After Coal Teacher Key

This document provides information teachers will need to carry out and teach the <u>lesson plans</u>.

The original lessons will be copy/pasted from the lesson plans, and the in-depth explanations and answers will be written in blue.

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Day 1 - Resource Depletion Overview

Lecture: Resource-Dependent Communities (10–20 minutes)

- Introduce basics about *After Coal,* contextualizing the curriculum
  - *After Coal* documents the rise, fall, and rebirth of two resource-dependent communities, South Wales in the UK and Central Appalachia in the US. These communities were constructed for the sole purpose of extracting coal, and when coal jobs began to leave these towns, they fell apart. But with a little work, the communities developed new economies and cultures that they could identify with, after coal.
- Explaining what resource-dependent communities are and how those featured in the documentary had formed
  - Resource-Dependent Communities
    - A community whose economy and culture is reliant on a resource or system.
  - Southern Wales & Central Appalachia
    - Extracting fossil fuels is very profitable, so areas with an abundance of coal were attractive locations for individuals and companies.
    - The industrial revolution in the UK and US was the initial impetus for the foundation of coal-based communities like Southern Wales and Central Appalachia – the UK and US needed fossil fuels to power the new machines that were being created and used. Because coal was now highly desired, communities were constructed with the sole purpose of its extraction. In the case of the US, some companies like US Steel literally built these extraction communities, providing houses, schools, and hospitals for their future workers. These communities offered both countrymen and immigrants alike the opportunity to work, so many came for the mines.
- Explaining how coal jobs left the communities in *After Coal*
  - Automation of coal industry
    - The development of better mining equipment eventually created machines and processes that could extract just as much coal while hiring

fewer individuals (thus saving coal companies money). This especially started becoming evident in the 1950s.
- ○ Global, cheap competition
  - ■ In the 1980s, cheaper coal starter emerging from countries like South Africa. If coal was made and sold for cheaper prices there, then companies and governments would just buy their coal abroad instead of domestically. Coal mining again became less profitable, meaning fewer workers were hired and/or existing workers were paid less.
- ○ Decreased reliance on coal
  - ■ The demand for coal slowly decreased due to the emerging popularity of alternative fossil fuels (natural gas, oil, etc.) and eventually renewable resources. Political maneuvers (like embargoes or deals) also occasionally negatively impacted coal's demand.

It's important to note that none of the job loss here is the workers' fault. All of the factors above cannot be controlled by the individual workers living and employed in these extraction towns.

- ● Explaining the effects of the communities losing their primary resource
  - ○ Job Loss
    - ■ Central Appalachia lost 20,000 jobs from 1994–2000.
    - ■ Southern Wales lost 20,000 jobs from 1980–1990.
  - ○ Poverty and associated issues
    - ■ Poverty and job loss brought stress, anxiety, suicide into resource-depleted communities in greater numbers than they had ever existed before.
  - ○ Population leaving community
    - ■ Many people chose to leave the community to look for work or a better life in other places. In Southern Wales specifically, the population of the mining towns decreased from ~250,000 people in 1919 to 600 people today.
  - ○ Cultural impacts
    - ■ Everyone felt lost, as if their entire life had been slowly torn away from them. Songs, stories, everything had been based around coal. After coal had been removed, the discussion of it even became taboo in some communities.

Documentary Clips: Community Recovery Efforts (15–25 minutes)

Show video clips from *After Coal* that explain how the communities began to recover after coal left. Feel free to show as many or as few of these as you'd like.

- ● d.o.v.e. workshops (27:08–30:45)
  - ○ Local women in Wales came together to offer a variety of services to the community, from college classes to daycare to mental health counseling.

- Farming as a local business (37:35–39:45)
  - Some former Kentucky coal miners have taken up farming as work, allowing them to make money and provide food for the community.
- Community Music Projects (32:30–35:40 and/or 45:35–50:25)
  - These music projects have helped people pass the time, as well as learn about their history and share their stories together.
- Outdoor Recreation (35:45–37:05 and/or 39:50–41:40)
  - Outdoor recreation has opened up these communities to tourism from elsewhere. Trails have been used for outdoor recreation and also business development courses.

Encourage students to explore some of the websites of these local business when they return home. These websites can all be found on aftercoal.com:

(If a large percentage of students do not have computer or internet access in their homes, this can be ignored.)

- South Wales
  - [Glyncorrwy Ponds Visitor Centre](#)
  - [Call of the Wild](#)
  - [Adventure Britain](#)
  - [Red House Media Centre](#)
  - [d.o.v.e. Workshops](#)
- Central Appalachia
  - [Kentuckians for the Commonwealth](#)
  - [Mountain Association for Community Economic Development](#)
  - [Higher Ground Theater](#)

Here are some guiding questions you can assign to the students to have them think critically about the communities' efforts:

- What kinds of services are offered? Do they seem successful?
- Can you find any of the stories for how these started? (check the "about" page)
- Do those stories align with what you learned about these communities from the documentary? Explain why or why not.
- Do you think these are more sustainable ideas than extracting coal?

Day 2 - Sustainability & Community Models

Lecture: Frameworks for Sustainable Community Development and Recovery (15–20 minutes)

Explain basics of sustainability and how they relate to resource-dependency. Introduce two models designed to promote sustainable development in rural, resource-dependent communities: the Community Capitals Framework and the 12-Step Recovery Program.

- Sustainability and Resource-Dependency
  - Sustainability is the property of systems to remain diverse and productive indefinitely. Resource-dependent communities are not sustainable because they fail one or both of these:
    - Their systems aren't diverse because they're based on just one resource
    - Resource-dependent communities tend to be extraction-based communities, and what they're extracting (fossil fuels, natural resources, etc.) are usually not infinite. Therefore, these communities do not tend to be productive indefinitely
  - A community whose systems (economy, culture) are based around many diverse sources is more likely to be sustainable.
- Community Development and Recovery Models
  - Community Capitals Framework
  - 12-Step Recovery Program
    - These are both covered in the flyers below, which will be given out to students for the day 2 group project.

Community Capitals Framework

The Community Capitals Framework examines how rural and regional communities can utilize their available resources to support sustainable economic, social, and environmental development. These available resources that communities can use to successfully develop sustainable practices are known as their "community capital."

The authors of this framework found that communities who successfully supported economic development focused on developing seven types of capital:

1. **Natural Capital** – the environmental elements of a community. Includes rivers, forests, natural beauty, wildlife, weather, etc.
2. **Cultural Capital** – cultural assets such as ethnic festivals, a multilingual population, traditions, and heritage.
3. **Human Capital** – the skills and abilities of community members. Also the ability to access external resources and knowledge for the community's benefit.

4. **Social Capital** – the connections among people and organizations, the social "glue" that makes things happen
5. **Political Capital** – a community's access to power, including the ability to influence standards, rules, regulations and their enforcement.
6. **Financial Capital** – the financial resources that can be invested in community building, business, and entrepreneurship to generate wealth for future community development.
7. **Built Capital** – a community's infrastructure. Includes telecommunications, parks, roads, water/sewage systems, etc.

By emphasizing these seven community capitals, the Community Capitals Framework focuses more on the resources a community has, rather than those it lacks. Once community capitals are identified, they can be developed in order to promote sustainable growth. Even if a community does not have all of these capitals, investment in some capitals can still positively influence the community's development.

Closing thoughts about this model, written by the authors:

"[This model] has proved itself very useful to help community developers and funders better understand the strategic nature of the funded program and the impact on rural communities. Although Community Capitals framework is increasingly used by a number of community researchers and practitioners in their work, there is little empirical work published that details the interaction of the capitals as they may be utilized by community residents."

12-Step Recovery Program

This model was created by Appalachian State University researcher Helen Lewis after studying Appalachian communities who had lost their economic base of mining, timbering, agriculture or manufacturing. Drawing inspiration from the 12-Step program used by Alcoholics Anonymous, this model outlines 12 steps communities can take to bring themselves to a point of economic and cultural sustainability.

This model was developed by closely observing the community development groups that emerged in these communities once their primary resource or system left. It emphasizes sustainability, cultural development, and local resource usage.

1. **Understand your history – share memories.** This strengthens understanding and social connection between community members. These shared stories also help identify that which created the current problems.

2. **Mobilize/organize/revive community.** Find suitable locations and hold community events (meetings, festivals, discussions, etc.). Make sure to include all sections of a community, not just one or two specific groups.
3. **Profile and assess your local community.** Examine your community's resources and needs. Resources include natural resources, companies, and individuals' abilities (skills, knowledge, leadership, personality, etc.).
4. **Analyze and envision alternatives.** Determine what the community wants to preserve and to change. Examine other communities for new ways of development.
5. **Educate the community.** People need to develop new skills to make new businesses. Community can organize classes, workshops, support groups, etc. to offer education to individuals and groups within the community.
6. **Build confidence and pride.** Use music, oral history and theatre to develop identity and pride that isn't tied to previous dependency culture. Recognize and celebrate group and individuals' achievements.
7. **Develop local projects.** Local projects (childcare, tutoring services, recreation areas, etc.) increase community participation and involve diverse groups.
8. **Strengthen your organization.** Broad and diverse leadership is needed for long-term sustainability. Be democratic, involve everyone in planning and evaluation.
9. **Collaborate and build coalitions.** Community groups should partner with other groups to share resources and learn from one another. Coalitions of groups can also become big enough to impact local government – big groups are harder to ignore.
10. **Take political power.** Encourage community members to run for local positions. Educate the community on how to register, work within the system to elect a local representative.
11. **Initiate economic activity.** Develop local business (tourism, recreation, food production, job training, etc.). If loans are needed, work with local banks. Attempt to recruit outside industry to come to your community.
12. **Enter the planning process.** Understand how the global economy impacts your country, region, state, community. Join international movements meant to help communities such as yours.

[These 12 steps do not have to be completed in a perfectly sequential order – communities will naturally move forward and backwards on this progression.]

Grassroots communities likely won't be able to become totally self-sufficient without any outside policy and extensive resource redistribution, which may never happen unless these local communities involve themselves in national and international development plans through politics. But even if communities' political aims are unsuccessful, communities can still bring themselves closer to self-sufficiency by utilizing their local resources to develop sustainable economic and cultural practices.

Sustainable Community Plan – Rubric

Students will develop a sustainable plan for their community in the hypothetical scenario that an influential resource or system leaves their community.

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This is the rubric for the written community plan that students will turn in after they have completed their presentation. Everything in this rubric is graded on a 3-point scale. The teacher may also want to consider including an anonymous group survey to learn if group work was conducted in unequal amounts. If this is the case, the teacher may consider revising grades accordingly.:

Needs Improvement (1), Satisfactory (2), and Excellent (3).

	Needs Improvement	Satisfactory	Excellent
Resource Identification	----------	----------	----------
Identify a vital community resource	No relevant resource identified	Uninfluential resource identified	Influential resource identified
Explain why that resource is vital to the community	No explanation, no supporting reasons	Little explanation, few supporting reasons	Strong explanation, several supporting reasons
Develop a Community Plan	----------	----------	----------
How does the plan address or solves issues caused by the resource leaving?	Solution does not address issues, no description	Plan tangentially addresses issues, simple description	Plan directly addresses issues, detailed description
Is it a sustainable and long-term solution? Why?	No sustainable solution or no explanation	Sustainable solution but little explanation	Sustainable solution offered with sufficient explanations
How is it based on the concepts learned in class – case studies, models, etc?	No references or influences to classroom material	References to class material are unclear and vague	References to class material are clear and specific
Oral Presentation	----------	----------	----------
Oral Presentation clearly describes the three objectives (why resource is influential, how plan addresses resource departure, and the sustainability /influences of the plan)	Does not clearly describe or ignores entirely the three objectives	Objectives are partially addressed or not described clearly	All three are addressed and clearly described
All group members present a similar amount	Presentation time is vastly uneven (1 or 2 students talk the whole time)	Presentation time is variable (most of the group contributes, though not all)	Presentation time is very even (similar talking time for all members)