

Aral Sea Role-playing Debate

Jan 2004

Need:

The diversion of inflows to the Aral Sea and the resulting environmental, economic and human health problems of the region has been described as the greatest environmental catastrophe of the 20th Century. Presently, efforts to restore the Aral Sea's inflows and to repair 5 decades of harms are stalled due to a lack of fiscal and political resolve both in the region and around the world. It is important for students to understand that often there is no correct answer to ecological questions. Instead, answers require a careful weighing of the available evidence and the use of personal judgment.

Objectives:

Students will be able to:

- Outline the benefits and trade-offs associated with inflow diversion of the Aral Sea, particularly with regards to water quality, human health and habitat loss.
- Generate an informed opinion about a widespread environmental issue (water diversions in semi-arid regions) through role-playing

Connections to Unit and other disciplines

This activity connects to what students have learned about biology, human health, geography and social studies. Connections to other skills involve public speaking, careful listening and critical thinking.

Prior Knowledge:

Students should be familiar with terms pertaining to a discussion of the Aral Sea such as *salinity*, *biodiversity*, *water quality*, *fisheries* etc. Many of these terms are defined and discussed in the introductory presentation.

Introduction

To The Class: "To illustrate the complexity of real-world ecological questions we are going to build on what we've learned so far about the Aral Sea and central Asia and do a role-playing exercise." Explain to students that we will present them with a realistic set of circumstances about a plan to put water back into the rivers that feed the Aral Sea in an attempt to restore its ecology and undo harms associated with declining water quality. They will be playing the roles of concerned citizens at a community meeting. They need to remember to be respectful and to listen carefully to each others comments and concerns so that they can make an effect case either for or against the proposed action.

Content and Procedures:

Divide the class into five groups. Pass out the scenario page to each. Ask someone to read the paragraph aloud to the class. Ask for questions.

Pass out the character descriptions to each group. Ask them to quietly read about their characters and to reflect on what they might say in response to the development scenario. Stress to the students that their characters are at this meeting because they have strong opinions about what should be done in their community.

Structure the debate so that each group introduces themselves to the other groups and states briefly their position on the issue.

Ask various questions of the groups about the plan:

Who has concerns? Who is for putting diverted water back into the Aral Sea? Why? Are there comments on this position? What are the advantages/disadvantages of this water management plan? If given a choice to only protect the Aral Sea or continue agricultural and urban development, which one would you prefer? Why? How can we satisfy both objectives of protecting the water resource and promoting economic development and jobs?

Summary/Conclusions/Closure

Collect the scenario papers etc. Ask the students to reconsider their original opinions about the scenario. Did anyone change his or her opinion? Why? Did having additional information about various citizens concerns make personal decision easier or harder? Ask them finally to suggest ways that each of the concerned groups might be satisfied by a compromise development plan.

As an extension:

Students research their role-playing characters positions and write a short position statement based on that research in response to the discussed plan.

The Proposed Action

Because of the scope of managing Aral Sea water resources and the international community's renewed focus on Central Asian issues, a coalition of developed nations, acting through the United Nations, has proposed a plan to direct water from the Syr Darya and the Amu Darya back into the shrinking Sea in an attempt to restore its ecology and address some of the health issues faced by residents in the region. This will mean significantly impacting rice and cotton cultivation in the region as water that would have been used to irrigate is instead put into the Aral Sea. As representatives from concerned citizen groups, you've been invited to discuss the costs and benefits of this plan in a community meeting. What is said will be considered by the United Nations in drafting the details of the proposed action.

(Below is information about your character's role in the debate. This information should help direct your research efforts in writing a position statement for the role-playing debate on Friday. To make the debate interesting, it's important to consider you're your characters will say, how your characters will react and the way other groups will perceive your character during the debate. Imagine yourself this person and what this person believes in. Please embellish these characters in a way consistent with the characters' core values—it will make the debate much more interesting.)

Agricultural Workers Party (AWP)

AWP represents the concerns of agricultural workers in the Aral Sea region. You are torn between the impacts that the Aral Sea has on the health of your families and your job. The Aral Sea region is poor and unemployment is high. Jobs, even difficult, low paying jobs like those in agriculture are scarce enough as it is. Any plan that negatively impacts agriculture must be balanced against benefits to the health of residents. Topics you might research would include facts about agriculture around the Aral Sea and how agriculture might adapt to conserve water for other uses such as restoring inflows to the Aral Sea.

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Coalition of Aral Sea Conservationists (CASC)

CASC represents conservation minded citizens of the Aral Sea region. Your group places high value conserving wetland habitats and biodiversity in the Aral Sea. You recognize that the region is poor and that people have to make a living and that a successful conservation program considers the economic needs of local people. Your task in this debate will be to convince other groups that conserving the Aral Sea makes sense and that the benefits of a restoring the Aral Sea go beyond simple economics. For your research, focus on documenting the environmental issues associated with a shrinking Aral Sea and try to imagine benefits to undoing those harms. For example, restoring water quality in the Aral Sea might allow fish populations to recover, thereby promoting jobs in the fisheries industry.

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Government representatives

Your group represents the political interests around the Aral Sea. Your primary concern is that Aral Sea conservation will negatively impact the primary source of government income in the region, taxes generated from exporting cotton and rice to global markets. Your group should research the complex politics of the Aral Sea region including, which group should pay for Aral Sea conservation and who will be responsible for enforcing the management plan the United Nations devises.

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Health workers

As health workers, you have spent your careers treating the effects of a shrinking Aral Sea on residents of the region. You see continued declines in human health as the primary reason for a plan to divert water back into the Amu Darya and the Syr Darya. For your research project, focus on the health issues faced by Aral Sea residents to present to the other groups at the discussion. Those issues include windblown dust, poor quality drinking water and pesticide pollution.

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Regional Association of Aral Sea Industry (RAASI)

RAASI represents business and industrial concerns in the Aral Sea region. You are concerned that a balance is struck between Aral Sea conservation and the needs of people and business. Not only is it important that there be enough water, that water needs to be suitable quality for industrial purposes. You also recognize the need for healthy workers. Your research should focus on water quality issues and the drinking water shortage faced by residents of the Aral Sea. Your closest ally in the debate will probably be the politicians because of your close relationship in the past on issues such as trade and taxes.

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Fish for an Aral Sea Tomorrow (FAST)

Your group is an international conservation group composed of biologists, unemployed fishermen and cannery workers. Your closest allies in the debate are the conservationists. You believe that people who would best manage the resources of the Aral Sea are those who depend on it for a living. The primary goal of your group is to see the recovery of Aral Sea fish populations to a level that commercial fishing could resume. For your research you should examine the history of Aral Sea fishing and its effect on jobs and the economy of the region.