

Sustainable Futures Day 2023

Introduction

One of the key ways in which we aim to support young people to progress into higher levels of education and qualifications, and ultimately successful careers, is to increase their awareness of labour market information (LMI), and in particular growing industries and required skills. Both nationwide and in Essex, green skills and green jobs are becoming increasingly important in order to achieve society's goals for net zero emissions, biodiversity, and food security, among others.

Investment in the low-carbon economy has increased in recent years driven by rising concern about climate change from scientists, policymakers, and activists, and a recognition of the economic opportunities that new technologies and services will provide.

- "Local green jobs – accelerating a sustainable economic recovery: An Ecuity Consulting report for the Local Government Association (LGA)"

Essex County Council in particular, in their Green Skills Infrastructure Review for Essex (2022), estimate that by 2030 at least 5,750 jobs in Essex will be "green skilled jobs" (jobs where green skills are the core function of the job role), up from around 2,900 jobs in 2019. They also identify a number of gaps and challenges that will need to be addressed in order for this increase to take place, including around awareness, education and communication.

Awareness of how jobs contribute to the climate emergency is crucial, especially to motivate younger generations.

- "Green Skills Infrastructure Review for Essex", Essex County Council, March 2022

The aim of Sustainable Futures Day was to improve awareness of, and aspiration to, the range of careers that contribute to tackling the issues of climate & environmental change and creating a more sustainable future, and the possible routes into such careers. In particular, we wanted to present students with a broad definition of sustainability based on the UN Sustainable Development Goals, demonstrating that what is needed to create sustainable society is not just solar panels, recycling, and biodiversity, but also equality, justice, education, and healthcare. We hoped that students would come away with the impression that sustainable careers can exist in any industry and that green skills are relevant to any job.

In June 2022 we ran the first Sustainable Futures Day at ARU, with 83 students from 3 schools – Bromfords School, Woodlands School, and De La Salle. There were 6 different sessions available throughout the day, with each student taking part in 3 sessions. We learned a number of things from this which helped in the planning and coordination of this year's event.

For the second Sustainable Futures Day event, we had 8 different sessions available, with each student again taking part in 3 sessions. We were joined by roughly 120 students from 5 schools – De La Salle, Colchester Academy, Tabor Academy, New Rickstones Academy, and Drapers Academy.

Despite originally planning for larger numbers and having capacity for 220 students, we were very happy with the number of schools and students that attended, given that the date of the event ended up coinciding with a day of strike action that impacted some schools' ability to attend.

The day started with a whole group session which encouraged students to think about what sustainability means and introduced them to the UN SDGs, first with a short video and then with an activity where they discussed in groups which they thought were the five most important priorities from among the 17 goals.



The students were also each given booklets with prompts and questions to complete throughout the day to help them reflect on the activities they took part in, relating each session to relevant SDGs as well as career options they found out about, and making note of anything they learned or skills they developed. At the end of the day, they also all received a certificate that recognised their engagement.

Theory of Change – outcomes & impact measures

A theory of change was created for this event which informed the design of the evaluation methods. Five planned outcomes were identified based on the main overall aim:

1. Improved understanding of sustainability and SDGs
2. Improved understanding of how sustainability relates to school subjects
3. Students understand how HE and FE relate to future careers
4. Improved awareness of green/low-carbon careers and pathways
5. Students feel that FE/HE is for them

These were linked to 5 impact measures:

1. Progression to HE/apprenticeships
2. Progression to FE
3. Aspire to study subjects that relate to sustainability
4. Aspire to green/low-carbon jobs, or careers that contribute to a more sustainable society
5. Increased confidence in abilities to progress to and succeed in HE/FE

As the students attending this event were in Year 10, their expected HE entry year wouldn't be until 2026, so this data may not be available to us to answer point 1 within the timeline of the programme. Expected FE entry would be in Autumn 2024, so this would in theory be possible to track via HEAT data.

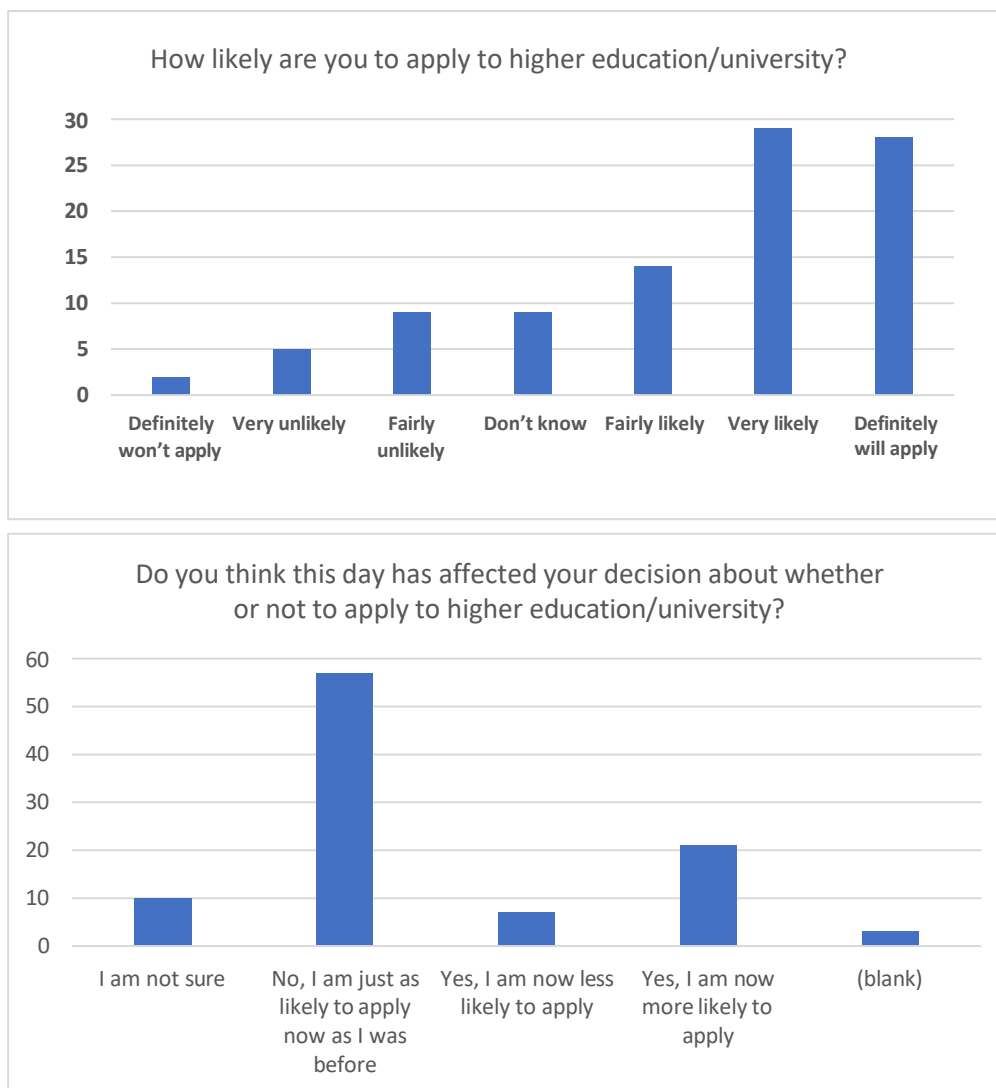
Points 3-5 were assessed via an end-of-day evaluation survey which students completed – the survey results are detailed below.

Results from surveys

There were 98 responses to the post-activity survey. 59.7% of 72 respondents who gave their postcodes were Make Happen target learners.

General questions about the day

The first two questions are asked in all Make Happen surveys and relate to students' aspirations to study at HE level. Often there is a challenge in getting students to understand that "Higher Education" in the context of these questions also includes higher level apprenticeships.



74% of students (n=71) said that they were either “Fairly likely” or “Very likely” to apply or “Definitely will apply” in response to the first question. The majority of students (n=57) said that they were “just as likely to apply now as I was before” after the event, which is not unexpected given the high number already aspiring to university. The second most popular option was “I am now more likely to apply”, with 21 students saying that they felt the day had this effect.

Students were asked to rate how much they agreed with a number of statements relating generally to their thoughts and impressions about university and higher education. 83% of students (n=80) agreed (or strongly agreed) that “Higher education/university will give me valuable life skills”, while 86% agreed that it could enable them to get a better job. Despite 90% (n=84) agreeing that “I believe I could go to university when I leave school if I wanted to”, only 59% of students agreed with the statement “University is for people like me”. This is not unusual, as this question often scores lower than others, which could be due to students finding it hard to define – this would make sense given that 29% of students selected “Neither agree nor disagree”.

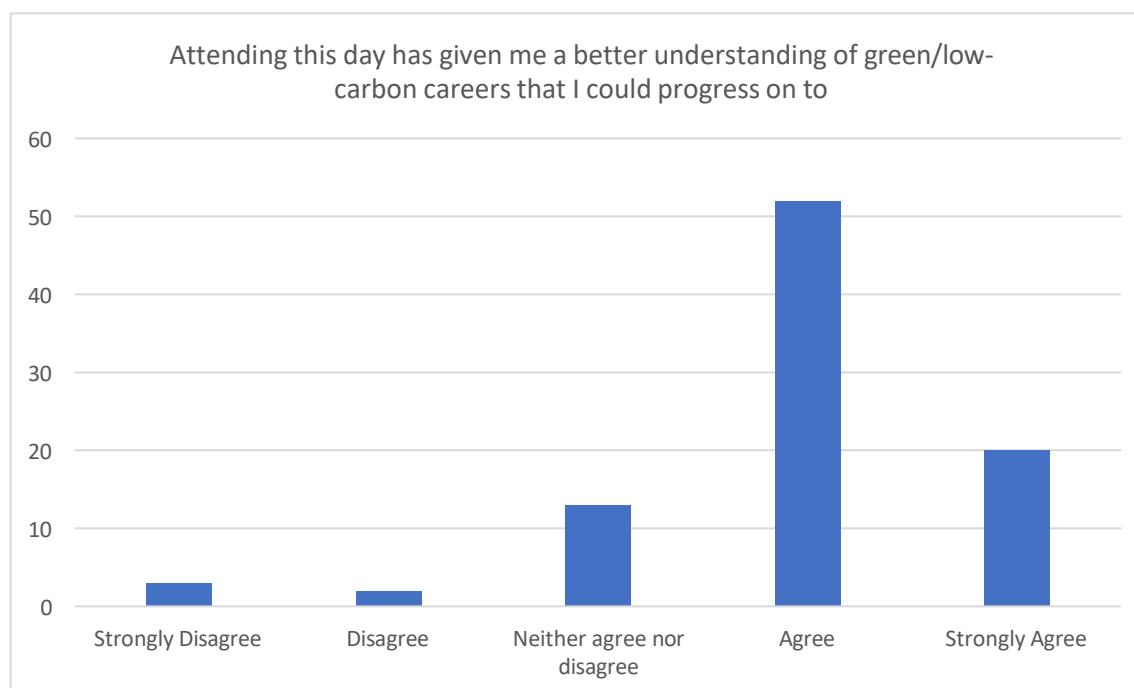
When asked about how they found the Sustainable Futures Day event in general, 80% of students agreed that they found it helpful, and 88% of students said that they learned something new. These numbers are respectively roughly the same as, and slightly higher

88% of students said that they learned something new

than, the average for Make Happen activities. Around 67% of students said that they would recommend the event to friends – usually this question scores lower than others, although this was slightly lower than the average. Only 43.5% of students agreed that what they learned would help them make an informed choice about their options after school or college, with 40% saying that they neither agreed nor disagreed, and the other 16.5% disagreeing. This may reflect the fact that most of the sessions were subject-based in fairly focused areas, with less time spent on discussing future options in general than most Make Happen events.

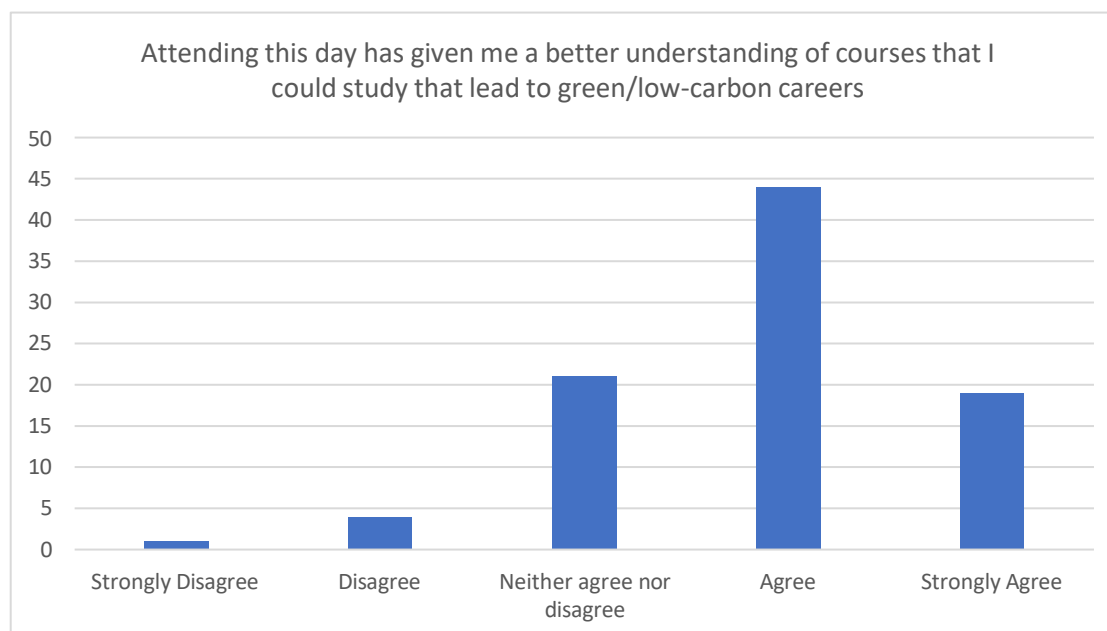
Students were also asked a set of questions relating to their thoughts about green (or low-carbon) careers. These had fairly low positive responses: when asked to state how much they agreed with the statement “I feel that a green/low-carbon career is for someone like me”, only 20% of students (n=19) selected Agree or Strongly Agree, with 50% saying they neither agreed nor disagreed, and the other 30% that they disagreed. This could suggest that there was still some uncertainty about what could be called a “green career”, with students still thinking of it as a narrow field of work – this may be combined with ambiguity of what is meant by “for someone like me”, as could be suggested about the same question posed about university/higher education.

When asked about green careers and related pathways, 23% of students (n=22) agreed with the statement “I am considering a green/low-carbon career”, with 36% saying they disagreed and 41% selecting “Neither agree nor disagree”. Many students in Year 10 may not have decided or thought about what career they want to pursue yet, which would explain the large number of students on the fence with regards to considering green career options. Even fewer students said that they were considering studying green/low-carbon related courses after school/college, with just 16% selecting Agree or Strongly Agree, compared with 45% who said “Neither Agree or Disagree” and 39% who agreed. This is not very surprising given that there are few courses that students might consider are directly “green or low-carbon related”, particularly if they are considering traditional subjects.



In answer to specific questions about the impact the day had had on their understanding and outlook, the majority of students agreed that “Attending this day has given me a better understanding of green careers that I could progress on to” (80%) and that it “Helped me to find out about the different jobs I can do in the future” (82%). Slightly fewer but still a large number said that

it had “given me a better understanding of courses that I could study that lead to green/low-carbon careers” (71%) and “helped me to find out about the different courses that I can do in the future” (79%) – this makes sense, given that the day in general, and most of the workshop sessions, were focused more around career areas students could consider. In answer to open free-text questions about the day, a number of students suggested that they might do more research into related courses they could study at further or higher education (below).



In response to other questions about the impact of the day, 62% of students (n=55) agreed that it “Improved my confidence in my ability to succeed”, and 73% (n=55) agreed that it “increased my understanding of how what I am learning now will help me in future”.

73% of students agreed that the day had “Increased my understanding of how what I am learning now will help me in future”

Students were also asked qualitative open-ended questions about their thoughts on the day:

In what ways, if any, did taking part in this Sustainable Futures Day affect your views on the future?

There are hundreds of different careers that aim to improve our future and the planet

Informed me about different career choices I had not considered

New ideas on courses I would like to do

I might research more on sustainable courses

I have a more focused idea on what I want to do when I leave school

Yes, helped realise I want a career in earth sciences

Is there anything else you would like to tell us about the Sustainable Futures Day?

I really enjoyed it and loved all the activities

It was fun and interesting

Should mix with other schools

Questions about the workshop sessions

For each of the workshop sessions students attended, students were asked to answer 5 questions. The first two involved rating to what extent they agreed with two statements:

1. "This session was helpful"
2. "I learnt something new in this session"

The other three were open ended questions with a free text box:

3. Are there any skills which you feel you have developed from attending this session?
4. Is there anything positive you would like to highlight about this session?
5. Is there anything that could be improved about this session in future?

For each session, the results from the first two questions have been summarised, and key qualitative comments have been highlighted that reflect themes mentioned by a number of students, or specific things about elements of the session.

Future of Farming – LEAF Education

23 students completed surveys for this session. 52% of students (n=12) answered positively (agree or strongly agree) that the session was helpful, with 78% (n=18) agreeing that they learned something new.

Are there any skills which you feel you have developed from attending this session?

How to know the difference in food

My knowledge on plants

How to identify food products

Skills to save climate change and skills to grow more crops

Is there anything positive you would like to highlight about this session?

It was interesting and I found lots of information helpful

I liked how we were able to do group work

The sorting of products was fun and interactive

Is there anything that could be improved about this session in future?

More time

More practical, less partner work

More interesting slideshows

Summary

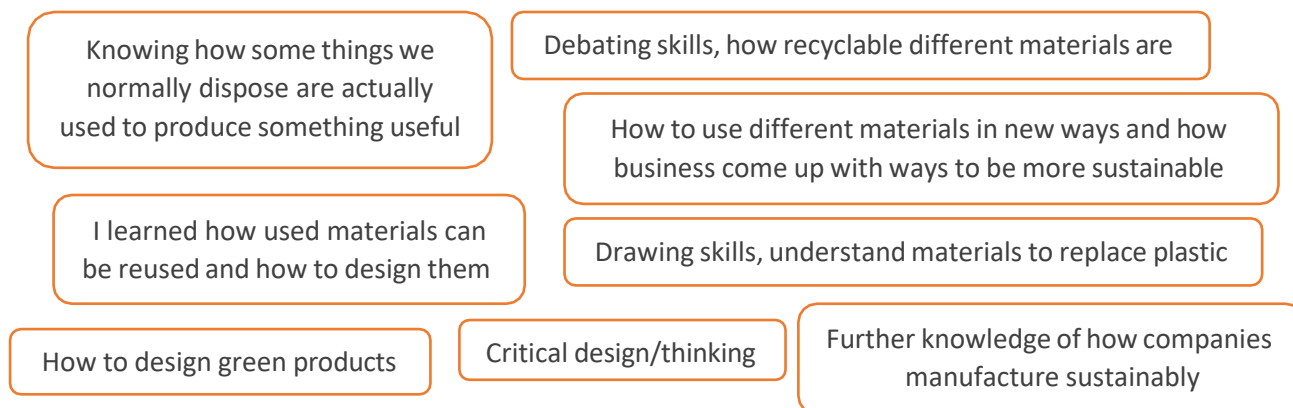
This workshop had some smaller groups than other sessions, so the sample number of students answering these survey questions was slightly less. Most students said that they learned something new, with students mentioning plant knowledge, identifying food products and finding out about jobs in farming in response to the open questions. Some students specifically mentioned that they enjoyed being able to work in groups, whilst one mentioned "less partner work" as something that

could be changed, probably mostly reflecting personal preferences. At least 2 students specifically mentioned sorting food products as a part of the session that they particularly enjoyed.

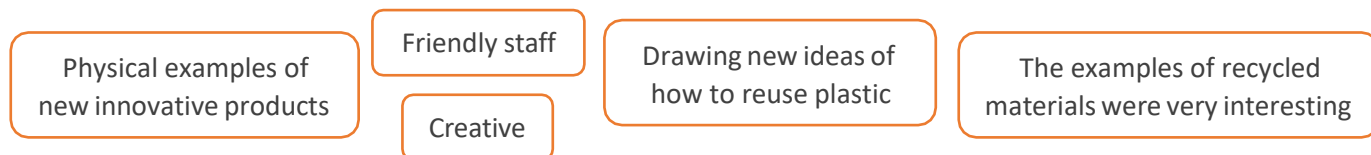
Sustainable Design – *The Design Museum*

39 students completed surveys for this session. 85% of students (n=33) agreed (or strongly agreed) that the session was helpful, with 87% (n=34) agreeing that they learnt something new.

Are there any skills which you feel you have developed from attending this session?



Is there anything positive you would like to highlight about this session?



Is there anything that could be improved about this session in future?



Summary

The responses to the questions about the helpfulness of the session and whether students learned something new were very positive. In describing skills they thought they had developed, students gave detailed and varied answers, mentioning a range of things specific to the session activities, including design thinking, knowledge of how sustainable manufacturing works, how recyclable different materials are, and being able to evaluate the design of different products. Many students enjoyed being able to see and handle the examples of different sustainably designed products, and they liked the creative element of the activities.

Biodiversity – *Francesca Wright, University of Essex*

42 students completed surveys for this session. 64% of students (n=27) agreed (or strongly agreed) that the session was helpful, with 76% (n=31) agreeing that they learned something new, with one student leaving this question blank.

Are there any skills which you feel you have developed from attending this session?

The 4 ecosystem services,
causes of extinction

How to find out which
species are endangered

My knowledge of
different species

Is there anything positive you would like to highlight about this session?

She delivered the session well, I
understood her presentation

The session leader was very friendly and
spoke to me in detail about university

Made me think about different careers

It was very fun and interesting

Is there anything that could be improved about this session in future?

More fun practical tasks

More activities

Summary

Many students said that they learned something new from this session, mentioning knowledge of different species, what species are endangered, and how/where to find out about endangered species, as well as causes of extinction and ecosystem services. Two students also commented “There are more grey squirrels than red” and “Blue fish tuna [sic] are overly exploited”. A number of students commented that the presentation was delivered well, and that Francesca was friendly/helpful. Students enjoyed looking up animals on the IUCN red list. Quite a few students mentioned more practical tasks as something they would have liked to see as part of this session.

Community Engagement – Sustainability Student Engagement Team, University of Essex

39 students completed surveys for this session. 74% of students (n=29) agreed (or strongly agreed) that the session was helpful, and 74% (n=28) also agreeing that they learned something new, with one student leaving this question blank.

Are there any skills which you feel you have developed from attending this session?

I was able to consider different
views on how things are done
from experienced people

Teamwork, decision
making, creativity,
budgeting

Targeting a specific audience

How to design &
budget a campaign

Word scheme, budgeting

Communication, delegation &
creativity

Is there anything positive you would like to highlight about this session?

The staff helping let us know all we needed

Enjoyed the end presentation

Fun working in groups and creating our own campaign

Session leaders were very engaged and helpful

Presenting and making the campaigns

Is there anything that could be improved about this session in future?

Being able to pick the groups

More time

Summary

Students frequently mentioned the interaction with workshop leaders in feedback about this session, with at least 6 students specifically saying that staff were “helpful” or “engaging”. Students enjoyed the group work aspect, and being able to create and then present their own campaigns. Among the skills students felt they developed, some were transferable and others were specific to the activities in the session, with students mentioning budgeting, targeting specific audiences, and word schemes, as well as teamwork, communication, decision making and creativity.

Planning a tree planting programme – *Essex Forest Initiative, Essex County Council*

42 students completed surveys for this session. 67% of students (n=28) agreed (or strongly agreed) that the session was helpful, with 81% (n=34) agreeing that they learned something new.

Are there any skills which you feel you have developed from attending this session?

I learnt different methods and viewpoints on the reasons things are done

Different aspects to consider when planting trees

I learnt things such as financial skills and decision making

What area would be suitable to plant trees (e.g. urban areas where people are)

How to sustainably grow trees

Teamwork, compromising and negotiation skills

Is there anything positive you would like to highlight about this session?

Extremely proactive session and the leaders helped us and got involved much better than the other sessions

I learnt about trees and I didn't know about them before

Very active and enjoyable activities

Different trees have different impacts

Is there anything that could be improved about this session in future?

More practical work

Summary

Many students said that they learned something new from this session, which is unlikely to be similar to any work they have done in school. Specifically, they mentioned “aspects to consider when planting trees”, including suitable areas to grow trees and how to grow trees in the most sustainable way. Students particularly praised the engagement of the workshop leaders in helping the students with the activity. Students felt they developed skills including teamwork, negotiation, decision making, and financial skills/budgeting.

Green Infrastructure – Essex County Council

33 students completed surveys for this session. 76% of students (n=25) agreed (or strongly agreed) that the session was helpful, with 85% (n=28) agreeing that they learned something new.

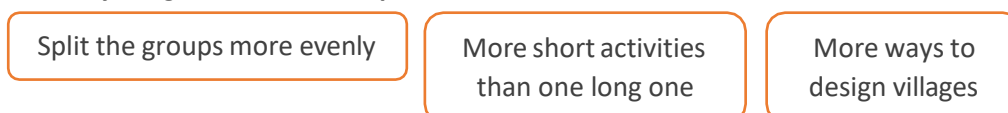
Are there any skills which you feel you have developed from attending this session?



Is there anything positive you would like to highlight about this session?



Is there anything that could be improved about this session in future?



Summary

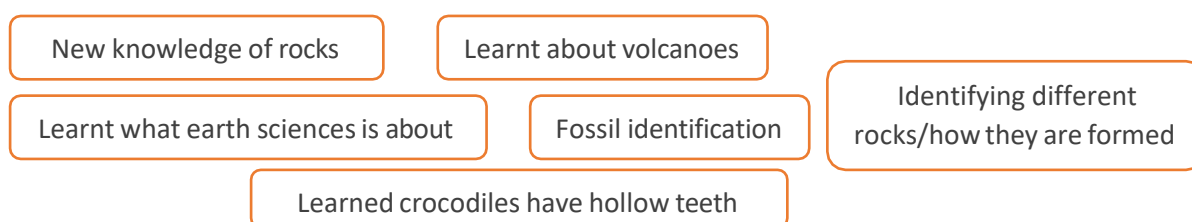
A large number of students said that they learned something new from this session, and again it is very likely something they have not encountered before. There were a number of things students said they learned that specifically mentioned green infrastructure or elements of the activities,

including learning what green infrastructure is, and what careers in the area involve, as well as how companies and other groups involved make decisions. They also mentioned transferable skills such as presentation skills, public speaking, and assessing benefits and drawbacks (pros/cons). Students liked working in groups on the whiteboards, and the ability to talk to people working in the field.

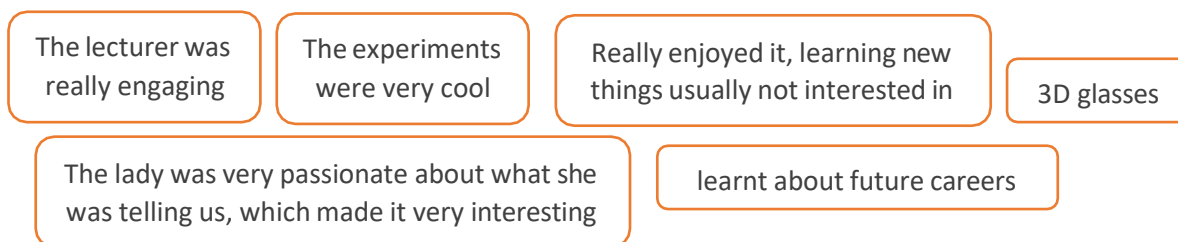
Earth Sciences – UCL Geobus

28 students completed surveys for this session. 79% of students (n=22) agreed (or strongly agreed) that the session was helpful, with the rest stating “Neither agree nor disagree”. 93% of students (n=26) agreed that they learned something new, with one student stating neither/nor and only one student saying that they disagreed.

Are there any skills which you feel you have developed from attending this session?



Is there anything positive you would like to highlight about this session?



Is there anything that could be improved about this session in future?



Summary

This workshop had some smaller groups than other sessions, but the feedback to this session was extremely positive, with 26 of 28 students saying that they learned something new. Among the things students learned, they mentioned knowledge of rocks, how to identify different rocks, and how they are formed, as well as fossil identification, and learning about volcanoes and earth sciences. Students especially praised Amy for her engaging presentation and passion for the subject. One student enjoyed learning new things they were “not usually interested in”, and many students loved being able to use the 3D glasses.

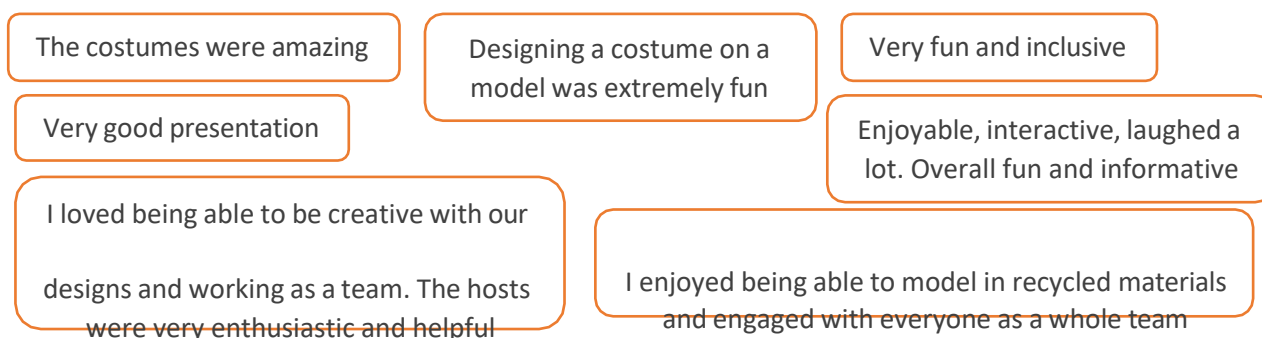
Sustainability in Costume Design – University Centre South Essex

28 students completed surveys for this session. 86% of students (n=24) agreed (or strongly agreed) that the session was helpful, with 96% (n=27) agreeing that they learned something new – in each case, all other students stated “Neither agree nor disagree”, with none disagreeing.

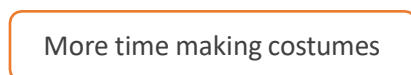
Are there any skills which you feel you have developed from attending this session?



Is there anything positive you would like to highlight about this session?



Is there anything that could be improved about this session in future?



Summary

This workshop had some smaller groups than other sessions, but again the feedback to this session was extremely positive. Students especially enjoyed the practical part of the session, being able to handle the costumes on display, and to model and design their own costume from recycled materials. The presentation also had an impact on students, who mentioned specific parts that had stuck with them such as “the 6 R’s” and the fact that “22000 litres of water is used to make 1 t-shirt and 1 pair of jeans”. A number of students mentioned their personal habits or choices as part of how the day as a whole had affected their views on the future, some of whom had attended this session.

Summary and future plans

Overall, there was very positive feedback from staff and ambassadors on the day regarding the levels of student engagement in sessions. Despite the school strike action, we still managed to engage a large number of students on the day. Although it would have been nice to be able to get more engagement from academic staff at our partner institutions, the students responded especially well to the Costume Design session led by lecturers from University Centre South Essex, particularly the hands-on aspects of the activity.

Much of the feedback from the student surveys was also positive, although some aspects did not score as highly as other Make Happen activities on average. In particular, the response for “What I learned will help me make an informed choice about my options after school/college” scored less positively than the average for Make Happen activities, but this is not necessarily surprising given that most Make Happen activities focus specifically on informing students about future pathways and options, while this day looked more into careers in a certain area.

Impact measures 3 and 4, looking at whether students “aspire to study subjects that relate to sustainability” and “aspire to green/low-carbon jobs, or careers that contribute to a more sustainable society”, were assessed through the statements about considering green jobs and related pathways, which had especially low levels of agreement from students. Just 23% of students agreed with the statement “I am considering a green/low-carbon career”, with even fewer (16%) saying that they were considering studying green/low-carbon related courses after school/college. In each case more than 40% of students selected “Neither Agree nor Disagree”, which could indicate that many students in Year 10 are still unsure about their future career and education aims. As this was only a one day event, we wouldn’t necessarily expect it to completely shape their future careers so these numbers are not a negative by any means. Although only 43.5% of students agreed that what they learned would help them make an informed decision about their future options, the majority of students reported a better understanding of green careers they could progress on to (80%), and courses they could study that could lead to green careers (71%), which matches one of the main aims of the event “Improved awareness of green/low-carbon careers and pathways”.

Having run one-day events for the past two years and reviewed feedback, if a project around sustainable careers were to run again, it may be a good idea to plan a longer term and more progressive activity that enables students to go into more depth, looking specifically at the available pathways and course options, and exploring the breadth of careers that can be considered green or low-carbon or contribute to a sustainable society. This could involve bringing employers into schools for one-off sessions, which would have the added benefit of flexibility with regards to timing in the academic year.