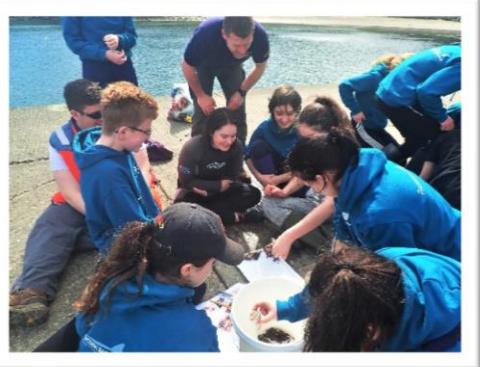




Programme Evaluation 2018

Produced by Rosemary McCloskey, Blue Connections



The Inishowen Coastal Explorers Programme was coordinated by the Inishowen Basking Shark Study Group and was funded by the EU LEADER programme through the Inishowen Development Partnership and Donegal County Council. The programme was developed and delivered by Project Coordinator Rosemary McCloskey (Blue Connections) in response to a programme outline developed by the Inishowen Basking Shark Study Group.



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Community Development**



*An Roinn Forbartha
Tuaithe agus Pobail*

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1 Introduction

1.1 The Inishowen Coastal Explorers Programme

The Inishowen Coastal Explorers Programme and Sea Science Traineeship was funded by LEADER through the Inishowen Development Partnership and Donegal County Council and ran from January to July 2018. The programme was coordinated by the Inishowen Basking Shark Study Group as part of the groups ongoing education and outreach initiatives within coastal communities in Inishowen. The group conducted a youth consultation in 2017 which advised the overall aims of the training. Local marine/environmental education company Blue Connections was responsible for the development, delivery and evaluation of the training, in partnership with the group.

The programme aimed to engage and inspire young people aged 14 – 17 from the Inishowen peninsula to explore and learn more about their local marine environment and heritage. This programme was designed to open the door for the young people of the peninsula to the best scientific equipment, training and knowledge available in the marine biology sector. Training content was designed to develop their awareness, appreciation and knowledge of the marine science sector and showcase marine based careers and employment possibilities available to them as young people from a coastal community.

The program was based around an initial 10 week 'Coastal Explorers' training program for 20 young people, which involved one evening and one full Saturday of marine science-based activities and skills development. The 10-week coastal explorers element was followed by a one week intensive 'Sea Science' traineeship which 10 trainees were chosen for following application. This was designed to develop their skills and knowledge to a higher level of expertise. The content here was aimed at enabling trainees to experience what a career in marine science would entail and to undertake a piece of scientific research in their own coastal seas.

During the programme participants had the opportunity to take on the role of citizen scientists and engage in a range of practical science discoveries such as: surveying wildlife and habitats; identifying species, environmental sampling, practical marine conservation projects, data analysis and basic marine safety and boat skills. In addition to marine skills training the programme included training and practical skills development in areas such as leadership, communication, team working

and problem solving. Participants shared their findings and learning with each other and the wider community via presentations on Wednesday evening sessions and via their assignments; which included organizing and hosting a ‘takeover’ event for the public to showcase their learning; and creating publications such as manuals, posters and an online blog.

1.2 Project Outputs and Learning Outcomes

The following table outlines the required outputs as detailed in the original Request for Tender issued by the Inishowen Basking Shark Study Group; and details on how Blue Connections staff would achieve these. Included below the table are additional learning outcomes that we aimed to achieve for the programme participants.

<i>Outputs from Coastal Explorers programme must include:</i>		
(i)	20 young people aged 14 – 17 will be given the opportunity to complete a 10-week Coastal Explorers Training Programme	The recruitment method will ensure a fair and inclusive recruitment of 20 young people to the programme.
(ii)	Participants will complete science experiments each week where data is collected, analysed and presented at a showcase event at the end of the programme.	Blue Connections staff will train young people in scientific method and young people will complete weekly science experiments where results will be made into science posters for the showcase event.
(iii)	Participants will demonstrate a greater awareness and appreciation of their local marine environment and biodiversity.	We will use an outcome-based approach to establish an evaluation strategy and framework at the beginning of the programme to meet the requirements of the IBSSG. Qualitative and quantitative baseline data collection, ongoing monitoring and final evaluation data will be used to demonstrate a greater awareness and appreciation of local marine environment and biodiversity in young people.
(iv)	Participants will gain practical skills and knowledge in marine/environmental survey methods.	As demonstrated through evaluation and ongoing monitoring. Young people will show increased knowledge and will actively demonstrate practical field skills.
(v)	Photos and video content taken throughout the programme	Young people and the trainers will create video and images from the programme for

	depicting practical field work to be made available to IBSSG.	evaluation and promotion purposes. All consents will be gained for photographer and usage rights passed to IBSSG.
(vi)	Weekly blog and online content to be created and published in a variety of media including online showcasing work of the students.	Young people will be trained to write blog content and will contribute to an online blog with the help of our Assistant Project Coordinator who is a professional online blogger/editor.
(vii)	Showcase event where program outputs and participants work will be shared with wider community.	Showcase event will take place at Dunree Fort where young people will show their work and learning to their friends, family and general public.
<i>Outputs from Sea Science programme must include:</i>		
(i)	10 young people will have the opportunity to take part in an intensive trainee week where they will plan, practice and deliver their own Sea Science experiments with minimal help from delivery staff.	Young people will have the opportunity to put their skills into practice with the assistance of qualified delivery staff.
(ii)	Participants will gain competence in boat based skills such as basic driving and handling skill, tying knots, navigation & chartwork, approaching wildlife via craft.	Young people will demonstrate their competence and practice their skills throughout the 5 day programme in real settings e.g. on powerboats and acting crew on a Sail Training Vessel. Trainees will gain an RYA Level 1 Accreditation in Powerboat (driving, handling, approaching a buoy etc.).
(iii)	Participants will complete an overnight residential to work intensively on 'Sea Science' skills training and preparation for final assignment.	Young people will complete an overnight on the sail training vessel the 'Spirit of Oysterhaven' where young people will complete 2 days at sea (including an overnight) working on their 'Sea Science' skills and preparing for final showcase event and presentations of their assignments (posters).
(iv)	As part of their final assignment young people will help plan and deliver a showcase event for the whole programme to share their	Young people will run a showcase event at Dunree Fort where they will share their work and learning to their friends, family and

<p>learning with the wider community. During this event young people will put their skills into action running small workshops for the general public.</p>	<p>general public through a poster presentation and leading small workshops.</p>
<p>Additional Outputs</p>	
<p>(i) Establish an evaluation strategy and framework for the programme using an outcome based approach. Collect and present baseline and end point data for the programme to be added to the overall evaluation report.</p>	<p>We will use an outcomes based approach to establish an evaluation strategy and framework for the programme based on Kirkpatrick's Model – 4 Levels of Training Evaluation. We will collect baseline, ongoing monitoring and end evaluation data as well as a final report of findings.</p>
<p>(ii) Production of an online publication available for download which will include the practical investigations/field studies conducted during the program. It is intended that this document can be used by interested parties after the life of the program.</p>	<p>The Assistant Project Coordinator is experienced in creating similar publications and will create a publication as described for download.</p>
<p>(iii) Copyright of all training materials used remains with the Inishowen Basking Shark Study Group and all materials will be made available for future use by the group.</p>	<p>Agreed.</p>
<p>(iv) A record must be produced with the following; course participants (supported by signed attendance sheets with dates of attendance); the training location; outlining the participants' achievements.</p>	<p>Agreed.</p>
<p>(v) Individual development sheets for each participant with initial skills and knowledge assessments and post training outcome assessment.</p>	<p>Project Coordinator is experienced in developing Individual Learning Plans (ILPs) (see previous project experience). We will include individual's development metrics, skills and knowledge and post training</p>

	outcomes assessment within the evaluation strategy.
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Table 1. Project outputs and how these will be achieved

Additional Learning Outcomes:

Young people from Inishowen taking part in this programme will gain the following positive learning outcomes:

- (i) Will have a greater appreciation and value for their local environment and natural resources.
- (ii) Will be more knowledgeable about their local marine environment.
- (iii) Will be better able to identify careers and/or opportunities in the marine/environmental sector.
- (iv) Gain practical marine/environmental skills and will demonstrate and apply their skills through practical work.
- (v) Improve their skills in communication, leadership and planning/organizing.
- (vi) Will feel more confident in their abilities.
- (vii) Will be more open to getting involved in environmental projects/volunteering in the future.

1.3 Monitoring and Evaluation Strategy

This evaluation has been carried out by the Programme Coordinator Rosemary McCloskey (Blue Connections). It follows the ‘Monitoring and Evaluation Strategy set out at the beginning of the programme (Appendix 1) using the Request for Tender specifications as detailed by the Inishowen Basking Shark Study Group. This evaluation strategy supported the programme training content and plan as designed by Blue Connections in partnership with the Inishowen Basking Shark Group.

The Monitoring and Evaluation Strategy has 3 main questions which address the overall objectives of the programme. These are detailed in table 2 below. In addition, the table shows what tools were put in place to answer these questions satisfactorily and ensure objectives were achieved.

Evaluation	Methodology and Sources
1) Outputs: Where the project outputs achieved?	In taking an outcomes-based approach to developing the monitoring and evaluation strategy we must identify the training outputs and outcomes, the indicators which suggest what the outcome looks like when achieved, and the information we will collect as evidence. Full details of this in M&E strategy (Appendix 1).
2) Learning outcomes: Did participants achieve the desired learning outcomes?	Individual Learning and Development Plans. These included a knowledge and skills self-assessment, pre and post programme, as well as opportunities to set goals and to review progress. Learning and development plans helped young people to identify knowledge and skills gained throughout the programme and give young people of all levels and abilities an opportunity to set personal goals and achievements.
3) Was the training effective?	This monitoring and evaluation strategy utilized the Kirkpatrick Model of Training Evaluation in order for us to monitor and evaluate the effectiveness of the training programme in an objective way. There are 4 levels to this model; Reaction, Learning, Behaviour and Results. For each of these we identified methods on how these would be measured (see M&E Strategy appendix 1).

Table 2. The main questions making up evaluation framework and the methodology and sources of information used.

This evaluation has been informed by the following tools:

- i) Pre-Questionnaire and Individual Learning and Development Plan which include a knowledge and skills self-assessment and goal setting.
- ii) Group discussions, feedback and observation inc. A3 Planning, post-it note feedback, scenarios.
- iii) Practical application and demonstration of knowledge and skills via group tasks/assignments, leadership roles, peer to peer learning.
- iv) Part way review of ILDP and self-evaluation data.
- v) Participant evaluation/training feedback form.

- vi) End questionnaire and review of ILDP and K&S Self-Assessment.
- vii) Photos, videos, blogging, poster presentation demonstrating work and progression.
- viii) Witness statements, testimonials feedback from parents/project partners, delivery staff.
- ix) Attendance records.
- x) Programme Reflection and end evaluation workshop with participants.

2 Trainees

2.1 The Recruitment Process

The recruitment process included the following:

- Promotion on the www.baskingshark.ie website and social media
- Recruitment posters in shops, community centres, schools and youth hubs
- Promotion via secondary schools
- Direct recruitment via teachers, youth leaders
- Participants who took part in initial consultation
- Promotion through media such as Donegal Now
- Videos on youtube promoted through social media
- Word of mouth
- Radio interview on Highland Radio

Examples of some of the media are shown below.

Figure 1. A selection of marketing outputs inc. posters, articles and online news reports released during recruitment.

Trainees made applications via an Expression of Interest form (Appendix 2). All participants were interviewed before being accepted onto the programme. A total of 45 applications were received and 32 interviews were conducted (some applicants did not meet the initial criteria, others were not available on the training dates or had other commitments). Project Coordinator Rosemary McCloskey discussed the responses to the Expression of Interest with each applicant over the phone before inviting to an interview panel. It was explained that trainees would be selected on individual merit and large groups of friends would not be accepted. During the interview the participants and parents met with the programme coordinators to ask questions and for the training staff to introduce themselves. Here programme staff were able to determine the commitment levels of individuals plus any external commitments that would keep participants from attending. Some participants realised at interview stage that they could not commit to the programme timescales.

2.2 The Coastal Explorers

20 young people were recruited to the programme. The group consisted of 11 females and 9 males between the ages of 14 – 17. Age 14 was the most common age (50% of group) followed by ages 15 and 16 making up 20% of the group respectively; whereas trainees aged 17 made up 10% of the group. Trainees were from across Inishowen including Buncrana, Muff, Malin Head, Malin town, Burt, Carndonagh, Clonmany, Fahan, Inch Island,



Figure 2. Trainees in their first week of the programme standing on Neds Point Slipway

3. The Programme

3.1 Youth Consultation

The expected outcomes and proposed content which informed the design of the training materials for the programme was based on a consultation run by the Inishowen Basking Shark Study Group in 2017. The youth consultation engaged 4 secondary schools in Inishowen (Moville Community School, Carndonagh Community College, Scoil Mhuire Buncrana and Crana College) and consulted with a total of 93 young people aged between 14 – 17 (2nd year up to transition year). The consultation consisted of a baseline questionnaire, four questions to be discussed in a group setting and a brainstorming/concept design exercise. The questionnaire was designed to gather formative baseline information on how young people described their current level of knowledge about their local environment and marine life, and opportunities and careers in the marine sector. Questions were also designed to gather information on whether young people currently take part in or have knowledge of training programmes/schemes themed around the environment and whether they thought learning about the environment and local marine life is important. Brainstorming sessions identified what the young people felt could be improved, what topics were important to them, potential barriers to participation and ideas for the design of a programme based on their local marine environment.



Figure 3. Images from the youth consultation in 2017

The main recommendations were as follows

- (i) A fun and engaging training programme where young people take part in lots of practical learning experiences and activities that raise their awareness and knowledge of Inishowen's marine environment and heritage.
- (ii) A dedicated programme for young people taking place outside of school due to the current limited opportunities for this in the Inishowen area.
- (iii) Opportunities for young people to learn more about the local marine industry and the skills required for the sector. This should include practical sector skills training, work shadowing, meeting local experts and volunteering opportunities.
- (iv) A programme that has young people in mind; a participatory approach to training delivery and a holistic approach to skills development which considers young people's development needs and employability e.g. confidence, self-esteem, leadership, problem solving.
- (v) A programme that gives young people an opportunity to learn new skills, put their skills into practice and share their learning with other young people and the wider community.
- (vi) More marine/environmental learning in school (made relevant to the local area).

For full consultation report see appendix 3.

3.2 Introducing the learning – a participatory approach

In the first Wednesday sessions the trainees had the opportunity to discuss what they wanted to achieve from the programme, the types of skills they had as individuals, what goals they could set for themselves, and what topics most interested them. The format for this included open room discussions and group questions, as well as individual learning and development plans and a knowledge and skills self-assessment that was completed at the beginning of the programme. This allowed learners and the trainers to identify current levels of knowledge and skills, and to put action plans in place for individuals, as well as the group. Weekly personal and team skills development led by the project coordinator and youth leader consisted of tasks to build confidence and team bonding, teamworking, communication, leadership and problem-solving skills. Weekly reviews and observations allowed the trainers to adjust the learning content to meet the needs of individuals and the group.



Figure 4. Wednesday night sessions with trainees

I am confident that I have the relevant skills and knowledge needed to pursue further training and/or a career in the marine/environmental sector		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MY ACTION PLAN

What do I want to achieve during this programme?	How will I achieve this?
Be confident on boats	Listen to instructions
Learn more about marine life.	Ask questions if I don't know what something is.

Figure 5. A trainee's Individual Learning plan containing K&S assessment and own Action Plan

Personal and team skills developed in the ‘youth setting’ on Wednesday evenings were applied each Saturday when working in a practical setting. The programme activities were designed to give the trainees as many opportunities to explore their local marine environment as possible, and to give first-hand experience of the marine sector. All activities were practical, and each week focussed on different learning objectives and outcomes. Trainees worked on their own skills as well as working together with their team to become competent and confident Coastal Explorers. The Activity Report (Appendix 4) explains the training activities that took place during the Coastal Explorers Programme and Sea Science Traineeship. The below tables are a summary of the timetable from the programme.

Week	Activities
1	Weds 7 th March: Personal Development- Welcome, icebreakers, introduction, pre-questionnaire Sat 10 th : Clipper Canoe journey along the coast – introduction to journey planning inc. tides, weather, navigation
2	Weds 14th: Communication Skills in the context of teamworking, games and activities Sat 17 th : Postponed due to snow
3	Weds 21st: Leadership and Communication skills in the context of working outdoors. Types of leadership. – games and activities Staying Safe in the marine environment (Talk from RNLI). Field work planning and safety. Sat 24th: Marine sampling techniques and survey on Canadian canoe. Using secchi disk, plankton net, crab pots.
4	Weds 28th: Review of boat work. Looking at the data so far and starting the group projects. Leadership skills training. Sat 31st: Easter Holidays
5	Weds 4 th April: Full practical Day. Plastics, pollutions and impacts. Beach clean at Stragill beach and Rocky Shores Survey using Coastwatch Europe method. Sat 7 th April: Rivers Day with Inishowen Rivers Trust. Looking at effect of pollution in rivers on coastal environment. Riverfly monitoring, invasive ID and removal, practical conservation training on Bredagh.
6	Weds 11 th April: – Teamwork discussion. Give Teamwork definition and compare to views of group, Top 5 teamwork skills (Communication, Conflict Management, Listening, Reliability and Respect) Sat 14 th April: Visit to Inishtrahull Island and Protected Area – learning about maritime heritage and marine conservation

7	<p>Weds 18th: – Teamwork Continued. Contributors to Conflict Resolution (Negotiating, Mediating, Arbitration, Litigation). Resolving Conflict Calmly – It Takes 2 Activity, each individual has a responsibility</p> <p>Sat 21st: Visit to Inch Island Bird Reserve and Fisheries Survey</p>
8	<p>Weds 25th: – Recap on previous Learning</p> <ul style="list-style-type: none"> – Teamwork activity – one colour drawing, 3 groups, choose an image, each group member has a different colour marker. Must contribute to drawing using only their colour (teamwork, communication, decision making). <p>Sat 28th: Kayak Fishing Survey and Expedition</p>
9	<p>Weds 2nd: – Interpersonal skills. Review of Personal Goals and Difference form start of programme</p> <p>Sat 5th: Hard Boat Cetacean and Shark Survey</p>
10	<p>Weds 9th May: –Evaluation Session</p> <ul style="list-style-type: none"> – Final recap of learning – Course completed <p>Sat 12th May: Gorge-walking – Exploring a river from Sea to Source. How river pollution influences the coast.</p> <p>Sat 13th May: Surfing and Litterpick</p>

Table 3. An overview of the main training activities delivered during the Inishowen Coastal Explorers Programme.

Day/Date	Activities
1 4 th – 6 th July	2 day (1 overnight) tall ship sail training experience
2 10 th July	Powerboat Level 1 RYA
3 11 th July	Powerboat Level 1 RYA
4 12 th July	RIB Survey work with the Inishowen Basking Shark Study Group Research Team
5 13 th July	RIB Survey work with the Inishowen Basking Shark Study Group Research Team

Table 4. Training Schedule Inishowen Coastal Explorers Sea Science Traineeship

4 Evaluation

4.1 Attendance Records

The average attendance rate over 19 sessions (Wednesday evenings and Saturday days) was 95.5% indicating a very high engagement rate from the participants. The lowest attendance figure across all sessions was 16 participants out of 20 which was due to the Easter holidays. All 20 of the original trainees finished the programme and graduated with certificates of achievement. Full attendance over the course of the Sea Science Traineeship was achieved expect 1 student could not finish out the RYA Powerboat training due to personal circumstances. We believe that attendance was high throughout the programme due to the variety of tasks and high level of engagement from students. Interviews before selection were vital in order to ascertain levels of engagement and interest from the beginning. Ongoing monitoring, liaising with trainees and discussing barriers to participation helped with the high retention rate across the programme.

4.2 Outputs: Where the project outputs achieved?

In order to evaluate whether the project outputs were achieved, each output is detailed below along with the indicator of achievement and the result.

- (i) **20 young people aged 14 – 17 will be given the opportunity to complete a 10-week Coastal Explorers Training Programme**

Indicator: 20 young people aged 14 -17 recruited. Attendance Records show young people taking part.

Result: 20 young people aged 14 – 17 were recruited from across Inishowen. 95.5% attendance rate on average was achieved throughout.

- (ii) **Participants will complete science experiments each week where data is collected, analysed and presented at a showcase event at the end of the programme.**

Indicator: Training content to include science experiments and data collection/analysis. Presentation of this learning at showcase event.

Result: Trainees conducted a range of scientific studies and experiments throughout the programme including secchi disk survey, plankton net survey, environmental survey, water quality, Coastwatch survey, rocky shore survey, fisheries survey (using pots and nets), static point/line transect cetacean/shark watches. Collection and analysis of data included making data tables,

reviewing the data in group discussions, charting the data on maps and using the data to draw conclusions and further understanding of processes. Science experiments/studies conducted during the programme were showcased to family, friends and members of the local community via a poster presentation and mini-workshops led by the trainees during the showcase event.



Experimenting/Surveying → **Collecting data** → **Analyzing results**



Taking a plankton sample

What are plankton?
Plankton comes from the Greek word 'planktos' which means to wander or drift. Plankton are a diverse range of tiny animals and plants that drift on ocean currents. Phytoplankton rely on adequate light for photosynthesis much like plants, whereas zooplankton consist of tiny animals including the larval stages of larger marine species such as fish, crustaceans and molluscs.

Plankton play an important role as the base of many oceanic food chains providing food for fish, whales, basking shark etc. Plankton also play an important role in the ocean carbon cycle. Phytoplankton are said to produce around 50% of the world's oxygen.

Why study plankton?
Plankton play a crucial role in ocean biology and climate, therefore any change in their productivity could have a significant influence on biodiversity, fisheries and the human food supply, and the pace of global warming. By studying plankton we can get an indication of changes that may occur due to seasons, weather or global climate change.

At a local scale, by studying when the plankton blooms occur (when enough sunlight and nutrients are available for rapid phytoplankton growth) can tell us when there will be more sightings of wildlife such as fish, dolphins, basking shark.

To study plankton you need to take a sample from the water column. You can do this using a specialised net that is towed behind a boat or hauled through the water.

What did we do...

- We learned how to use the plankton net to take coastal plankton samples at different locations by canoe.
- At each station the net was hauled for the same amount of time and the samples were retained to be counted or identified under a microscope.
- During our surveys further offshore we conducted plankton hauls at fixed points on our transect survey, as well as a plankton tow.
- A plankton tow is conducted over a fixed distance (300m) and speed.
- Once back on board the plankton net must be washed down with seawater so that any plankton within the net can be washed into a small container at the base of the net.
- Samples are transferred into sampling jars and preserved for further study under the microscope.

Conclusions
We found local plankton abundance to be low during our surveys (March–May) which we concluded to be as it was early in the season.

In our samples we found copepods, daphnia, cladocera, ostracods, fish larvae and various species of phytoplankton.

This project was part of the Inshore Coastal Research Programme, a funding programme for young people aged 16-25 contributed to by the European Regional Development Fund. This programme was funded by the EU LIFE+ Basking Shark Project and the Inshore Coastal Research and Management Scheme.

www.baskingshark.ie info@baskingshark.ie





Copepod plankton: main food for basking shark

Trainees preparing plankton net

Figure 6. A collection of images showing how trainees conducted experiments/surveys, collected data, analyzed/studied data and shared this learning through a showcase event which included mini-workshops and posters.

(iii) Participants will demonstrate a greater awareness and appreciation of their local marine environment and biodiversity

Indicator: Knowledge and Skills Assessments, casual feedback, group work, observation, end evaluation workshop/feedback sheet.

Result:

a) Knowledge and Skills Self-Assessment

Knowledge and Skills self-assessments required trainees to rank their existing skills and knowledge on a scale from 1 to 5, where 1 is nothing and 5 is detailed knowledge. Results showed that all the trainees demonstrated a higher overall average score for the questions on knowledge after completing the training. All but one trainee demonstrated a higher overall average score for the questions on skills after completing the training. The reason for this was that the student in question was a very confident and capable trainee who through the course of the training became more aware of their current knowledge, skills, how to identify and demonstrate these and areas of improvement needed. See Figure 7 below for before and after self-assessment scores by learner.

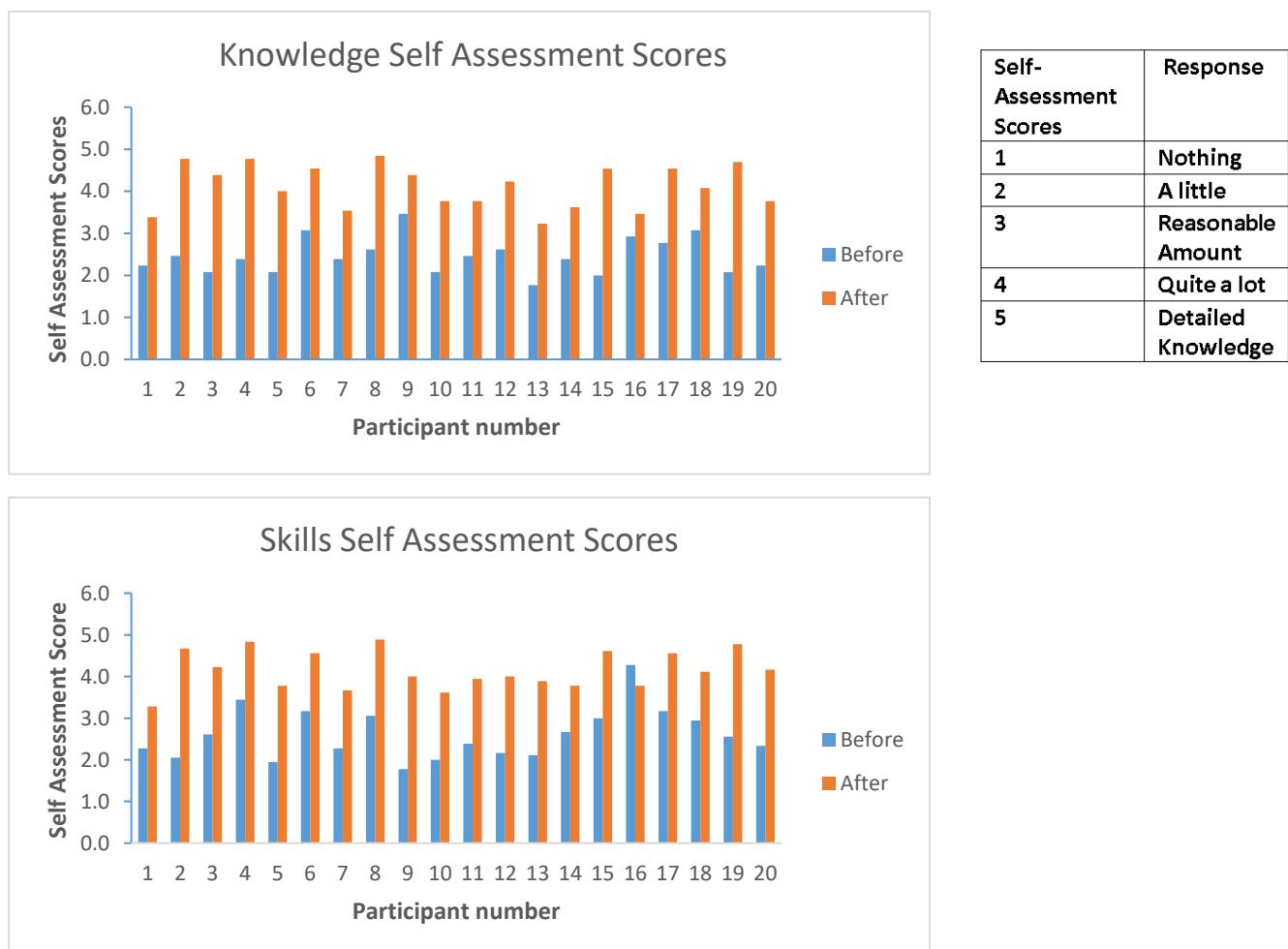


Figure 7. Participant Knowledge and Skills Self-Assessment scores Before and After

The questions asked in the K&S assessment are included table 5 below. Questions 1, 3, 4 and 9 under the ‘Knowledge’ assessment directly address ‘awareness of local marine environment and bio-diversity’. You will see in the graph below (Figure 8) that participants scored their knowledge in these areas higher after the training programme (as was the case with all questions). Question 1 specifically asks “How would you describe your current level of knowledge about your local marine environment”, in response to which trainees gave an average response score of 2.2 in pre-analysis and 4.3 in post analysis indicating a change in response from “a little” knowledge to “quite a lot” of knowledge.

Question	KNOWLEDGE
1	How would you describe your current level of knowledge about your local marine environment?
2	Marine processes such as wind, tides, coastal weather, ocean fronts, plankton cycle?
3	Awareness of local marine habitats
4	Awareness of local marine animals
5	Identification of local marine animals (species)
6	Threats/Impacts on the ocean
7	Collecting scientific data
8	Field work planning and safety
9	Familiarity/recognition of local coastline e.g. Dunree, Fanad, Dunaff, Leenan, Malin Head, Shrove
10	The types of skills you need to be a good team member and team leader
11	The skills you need for a career in the marine/environmental sector
12	Local opportunities to get involved in marine/environmental sector
13	Career pathways and jobs in the marine/environmental sectors
Question	SKILLS
1	Working on boats
2	Navigating at sea
3	Conducting science experiments/surveys at sea
4	Using marine scientific equipment
5	How to identify species
6	How to interact with marine animals (e.g. handling, measurement, observing)
7	Staying safe when working in outdoors
8	Communication skills
9	Speaking in public/in front of others
10	Decision making
11	Problem solving and coming up with fresh ideas
12	Leadership
13	Planning and organising a team activity
14	Managing a task or team activity
15	Confidence in a new setting/situation/challenge
16	Working with others
17	Setting/Achieving Goals
18	Self-motivation

Table 5. Questions asked in pre and post K&S Assessment

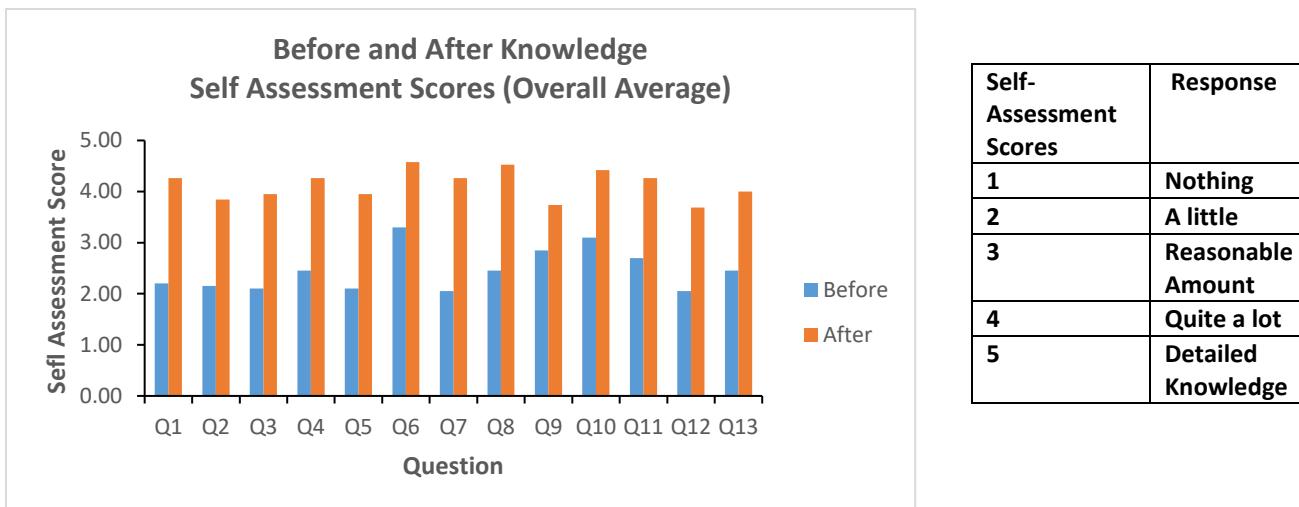


Figure 8. Average Knowledge Self-Assessment Scores arranged by question (before and after)

b) Perceptions

In addition to K&S pre and post assessment participants also answered questions on perceptions. Learners were asked to rank their responses from 'Strongly Agree' to 'Strongly disagree'. Questions 1, 5, 6, 7 and 8, refer to an 'appreciation' of the marine environment. Pre vs post analysis indicated that the majority of learners already showed a high level of appreciation for the environment, so there weren't any highly significant changes in these questions. There was some change from 'neutral' responses to 'agreed' responses on question 1 about volunteering to help the environment. There was also a change from two learners responses on question 8 about protecting local marine species and habitats from neutral/agree to strongly agree, resulting in 100% of learners choosing 'strongly agree' to protection of marine species and habitats.

Question	Perceptions
1	I am interested in volunteering on a local project to help the environment
2	I am interested in pursuing a career in the marine sector or finding out more about it
3	I think there are a lot of opportunities in the marine/environmental sector
4	I am aware of local individuals and groups involved in marine/environmental activities
5	I think my local coastline is beautiful
6	I think that the sea and coast are important resources
7	I think that it's important to learn about local marine species and habitats
8	I think that it's important to protect local marine species and habitats
9	I feel confident on-board boats and doing water-based activity
10	I feel confident in my ability to collect scientific data and carry out surveys
11	I am confident that I have the relevant skills and knowledge needed to pursue further training and/or a career in the marine/environmental sector

Table 7. Questions asked in K&S assessment on current 'perceptions'

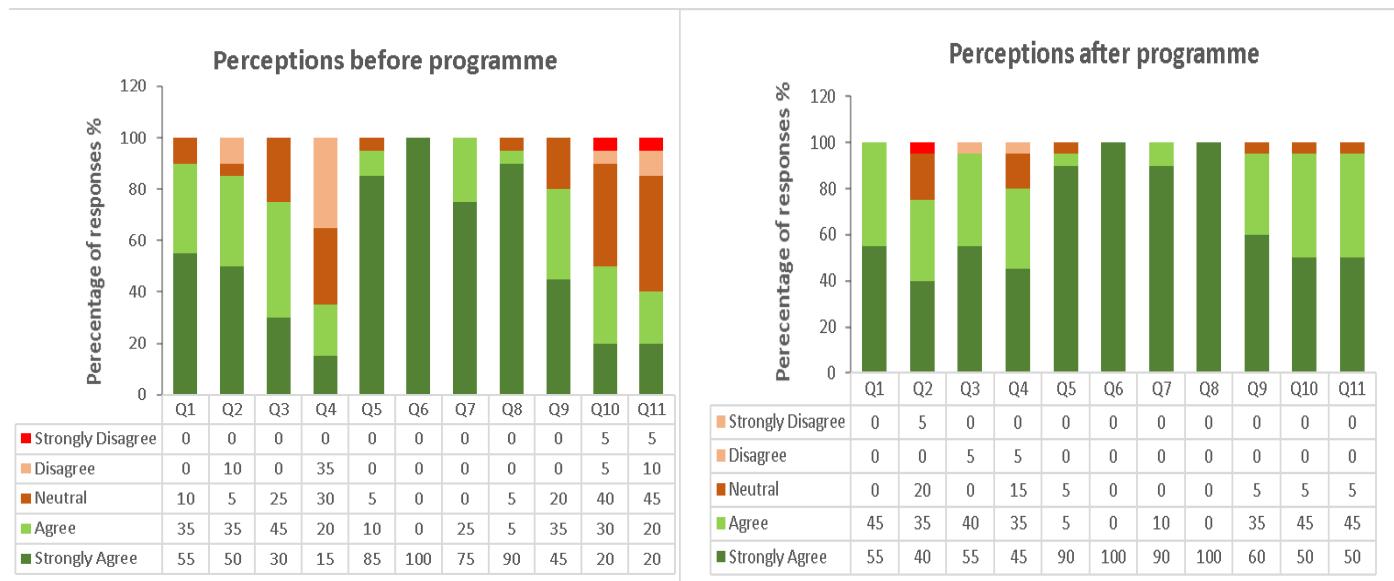


Figure 9. Graphs showing responses to perception questions before and after programme. Data is displayed by the percentage of participant responses in each category from Strongly Disagree to Strongly Agree (see key).

c) Observations/Group Work/End Evaluation Workshop

From observation of each learner's progress over the course of the programme it was clear that there was a significant increase in knowledge, awareness and appreciation of the local marine environment and biodiversity. Trainees expressed excitement to discover new areas of their local coastline, in particular those areas that have special protected status or are known for their abundance of wildlife. This is apparent in the end evaluation feedback forms where the visit to Inishtrahull Island was a highlight to many of the trainees. Trainees became more aware of coastal resources and confident at identifying their coastline when on board boats, such as picking out key landmarks.

Ongoing reviews of learning through the Individual Learning plans and K&S reviews, as well as group discussions showed the increase in awareness and appreciation of local marine resources. Participants wrote things like "I have a much better understanding of our coastline" and "I learned the importance of marine life" (see figure 10 below). Additionally, in the end evaluation questionnaire participants were asked what they would do because of the programme. Answers included "volunteer more" for local projects to protect/help environment, "learn more about local marine life", "pick up litter" and "inform others". This shows that participants have developed a sense of pride and appreciation of their local marine environment and biodiversity (see section 4.4.1 for further details).

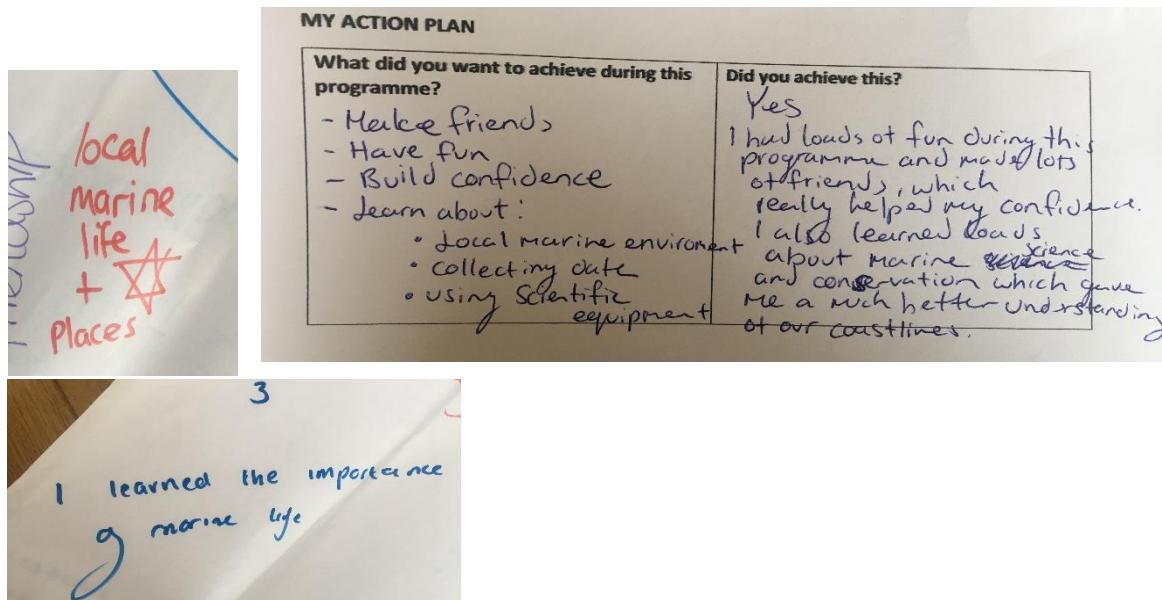


Figure 10. Snapshots from trainee action plans and reviews showing an appreciation and increase in awareness/understanding of local marine environment

(iv) Participants will gain practical skills and knowledge in marine/environmental survey methods.

Indicator: K&S Assessment, observation, end evaluation workshop.

Result:

a) Knowledge and Skills Self-Assessment

The table below shows the questions within the K&S Self-Assessment that specifically related to practical skills and knowledge of marine/environmental surveying methods. Figure __ shows that before and after self-assessment scores for these knowledge and skills questions increased after the training. In particular “Collection of scientific data” and “Using marine scientific equipment” showed the most change overall.

Question	KNOWLEDGE
2	Marine processes such as wind, tides, coastal weather, ocean fronts, plankton cycle?
5	Identification of local marine animals (species)
7	Collecting scientific data
8	Field work planning and safety
Question	SKILLS
1	Working on boats
2	Navigating at sea
3	Conducting science experiments/surveys at sea
4	Using marine scientific equipment
5	How to identify species
6	How to interact with marine animals (e.g. handling, measurement, observing)
7	Staying safe when working in outdoors

Table 8. K&S questions relating to practical skills and knowledge of marine/env sampling methods



Figure 11. K&S self-assessment scores (before and after arranged by question)

c) Observations/Group Work/End Evaluation Workshop

As well as telling us via the K&S assessment that they felt these skills had improved; participants actively demonstrated their improvement throughout the programme. This was particularly evident during practical sessions where trainees took turns to undertake different team roles including leadership roles. Here trainees had to put their new-found skills into practice to work together as a team to plan and deliver field work and marine/environmental surveys safely and effectively. As the weeks went on the trainees, leaders and delivery team saw a marked difference in the ability of the group to complete these tasks with minimal supervision.

By using Individual Learning Plans and by identifying current levels of knowledge and skills for each individual, trainees were able to set their own goals and identify where they wanted to improve. During K&S reviews throughout the programme and during the evaluation workshop trainees were able to clearly identify the marine/environmental survey skills they had developed (see Figure 12 below).

I thoroughly enjoyed my experience.

How did you do it?

I learned about marine life by looking at keys and learning how to carry out surveys and use scientific equipment.

What did you learn?

I learned about marine biology equipment and I learned how to use it and why it is used. I also learned the best ways to carry out a scientific survey.

What do you think was good about the programme? Why?

The programme was brilliant for many reasons. It is like for

Figure 12. Snapshot of trainees end evaluation feedback where they have identified learning marine sampling skills

(v) Photos and video content taken throughout the programme depicting practical field work to be made available to IBSSG

Indicator: Photos and videos to be made available to IBSSG.

Result: Photos were made available to IBSSG with full parental consent for future promotion of the program and related activities. A selection of these photos was uploaded to the Irish Basking Shark Project Facebook page. The project video is available on Youtube via the link.

(vi) Weekly blog and online content to be created and published in a variety of media including online showcasing work of the student

Indicator: Weekly blog and online content produced by students showcasing their work.

Result: The trainees set up and ran an online blog available at www.inishowencoastalexplorers.blogspot.ie. See below for a screenshot of one of the weekly entries.

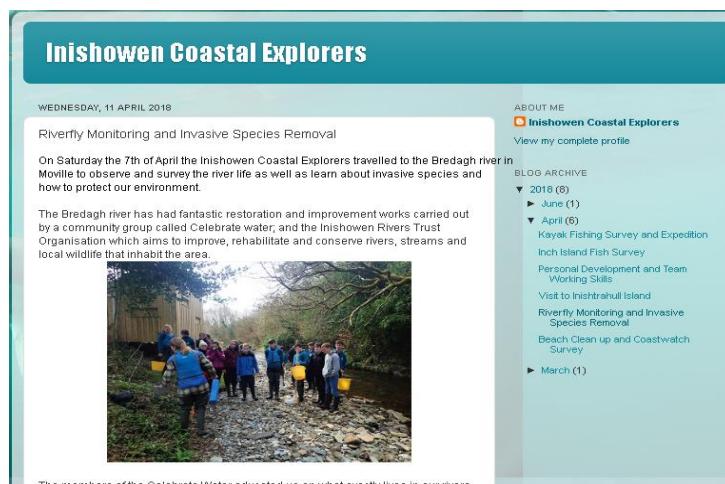


Figure 12. Screenshot from the online blog

(vii) Showcase event where program outputs and participants work will be shared with wider community.

Indicator: Showcase event

Result: Trainees organized and delivered a ‘Takeover Fort Dunree’ showcase event where they demonstrated to over 100 family, friends and community members their outputs and learning from the training programme via workshops, demonstrations and a poster presentation.



Figure 13. Images from the Showcase event and graduation at Fort Dunree

The majority of the evaluation work with participants was completed at the end of the 10 week coastal explorers programme. However, a key part of participant progression included the Sea Science Traineeship where 10 young people went on to complete a 1-week intensive traineeship to give more advanced experience in the marine sector. Required outputs from the traineeship and how these were achieved are detailed below.

Outputs from Sea Science programme must include:		
(v)	10 young people will have the opportunity to take part in an intensive trainee week where they will plan, practice and deliver their own Sea Science experiments with minimal help from delivery staff.	10 young people were recruited from the 20 explorers.
(vi)	Participants will gain competence in boat-based skills such as basic driving and handling skill, tying knots, navigation & chartwork, approaching wildlife via craft.	Trainees spent 6 days at sea in a variety of craft learning to sail and powerboat. Trainees gained an RYA Level 1 Accreditation in Powerboat (driving, handling, approaching a buoy etc.).
(vii)	Participants will complete an overnight residential to work intensively on 'Sea Science' skills training and preparation for final assignment.	Trainees completed an overnight on the sail training vessel the 'Brian Boru' working on their 'Sea Science' skills and collecting data.
(viii)	As part of their final assignment young people will help plan and deliver a showcase event for the whole programme to share their learning with the wider community. During this event young people will put their skills into action running small workshops for the general public.	Trainees ran a showcase event at Dunree Fort where they shared their work and learning to their friends, family and general public through a poster presentation and leading small workshops.



4.3 Additional Learning outcomes: Did participants achieve the desired learning outcomes?

- (i) Will have a greater appreciation and value for their local environment and natural resources.



Indicator:

- Use more positive language to describe local environment
- Identifies personal sense of value in local environment
- Attributes importance to environment and natural resources
- Change of perception of local environment
- Change of behavior. More likely to be respectful to local environments in future e.g. less likely to litter, more likely to help to improve environment.

Result: In Section 4.2 part (iii) above it addressed the pre and post training responses to 'perception' questions, in particular that referred to an appreciation of the local marine environment. There was no significant difference in the perceptions pre and post programme on the test, however the reason for this may have been due to the fact that trainees already were engaged and showing a positive appreciation for the environment to begin with. From observation it was clear to from programme leaders that the awareness and understanding of the local marine environment changed over the course of the training; participants expressed how much they enjoyed seeing their coastline from a different perspective and how it made them look at their local environment in a different way. Participants told us in the evaluation form they would like to volunteer more and help protect the local environment, which indicates a sense of appreciation.

(ii) Will be more knowledgeable about their local marine environment.

Indicator:

- Will demonstrate a greater understanding of marine processes
- Will demonstrate a greater understanding of local marine habitats
- Will be able to identify local marine species and habitats
- Will be able to speak more fluently about local marine environments.
- Will be more familiar with their local coastline.



Result: The table below shows the knowledge questions tested in the K&S self-assessment. Questions 1,2,3,4,5,6,9 and 12 specifically refer to a knowledge about the local marine environment. All of the trainees ranked their knowledge higher in these questions after the training programme (see Figure 14). Question 1 specifically asks “How would you describe your current level of knowledge about your local marine environment”, in response to which trainees gave an average response score of 2.2 in pre-analysis and 4.3 in post analysis indicating a change in response from “a little” knowledge to “quite a lot” of knowledge.

Question	KNOWLEDGE
1	How would you describe your current level of knowledge about your local marine environment?
2	Marine processes such as wind, tides, coastal weather, ocean fronts, plankton cycle?
3	Awareness of local marine habitats
4	Awareness of local marine animals
5	Identification of local marine animals (species)
6	Threats/Impacts on the ocean
7	Collecting scientific data
8	Field work planning and safety
9	Familiarity/recognition of local coastline e.g. Dunree, Fanad, Dunaff, Leenan, Malin Head, Shrove
10	The types of skills you need to be a good team member and team leader
11	The skills you need for a career in the marine/environmental sector
12	Local opportunities to get involved in marine/environmental sector
13	Career pathways and jobs in the marine/environmental sectors

Table 9 . Questions from Knowledge Assessment related to local marine environment

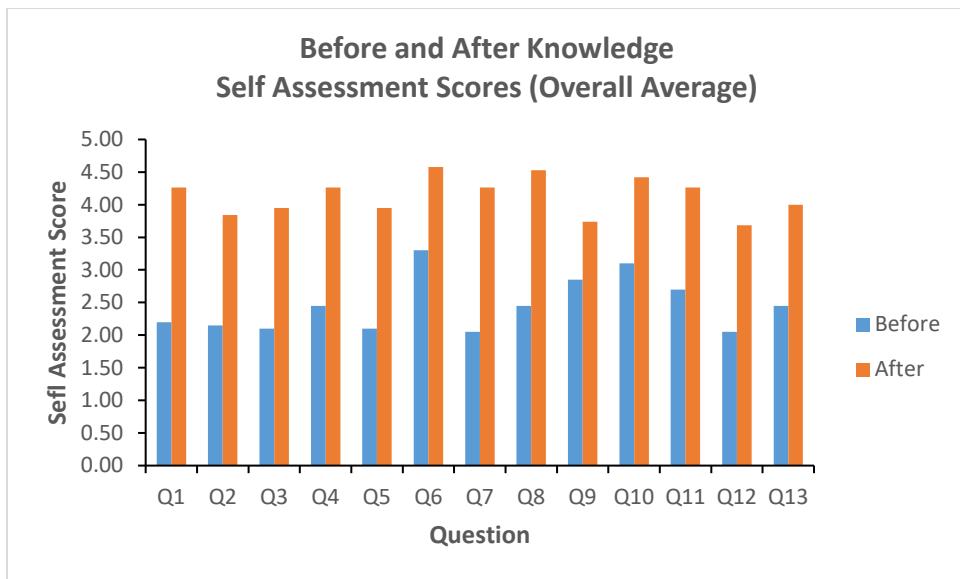


Figure 14. Knowledge Self Assessment Scores arranged by question (before and after)

As well as telling us via the K&S assessment that they felt more knowledgeable; participants actively demonstrated their increase in knowledge about their local marine environment week to week. This was particularly evident during practical sessions where trainees took turns to undertake different team roles including leadership roles. Here trainees had to put their knowledge into practice to plan and deliver field work safely and effectively. As the weeks went on trainees built up their knowledge on tides, weather, sea safety, local conditions, local species/habitats and coastal navigation. For the final practical session trainees took the lead on this themselves including communicating a plan with the skipper and the team, deciding where to take samples and surveys, deciding what information to gather and how to do it safely and effectively. Trainees also demonstrated this increase in knowledge by being able to confidently articulate their understanding of different concepts. This was evident in the review sessions on Wednesday evenings, during the practical sessions (in particular when leading and helping others to understand concepts and complete tasks) and during the showcase event where trainees shared their learning with friends and family.

(iii) Will be better able to identify careers and/or opportunities in the marine/environmental sector.

Indicator: K&S Self-Assessment, evaluation feedback.

Result: Questions 12 and 13 in the Knowledge self-assessment tested specifically for this (see below). Participants scored their knowledge higher in these areas after the training programme.

Q12	Local opportunities to get involved in marine/environmental sector
Q13	Career pathways and jobs in the marine/environmental sectors

Participants also expressed an increased interest in pursuing marine science or marine sector jobs In response to the question ‘what will you do because of the programme” within the evaluation feedback form.

- (iv) Gain practical marine/environmental skills and will demonstrate and apply their skills through practical work



Indicator: Pre and Posts Questionnaire answers, observation, K&S reviews, evaluation feedback.

Result: Answered in section 4.2 part (iv) above.

- (v) Improve their skills in communication, leadership and planning/organizing.

Indicator: K&S Self-Assessment, casual feedback, group work, observation.

Result: Wednesday evening sessions during the programme focused specifically on developing personal and team skills such as communication, leadership, planning/organizing, decision making, working with others (see table below for full list). Learners ranked their current level of skills in these areas in the before and after skills assessment. Figure below shows that the average scores for all these questions had increased after the training. Of these skills leadership skills followed by communication skills and confidence had the most significant changes.

Table 10. List of skills relating to personal development/team skills

Q	Skills
8	Communication skills*
9	Speaking in public/in front of others
10	Decision making
11	Problem solving and coming up with fresh ideas
12	Leadership*
13	Planning and organising a team activity*
14	Managing a task or team activity
15	Confidence in a new setting/situation/challenge
16	Working with others
17	Setting/Achieving Goals
18	Self-motivation

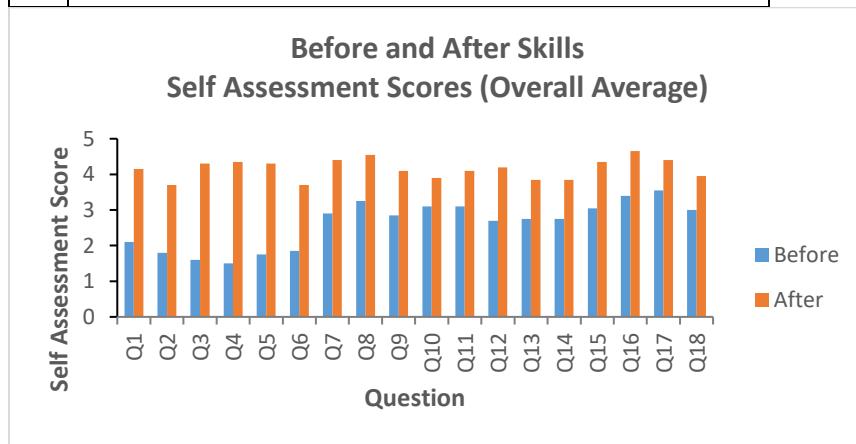


Figure 15. Skills Self-Assessment Scores arranged by question (before and after)

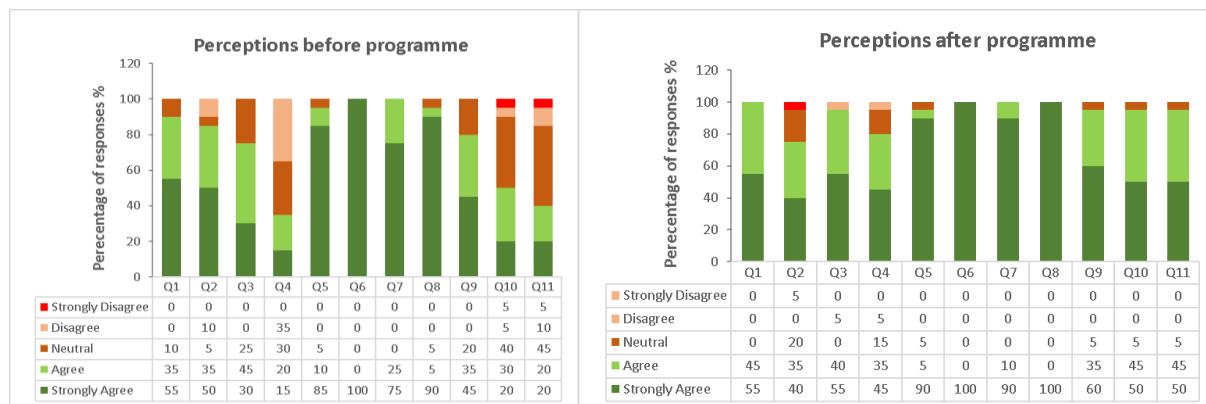
As well as telling us via the K&S assessment that they felt these skills had improved; participants actively demonstrated their improvement in personal development and team skills throughout the programme. This was particularly evident during practical sessions where trainees took turns to undertake different team roles including leadership roles. Here trainees had to put their new-found skills into practice to work together as a team to plan and deliver field work safely and effectively. As the weeks went on the trainees, leaders and delivery team saw a marked difference in the ability of the group to work together and to communicate effectively. With practice the leadership abilities of the group improved, with natural leaders becoming very evident by the end of the training. It was helpful for trainees and staff to intermittently review the skills gained, how these were applied and what improvements could be made. By using Individual Learning Plans and by identifying current levels of knowledge and skills for each individual, trainees were able to set their own goals and identify where they wanted to improve.

(v) Will feel more confident in their abilities.

Indicator: K&S Self-Assessment, casual feedback, group work, observation.

Result: Question 15 in the skills assessment refers specifically to confidence; which results indicate went from an average response of “reasonable amount” to “quite a lot”. Questions 9, 10 and 11 also refer to confidence in the ‘Perceptions’ part of the K&S assessment (see questions below). The before and after answers to these questions showed a significant increase in confidence. For example in pre-analysis 50% of the responses to question 10 were in the Strongly Disagree to Neutral range. In post analysis 95% of responses were in the Agree to Strongly Agree range.

9	I feel confident on-board boats and doing water-based activity
10	I feel confident in my ability to collect scientific data and carry out surveys
11	I am confident that I have the relevant skills and knowledge needed to pursue further training and/or a career in the marine/environmental sector



Perhaps more significant was the observational feedback from youth leaders, delivery partners and the participants themselves regarding confidence levels in the group. The group initially were very shy and struggled to engage in the Wednesday sessions. The personal development sessions on a Wednesday combined with the practical application of team-working, communication and leadership skills in the field on Saturdays were a key part in the confidence building of the trainees. As roles were rotated week on week this allowed each trainee an opportunity to lead on an activity which contributed to an overall sense of achievement. There was also a marked increase in the trainees confidence and competence when working on board boats.

“There was a marked change in the ability of the group over time. Their confidence and competence improved a lot and we saw achieve a lot more when on board” Emmett Johnston, IBSSG.

(vi) Will be more open to getting involved in environmental projects/volunteering in the future.

Indicator: Pre and Posts Questionnaire answers, casual feedback, group work, observation.

Result: There was a slight change in the answer to the question within the K&S assessment “I am interested in volunteering on a local project to help the environment” where 2 trainees that had put “neutral” changed their responses to “Agree” following the training programme. Apart from this there wasn’t a significant change in responses as the group (although not actively involved in environmental projects) already had a strong interest to get involved. What was apparent however was the number of trainees who came forward for advice on careers, third-level studies, work experience opportunities and other projects, groups and training/volunteering that they could be involved in. From this 4 of the trainees went on to take part in an environmental summer scheme led by the Loughs Agency. 2 other trainees were connected with marine industry work experience opportunities in the Loughs Agency and with Sail Training Ireland.

4.4 Was the training effective?

The evaluation strategy for this training programme used the Kirkpatrick Model of Training Evaluation, in order for us to monitor and evaluate the effectiveness of the training programme in an objective way. There are 4 levels to this model including Reaction (of the trainees), Learning, Behavior and Results (see Evaluation Strategy for full details). In this report so far we have discussed and gave evidence for Learning (knowledge and skills gained), Behaviours (anecdotal, group observation, testimonial) and Results achieved (outputs/outcomes evidenced) during the programme. In order to complete this evaluation, we looked at the reaction of participants via a training feedback form and an end evaluation workshop (combined with an ongoing participatory response and feedback from trainees).

4.4.1 Training Feedback & Evaluation

Evaluation feedback consisted of questions on 3 main topics:

- a) What did you do/learn?
- b) What was good/bad about the training?
- c) What would you change?
- d) What are you going to do because of the programme?
- e) Scoring matrix on various aspects of training e.g. effectiveness of trainers.

The results are as follows:

- a) *What did you do/learn?*

The first four questions were designed to set up the evaluation feedback from and to gain feedback from trainees on why they joined the programme and if they could summarise their activities and learning.

- Why did you decide to get involved in the programme?
- What did you do?
- How did you do it?
- What did you learn?

Results: The majority of trainees identified that the reason they wanted to take part in the programme was to learn about local marine life and the environment. Some identified the programme as a worthwhile thing to do or that it was “something new” to try. A few of the trainees had been referred to the programme by parents/mentors. Trainees were able to easily identify the different activities, knowledge, skills and learning they had achieved during the programme. Responses to the questions about what did you do/learn were categorized into the following:

Topic	No of Responses Containing
Local marine life and environment	13
Surveys and experiments	12
Using equipment	12
Boating	10
Personal development skills	9
Identify species and habitats	8
Exploring coast	7
Protecting Environment	6
Fun & Friends	5
Mariner Skills e.g. knots	2
Marine careers	1

Table 11. No of responses to ‘what did you do/learn’ arranged by category

b) What was good/bad about the training?

The following questions were used to gain feedback from learners:

- What do you think was good about the programme? Why?
- What were the two best things about it?
- What were the two worst things about it?

Responses to the questions were categorized and ranked by number of responses containing the category. See tables below.

The most popular answers for what was good about the programme included ‘On the water/boating’, ‘Developing skills’ and ‘Other young people’. The Wednesday sessions and a ‘Friendly and inclusive atmosphere’ were also rated highly. The most popular answers for the ‘best bits’ of the programme were ‘On the water/boating’ and ‘Inishtrahull trip’ and meeting new people. Popular responses to the ‘worst bits’ was the ‘cold weather’, ‘overcoming initial shyness/getting to know others’ and ‘seasickness’.

What was good about the Inishowen Coastal Explorers Programme?	
Topic	No of responses containing
On the water/boating	9
Developing skills	7
Other young people	5
Wednesday sessions	5
Inclusive and friendly	4
Practical learning	3
Helping protect environment	3
Putting skills into practice	2
Trainers	2
No cost	2
Chance to be a leader	1
Recognising progression	1
Learning to identify species	1
Unique experiences	1
Life of marine biologist	1
Layout	1

What were the best bits?	
Topic	No of responses containing
On the water/boating	11
Inishtrahull trip	9
Meeting new people	7
Wednesday sessions	5
Learning new things	4
Developing confidence	2
Science experiments	2
Seeing wildlife/identifying species	2
First-hand experience	2
Trips	1
Fishing	1
Getting out of house	1
Beach clean	1
Protecting environment	1

Worst Bits	
Topic	No of responses containing
Cold	8
Overcoming initial shyness/getting to know others	4
Sea sickness	3
Weather	3
Getting wet	2
Lack of changing facilities on beaches	2
Early rises	2
Missing a trip	2
I was ill prepared sometimes	2
Programme not long enough	1
Some things were rushed	1
Not seeing sharks	1
Coastwatch survey too hard	1

Table 12. No of responses to good/bad/best bit questions arranged by common categories

c) *What would you change?*

The following questions were used to gain feedback from learners:

- What could have been better? How?
- If you were to be involved in the programme again what would you change?
- Is there anything you will do because of the programme?

- How, if at all could the course be improved in terms of time, content and structure?

Responses to the questions were categorized and ranked by number of responses containing the category. See table below. The most popular answer was 'Nothing', followed by a longer programme and more consistent hours/schedule. The third answer is in reference to the occasional timetable changes due to weather or tides.

What could be better/what would you change?	
Nothing	8
Longer programme	3
Consistent hours/schedule	3
More trips to Inishtrahull	1
Not so early on Saturday morning	1
Shorter Wednesday sessions	1
A chance to see a basking shark!!	1
Less kayaking	1
Weather	1
Location - far to travel	1
More opportunities to help out locally	1
Put it in summer	1
More time on the boats	1

Table 13. No of responses to 'what could be better/what would you change' questions arranged by category

d) *What are you going to do because of the programme?*

The following questions were used to gain feedback from learners:

- What do you think should happen next? Is there anything you are going to do because of the programme?
- Has the training given you any specific ideas to follow up?

These questions are related to whether the programme content changed behaviour or influenced the trainees in any way e.g. new ideas, new found confidence. The most popular response was that the programme made trainees 'consider studying marine science'. Trainees also indicated they would like to 'volunteer' and potentially pursue a 'career in the marine sector'.

Is there anything you are going to do because of the programme?	No of responses containing
Consider studying marine science	8
Volunteer	7
Career in marine sector	6
More interested in marine life	3
Learn more about local marine environment	3

Pick up litter	2
Try more fishing	2
More boating	1
Inform others	1

Table 14. No of responses to ‘what are you going do because of the programme’ arranged by category

e) Scoring matrix on various aspects of training e.g. effectiveness of trainers.

Below is a table of the results from a series of scored questions on the training content, relevance and effectiveness. The majority of feedback was positive with the most positive feedback being given for ‘Effectiveness of the trainers’ and ‘Course relevance’.

Question	Rank				
	1	2	3	4	5
1. How much of the training/subject content was new to you? 1 = none 5 = a lot			4	11	5
2. Did you find the course relevant to what you were looking to learn? 1 = not at all 5 = a lot			3	2	15
3. How easy was the training content to understand? 1= not at all 5 = very easy			1	10	9
4. How effective were the trainers? 1 = poor 5= very good				1	19
5. How confident do you feel about your ability to put what you have learned into practice? 1 = not at all 5= v. confident	1	1	3	4	11

Table 15. Scoring matrix indicating the number of responses within ranks 1 – 5 to each question

The final two questions in the evaluation feedback form were as follows:

- Would you recommend the course to a friend or colleague/others?
- What is your overall assessment of the course? (Circle one)

All 20 trainees said they would recommend the programme to a friend, and 19 trainees rated the programme as ‘excellent’ and 1 trainee rate it ‘very good’.

4.4.2 Evaluation Workshop with Trainees

At the final Wednesday session, the trainees took part in an evaluation workshop to review the highs, lows, learning and recommendations from the programme. The layout of which is below:

Question	Methodology
1) Skills developed during the programme and how these were developed	On A3 sheets students worked together in small teams to identify skills learned (10mins). Once completed groups identified where each member had developed a skill and when they demonstrated this. Results were shared in group work (15mins).
2) “You have been working together as a team for 10 weeks. At the beginning you didn’t know each other or what to expect. It took a while for the team to click, to get to know one another and to start working as a team. What are the things the team have got better at over time? Think of specifics examples/scenarios?”	A3 Sheets working in groups to write answers down. X Factor style challenge where a judging panel was created from a member of each team and the team members plus the judging panels had to come up scores for their team’s performance in different scenarios at the beginning versus end of programme e.g. communication in the field.
3) Highs and Lows of Programme	String represents a mountain range of high peaks and low troughs. The groups used sticky notes to annotate the peaks and troughs of the programme.
4) Evaluation Feedback	Feedback form

Table 16. Layout of Evaluation Workshop

Outcomes/Conclusions from Evaluation Workshop

- 1) Participants were able to clearly identify and articulate the skills they had developed over the course of the programme, where/how these had been developed and gave examples. Skills mentioned included scientific survey/data collection, using scientific equipment, communication, leadership, teamworking, problem solving, identifying species, planning and organising fieldwork, boat skills etc.
- 2) Participants recognised where the skills of the entire group had improved since week one and determined that the group were working better as a team because of improved communication, better leadership styles, more confidence, safer and more knowledgeable and competent in the field.
- 3) Participants identified their highs and lows during the programme. High points included the on-the-water activites such as boating and kayaking, the trip to Inishtrahull island, working together as a team and making friends, and protecting the environment on the rivers day and beach clean. Low points included the cold/wet weather, getting changed on the beach without changing rooms and overcoming shyness whilst getting to know everyone at the beginning.



Figure 16. Images from Evaluation Workshop.

4.4.3 Testimonials

Participants:

"I had such a great time and I am sad its ending" Anon

"It was great fun. I learned a lot about marine biology. I made amazing friends and loved it so much. I became confident and learned lots of new skills" Sadhbh



"I had an amazing time and would definitely participate again given the chance" Jane K



"A once in a lifetime opportunity that I enjoyed greatly" Anon



"It was one of the best experiences of my life" Anon



"Extremely well put together and great craic, interesting too!" Sean

“Thoroughly enjoyed it from the Wednesday sessions to the more practical elements. It was all very good and well taught, and I do feel I’ve learned a lot about myself and what I am capable of; and about marine biology and the sea”. Odhran



“It was brilliant, and I would do it all over again if I could. I would love to get involved in something like this again and I would recommend it to everyone with an interest” Caitlin

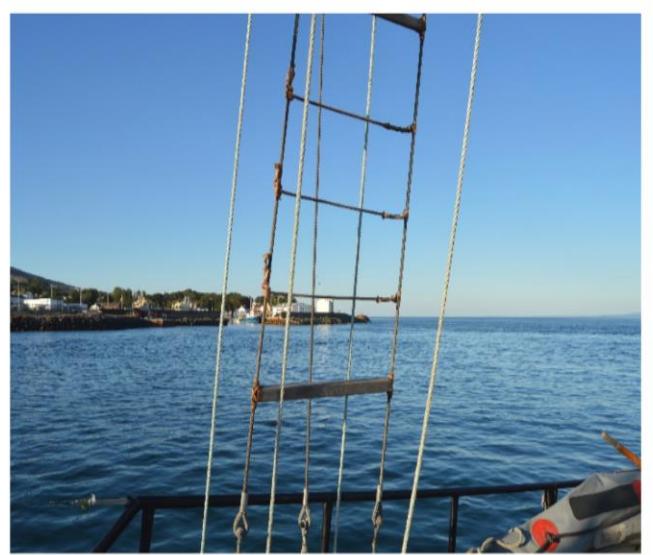
“Loved the programme will recommend to friends and family for future year groups. Showed me different outlooks on things. Loved the trainers and they made the sessions fun. It can be hard to concentrate on academics after school but they made it good” Orla B



Parents:

"I would like to take this opportunity to thank yourself and all the extremely hard-working team behind you for the amazing opportunity afforded to my son Sean during his time with the coastal explorers this year.

He started out with a very real interest in marine studies and by the time he had finished he is now convinced that this is definitely the career pathway for him and he is not for turning!



Not to mention the fantastic experiences with the shore surveys ,kayaking from Moville to Greencastle, learning about marine pollution and marine life all about the plankton, the incredible trip out to an uninhabited island of Inishtrahull, the importance of safety in and around the water, the unforgettable night away on the tall ship , but I truly feel it enabled Sean to mature as a young man ,I feel he has learnt to empathise with others and appreciate other points of view , he seems a lot more tolerable of others (I hope this all lasts !), I feel this course has really enabled Sean to appreciate team work and understand the importance of having to get on with strangers and place your trust in others for the optimal benefits of a group.

It was an amazing opportunity that he was given and I feel the benefits of which will stay with him for life"

Fiona (Sean's Mum!)



"The Coastal Explorers programme was an excellent experience for our family, especially Rachel, who was lucky enough to be a participant for the duration of both the initial 10 week programme and the follow up traineeship experiences. We were initially apprehensive, as the course outline seemed to be quite intense and covered a lot in a short time, but we needn't have to be worried. Rachel was taken under the wing of the expert team of Rosemary, Emmet and Chris, who ensured that the programme was professionally executed with excellent communication and supervision throughout. We were delighted to see Rachel grow in confidence, making new friends, learning new skills, and in fact had so much new knowledge to share with us that she still hasn't stopped talking about it. With each week, she enthusiastically looked forward to the next session and it was great to see her settle into enjoying an environment that had previously been quite foreign to us. I would rate the Coastal Explorer's Programme as a five-star experience and it has made Rachel even more convinced that she wants to study marine biology as a career.

Janet (Rachel's Mum!)



5. Conclusions and Recommendations

Conclusions:

- (i) The programme setup which included a youth consultation delivered in a participatory style, allowed for a meaningful and enjoyable outline of activity to be created which came from the young people themselves.
- (ii) The recruitment method which comprised of an Expression of Interest form and an interview process where expectations were made clear at the beginning was key in the high engagement and retention rate for the programme (95.5% attendance on average over 10 weeks).
- (iii) The combination of personal development sessions on a Wednesday evening followed by a practical session on a Saturday worked well for the programme participants and was a well-received format. Wednesday sessions were vital for developing confidence, team bonding and skills such as communication, leadership, decision making and problem solving that are vital for the field work elements.
- (iv) Trainees had ample opportunity over the course of the 10 week programme to take on different team roles (e.g. team leader, recorder, technician) and put skills into action in a practical setting.
- (v) Each week trainees were able to learn new information about their local marine environment that contributed to their overall understanding of how to plan and deliver coastal explorations and 'science at sea' in a safe, fun and effective way.
- (vi) It was easy for participants to see how they were progressing week on week. This was achieved by reviewing learning on Wednesday sessions, setting goals and action plans in the Individual Learning Plans, completing Knowledge and Skills reviews and through group discussions. In addition, the level of responsibility and challenge was increased at an appropriate level each week so that trainees could progress, learn new skills and achieve.
- (vii) Participants learned a range of skills beneficial for their personal development and long-term study/career aspects. Self-assessment scoring of knowledge and skills showed that all of the knowledge and skills that were set out in the initial evaluation strategy had higher scores after the training. This indicated that trainees felt their knowledge and skills had improved in all areas
- (viii) Participants were easily able to identify the skills they had gained and provide scenarios for how they achieved these.
- (ix) The length of the programme (10 weeks) seemed appropriate as it took a long time for participants to gain confidence and to bond as a group.

- (x) Participants told us their favourite parts of the programme were the on-the-water activities, the trip to Inishtrahull island, learning new skills and meeting new people.
- (xi) The majority of trainees expressed an interest in taking part in similar projects or activities again, further learning (informal/formal), volunteering, career, other environmental programmes, beach cleans, Rivers Trust.

Recommendations:

- (i) The training ran from March -May and although a good time for trainees (not too close to exams or in school holidays), the weather was unpredictable, and the year had an unseasonably cold start making some of the outdoors work difficult/uncomfortable. Running the programme later in the year or over summer could make field work more pleasant and easier scheduled.
- (ii) It was difficult to find boat operators who were running before the summer season meaning there was less boat-based activity than anticipated. There was only one hard boat operator available to us during the programme and because they weren't always available it was difficult to schedule. Potentially would need to run the programme later in the year and over summer period.
- (iii) Extreme/adverse weather changed the itinerary more often than anticipated. It would be recommended to run the training later in the year to take advantage of fairer weather.
- (iv) Despite forewarning participants were often underprepared for weather conditions. Investment in fit for purpose clothing to provide trainees when faced with rough conditions would be advised.
- (v) The 10 week programme layout was more effective than the 1 week traineeship. Trainees found it challenging to be doing activities over successive days. The value in this experience was the additional time at sea and the networking opportunities for the trainees. The trainees appreciated the accreditation provided by the RYA L1 Powerboat course. The overnight experience on board the tall sail training vessel the Brian Boru was perhaps too challenging for some of the trainees (too stretched).
- (vi) An idea for the future would be to link with more marine sector businesses and third level educators to enhance the learning outcomes of the programme. It would be useful for participants to gain further insight and connections in the industry.