



SUSTAINABILITY: Our Future, Your Story

Introduction – What’s in Store

General STEMreach programme information: www.calmast.ie/stemreach-2/

The STEMreach, sustained engagement programme for Transition Years was created by Calmast STEM Engagement Centre at SETU to connect and integrate communities, academia and industry. Sustainability: Our Future, Your Story was first developed and trialled in April/May 2021, with over 420 Transition Year students from ten schools across the South East region.

The updated module explores sustainability and biodiversity using the medium of digital storytelling. The programme aims to create environmental awareness and will empower students to think creatively and critically about the world around them. Throughout the module students will work together to create a fun and engaging lesson for primary pupils showcasing what they have learnt during the programme. In addition, students will develop a short TikTok style video to communicate a message about sustainability to their wider community.

Format – How it Works

Each week teachers and facilitators will receive a handbook that includes all materials, video links, activities, advice and supplementary work that can be completed throughout the session. The handbook will function as a detailed step by step guide for facilitators while offering TY students the opportunity to understand how a lesson may be structured to ensure participants enjoy the experience. In groups, students will need limited internet access throughout the module for the purpose of research and feedback, this may be completed on mobile or using a tablet.

After distribution, all videos and handbooks will be uploaded to a dedicated webpage, which will serve as a comprehensive reference point. As flexibility and adaptability are paramount when running a programme for Transition Year’s the resources will be available on demand. Time commitment is approximately 60-80 minutes per week, this may be increased or decreased depending on time available.

Feedback & Evaluation – Pre & Post Programme

Student and teacher feedback will be gathered both before and after the programme through detailed pre and post surveys.

Primary pupils will also be evaluated by TY students, using a short set of simple questions such as: Can you tell me one thing you learned today? Can you tell me about one thing you enjoyed and why? Can you tell me about one thing we could have done better?

Module Breakdown – Inputs and Outcomes

Week 1: Introduction

This introductory session will outline the aims and outcomes of the module focusing on the UN sustainable development goals to create awareness about sustainability and biodiversity, within our local community through positivity action or change.

We will guide students in digital storytelling, and they will be tasked with developing and delivering an activity for younger pupils. Each session will include a range of activities, short videos from experts, tasks and advice. This week's session will culminate with students calculating their carbon footprint, noting the impact that simple day to day activities have on our planet.

Week 2: Engineering and Renewable Solutions

(May be substituted for industry representative talk subject to availability)

Focusing on engineering, renewable energy and the design cycle, students will be introduced to the concept of design thinking and its benefits for our planet.

Through collaborative play using the Happy Planet game, designed by Calmast STEM Engagement Centre, students will be challenged to think critically to create a range of sustainable energy solutions for their community with the circular economy in mind. By incorporating hands on learning through play, participants will be encouraged to have discussions in an open and relaxed environment.

Week 3: Consumption, Sustainability and Me

Guided by Geraldine Carton and Taz Kelleher, founders of the 'The UseLess Project' students will learn about the impact of excessive consumption and food waste and on our planet.

Through an empathic lens, students will be tasked to look at their local community and develop an idea to reduce their consumption or improve their sustainability or incorporate a more circular based economy. These ideas may form the basis of their storyboards and videos to be completed during the next session.

Week 4: Digital Story Telling & Video Production

This week students will delve into the world of digital storytelling, storyboarding and videomaking guided by industry tools and tricks. They will build upon their communication and teamworking skills by developing a storyboard using the template provided based on an idea of their choice.

Utilizing their storyboard as a starting point, students will then develop a short 15 – 30 second TikTok style video based on sustainability, renewable energy or consumption. These videos will be



showcased on Calmast social media during Science Week. Videos may also be used by TY students during their final session with younger pupils.

Week 5: Activity Ideation and Development of Primary Activity

A key element of the STEMreach programme is the design, delivery and implementation of a sustainability-based lesson by TY's for younger pupils.

In teams of 4-5 or as a class students will begin the session by discussing what makes a successful lesson, taking key learnings and implementing them into their own lesson plan. They will design and develop a short educational piece accompanied by fun and engaging games and activities for primary pupils.

Week 6: Primary School Activity and Workshop

(To take place potentially during Science Week)

This week, Transition Year students will join younger pupils to deliver a fun and engaging lesson that they have designed, developed and coordinated.

The lesson will incorporate a short educational piece focusing on an element of the programme TY students found engaging as well as a fun hands-on activity, such as a game or ice-braker.

Optional: Career Talk and Renewable Energy by Industry Volunteers

(Subject to availability)

Based on the availability of industry volunteers, an additional in-person or online session will be offered to schools, this session may focus on the range of careers available in the region.

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Website: www.calmast.ie **Email:** calmast.wd@setu.ie