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Environmental lessons, their structure and rationale behind: SDG 6 – Clean Water & Sanitation

Olga Dziabenko
University of Deusto

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Climate Change

Clean Water and its management (part 2)

Clean Energy

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Lessons setting

- 6 Lessons are divided into two groups:

  Clean Water (for primary school)

  Clean Water (for secondary school)

- Each lesson is a standalone activity, but they can also be used progressively in 3-lesson bundles

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Group 1: Clean Water (for primary school)

- Making Water Ready-To-Drink

(Scientific approach)

- How many jeans do you need?

(Socioeconomic approach)

- Past and Present

(Cultural approach)

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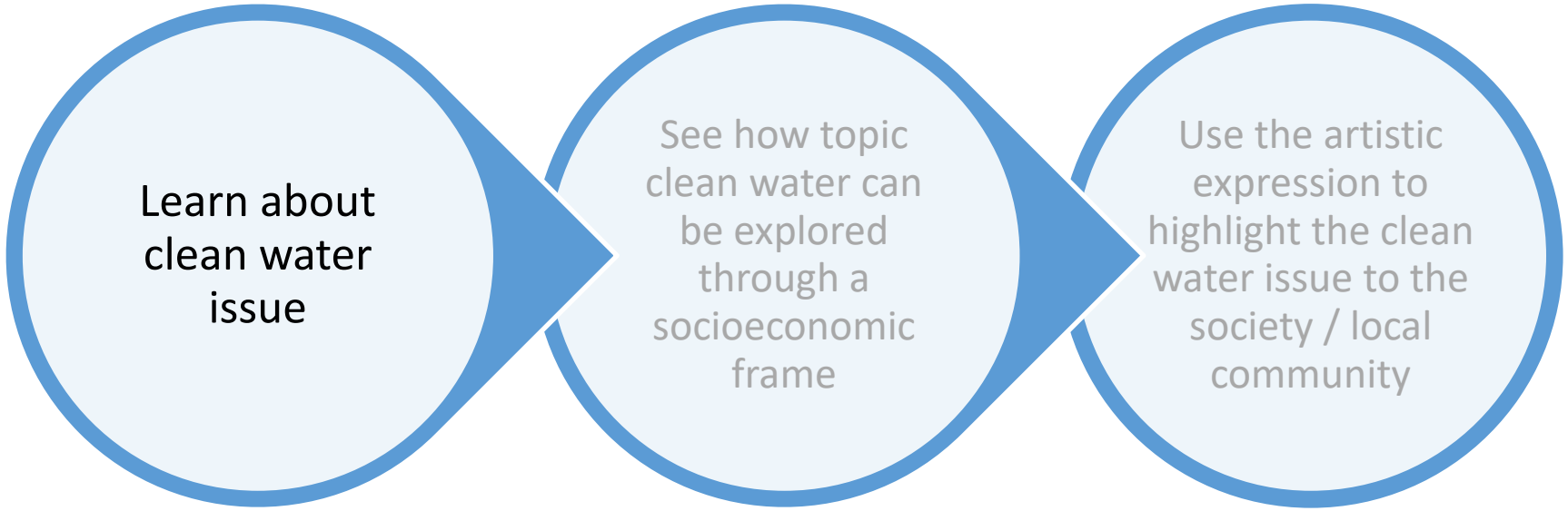
Group 1: Clean Water (for primary school)



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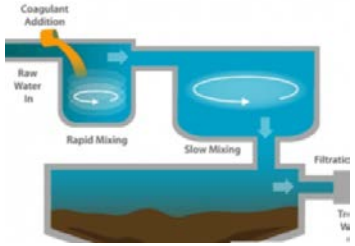

Clean Water: Making Water Ready-To-Drink

Using the UDL principle of different learning styles students engage to select the level of difficulty of content presentation about clean water.

Students:

- Select the instruments required for performing the experiment
- Learn to design own experiment
- Are asked to create the water filter
- Learn to produce clean water when hiking and share/communicate this experience with people
- Choose ways (audio, visual, text, etc.) for communication

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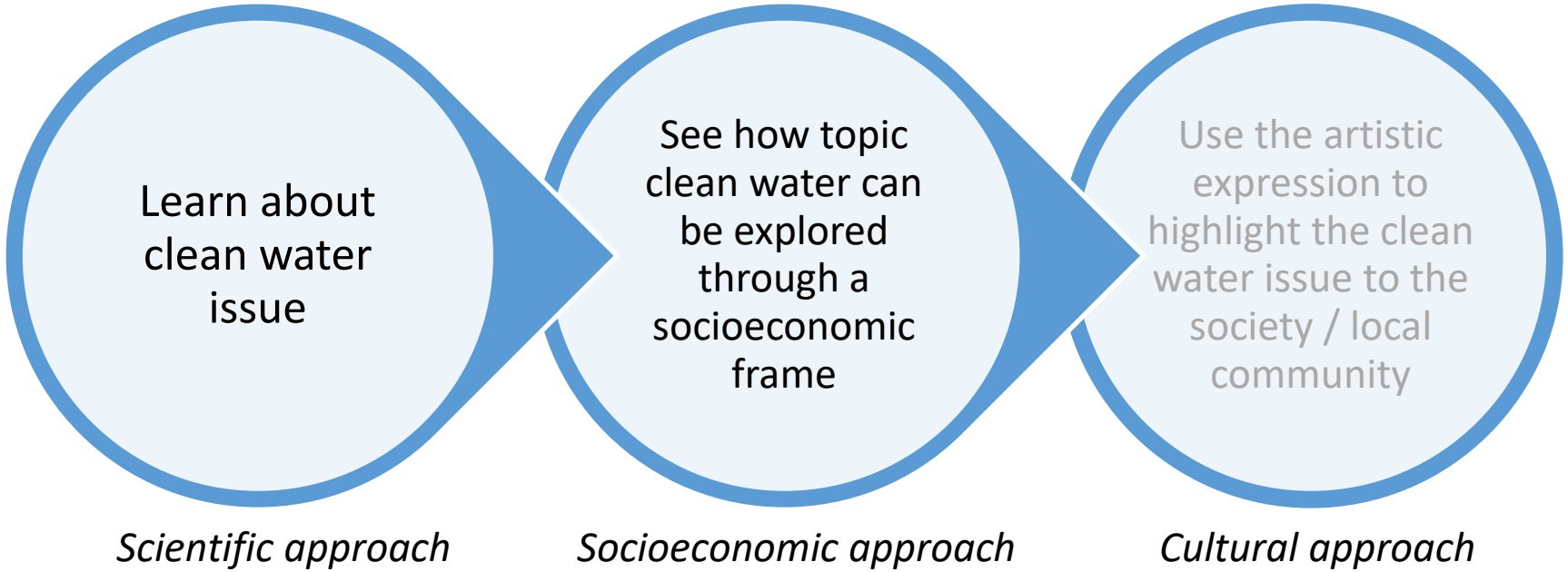

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Clean Water: How many jeans do you need?

Students are invited to learn about their dress habits through prism of socioeconomic frame - necessity of clean water for the life cycle of the jeans.

Students:

- Understand how the jeans production affects on the environment
- Learn techniques to reduce the usage of water on each phase of production and consuming
- Are invited to design the SWOT table and analyze it
- Work collaborative to solve the environmental problems
- Have the opportunity to make their voice heard in their local community by communicating their ideas

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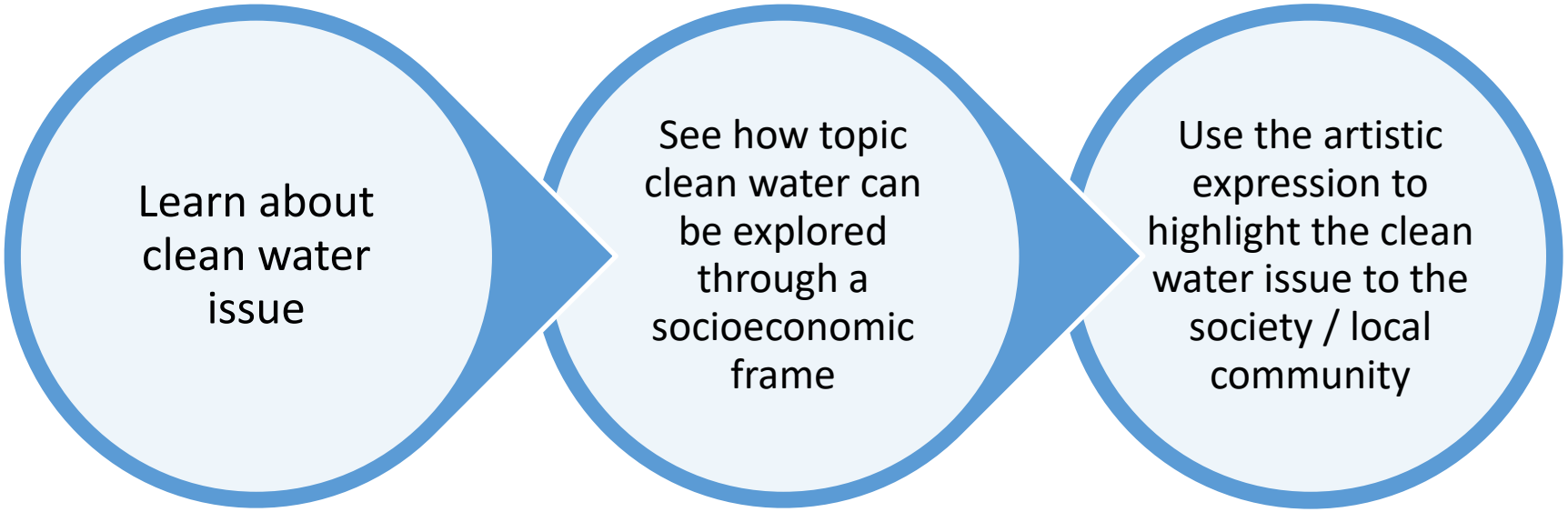

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Clean Water: Past & Present

Students are invited to learn about clean water issue through art and express their views and feelings creatively using artistic means.

Students:

- Learn about clean water usage while also learning how this topic presented in the art and through the art
- Learn about changes of culture of consuming the clean water over centuries
- Are invited to express themselves in an artistic way using the creativity and imagination
- Learn to use the constructive criticism and accept others' points of view

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Group 2: Clean Water (for secondary school)

- Sanitation of Wastewater

(Scientific approach)

- Reuse of Greywater

(Open schooling approach)

- Viruses in Water

(Scientific approach)

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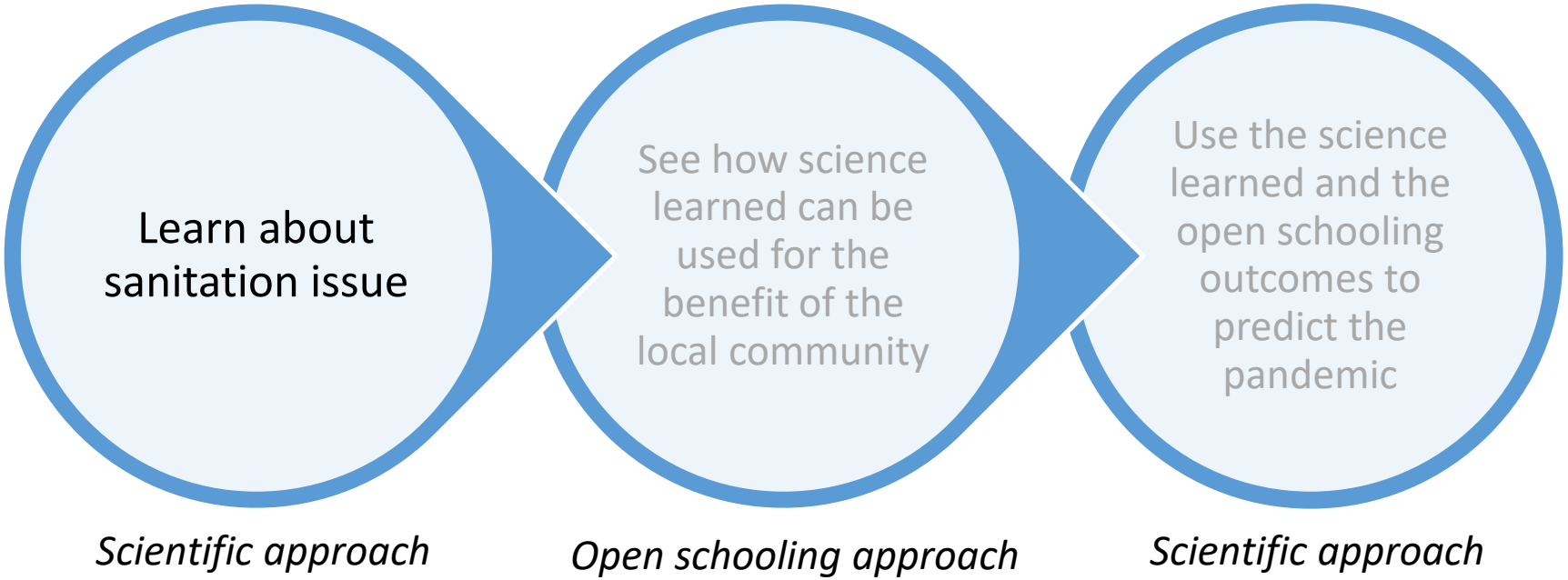
Group 2: Clean Water (for secondary school school)



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Clean Water: Sanitation Of Wastewater

The discussion of sanitation of the waste water initiates student's thoughts on water management: deficit of the clean water and generation it from the used one.

Students:

- Learn phases of the wastewater sanitation process and understand how it works
- Recognize the wastewater impact on the environment
- Make responsible use of water resources
- Promote a culture of environmental sustainability

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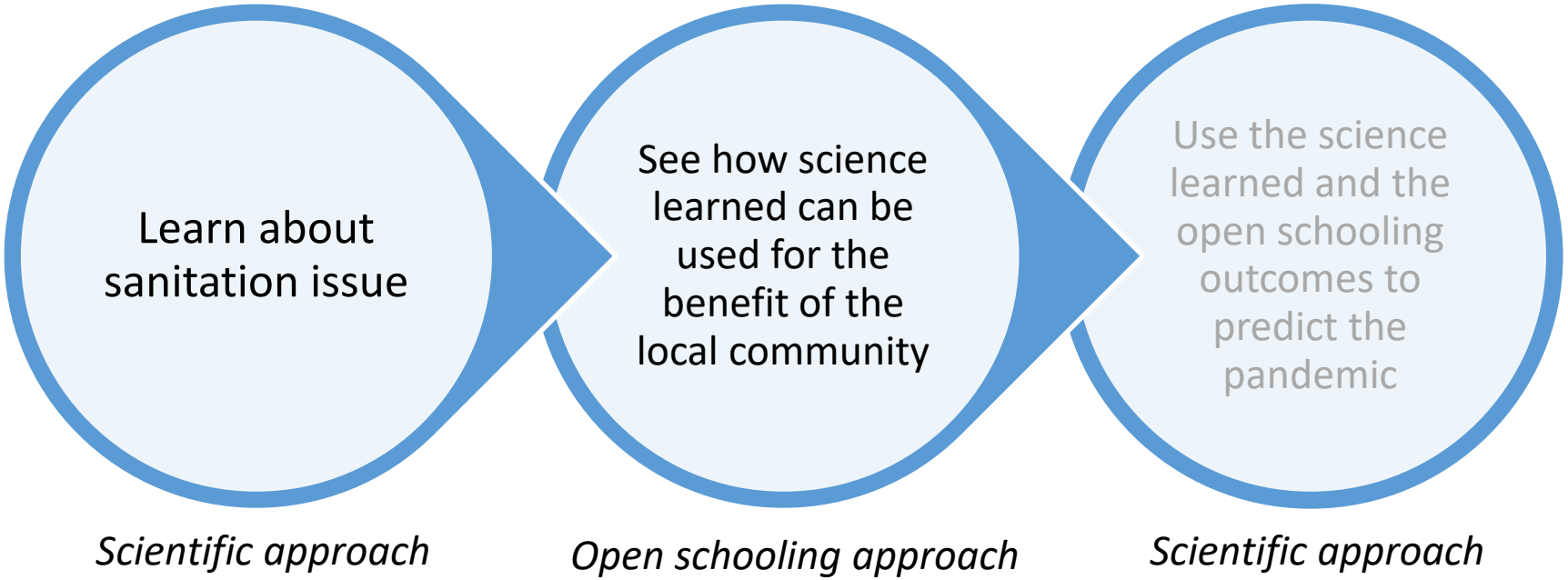

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Clean Water: Reuse Of Grey Water

The average person produces around 204 L of greywater per day. Students analyze industrial wastewater treatment and create own solution for grey water reuse in their local community.

Students:

- Understand how water recovery systems work
- Recognize the wastewater impact on the environment
- Identify water recovery systems in their local community
- Create own solutions for reuse of grey water
- Make aware the local community about the water resources and promote a responsible use of them

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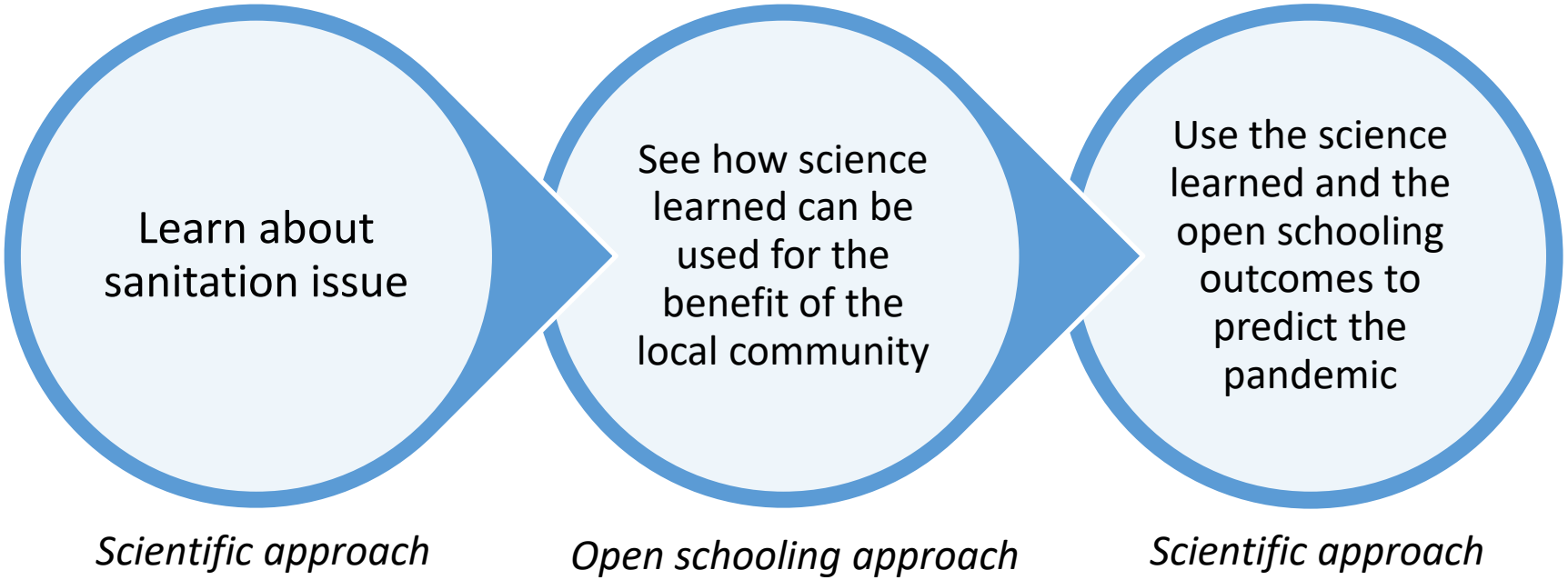

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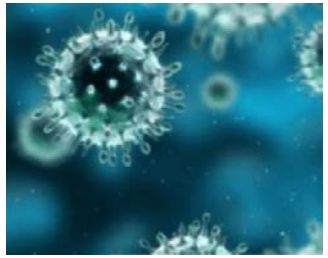

Clean Water: Viruses In Water

The COVID-19 pandemic brings a question about a prediction of the diseases based on the water analysis. For this students explore bacteria and viruses lifetime in water (tap, river and ground water).

Students:

- Analise viral lifetime and processes, which impact on it
- Describe components/characteristics of viruses and their role in infection
- Recognize the ways in which viruses can differ from each other
- Learn to self-evaluate the work performed
- Learn to write a laboratory report

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Thank you!

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