

Our Project

- **Focus:**
 - Promote sustainable practices
 - Sustainability through geography
 - Prepare students for GCSEs
- **Target audience:** secondary school students
- **Location:** Hereford, UK
- **Responsibilities:**
 - Opening speaker, workshop facilitators, evaluations



Background



Defining Sustainability

- Wide Scope
- Social impact
- Sustainable development
 - “Simply stated, the principle recognises the importance of ensuring that all people should be able to satisfy their basic needs and enjoy a better quality of life, both now and in the future”

(UK Parliament, 2011)



Sustainability Education

- The NHS Survey
 - 96% care about sustainability efforts
 - 25% think it's a top priority
- Sustainability in Education
 - Not required
 - Taught by geography teachers
 - GCSE exam on geography



Methods



Objectives & Methodologies

- **Objective 1:** Efficiently connect logistics to the primary objective of the conference to ensure a cohesive event
 - **Methods:** brainstorming
- **Objective 2:** Develop an approach for contacting appropriate organizations to facilitate beneficial workshops
 - **Methods:** checklists, unstandardized interviews



Objectives & Methodologies

- **Objective 3:** Produce a conference that engages the students and increases their awareness of sustainable practices
 - **Methods:** focus groups, unstandardized interviews
- **Objective 4:** Evaluate the conference's impact on the attending students and develop suggestions for future events
 - **Methods:** surveys, participant observation, field notes



Organization

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Book the Introductory Speaker	Active	Active						
Contact Organizations	Active	Active	Active	Active				
Finalize Workshops			Active	Active	Active			
Contact Participant Schools	Active	Active	Active					
Secure Materials				Active	Active	Active		
Deliver Conference						Active		
Analyze Results							Active	Active



Results



Formulation of Pre-Conference Materials

- Flyer provided to invited schools





skillsfortomorrow

JOIN US AT THE SKILLS FOR TOMORROW CONFERENCE TO PARTICIPATE IN INTERACTIVE ACTIVITIES TO FURTHER YOUR UNDERSTANDING IN GEOGRAPHY AND PREPARE FOR THE GCSE

THE HEREFORD ACADEMY
MARLBORO ROAD
HEREFORD, HR2 7NG

SPECIAL FEATURE;
TEST OUT AN E-BIKE!

PERMISSION SLIP MUST BE FILLED OUT BY A PARENT/GUARDIAN AND BROUGHT IN ON DAY OF CONFERENCE

LUNCH PROVIDED ONLY FOR STAFF AND GUESTS

PUPILS ARE EXPECTED TO BRING A PACKED LUNCH

WORKSHOP TOPICS
FOOD SECURITY
GEOGRAPHICAL INFORMATION SYSTEMS
SUSTAINABLE CITIES

SCHEDULE

9.00AM	ARRIVAL
9.15AM	OPENING REMARKS
9.30-11.45AM	WORKSHOP 1
10.45-11.00AM	BREAK
11.00-12.15PM	WORKSHOP 2
12.15-12.45PM	LUNCH
12.45-14.00PM	WORKSHOP 3
14.00-14.30PM	CLOSING ACTIVITY
14.30PM	END OF EVENT

*SCHEDULE SUBJECTED TO CHANGE

FRIDAY 30TH NOVEMBER

Formulation of Pre - Conference Materials

- Color coded groups



Conference Agenda

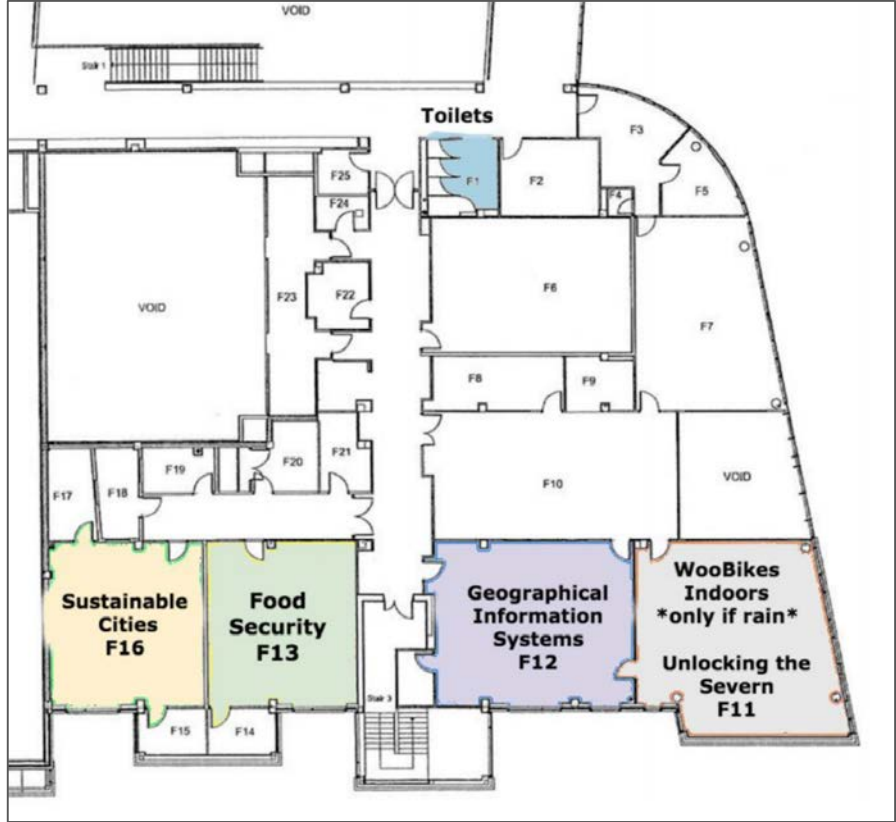
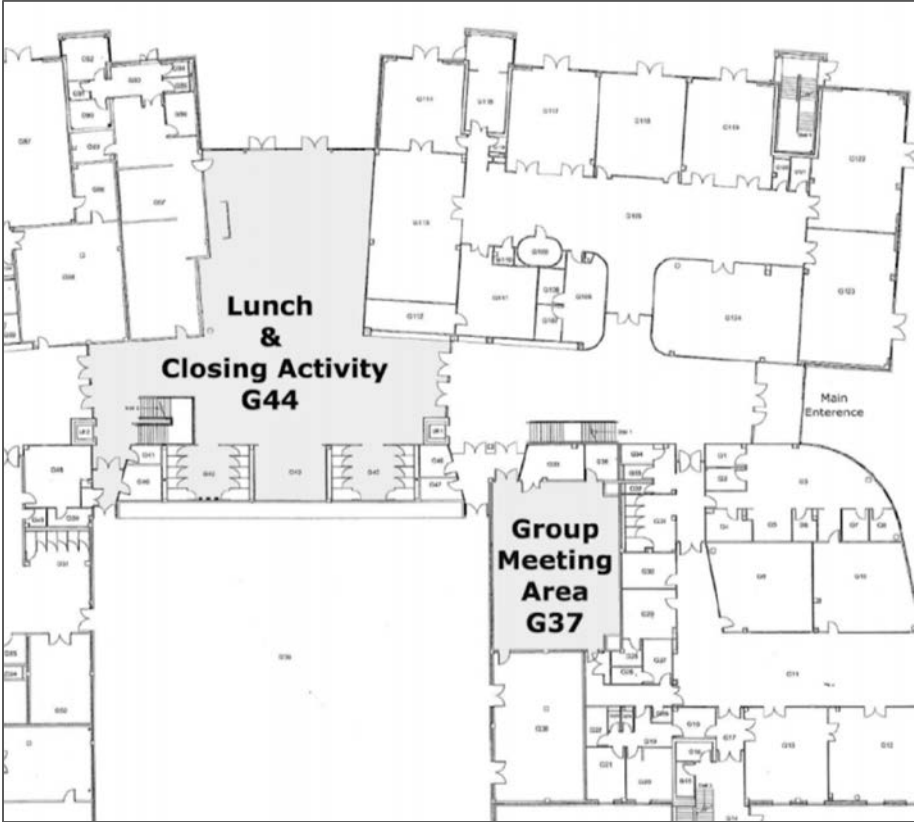
Group 1	Yellow
Group 2	Green
Group 3	Purple
All	Grey

9:00-9:15	Arrival & Registration G37		
9:15-9:30	Opening remarks G37		
9:30-10:45	Food Security F13	Sustainable Cities F16	Geographical Information Systems F12
10:45-11:00	Break G37		
11:00-12:15	Geographical Information Systems F12	Food Security F13	Sustainable Cities F16
12:15-12:45	Lunch G44		
12:45-14:00	Sustainable Cities F16	Geographical Information Systems F12	Food Security F13
14:00-14:30	Closing Activity G44		

* WooBikes will be occurring in room F11 in the case of rain

* Unlocking the Severn will be in the Auditorium until 11:00 and then in F11 from 11-14:30

Formulation of Pre-Conference Materials



Formulation of Pre -Conference Materials

CASE STUDY: Sustainability in a Newly Emerging Economy – Rio de Janeiro

Background

Rio de Janeiro is a large city on the southern coast of Brazil. It is home to 6.3 million people and is the capital of second wealthiest Brazilian state. The city is a hub for tourism, as it's the home the the Christ the Redeemer statue and the popular Carnival festival, as well as a recent site of the Olympic Games. Brazil's economy as a whole is rapidly growing, beating out countries like Canada and Australia in recent years and seeing an average foreign investment of £23 billion per year (Brazilian Government 2005).



The Problem

Rio is not without its problems however, one of the most prominent being favelas, which are a kind of slum. There are about 1,000 favelas in Rio, tightly packed settlements often built on steep hills.

CASE STUDY: WooBikes

Background

The average person elects to travel on foot for trips that are under one mile. For longer journeys, automobiles are by far the most popular mode of transportation. In fact, more than half of car trips are less than 5 miles long. The primary situation in which car trips persist longer than 5 miles is when they involve motorways or other high throughput thoroughfares (Department for Transportation, 2017).


















With so many people traveling by car, however, traffic becomes inevitable as the sheer volume of vehicles becomes more than a motorway can handle. The worst instances of traffic occur during the rush hour in the morning and evening when people commute from their homes to their jobs and vice versa. Rush hour traffic is not only a frustrating inconvenience for the working person, but represents a significant waste of gasoline and in turn a sizable source of harmful emissions, as cars continually burn fuel to keep the engine



Focus Group

Activity: Sustainable Cities

- Get into groups of 3-4
- Take a sheet of paper and drawing tools
- You will have a designated amount of time to design your sustainable city
 - Based off the sustainable development goals and your prior knowledge
 - Can get as many of anything as like
- Constraints:
 - Time
 - Paper space
 - Resources
- Once time is up, the best city will be chosen!

45,000	30,000	27,000	25,000	15,000	10,000
					
City council	Clean water	Social services	Waste program	farm	Research center
					
University	Vaccines	Vocational schools	Corporate offices	Recycling system	Bike share
					
Accessible healthcare	Renewable energy	Wind farm	Public transportation	Forest protection	

Specification:

Budget: 250,000

Population: 50,000

% under the poverty line: 7%

2 primary schools

2 secondary

1 college

2 rivers

1 lake

1 park

10 apartment

complexes

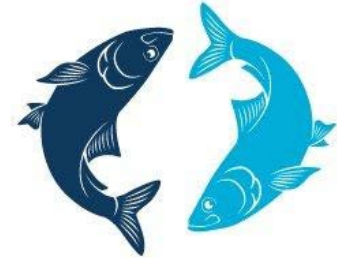
1 local court

2 grocery stores

4 gas stations

General Overview

- **Overall positive feedback**
 - Games and activities engaging
 - Efficacious videos and presentations
 - Less interest in lectures
- **WooBikes was incredibly successful**
 - Two e-bikes available
- **Unlocking the Severn**
 - Desired data gleaned



UNLOCKING THE
SEVERN



Sustainable Cities

Pupils had to design their own sustainable city on a budget while reacting to “News Flashes” such as a flood or overflowing landfill

- **Positives**

- News Flashes
- Collaboration

- **Negatives**

- Desire for more News Flashes



Geographic Information Systems

Pupils were shown practical applications of cartographic knowledge and geographic information systems (GIS)

- **Positives**

- Group work
- Overall very informative

- **Negatives**

- Too much lecturing
- Computers were distracting
- Least popular workshop



Food Security

Pupils were given a brief overview of the definition of food security then participated in a “farming strategy” activity

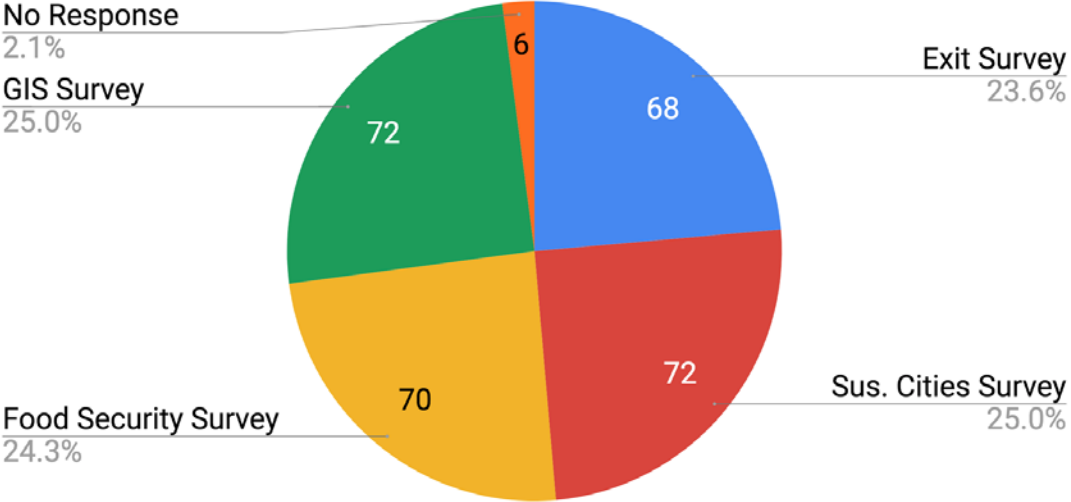
- **Positives**
 - Farming strategy game
 - Well-made presentation
 - Based on Oxford research
- **Negatives**
 - One long activity



Survey Statistics

- 72 pupils in attendance
- 288 surveys given out
- 282 responses
 - 98% response rate

Survey Response Breakdown



Idea Tree

Pupils were asked at the beginning and end of the conference to write what sustainability meant to them.

- **Positives:**

- Engaged the pupils
- Reduced downtime

- **Negatives:**

- Unre liability
- De finition of sustainability
- Low response rate



Idea Tree

- Opening
 - 80% response rate
- Closing
 - 90% response rate
 - Lower number because some pupils left early

Idea Tree Results	
103 Total Responses	
Opening Ceremony (57 responses)	Closing Ceremony (46 responses)
1 - pledge	2 - recycling and reusing
2 - looking after the Earth	2 - environment and life
2 - keeping the world clean	2 - "I learned a lot"
2 - save the environment	3 - Energy without pollution
3 - sticking to a goal	3 - Woobikes
3 - environment efficiency	3 - mentioned SDGs
3 - balanced and protected Earth	5 - miscellaneous
6 - miscellaneous	11 - sustainable pledges
7 - question marks	15 - renewed definition of sustainability
8 - renewable energy	
9 - definition of sustainability	
10 - long lasting impact	



WooBikes and Unlocking the Severn

- 39 WooBikes riders
 - (54% of attendees)

- 35 participants in Unlocking the Severn activity
 - (48% of attendees)



Conclusion

Overall:

- Positive results overall
 - Responses lacked depth
- Popular bonus activities
- Workshop popularity:
 1. Sustainable Cities
 2. Food Security
 3. Geographical Information Systems



Recommendations

- Increased instruction on surveys
 - Increased question structure
 - Reverse scale
 - Sentence template

What was your greatest takeaway from this workshop?

(Example template)

I learned that _____ impacts _____ during the Sustainable Cities workshop



Recommendations

- Activity-centered workshops
 - Avoidance of lecture-style
 - Multiple shorter activities
 - Audience participation



Recommendations

- Better-suited classrooms
 - Distractions
 - Pre-event setup



Acknowledgements

- United Purpose (Food Security facilitators)
- Ordnance Survey (GIS facilitator)
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- Katy Boom (Opening Speaker)
- Sarah Williams (Hereford Academy contact)
- Dan Webb (Earl Mortimer contact)
- James Hanlan (WPI Advisor)



Questions?

