

# EVERY ACTION MATTERS

## CLASSROOMS TAKE CHARGE

### Service-Learning Lesson Plan

**Project:** Southern Oregon Take Charge

**Author:** Jesse Stonewood at Armadillo Technical Institute in Phoenix, OR

**Project Overview:** Students will take part in an outreach effort about Classrooms Take Charge at an Earth Day celebration. Students will determine how best to communicate information about Take Charge with the public (ex. flyers, speeches, business cards) and be responsible for running a booth at the celebration.

#### Learning Objectives

Students learn about the basics of climate change science and how energy use contributes to climate change.

#### How were the learning objectives evaluated?

The Carbon TIME pre- and post-tests were used to evaluate the content-related learning goals.

#### Service Objectives

Students learn how they can take direct action to effect change. This will come through both the service learning project and their own experience using the Take Charge website, which is integrated with the Carbon TIME curriculum.

#### How were the service objectives evaluated?

Students filled a short survey, and we had a class discussion about their experiences during the project.

**Subject Areas:** Environmental Science

**Grade Levels:** 9th, 10th and 11th

#### Materials Needed:

- Computers, card stock, plastic sleeves for paper, markers, printer, table, canopy, portable wifi device.

#### Key Partners:

- Rogue Climate: a local non-profit that helped develop outreach effort (news media, social media and public outreach) both in class
- GEOS Institute: helped with outreach effort by email (folded CTC into Ashland Climate Challenge)
- ScienceWorks Museum: hosted Earth Day event
- Medford Mail Tribune: reporter came to interview students and write article; photographer came to document class work

#### Time Required to Complete Project:

- Five weeks

## Human Energy Systems Units Used (For lesson plans visit: [carbontime.bsccs.org](http://carbontime.bsccs.org))

**Activity 1.1** Human Energy Systems Unit Pretest

**Activity 1.2:** Graphing Arctic Sea Ice

**Activity 1.3:** Finding a Trend in Large-Scale Data and Generalizability

**Activity 1.4:** Finding a Trend in Arctic Sea Ice Data

**Activity 3.1** Millions of Flasks of Air

**Activity 3.2** The CO<sub>2</sub> Trend: Your Ideas about the Keeling Curve

**Activity 3.3** Why We Care About the Keeling Curve

**Activity 4.1** Finding the Carbon

**Activity 4.2** The Organic/Inorganic Swap

**Activity 4.3** The Seasonal Cycle

**Activity 4.4** Zooming Into Fossil Fuels

### Lessons & Activities (See below.)

- Example Outreach Plan
- Outreach examples: Talking Points, Letter to the Editor, and Business Cards

### Celebrating Student Accomplishments

Pizza party and day off from class.

### Media Coverage

<http://www.mailtribune.com/article/20160502/NEWS/160509981>

### Project Milestones

- Reach out to community partners; plan curriculum and project (Spring Break)
- Develop background knowledge about climate change (Week 1)
- Teach Human Energy Systems Unit (Weeks 2-3)
- Develop outreach effort and plan booth; share project with whole school; media and social media outreach (Weeks 3-4)
- Earth Day Event booth (end of Week 4)
- Finalize project: newspaper article and celebration.



**Photo:** Students signing up Take Charge participants.

## Example Outreach Plan

Purpose Statement (WHO, WHAT, WHY): We are a group of ATI students trying to become more energy efficient and lower our carbon emissions by getting 400 people to sign up for the Communities Take Charge program because we want to act now to save our ecosystems and Earth from climate change disasters.

Website: [www.communitiestakecharge.org](http://www.communitiestakecharge.org)

1 Mon 4/18	<p>Roll out different group tasks (News, Social, Public); decide on who does what and begin work.</p> <p><i>Tasks may be assigned to different groups as needed Members may be switched as needed.</i></p> <p><i>Tasks may be stopped and others may be added as needed.</i></p> <p>Get quotes for media release (RC will do this) Get media contact info to students</p> <p><u>Outreach Teams</u></p> <ul style="list-style-type: none"><li>• <u>Public Relations</u></li><li>• <u>Social Media</u></li><li>• <u>News Media</u></li></ul>
2 Tue 4/19	<p>Hannah and Carly from RC here to help where needed. Send out media release (RC)</p> <p><u>Survey</u> on who does what outreach (ex. Earth Day, whole school, media) <a href="https://goo.gl/8nJ1Ps">goo.gl/8nJ1Ps</a></p> <p>Groups continue to work on tasks</p>
3 Wed 4/20	<p>Groups continue to work on tasks</p> <p>Practice <u>talking points for Thursday meeting</u></p> <ol style="list-style-type: none"><li>a. Dominic, Cris, Mike B, Felix = help with sign up sheets</li><li>b. Jymone, Zach = talking points</li><li>c. Austin = computer demo</li><li>d. MRC, Eden, Dezi = social media outreach</li></ol> <p>Prepare whole-school presentation</p>

4  
Thur  
4/21 Carly from RC here to help as needed.  
Whole school presentation of website (after lunch)  
Practice talking points for news media Laminate flyers, call media (Jesse). Pick up materials for booth (easy-up, table cloth, sturdy folding tables)

THIS WILL BE A FRIDAY ACTIVITY

5  
Fri  
4/22 Carly from RC here (and possibly media) News media interviews:  
Practice [talking points for Earth Day event](#) (Shelby, Eden, Preston)  
  
Gather and test final materials for booth (chromebooks, mi-fi unit, solar panel, inverter)

Earth Day event Booth Shifts

6  
Sat  
4/23

Times	People
845-1030	Jesse, Austin F (maybe)
11-130	Jesse, Austin F, Eden T, Shelby D, Roy B, Preston B
130-4	Jesse, Austin F, Eden T, Shelby D, Preston B

Afternoon shift 1-4 (duties assigned by Paige) AJ F, Sam Mc, Gary W and Daniel C

Available in afternoon (ED help or booth) John E, Henry O, Patrick F

**Materials list:** Clipboards, pens, whiteboards, whiteboard pens, chromebooks, table cloth, extension cords, boxes, clamps,

Hannah: solar panel, mifi, Carly: tarp

## Example Talking Points for Different Audiences

### Talking Points: Thursday Whole-School Meeting

#### **WHO**

Our 4th period environmental science class is working with a local, grassroots organization called Rogue Climate to promote a way to help people save energy and reduce carbon pollution in the atmosphere.

#### **WHAT**

The program is called “Communities Take Charge” (or CTC) and it is a website that gives people an easy way to reduce their energy use. You can try various actions that reduce carbon emissions, and keep track of energy savings through the site.

#### **WHY (energy)**

A lot of the Rogue Valley relies on energy from coal (a fossil fuel) fired power plant. So by being energy efficient we will lower our carbon footprint and save money simultaneously.

#### **WHY (climate)**

Since burning coal and natural gases releases CO<sub>2</sub>, energy use contributes to climate change in that it adds more greenhouse gases to the atmosphere. This leads to increasing temperatures and irregular seasons.

#### **HOW**

We’re trying to get four hundred people to sign up across the Rogue Valley.

It’s really easy to sign up. You pick the actions that you are able to do, like unplugging your appliances or taking the city bus. All of our savings are tracked together.

*GIVE A DEMONSTRATION ABOUT HOW THE WEBSITE WORKS. SHOW SOCIAL MEDIA OUTREACH GROUP (EX. CAPTION AND PHOTO)*

#### **HOW**

We are going to send around sign up sheets. If you would like to learn more about the program and possibly join, please put your name on the sheet. We will send you an email with further instructions and links.

## Communities Take Charge Talking Points in the Community

Are you concerned about climate change and would like to know about how to start taking action?

Have you heard of the Communities Take Charge website?

My name is \_\_\_\_\_ and my school (Armadillo Technical Institute in Phoenix) is promoting the Communities Take Charge website. Can I tell you more about it?

The website lets users select energy saving actions (like switching out light bulbs, driving less, eating more vegetarian meals) and tracks your carbon pollution savings for you. It's easy and free and is already up and running in places like Eugene, Portland and Seattle.

Can I show you the website? You can feel free to just browse or sign up to take action today if you would like to.

*Bring them in to look at flyers and Chromebooks. Help them navigate.*

Our school is trying to get 400 people in the Rogue Valley to sign up.

# Talking Points Organizer

## Stop Line

Hi! Have you heard about the Communities Take Charge website?

## Intro

My name is . *(Ask their name too!)*

I am with Armadillo Technical Institute, a small charter school in Phoenix.

## Context *1-2 sentences about the Communities Take Charge website*

Our school is trying to get people to sign up for an energy saving program called “Communities Take Charge”. CTC gives people an easy way to reduce their energy use. You can try various actions that reduce carbon emissions, and keep track of energy savings through the site.

## Importance of project

**Energy Use:** *1-2 sentences about energy use/efficiency, money, etc.*

A lot of the Rogue Valley relies on energy from coal (a fossil fuel) fired power plant . So by being energy efficient we will lower our carbon footprint and save money simultaneously.

**Climate Change:** *1-2 sentences about energy use/efficiency, money, etc.*

Since burning coal and natural gases releases CO<sub>2</sub>, energy use contributes to climate change in that it adds more greenhouse gases to the atmosphere. This leads to increasing temperatures and irregular seasons.

## Where the project is now

*1-2 sentences about the project we are doing in class, how we are reaching out to the public*

We’re trying to get four hundred people to sign up across the Rogue Valley to reduce their energy use.

## Actions

*Describe which actions you chose and what you have done since choosing them*

It’s really easy to sign up. You pick the actions that you are able to do, like unplugging your appliances or taking the city bus. All of our savings are tracked together.

## Sign Up

Would you be interested in either?

1. Looking at and signing up for the website right now?
2. Filling out our interest form with name and email contact information

## Letter to the Editor Sample

To the Editor,

Happy Earth Week! Have you heard about the Communities Take Charge website? Armadillo Technical Institute, a small charter school in Phoenix, is trying to get people to sign up for an energy saving program called “Communities Take Charge”.

CTC gives people a simple way to reduce their energy use. You can try various actions that reduce carbon emissions, and keep track of energy savings through the site. 24.5% of the Northwest’s energy is from coal fired power plants. By being energy efficient we will lower our carbon footprint and save money simultaneously. Since burning coal and natural gases releases CO<sub>2</sub>, energy use contributes to climate change in that it adds more greenhouse gases to the atmosphere. This leads to increasing temperatures and irregular seasons.

We’re trying to get four hundred people to sign up across the Rogue Valley. It’s really easy to sign up. You pick the actions that you are able to do, like unplugging your appliances or taking the city bus. Please help us out by visiting the website, and taking action for our community and the environment.

*Best Regards,  
ATI Students*

### Final Draft

Nearly a quarter of the electricity used in the Northwest comes from coal fired power plants. Since burning coal releases carbon dioxide, our energy use contributes to climate change by adding greenhouse gases to the atmosphere. This leads to increasing temperatures and impacts like irregularities in seasonal cycles.

Many people are concerned about climate change but don’t know what to do about it. Our school, Armadillo Technical Institute (a small charter school in Phoenix) has a solution that everyone can take part in. We are trying to get people to sign up for an online energy saving program called “Communities Take Charge” (CTC) which helps users people reduce their energy use and therefore lessen carbon pollution.

Users of the CTC website choose various energy saving actions, like unplugging your appliances or taking the city bus, and the website tracks the reduction in carbon emissions. The CTC website is being used in many different northwest communities and our goal is to have at least four hundred people (especially students) in the Rogue Valley sign up for it.

Please help us by visiting the website and taking action for our community and the environment. Visit the CTC website at [www.communitiestakecharge.org](http://www.communitiestakecharge.org).



## Sample Business Cards Front and Back



For more information, contact:  
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