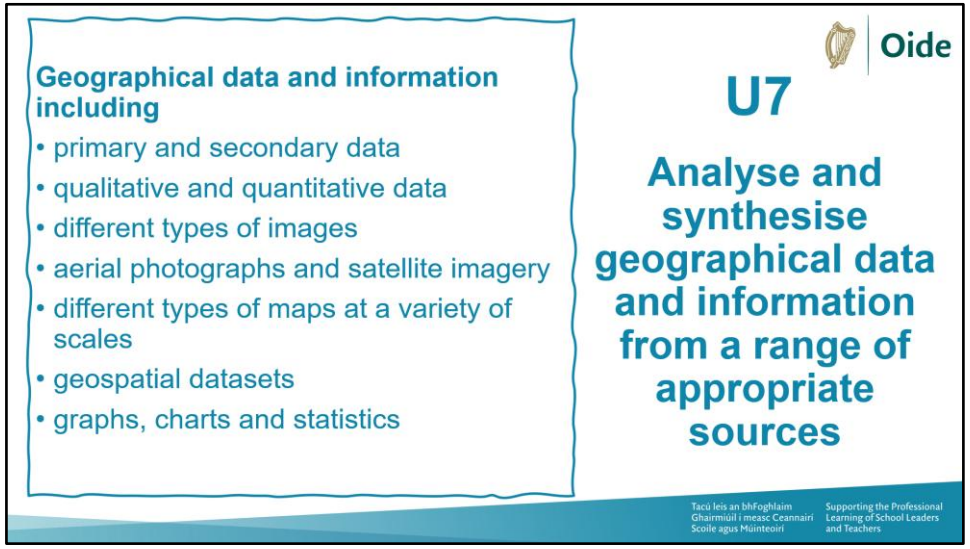






Station 3 Layout









Pause



Think



Connect

How would the tasks at each station enhance students' ability to collect, analyse, and interpret data for their Applied Geography Project?



Time for a Geo-Check

Oide

Solar Radiation & Uneven Heating

QUESTION

How does Earth's curvature affect solar heating?



ANSWER

Curvature causes uneven distribution—more concentrated energy at the equator, less at the poles.

Solar Radiation & Uneven Heating

QUESTION

Why do deserts often form around 30° latitude?



ANSWER

Descending dry air from Hadley cells creates high pressure and arid conditions.







Reflection

What did it feel like to learn through inquiry?



Emoji reason



How can these approaches be adapted to support the diverse range of learners in LC Geography?

Oide

Take a Break!

Be back in

20 : [redacted]

Minutes



Oide

Tacú leis an bhFoghlaim Ghairmiúil i measc Ceannairí Scoile agus Múinteoirí

Supporting the Professional Learning of School Leaders and Teachers

Session 2

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Learning Intentions

- To engage in inquiry-based learning through practical, hands-on stations that spark curiosity and support student-led thinking

- **To consider how asking good geographical questions can drive student-led discovery and to investigate the impacts of and responses to climate change through inquiry-based learning**

- To explore ways to embed inquiry-based learning into everyday practice through fieldwork and integrate inquiry-based learning into subject planning

Teaching for Student Learning

‘Through these pedagogies students will be supported to see the relevance of and apply key concepts in geography, pose geographical questions, and engage in the examination and generation of geographical data and information including maps, photographs and images, graphs, charts, statistics and geospatial datasets.’

(Curriculum Specification for Leaving Certificate Geography, 2025, pg. 21)



Geographical inquiry in the Leaving Certificate Classroom

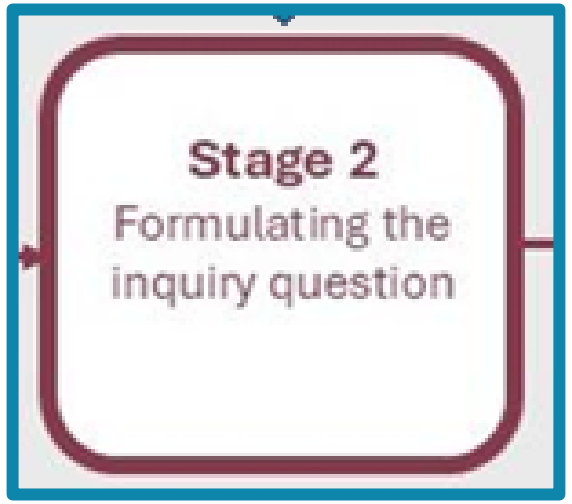
1. What do you expect your students to know and be able to do before they undertake geographical inquiry?

2. What opportunities would students previously have had to learn about the process of geographical inquiry?





If we give students the questions, whose inquiry is it?





How do you support students in generating their own questions?

Oide

Use Scaffolds and Question Frames

Oide

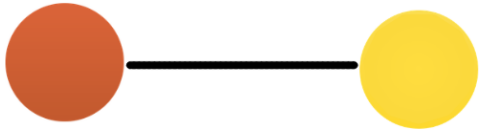
Provide structures that students can adapt

Cause-Effect Frames

Cause → Effect

What factors influence .....?

Change Over-Time Frames



How has ___ changed in ___over the past ___ years?

Spatial Variation Frames



Why does ___ vary between ___and .....?

Human environment interaction frames



How are human activities impacting ___ in ___?

CC BY NC

- Start with observation
- Possible question frames
- Analyse questions
- Link questions to methods
- Use sub-questions
- Connect to the unifying strand

U4



Geographical inquiry and skills

- geographical questions including Who, What, Where, When, Why, How

U4

formulate geographical questions



INTERNET RESEARCH TIPS

Oide



SEARCH TERMS

Begin with broad keywords and gradually refine them to focus your research and locate more relevant information.



RELIABLE URL'S

Prioritise official and educational domains (e.g. .gov.uk, gov.ie, .edu), noting they vary depending on the country they are from.



CROSS-CHECK

Confirm the accuracy of information by comparing it across multiple credible sources.



LOOK FOR BIAS

Evaluate whether a source presents objective facts or attempts to influence the reader with personal opinions or bias.



EVALUATE

Assess each source by considering its author, purpose, reliability, and how current the information is.

CC BY NC



Consider

What further scaffolds could you use to help students with the geographical inquiry process?

Exploring the Specification: LO 1.14

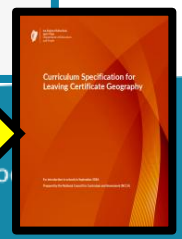
Oide

Students learn about	Students should be able to

• impacts on physical and human environments including:
  • melting frozen landscapes: glaciers, ice caps, and permafrost
  • ocean circulation
  • sea level rises
  • extreme weather events
  • farming practices
  • climate migration
• Irish and international examples for each applicable impact
	1.14 investigate the impacts of climate change on physical and human environments

Investigate	observe, study, or make a detailed and systematic examination, in order to establish facts and reach new conclusions

P.16



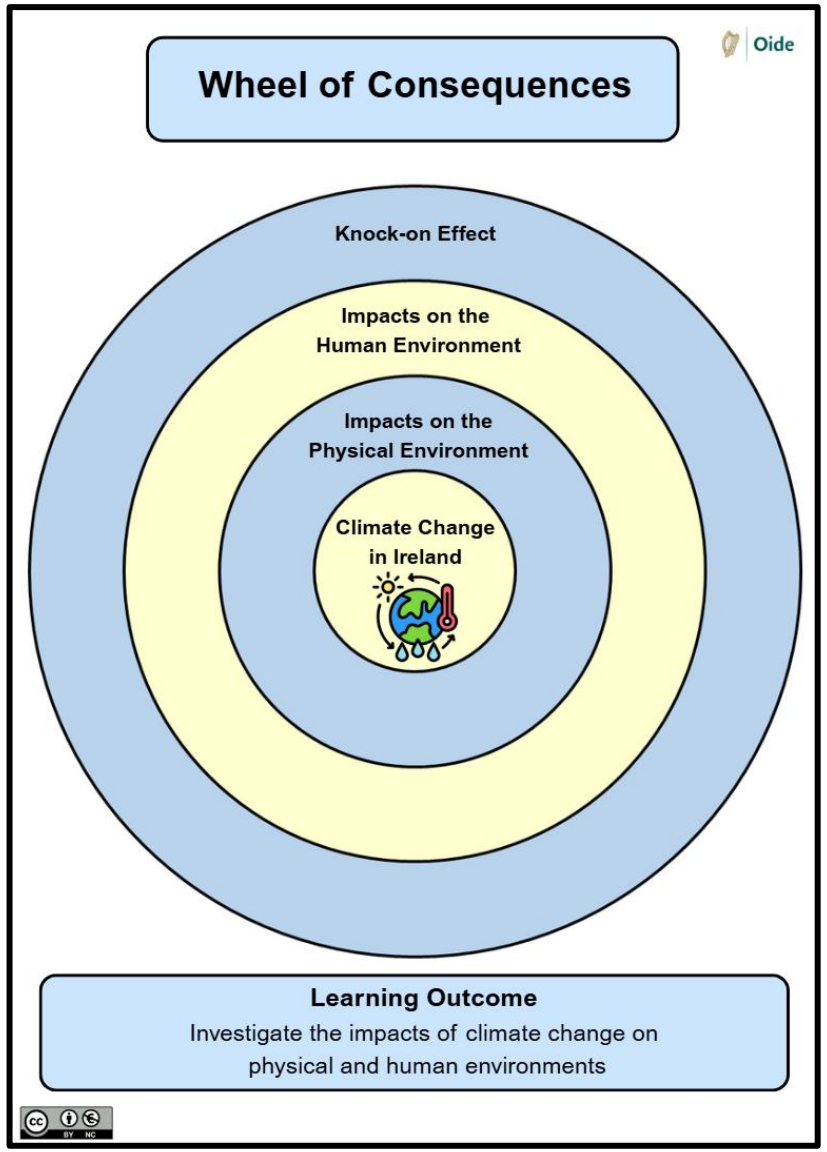
Geographical data and information including

- primary and secondary data
- qualitative and quantitative data
- different types of images
- aerial photographs and satellite imagery
- different types of maps at a variety of scales
- geospatial datasets
- graphs, charts and statistics

U7

Analyse and synthesise geographical data and information from a range of appropriate sources

Activity: Impact of Climate Change Ireland



Step 1: Investigate

Use reliable sources to research how climate change impacts Ireland.
Record your findings under the following headings:

1. Ocean circulation
2. Sea level rise
3. Farming practices

Step 2:

Draw a ‘wheel of consequences’ on flip chart paper.
Organise your findings into categories: physical and human impacts on the environments and finally the knock-on effects.



Mingle and Meet

- Mingle and meet other participants in the room
- Share your Wheel of Consequences ideas
- As you review other groups' work, note any impacts that you had not considered and if there are differences in how they interpreted the consequences







Follow-on Activity



Exploring the Specification: LO 1.14

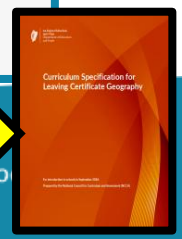
Oide

Students learn about	Students should be able to

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  • ocean circulation
  • sea level rises
  • extreme weather events
  • farming practices
  • climate migration
• Irish and international examples for each applicable impact
	1.14 investigate the impacts of climate change on physical and human environments

Investigate	observe, study, or make a detailed and systematic examination, in order to establish facts and reach new conclusions

P.16



Activity: Impact of Climate Change Bangladesh (International Example)

Step 1:

Explore the ArcGIS Bangladesh inquiry Map using the link/QR code and prompt sheet in your booklet

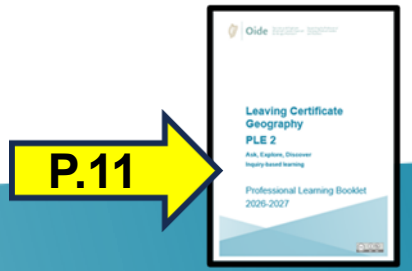


https://tinyurl.com/Bangladesh-Experience

Step 2:

What do you find yourself asking?
What would you like to explore?
What would you like to discover?





U4

We asked. We explored. What will we discover together?

Open up Mentimeter :

- Submit the inquiry question you formed from the Bangladesh map
- What SLA's of LO1.14 are being investigated with the questions that you have submitted



Follow-on Activity



Exploring the Specification: LO 1.15

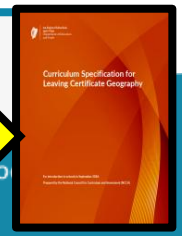
Oide

Students learn about	Students should be able to

• responses including:
  • international agreements
  • mitigation including carbon capture and reducing greenhouse gas emissions
  • adaptation aimed at reducing vulnerability to climate change including early warning systems, and climate resilient infrastructure
• Irish, international and global examples for each applicable response
	1.15 examine responses to global climate change

Examine look closely at arguments, concepts, data, information and/or stories in order to uncover origins, assumptions, perspectives, trends and/or relationships

P.16



Climate Action: Adaptation vs. Mitigation

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Climate action requires a two-pronged approach: adaptation involves adjusting to the changes we already see, while mitigation focuses on tackling the root causes to prevent the situation from worsening.

Climate Adaptation (Adjusting to Change)



Living with climate effects

Making changes to survive impacts like rising sea levels and stronger storms.





Focus on protection

The primary goal is protecting communities, nature, and people from immediate harm.



Practical defences

Actions include building flood defences and changing farming methods.

Climate Mitigation (Slowing Down Change)





Tackling the root cause

Taking direct action to reduce the greenhouse gases causing global warming.



Preventing future damage

The goal is to slow down warming to stop climate change from worsening.



Cleaner solutions

Using renewable energy, planting trees, and cutting pollution from cars.

Quick-Reference Comparison of the Two Strategies

Feature	Adaptation	Mitigation
Core Concept	Coping with changes	Stopping the cause
Timeframe	Immediate/Current effects	Future/Long-term prevention
Primary Action	Adjusting infrastructure	Reducing emissions

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Adapted from EPA (https://www.eea.europa.eu/en/about/contact-us/faqs/what-is-the-difference-between-adaptation-and-mitigation and https://climate.mit.edu/explainers/mitigation-and-adaptation) using MS Co-Pilot (AI)

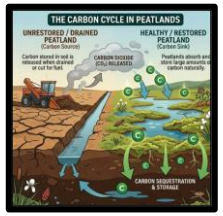
Activity: Responses to Climate Change

Step 1:

Sort the cards into the following categories:

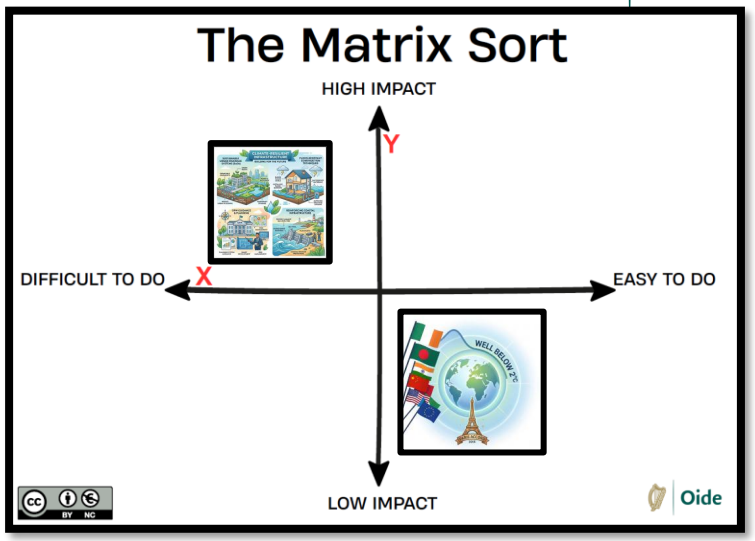
- ❑Mitigation
- ❑Adaption











Step 2:

Copy the matrix axis on your flipchart paper and place each strategy card on the effectiveness matrix according to whether it is high or low impact and easy or difficult to implement.

Step 3:

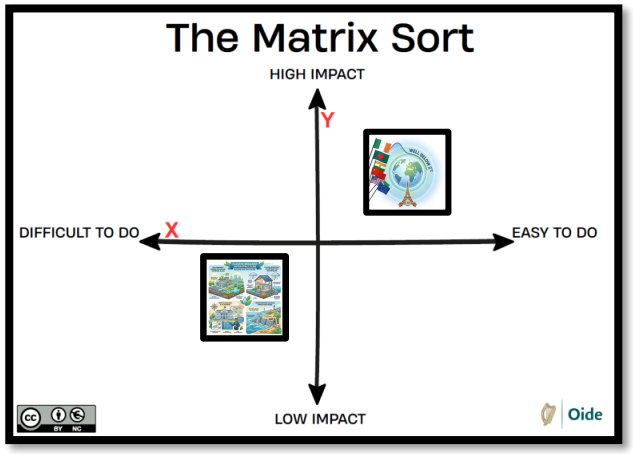
Discuss and justify your placements, considering why some high-impact international strategies may be politically difficult to implement, while local adaptations may be easier but have lower overall impact.



Using the Matrix Sort, Discuss…

- Ireland’s responses are often driven by 'Legislation' (EU laws), whereas Bangladesh’s responses are driven by 'Survival' (Physical Geography)

- In your opinion, which country is showing the most ‘transformative' response to climate change?’





Reflection:

Beyond Climate Change

What other topics in the specification could be effectively explored through inquiry-based learning?



Thinking Like a Geographer

Which unifying strand skills were students naturally practicing? How might making these visible deepen geographical thinking over time?



Your Students, Your Context

Think of one student or group in your class. What one change would make this inquiry more accessible or more challenging for them?

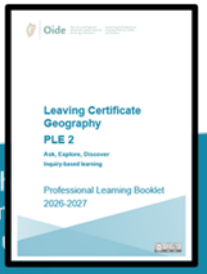
Connect







P.13



Oide

Take a Break!

Be back in

60 : [redacted]

Minutes



Oide

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Supporting the Professional Learning of School Leaders and Teachers

Session 3

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Learning Intentions

- To engage in inquiry-based learning through practical, hands-on stations that spark curiosity and support student-led thinking

- To consider how asking good geographical questions can drive student-led discovery and to investigate the impacts of and responses to climate change through inquiry-based learning

- **To explore ways to embed inquiry-based learning into everyday practice through fieldwork and integrate inquiry-based learning into subject planning**

Your Local Environment: Fieldwork

"Local settings and examples should, where available and applicable, be used to illustrate the learning in the outcomes. This, together with an emphasis on outdoor learning and fieldwork in local settings, will support student access and interest in relevant and engaging geographical learning"

(Curriculum Specification for Leaving Certificate Geography, 2025, pg. 21)

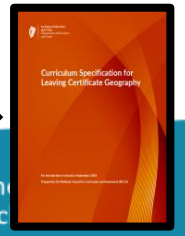


Learning outcome 2.1

Students learn about	Students should be able to
Human settlement • rural and urban settlements in Ireland, including local examples • evidence of site, situation and function of settlements in Irish-language placenames	2.1 describe how human settlements can be defined by site, situation and function

Describe	develop a detailed picture or image of, for example, a structure or a process, using words or diagrams where appropriate; produce a plan, simulation or model

P.15

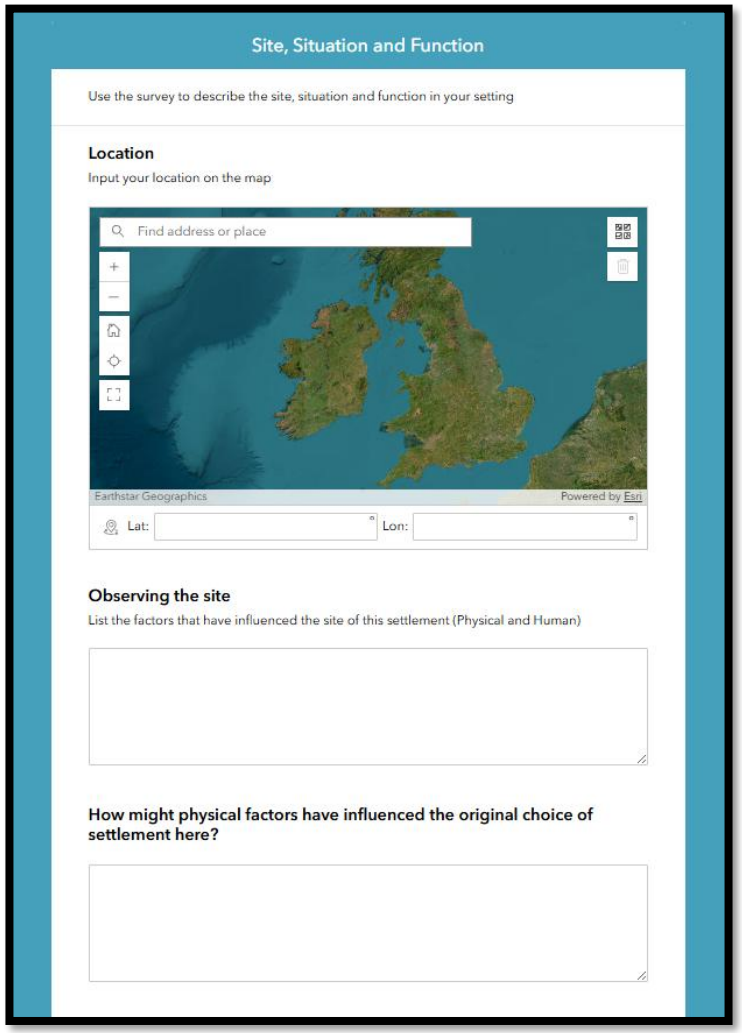


Activity: Fieldwork

SCAN ME

Stage 3
Considering evidence collection

Stage 4
Evidence collection





U6

Survey123 for ArcGIS

Oide

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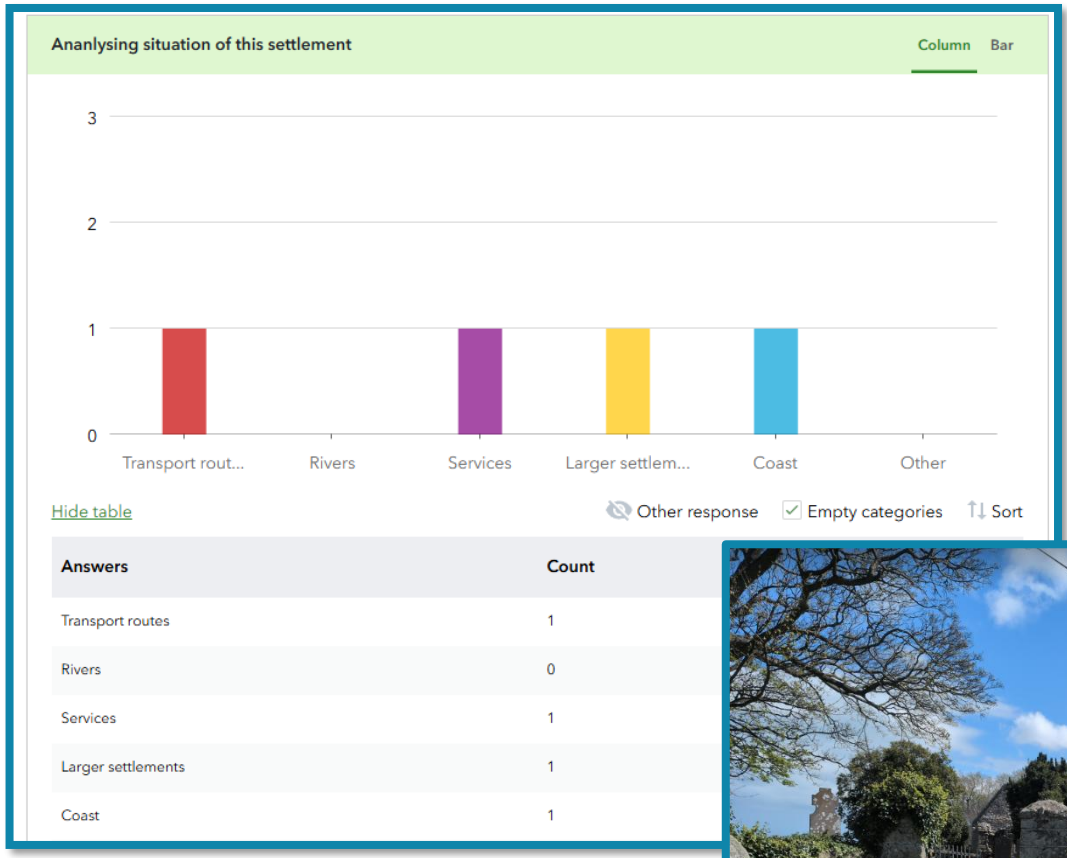
Supporting the Professional Learning of School Leaders and Teachers

Survey Analysis

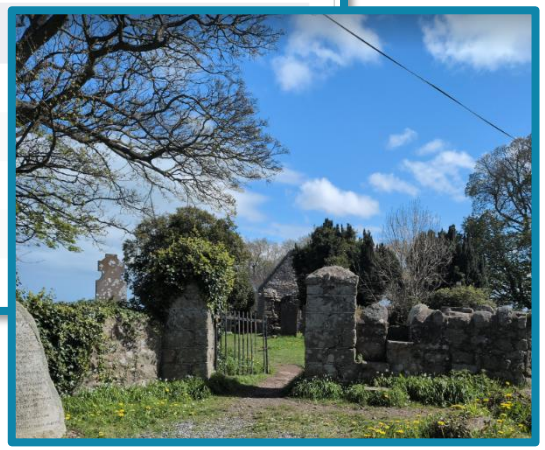
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SCAN ME

Stage 5
Analysing and communicating







Survey123 for ArcGIS

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Follow-on Activity



Learning outcome 2.1

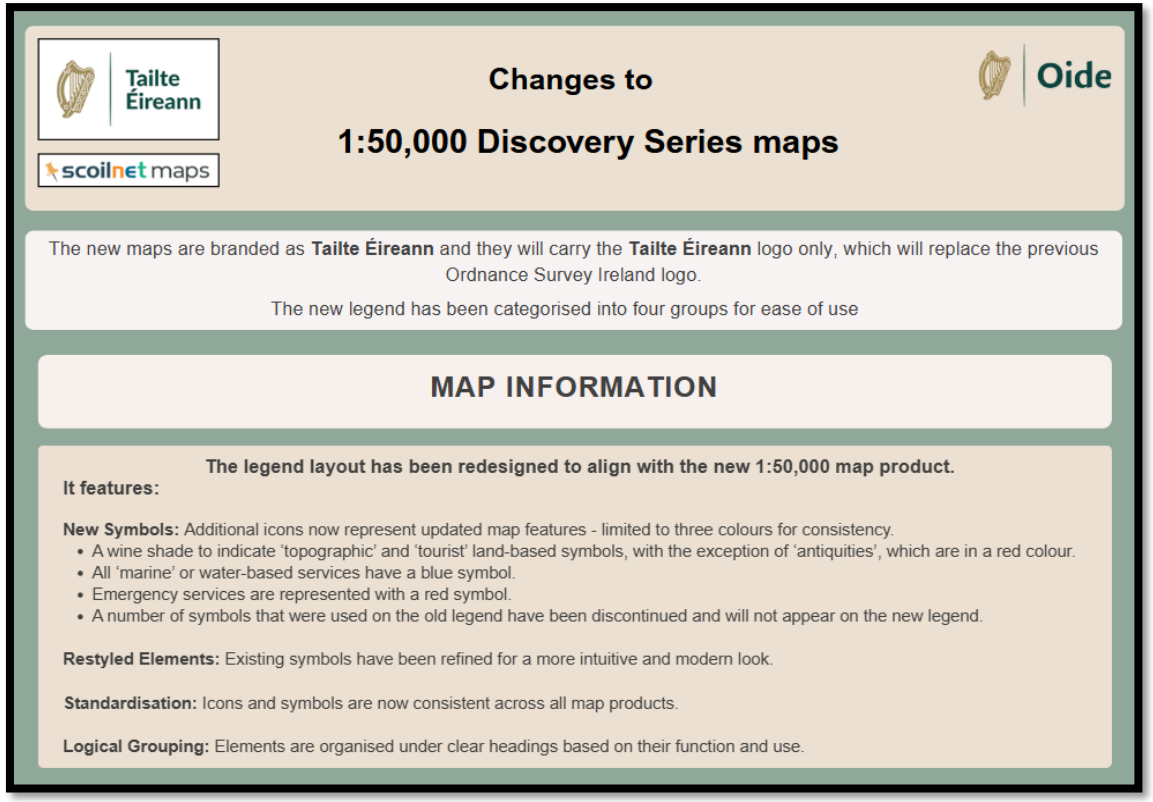
Students learn about	Students should be able to
Human settlement • rural and urban settlements in Ireland, including local examples • evidence of site, situation and function of settlements in Irish-language placenames	2.1 describe how human settlements can be defined by site, situation and function

Describe	develop a detailed picture or image of, for example, a structure or a process, using words or diagrams where appropriate; produce a plan, simulation or model

P.15



Changes to the Tailte Éireann 1:50,000 Discovery Series maps Infographic



https://oide.ie/wp-content/uploads/2026/01/Tailte-Eireann-Map-Changes.pdf

Individual Activity





Oide

Using maps.scoilnet.ie

- Open the Tailte Éireann 1:50,000 map of the area you have just surveyed
- Use the map to identify evidence of site, situation, and function of the settlement, building on what you discovered during your fieldwork survey

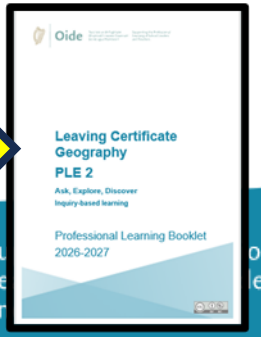
logainm.ie

Using logainm.ie

- Examine the Irish-language placenames on your map to identify evidence of the settlement's site, situation, and function



P. 14





How can fieldwork in local settings support inquiry-based learning in Leaving Certificate Geography?

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Pause and Reflect

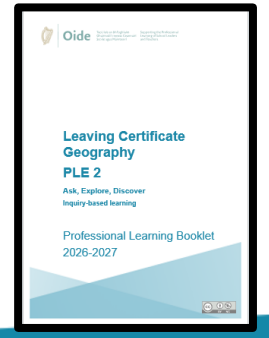


- In what ways did we integrate and apply the learning from the Unifying Strand throughout today's activities?

- How did this give us opportunities to develop the knowledge, skills, values, and dispositions needed for the Applied Geography Project?







P.15

Follow-on Activity



Planning



Take a moment to consider…





- Where in your subject planning do you already develop inquiry-based skills?

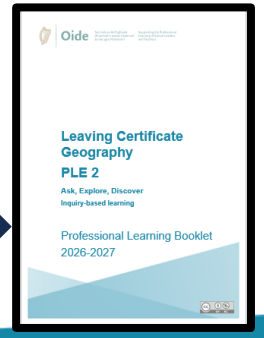


- Where are there opportunities in your subject planning to further develop inquiry-based skills?



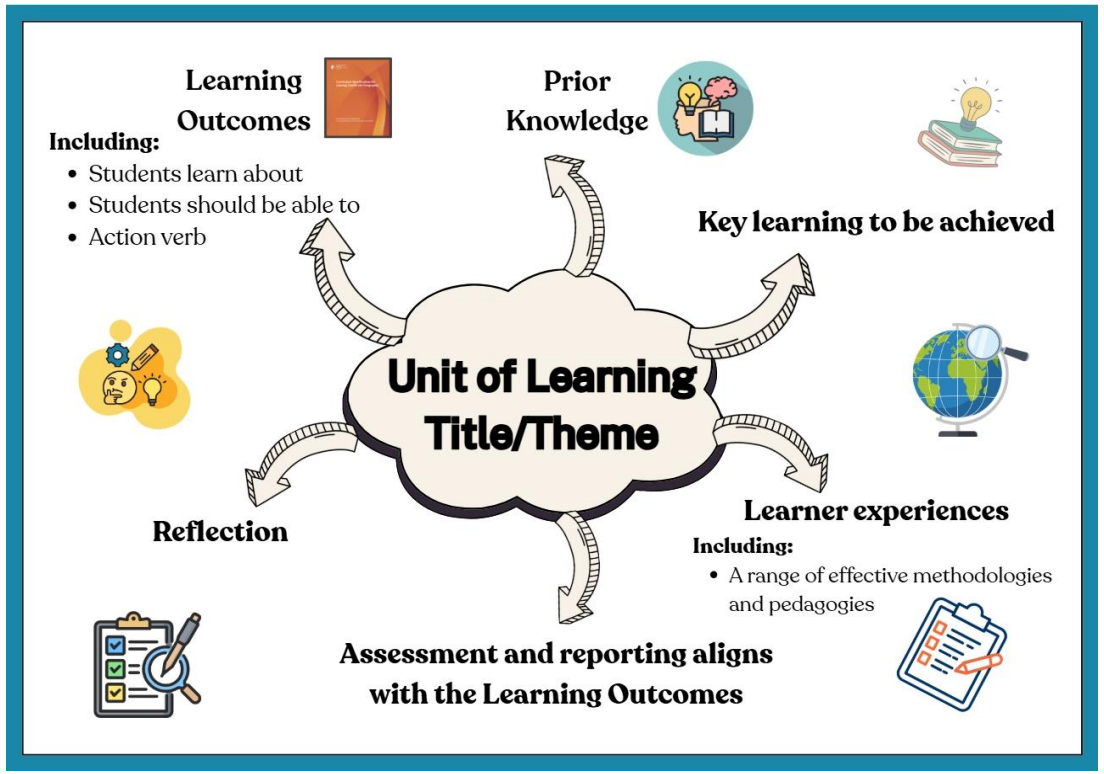


P. 15



Developing a Unit of Learning

- Plan a Unit of Learning
- Incorporate the Unifying Strand
- Use the headings and prompt questions to assist you





Oide

Unit of Learning Title/Theme

Learning Outcomes



Including:

- Students learn about
- Students should be able to
- Action verb

Prior Knowledge





Key learning to be achieved





Learner experiences

Including:

- A range of effective methodologies and pedagogies

Reflection

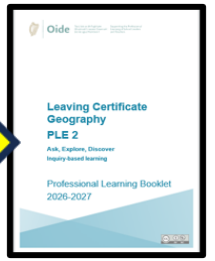


Assessment and reporting aligns with the Learning Outcomes



Prompts

P.20



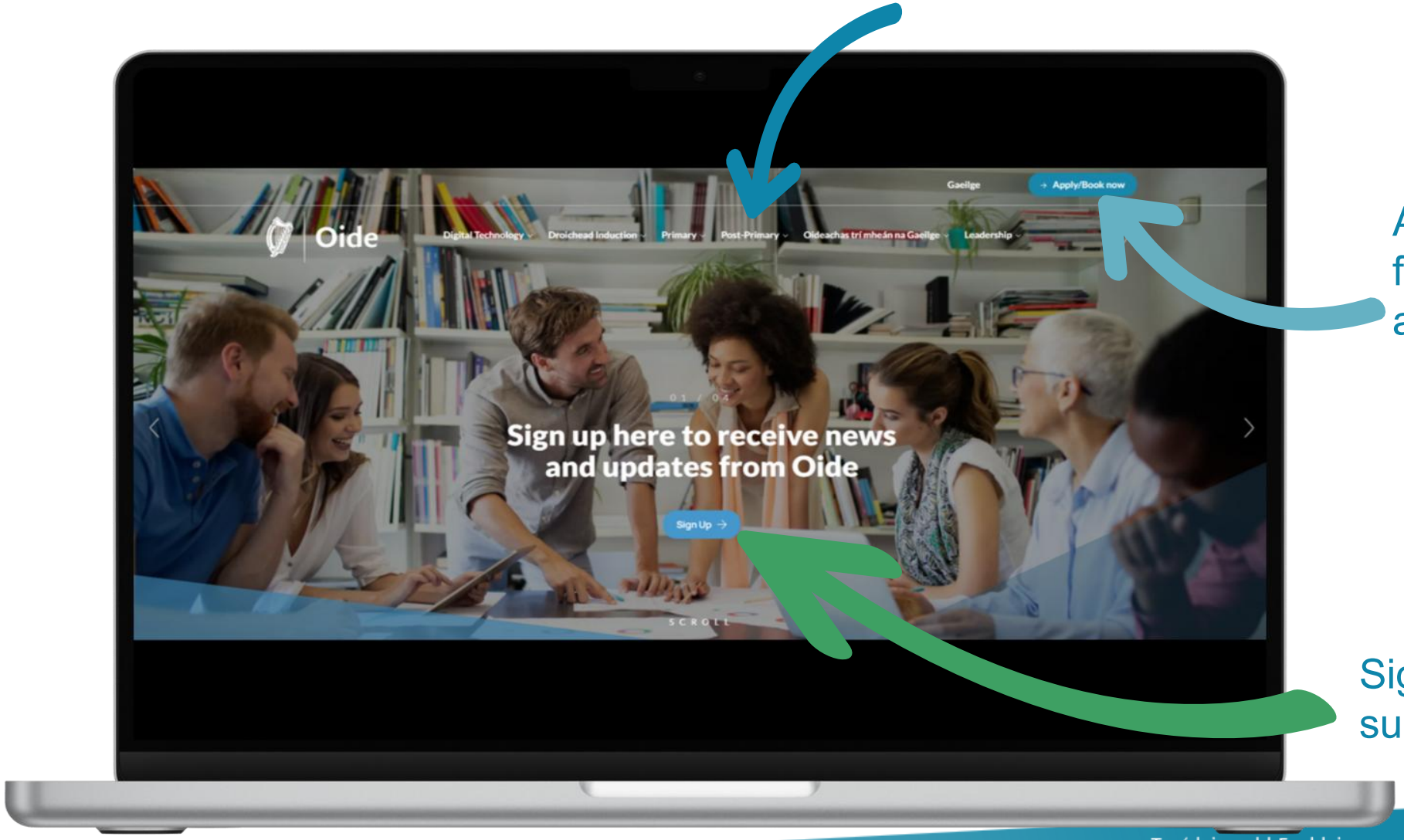




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Geography: News, information and resources.

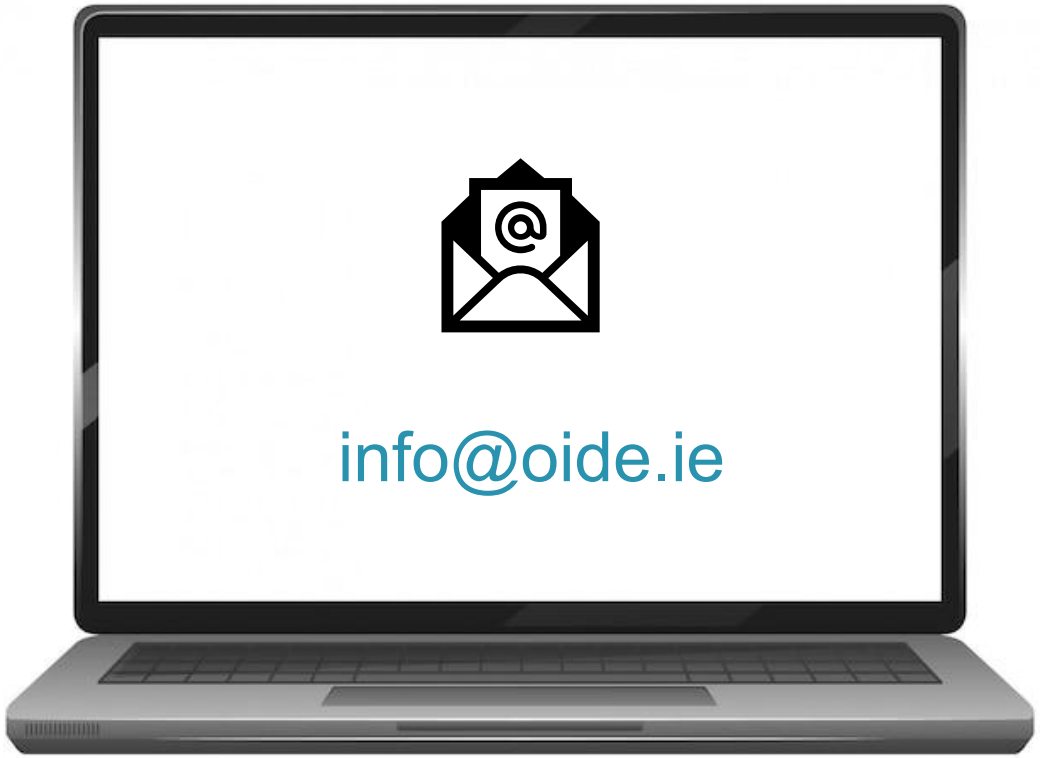
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All bookings for teachers and schools.

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Thank you