



EXPLORERS
OUR OCEAN OUR
FUTURE

**Marine Spatial
Planning for Kids**

TEACHERS GUIDE & LESSON PLANS





The OUR OCEAN, OUR FUTURE TEACHERS PLANNING GUIDE provides an outline of the resources and lesson plans available to complete a class project about Ireland's marine activities and marine spatial planning.

RESOURCES AND MATERIALS

The following resources are available to download from www.explorers.ie.



The [Marine Spatial Planning for Kids Presentation](#) provides an introduction to marine spatial planning for children, guiding their investigations relating to ports, fisheries, aquaculture, shipping, offshore wind energy, marine transport, recreation, and marine conservation.



[Explorers Digital Marine Maps Platform](#) provides a selection of interactive maps showing marine activities that take place within Ireland's marine space.



[Explorers Digital Maps Handbook & Guide](#) provides a step-by-step guide on how to use the Explorers Digital Maps platform.



[Explorers Marine Spatial Planning for Kids: Learning about Marine Spatial Planning Information sheets](#) provides children with additional information to guide them in their investigations about Marine Spatial Planning and those that work, live and are passionate about the marine.



[Explorers Marine Spatial Planning Photos and Resource Pack](#) includes photos and decorative templates that can be used for class activities.



LEARNING OBJECTIVES

Seamlessly integrated with the Irish national curriculum Framework, STEM development, and the SDGs, the Marine Spatial Planning resources aim to help teachers cultivate children's ocean literacy and key competencies, shaping environmentally conscious and future-ready learners. Each of the lesson activities will provide children with an opportunity to develop their competencies and skills based on the Irish National Curriculum Framework:

- **Being a communicator and using language:** The children will develop their ability to understand, interpret, and use different forms of communication, like gesture, spoken language, and digital media while learning and engaging others in the concepts related to Marine Spatial Planning in Ireland. The children will work in collaboration with each other, building their team work and communication skills.
- **Being a digital learner:** By using the Explorers Marine Spatial Planning Interactive Map, creating posters and or a film, the children will be encouraged to become curious, creative, confident, and critical users of digital technology. They will be encouraged to learn to use technology as a tool for learning and creating solutions.
- **Being an active learner:** Gaining an understanding of the size of Ireland's marine territory, and the boundaries at sea, they will foster a sense of curiosity and the ability to learn both independently and with others. They will develop their knowledge, skills, and attitudes needed to become a self-directed learner.
- **Being an active citizen:** Each of the lessons aim to motivate students to be responsible, engaged members of their community. It focuses on developing their values for creating a sustainable marine environment and to help them empower each other to act positively creating win-win results.
- **Being creative:** The Marine Spatial Planning Poster and or Film Project aims to develop building children's interests in the marine and provides opportunities for meaningful creative experiences. It involves exploring ideas and feelings with originality, open-mindedness, and curiosity to help create solutions and positive engagement by creating 'our ocean – our future'.
- **Being mathematical:** Activities throughout the project support the development of mathematical thinking and logic. It teaches children to apply these skills to solve a wide range of problems in various contexts.
- **Being well:** Activities throughout this project enable children to foster an understanding and appreciation of working together in teams and creating positive solutions to 'real-life' challenges interactive social and emotional skills.



LESSON PLANS

The Marine Spatial Planning module has four lessons that can be developed as a class project incorporating thematic learning. The content is suitable for 10 to 12 years.

Lesson	Aim	Time Allocation
Lesson Plan 1: Where We Live - Our Place & Space: Land & Sea	The introductory lesson plan provides children with an understanding of the size of Ireland's marine territory (the Real Map of Ireland) and the area dedicated to Ireland's National Marine Planning Framework (7 x the size of Ireland's land area). The children will gain an understanding of how maps have been used from early discovery to mapping valuable space that needs to be planned for future planning.	30 -45 minutes
Lesson Plan 2: Introducing Marine Spatial Planning – Digital Map Activity	The Marine Spatial Planning lesson aims to provide children with an understanding of the area dedicated to Ireland's National Marine Planning Framework. Using a physical map and images / and the digital interactive map the children will learn about the different ways we use the ocean, the types of jobs and industry that are connected to the ocean, and the areas needed for recreation and conservation.	90 - 120 minutes
Lesson Plan 3: Marine Spatial Planning – Our Ocean Our Future Poster and Film	The children will develop their digital and communication skills by designing an information Poster and or Film sharing key messages and information about Marine Spatial Planning! The children will focus on key messages explaining the benefits of Marine Spatial Planning, and the importance of communities working together to build a positive marine future.	120 minutes – time may be extended to develop a film project
Lesson Plan 4: Marine Spatial Planning – Our Ocean Our Future Game	The children will work together in teams to create an interactive game that helps engage others to work together in creating a Marine Spatial Plan that benefits everyone, as well as the marine environment.	120 minutes - depending on game complexity



MARINE SPATIAL PLANNING WORDS AND VOCABULARY

The following words and terms are used throughout this module. The list of words may be helpful for children during the development of their ocean literacy skills:

The Big Picture Words

- **Ocean:** The ocean covers 71% of Earth. This massive body of salt water is connected. It provides us with a huge amount of resources. These include food, energy, and minerals. The ocean has five main parts. We call them the oceans:
 - Pacific Ocean: This is the largest ocean. It is also the deepest.
 - Atlantic Ocean: It separates continents.
 - Indian Ocean: This is the warmest ocean.
 - Southern (or Antarctic) Ocean: It surrounds Antarctica. It is very cold.
 - Arctic Ocean: It is the smallest and iciest ocean.
- **Marine:** Anything that has to do with the sea. If it's marine, it lives in, happens in, or is connected to the ocean.
- **Spatial:** Just a fancy word for "space." When you talk about something being "spatial," you're talking about where it is and how much room it takes up.
- **Planning:** A way of thinking ahead to make smart decisions. It's like making a game plan before you play a sport or figuring out what you'll pack before a trip.

Putting It All Together

- **Marine Spatial Planning (MSP):** This is like creating a map or a set of rules for the ocean. It's about deciding what activities—like fishing, shipping, and building wind farms—can happen where, so that everyone can use the ocean without causing problems and so we can protect the sea life.
- **Marine Territory:** The part of the ocean that a country, like Ireland, has control over. It's like the country's own backyard, but it's all water!
- **D-MAP:** A D-Map is a special part of the ocean shown on a detailed map, that is used with a rulebook for developing areas (like wind farms) and protecting key areas (environment and social activities).



- Identify the benefits of Marine Spatial Planning (environmental, economic, and social benefits) and learn about why it matters that we put a plan in place.
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Key Concepts

- **Sustainable:** This is about using something, like fish or oil, in a way that doesn't use it all up. The goal is to make sure there's enough for us and also for the people who come after us—our kids and their kids!
 - **Biodiversity:** The incredible variety of living things in the ocean. This includes everything from tiny seahorses and colorful coral to giant whales and speedy sharks. Keeping biodiversity healthy is super important.
 - **Sustainability:** This is the big idea behind being "sustainable." It's the goal of making sure our resources last for a really long time. It's like making sure a magical water well never runs dry.
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Specific Activities

- **Aquaculture:** This is just a fancy word for fish farming. It's when people raise fish or shellfish, like mussels, in pens or cages in the sea instead of catching them from the wild.
 - **Offshore Wind:** This is a way of creating clean electricity by putting giant windmills (called turbines) in the ocean. The strong winds over the water spin the blades, which makes power.
 - **Marine Protected Area (MPA):** A special part of the ocean that's protected by law, like a national park on land. MPAs are created to keep the animals and plants that live there safe from harm, like too much fishing or pollution.
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Problems and Solutions

- **Conflict:** When two different activities or groups want to use the same space in the ocean, and it causes problems. For example, a shipping lane might pass right through a fishing area, which could be dangerous.
- **Conservation:** This is the act of protecting and caring for something, like a coral reef or a type of whale, so that it doesn't get destroyed or disappear. It's about making sure the ocean stays healthy and full of life.



ASSESSMENT RUBRIC (adapt as needed)

Criteria	Excellent (4)	Good (3)	Developing (2)	Needs Improvement (1)
Understanding of MSP	Clearly demonstrates understanding of MSP and its relevance to offshore wind.	Shows good understanding of MSP and its relevance.	Demonstrates some understanding of MSP, but may have misconceptions.	Limited understanding of MSP.
"Win-Win" Solutions	Challenges are well-defined, and solutions clearly demonstrate "win-win" outcomes for all stakeholders.	Challenges are clear, and solutions generally aim for "win-win" outcomes.	Challenges are present, but "win-win" solutions are not consistently clear or comprehensive.	Solutions are self-serving or do not address multiple stakeholders.
Team Collaboration	All team members actively participated and contributed to the game design.	Most team members participated and contributed effectively.	Some team members dominated, or participation was uneven.	Limited evidence of teamwork.
Creativity & Design	Game concept is innovative, engaging, and well-developed with clear mechanics.	Game concept is good, and mechanics are generally clear.	Game concept is somewhat developed, but mechanics may be unclear or inconsistent.	Game concept is undeveloped or unclear.
Map Quality	Map is clear, detailed, and effectively integrates wind farms with other marine uses.	Map is clear and shows integration of wind farms with other uses.	Map is present, but lacks detail or clear integration.	Map is messy or does not effectively represent marine planning.
Presentation	Presentation is clear, engaging, and effectively explains all game elements.	Presentation is clear and explains most game elements.	Presentation is somewhat clear but may omit key information.	Presentation is unclear or incomplete.

