

An underwater photograph of a swimmer in clear blue water. The swimmer's head and arms are visible, with bubbles around them. A large, semi-transparent circular logo is centered in the image. Inside the circle are four black water bottles. A blue banner with white text is superimposed over the bottles.

4 LITERS

Curriculum: Instructor Guide





Foreword

CATARINA DE ALBUQUERQUE

In 2010 the United Nations General Assembly and Human Rights Council adopted resolutions recognizing the human right to safe drinking water and sanitation, affirming that all people have the right to the water and sanitation services they need to live in dignity.

2010 is not very long ago. But if the human rights to water and sanitation are relatively new on the international agenda, activities and initiatives like this 4Liters Curriculum are not. Human rights are part of our daily lives, and many of us are constantly working to better implement, protect, and enforce these rights in the communities around us.

Wherever I go on country mission, I witness challenges in the realization of the human rights to water and sanitation, whether in developing countries or the most developed countries. All too often, the most marginalized and disadvantaged members of society also face difficulties and obstacles in accessing sanitation and water. However, I also witness great efforts, good practices, and encouraging work in realizing the human rights to water and sanitation. And above all, I am often struck by the role that children and youth can play as agents of change.

We cannot see problems in the realization of the human rights to water and sanitation as distant or foreign. They are not. Every human being enjoys the very same human rights. Those of us who enjoy our rights to water and sanitation have an important responsibility to better understand and defend our resources, for ourselves and for the most marginalized among us.

No one has described this more convincingly than Eleanor Roosevelt:

“Where, after all, do universal human rights begin? In small places, close to home – so close and so small that they cannot be seen on any maps of the world. [...] Such are the places where every man, woman and child seeks equal justice, equal opportunity, equal dignity without discrimination. Unless these rights have meaning there, they have little meaning anywhere. Without concerned citizen action to uphold them close to home, we shall look in vain for progress in the larger world.”

This 4Liters Curriculum contributes to these efforts by providing a tool for human rights education. It aims to unite students from diverse backgrounds across the educational spectrum, demonstrating the challenges related to water

and sanitation, and inspiring young people to better understand and defend their rights.

We all imagine and seek to work towards the same future: one where the human rights to water and sanitation are a reality for everyone.

CATARINA DE ALBUQUERQUE

**UN SPECIAL RAPPORTEUR ON THE HUMAN RIGHT
TO SAFE DRINKING WATER AND SANITATION**



Welcome to 4Liters

George Orwell spent several years as a police officer in colonial Burma in the 1920s. When he returned to London to write, he found himself struggling to understand the characters he wanted to portray: tramps and vagrants living on the social margins of European cities.

Orwell dressed the part and took to the streets, living in Paris and East London, doing odd jobs and frequenting odd places. He was determined to discover through *experience* what life was like for a faceless people. "I wanted to submerge myself," he wrote, "to get right down among the oppressed."

The result, *Down and Out in Paris and London*, was a critically acclaimed memoir that shifted European views on social inequality. By living poverty, Orwell discovered a new perspective on humanity that would make him one of history's greatest social observers. //



Today, nearly [one in seven people](#) lack access to a safe source of clean water. Many of us in the developed world, however, will go our whole lives without meeting a single one of them. Perhaps that's why Americans consume around [550 liters of water a day](#), why 69% of us take our water access for granted, and why over 50% of the projects we build to address water poverty around the world fail within the first year. Without a personal experience of water poverty, we lack the empathy necessary to change our lives and empower others to do the same.

Fortunately, what we lack in empathy we can make up for in curiosity. [4Liters](#) helps bridge the empathy gap for water. By choosing to experience water poverty for a short time, we can create a thirst for change that will motivate ourselves and inspire others.

The 4Liters Curriculum moves that experience into the classroom. It is built to transform your students, by providing a glimpse into the lives of nearly a billion people suffering in water poverty. It is a brave experiment in compassion that Orwell would be proud of.

This multi-disciplinary curriculum was written for [6-12 grade classrooms](#), and gives educators the flexibility to plan the experience that works best for them. Each lesson is a freestanding unit that can be combined flexibly with others. When put together, your selected lessons will empower students to [See, Judge and Act](#) on the water crisis.

This Introduction considers the scope of the text, as well as important concepts used in both lessons and overall design. While deciding how to incorporate 4Liters into your classroom, we hope you'll embrace the mantra of philosopher John Dewey: "all genuine education comes about through experience."

Use 4Liters to mold your students into global citizens.

A handwritten signature in black ink, appearing to read "George". The signature is fluid and cursive, with a large loop at the end.

**EXECUTIVE DIRECTOR
DIGDEEP WATER**

Outline.

Page:

- | | | | |
|-----------|--------------------------------------|-----------|-----------------------|
| 4 | Global, experiential learning | 12 | Using 4liters.org |
| 6 | The See - Judge - Act model | 13 | The webtool |
| 7 | Common Core alignment | 14 | Student sign-up |
| 8 | Organizing your classroom experience | 15 | Profile functionality |
| 9 | Anatomy of a lesson | 16 | Forming teams |
| 10 | List of lessons by objective | 17 | Fundraising |
| 11 | Sample class planner | | |

Global, Experiential Learning

Learning requires a total commitment of the person – feeling, perceiving, thinking and behaving. When seen this way, it's a holistic process that extends well beyond the classroom.

4Liters is a tool for multidisciplinary, experience-based education that can be modified to fit the needs of any group learning setting. It encourages students to participate in their own education, empowering them to be both the source and object of new knowledge.

"The education community has long recognized the benefits of experiential learning. A range of academics have pointed out that one of the most effective ways to teach concepts is through active learning strategies." (Krain and Shadle, 2006)

"Why devote time and energy to the global water crisis when there are so many problems here at home?" For DIGDEEP, the answer is always the same: the water crisis is closer to home than you think.

Today 13% of American Indians lack access to clean water or sanitation. The homeless, undocumented immigrants, and irregular border communities all suffer routine water poverty. Consider that US water consumption rates continue to grow despite increasing water stress, and you'll realize that there has never been a better time to take water education more seriously in the US.

By considering water poverty abroad, 4Liters helps students become educated, engaged global citizens. It fosters an understanding of humanity as interdependent and mutually responsible – endowed with basic, universal rights.

By considering water poverty and consumption at home, 4Liters connects American students to this international problem more deeply than they could have at first imagined.

A photograph of a rural farmstead in a dry, open landscape. In the foreground, a man in a green shirt and blue jeans is filling four blue plastic barrels on a wooden pallet. The barrels are arranged in a row, with the first three being blue and the last one being black. A white hose is connected to the first barrel. The farmstead consists of several wooden buildings with corrugated metal roofs. In the background, a white pickup truck is parked on a dirt road, and a fence line runs across the field. The sky is clear and blue, and the horizon shows distant hills.

FOR THE THINGS WE HAVE TO LEARN BEFORE
DOING THEM, WE LEARN BY DOING THEM.


Aristotle


See, Judge, Act


Experience is the best teacher. Like The 4Liter Challenge itself, this curriculum encourages young people to consider the global water crisis in light of their own daily lives, and to use that awareness to bring about positive change.

Lessons are divided into three sections – [See](#), [Judge and Act](#) – which help the student explore everyday situations of water poverty and plan specific actions to create change.

The See, Judge, Act model also allows you to select the lessons that best fit your classroom, and to arrange them into a complete curricular experience. Since each lesson is a complete unit, you can mix and match lessons within each category to meet constraints of time, technology and subject matter.

 **See:** What exactly is happening? Why is it happening? What effect is it having on people's lives?

 **Judge:** What should be happening? How does the problem affect you? What do you think about all of this?

 **Act:** What needs to change? How can you help make this change a reality? Who can you get involved?



The Common Core.

For charter and private schools, the 4Liters Curriculum is both project-based and worldview centered - key components of a global education.

For public schools, lessons are also Common Core aligned, making them helpful tools for reenforcing skills and concepts already being considered in the classroom.

Most lessons are aligned with one or more CCR anchor standards, including [Reading](#), [Writing](#) and [Speaking/Listening](#). 4Liters is an excellent way to incorporate these new standards into non-English classrooms.



Organizing your experience.

1

Plan your 4Liter Challenge.

- Begin by deciding when you will begin your class' 4Liter Challenge and consider planning your lessons around it.
- This Curriculum takes advantage of 4liters.org, a place where educators and students can document their experience of water poverty in real time. The ability to group users and track their progress helps facilitate class learning. 4liters.org is also a great place to have your students reflect on their class work. Raising funds takes the lesson a step further - by creating change students can see.

2

Review lessons based on subject, length and teaching style. Select the lessons of interest to you in the *See* and *Judge* categories.

3

Organize lessons using the See, Judge, Act planner. Lessons are non-sequential, so feel free to mix and match. Lessons also list their expected time burden, allowing you to easily complete a 4Liters lesson during class, even if you're teaching another unit at the same time.

Anatomy of a lesson.

The screenshot shows a lesson page with a blue header containing three tabs: 'SEE', 'JUDGE', and 'ACT'. The main title is '1.1 Meditation on Water'. Below the title is a sub-header: 'A **30-45** activity, introduces the Basic Water Requirement (BWR) for human households. Provides a visual reference for common volumes of water. Print version only.' There is a small image of a person holding a water bottle. Below this are icons for 'visual reference', '30-45', '30-45', '30-45', and '30-45'. The page is divided into sections: 'Snapshot', 'Objectives', 'Supplies', 'Timeline', and 'Debrief & Discussion'. The 'Snapshot' section describes the activity as a visualization and brainstorming exercise. The 'Objectives' section lists two goals: identifying clean water as a basic human need and identifying potential problems related to water access. The 'Supplies' section lists visualization guidelines and a trash bag. The 'Timeline' section lists six steps for the activity, with an expected time of 20 minutes. The 'Debrief & Discussion' section prompts students to highlight key ideas and provides background information on water usage in different countries.

See, Judge, Act: Lessons are clearly marked as See, Judge or Act in the header. This is the most important organizational feature. For the full curricular experience, you should complete one or more lessons in each category.

Number and Title: Lesson numbers are non-sequential; they're simply an organizational aid. Feel free to mix and match lessons, and to improvise on the text.

Category: Looking for lessons that fit a specific subject? These icons are for quick reference.

Snapshot: This is a brief overview of the lesson, including its theme, summary, and technology requirements.

Debrief and Discussion: You can extend learning beyond the classroom by using these prompts to facilitate discussion and plan optional homework.

Alternate Version: Since the curriculum is written for a variety of grade levels and learning environments, some lessons include a section to help you optimize for your classroom.

Context and Additional Resources: Though each lesson can stand alone, this brief explanation on some lessons will help you better understand how lessons can be combined to tackle big concepts.

Outline of lessons.



WC: World Cultures and Social Science

E: Ethics

T: Theology / World Religions

NS: Environment and Natural Science

GE: Government and Economics

I. Student objectives for 'See'

Students identify water as a basic human need. Students identify the problems related to water access around the world.

1. Meditation on Water: WC, E, T, NS, GE
2. Backs and Facts Activity: WC, E

Students compare water usage in representative areas of the world. Students relate water access to other human development criteria.

3. Map Activity: WC, E, NS, GE
4. Changing Water: WC, NS, GE
5. Financial Water Forecast Activity: WC, E, GE

Students explore water consumption issues first-hand.

6. Water Bucket Race: WC, GE
7. Dangerous Drinks: WC, NS

II. Student objectives for 'Judge'

Students define human right. Students distinguish a human right from other rights and privileges. Students distinguish ethical norms related to water and relate them to daily lives in the United States.

8. Rights Group Think: E, T, GE
9. Rights Worksheet: E, T, GE
10. David's Day: WC, E, T, NS, GE

Students compare and contrast water attitudes in major cultural/religious systems.

11. World Religions and Water: WC, T

Students examine the idea of water conflict vs. water cooperation. Students relate negotiation and solidarity to the issue of water access. Students evaluate cooperation over water access in light of justice, solidarity and stewardship.

12. The Ugli Orange Negotiation: WC, E, GE
13. Water and Peace: WC, E, T, NS, GE
14. California Water Negotiation: WC, E, T, NS, GE

III. Student objectives for 'Act'

Students create and implement action plans to affect real change. Students develop an action timeline. Students demonstrate leadership by organizing their peers into competitive fundraising teams.

15. Act: WC, E, T, NS, GE

	SEE	JUDGE	ACT
10/23/13	1.1 MEDITATION	✂	INTRO 4LITERS.ORG



Using the platform.

This curriculum was created to make your students' 4Liter Challenge an even more enriching experience.

Now that you've begun planning your classroom experience, this section will help you understand how to use the tools at 4liters.org

Have a question or a problem? We're always here to help: info@digdeepwater.org



Everything in one place.

4liters.org is designed to function like an app, ditching bulky, multi-page tasks for sleek interactions that take place in a single frame.

Dialog boxes appear on the homescreen and scroll off the end of the page.

On user profiles, posts load from most recent to earliest, allowing users to review their entire 4Liters history with a single scroll. A disappearing return arrow guides them back to the top of the page.

How long is your challenge?



2 DAYS 

*All challenges are between 1-5 days. Longer challenges are harder to complete but make fundraising easier.

A sign-up your students won't hate.

Students can log in with their Facebook credentials, making the process quick and easy. (Users without a Facebook account may still log in manually.)



Some schools block social network access on their computers. If this is the case, you may want to have your students sign up at home.

Give your students clear instructions regarding the length, start date, and fundraising goals for their campaign. You may want to log in first to create the group that you want your students join. (More about that later.)

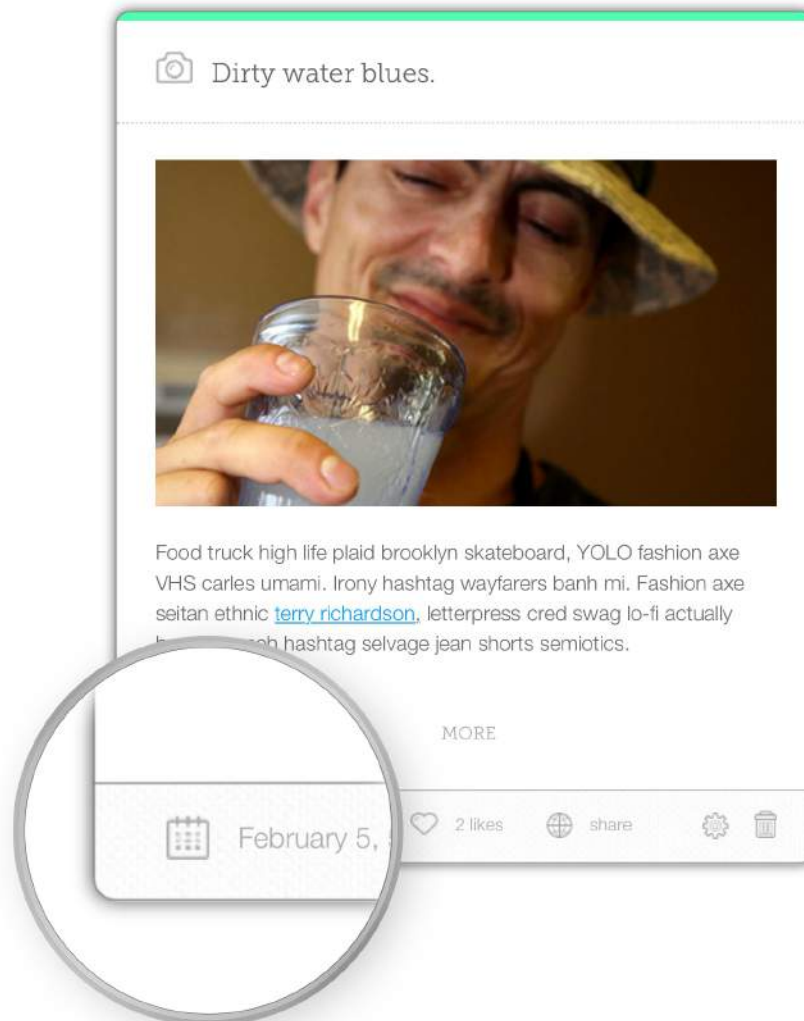
Active, multi-channel content creation.

The 4Liters profile is a social amplifier. Like a pulley, it takes the effort your students are already exerting online and multiplies it.

Profiles automatically pull posts from Instagram and Twitter with hashtags determined in the sign-up process. Students can also post pictures, video and text directly to their profiles.

The system generates both educational and behavior-prompting autoposts to boost learning and engagement.

Students can interact with other profiles by "liking" posts and sharing them accross networks. Everything is kept in order with a handy time stamp, allowing you to re-live their 4Liter Challenges moment-by-moment.



Ms. Smith
4th Period

+ JOIN

Leonard Langenscheidt

Together, we're raising
\$1545!

76%

start about teach find

Back to Profile



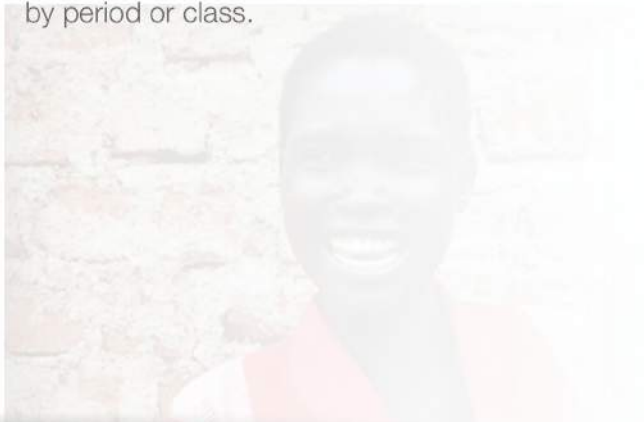
Team up to create change.

Teams are an essential part of The 4Liter Challenge.

Dirty water blues
Team pages have open memberships and aggregate user posts and fundraising totals. For clarity, autoposts and pledges are omitted.

Food truck high life plaid brooklyn skater zoro
Teams provide a place for users to share anecdotes, insights and advice along the way. Of course, teams also create competition and boost participation.

Finally, teams are an information management tool for teachers. By instructing your students to team-up, you can monitor their interactions by period or class.



A step further.

4liters.org takes online fundraising a step further. It creates a stream of dynamic, student-generated content that can be shared across networks... content that's authentic because it's directly related to the problem being solved: water poverty.

100% of every tax-deductible donation on 4liters.org is batched to a water project. When that project is complete, a report is delivered to students and their donors with data, pictures and stories from the field.

4Liters won't just change your students' lives, it will change the world.



License and credits.

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