

Environmental Literacy and Trauma: An Overview

Resources Curated by San Mateo County's [Environmental Literacy Initiative](https://sites.google.com/smcoe.org/smcoe-environmental-literacy/resources/curriculum-and-instruction/smcoe-model-efs-curriculum)
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I. Defining Trauma

Trauma is the response to a distressing or disturbing event that overwhelms an individual's ability to cope, causes feelings of helplessness, diminishes their sense of self and their ability to feel the full range of emotions and experiences. Trauma can be caused by experiencing or witnessing an event - *see examples in image to the right.*



II. Connections Between Climate Change and Trauma


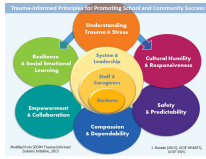

Research shows that there is a strong connection between experiencing and witnessing environmental issues (i.e. climate change disasters, ecosystem degradation, pollution, etc.), and an increase in traumatic stress. This is due to the connection between the environment and human health. According to the World Health Organization the overall health effects of a changing climate are overwhelmingly negative with impacts on social and environmental determinants of health such as clean air, safe drinking water, sufficient food, and secure shelter. The American Psychiatric Association, has shown the further threat that Climate Change poses to mental health as well, which leads to an increase in traumatic stress for all, but most importantly for our most vulnerable and marginalized populations. *See resources below for more research showing the connection between climate change (and other environmental issues) to health and trauma.*

 <p>WHO</p>	<p>The World Health Organization outlines how the overall health effects of a changing climate are overwhelmingly negative because climate change affects social and environmental determinants of health – clean air, safe drinking water, sufficient food and secure shelter.</p>
 <p>AMERICAN PSYCHIATRIC ASSOCIATION</p>	<p>The American Psychiatric Association (APA) recognizes that climate change poses a threat to public health, including mental health of everyone, but in particular are most vulnerable and marginalized population. They have a number of resources that are useful for this work:</p> <ul style="list-style-type: none"> • Overview - How Climate Change Impacts Mental Health • Report: Mental Health & Our Changing Climate
 <p>CDC CENTERS FOR DISEASE CONTROL AND PREVENTION</p>	<p>The Centers for Disease Control (CDC) has put together a Climate and Health Program that supports states, cities, territories, and tribes prepare for the specific climate-related health impacts their communities will face.</p>
 <p>PSR PSYCHOLOGISTS FOR SOCIAL RESPONSIBILITY</p>	<p>Psychologists for Social Responsibility have outlined how climate change will cause more psychological than physical harm for U.S. citizens and people around the world, and the costs socially, societally, and economically are apt to be enormous.</p>

 United States Global Change Research Program	The U.S. Global Change Research Program has outlined how climate change issues such as drought, heat, fire, flood, etc. have a serious impact on mental health and wellbeing.
	Yale Climate Connections interviewed climate scientists Sara Myhre and Jeffrey Kiehl, who are on the forefront of scientists who are engaging with the discussion around the emotional impacts of climate change. Check out their video here .

III. Trauma Informed School Communities

It is the responsibility of educators to integrate trauma-informed practices into schools in order to protect the health and wellbeing of both the students and adults in the community. In a trauma-informed school, the adults (administrators, teachers, staff, parents, and law enforcement) in the school community are prepared to recognize and respond to those who have been impacted by traumatic stress of all kinds, including those related to environmental issues. The goal of a trauma-informed classroom and school is to provide tools to cope with extreme situations, and to create an underlying culture of respect and support. Additionally, trauma-informed classrooms and schools provide students with clear expectations and communication strategies to guide them through stressful situations. Utilize the resources below to learn more in general about trauma informed practices in classrooms and schools.

	The Treatment and Services Adaptation Center has developed a rich set of resources to support educators and the greater community to bring trauma-informed practices into classrooms and schools.
	The University of California San Francisco (UCSF) has developed the HEARTS Framework , which is guided by six principles that create trauma informed schools. The framework is modified from the San Francisco Department of Public Health Trauma Informed Systems Initiative (SFDPH TIS), and can be applied to students and adult members of the school community (staff, caregivers, leadership) alike, as well as to the school system as a whole.
	The Trauma and Learning Policy Initiative (TLPI) engages in a host of advocacy strategies to support bringing trauma informed practices into schools including: providing support to schools to become trauma sensitive environments; research and report writing; legislative and administrative advocacy for laws, regulations and policies that support schools to develop trauma-sensitive environments; coalition building; outreach and education; and more.

III. Trauma Informed Practices and Environmental Literacy

Bringing Environmental Literacy into the classroom means touching on topics and issues that can trigger traumatic stress. There are a number of strategies that are recommended for teachers to consider in order to support students to grapple with these complex environmental issues, and feel empowered to drive environmental and social transformation within their school community. Examples of strategies include:

- Cultural Humility and Responsiveness:** Framing environmental topics and issues with a lens that is culturally responsive. In general, environmental problems such as poor air quality, unclean water, toxic environments, waste, etc. disproportionately impact communities of color and lower income communities. It is critical that educators recognize

and acknowledge the role of environmental justice in these conversations, and to leverage resources such as the [Principles of Environmental Justice](#) in class discussions. Another thing to consider in regards to cultural responsiveness is understanding the need to be sensitive when teaching about environmental disasters such as fire, flood, heat waves, etc. Many communities have suffered directly from a disaster of this nature, and/or individuals in a classroom have had direct connections from loved ones. It is important that lessons and discussions that are based around these disasters are prefaced with recognition that members of the community might be triggered by the conversation and that it is okay to take a break or step away from the content if things feel emotionally overwhelming or begin to trigger PTSD.

- **Social and Emotional Learning (SEL):** Conversation regarding impacts of climate change often center around the increase of climate related disasters and/or topics such as extinction of plants and animals. These topics can trigger fear and anxiety, and provide an overwhelming sense of doom and gloom in students. It is critical that teachers prepare to engage students in activities that help them process their emotions related to these situations, for example:
 - Quiet time in a natural setting (i.e. solo sit spot, or nature walk)
 - Journal writing or perspective writing
 - Visual and Performing Art activities
 - Seminar discussions

These activities do not need to be significantly time consuming and can be as simple as providing students a few minutes to process their emotions individually or with a partner after viewing large data sets or watching emotionally triggering videos. A simple prompt might be, “How are you feeling emotionally after reading that article, or watching that video? What fears or anxieties did the data or visuals bring up for you?”

- **Empowerment and Collaboration:** Providing students with the opportunity to engage in solutionary action and advocacy provides an important opportunity for students to realize that they can make a difference in their community to mitigate or reduce the negative impacts of environmental degradation or climate change. It is recommended that teachers design units of study that follow a Solutionary Project/Problem/Place based learning framework - see the framework developed by San Mateo County at tinyurl.com/SMCSolutionaryUnit.

For more information about how to integrate trauma informed practices into environmental education please reach out to Andra Yeghoian at the San Mateo County Office of Education (SMCOE): ayeghoian@smcoe.org.

For a slide deck presentation of this information please visit: [Environmental Literacy and Trauma General Overview](#).