## Developing opportunities for service and workforce programs to support climate-ready communities HB 1176 & SB 5247

#### Sponsored by Representative Slatter & Senator Nobles, by request of the Office of the Governor

This bill builds climate-ready and climate-resilient communities through expanded service opportunities and clean-energy workforce development. The bill:

- Creates the Washington Climate Corps Network to connect and grow climate-related service opportunities, increase equitable access to these programs, encourage more climate-related service programs in overburdened communities and in partnership with tribes; and
- Directs the State Workforce Board to partner with labor groups to evaluate the workforce impacts and demands created by Washington's climate policies and recommend strategies to support clean-energy job creation, prepare workers, and prevent workforce displacement.

#### **Creating the Washington Climate Corps Network**

Building off the legacy of the Civilian Conservation Corps from the 1930s, service programs today place young adults in non-profit organizations and governments to engage in a term of service to work in and improve the local community.

The bill directs Serve Washington, which is housed within the Office of Financial Management, to establish the Washington Climate Corps Network to support and grow climate-related service opportunities for young adults and veterans. The Climate Corps will work to build low-carbon and climate-resilient communities, ecosystems, and economies while providing education and career pathways to service members. Service members will have the opportunity to engage in projects such as helping a community implement Firewise projects to reduce wildfire risk or connecting residents to home weatherization services.

The Climate Corps will build upon existing service programs to increase equitable access to service opportunities and ensure that service programs serve all Washington communities, especially those disproportionately impacted by environmental burdens. It does this by:

• Augmenting living stipends for service members;

- Reducing the cost for community organizations and tribes to host service members; and
- Supporting service members ineligible for federal funds.

There is currently a national movement for creating Climate Corps programs. Eight other states have recently established similar programs; <u>California's Climate Action Corps</u> is one example.

#### Advancing Workforce Development in Clean Energy

Our state's strong suite of climate and clean energy laws is going to bring about significant job growth and evolving skills needs. This legislation launches a new phase of collaborative work with labor, business, and communities, facilitated by the State Workforce Board, to forecast and track job demand in clean energy; to prepare the workforce; and to support workers in the transition. The bill directs the Workforce Board to:

- Create the Clean Energy Technology Workforce Advisory Committee to recommend how to support expansion of clean energy jobs and prepare the workforce;
- Evaluate and report on the labor market trends and workforce demands created by Washington's climate policies, including needed skills; wage and benefits ranges; and workforce demographics; and
- Explore the feasibility of a "transition to retirement" program for workers affected by energy system changes.

The bill also repeals three statutes requiring legislative reports related to workforce development in clean-energy jobs that are now outdated.

#### **Contact Information**

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August 23, 2022

To: RETC

It all started with IBEW 77' attending The EnergySec, Energy Security & Compliance Summit held In Anaheim, CA last October 4<sup>th</sup>-6<sup>th</sup> 2021. It was here that we began the discussion on how to best prepare our IBEW 77 members for new and ongoing security threats. These workers in their current utility classifications would greatly benefit from additional training and upscaling provided by way of a state recognized apprenticeship program, either within an existing program or creation of an entirely new program. It is the everchanging technology that requires a new awareness and skillset that will benefit not only the employee, but the employer as well.

Rex Habner, Business Manager and Secretary Treasurer for IBEW 77, along with myself attended the conference. After much discussion and working along with retired IBEW 77 member Bob Guenther, we determined there was a strong case to be made for providing our members the opportunity to skill up to meet the ever-increasing demand and need our utilities have around cybersecurity.

Since then, we have formed an "Oversite Committee" to discuss the different pathways, challenges, and educational components necessary as we embark on creating this highly important program and training. It is critical that the skills being taught be of the highest standard and be uniformed in a way that quality is assured, and they be relevant to daily operations and safety.

Our oversite committee has been meeting consistently since the fall of last year, and since the first of the year meeting every two weeks. The Committees goal is to work through the details and desired outcomes of what will be presented to Labor and Industries this fall. Our committee consists of both equal management represented member and union members, with 75% being subject matter experts.

We have reached out to our different utilities as well as membership at large who have both shown an interest to create and provide this program. From the White House down to local utilities, there is a high importance placed on this work. Our hope is to create value added for current employees of our utilities as well as new opportunities.

We the IBEW were born out of the need to protect our members and their Safety when our Electrical worker mortality rate was at 50%. We carry the torch for all those who came before us. Our work today is for the betterment of the generations of those who follow us. We see and understand the need to protect our workers and communities. With this same tenacity and drive the IBEW was born out of, we turn our focus to Information and Cyber Security and Carey the IBEW dream into the 21st Century.

A special thank you to the *Building Apprenticeship Systems in Cyber Security* (BASIC) project team. This U.S. Department of Labor multi state grant is being led by Southern Utah University and includes Washington partners, the Regional Education and Training Center, Everett Community College and the Washington State University Energy Program.

Please contact IBEW 77 with any interest you may have as an employer or employee in participating in this exciting project.

Sincerely,

Habrer

Rex Habner Business Manager/Financial Secretary

Christine Reid Political Director

# Keeping Climate Science Learning and Instruction Focused on Creating Solutions and Building Community Resilience

# What Is The Issue?

Climate change is affecting us all. <u>Young people</u> and <u>low-income communities of color</u> are some of the most heavily impacted populations. <u>As</u> <u>anticipated impacts worsen</u>, <u>people under 30 suffer</u> from increasing levels of sleep disorders, despair, depression and substance abuse. <u>Research has shown</u> that teaching climate science alone contributes to anxieties and phobias. <u>By also introducing students to</u> <u>climate solutions—along with opportunities to take</u> <u>scientific and civic action</u>—climate learning can have a positive effect on students' well-being and life and employment prospects.

# WHY IT MATTERS TO YOU

- Teachers should engage students of all backgrounds in locally contextualized climate solutions curricula. This work can even be taken up across school subjects.
- Less than 50% of preservice teachers have completed coursework related to climate science. District Staff & PD Providers should help teachers learn to partner with scientists, tribal educators, businesses, and other community members.
- School Leaders can promote student achievement and community-based service-learning by supporting solutionsfocused climate science education.

## **Things To Consider**

- Students' climate anxiety and despair can be mitigated by learning about collective and individual climate solutions. By <u>making climate</u> change feel personal, urgent, and close-to-home, students' values and identities change—and they take informed actions. This happens when teachers spend more instructional time on climate solutions than on decontextualized science. Spend ¾ of instruction on exploring solutions.
- Providing students with climate-solutions pedagogy and resources not only responds to their social-emotional needs, but also can enhance their academic achievement and life and job preparation.
  Climate science learning involves engaging in interdisciplinary, field- and project-based, experiential, collaborative learning. This approach results in higher student engagement in core subject area content and higherorder cognitive skill development, such as critical thinking and problemsolving. Solutions-centered action—like in the Multisolving Framework engages youth in socially just caretaking of their local community.
- Effective practices in climate science education focus on solutions. Instruction should: (1) be personally relevant and engaging, (2) build students' problem-solving skills and engineering design in the classroom and community, (3) help learners construct their own ideas, and (4) engage students with scientists to collect, analyze & apply data.

### **Recommended Actions You Can Take**

• Use <u>climate-solutions-oriented curriculum</u>, <u>assessment tools</u>, <u>and other</u> <u>learning resources</u>. Climate solutions storylines, digital games, carbon footprint calculators and virtual reality simulators are increasing in number, often come with teacher guides, and can be a powerful in-road for student engagement in climate science learning and solutions.

Consider: the <u>Cool School Challenge</u>, the <u>Climate Game Changer</u>, <u>Learning in Places</u>, and <u>this team-oriented carbon footprint reduction</u> <u>EcoChallenge tool (from NW Earth Institute)</u>.

- Provide students with field learning experiences with climate solutions professionals in your community, including Indigenous elders and scientists, local green technology businesspeople, farmers, foresters, water and soil scientists, food sovereignty experts, etc. <u>Project</u> <u>Drawdown's 100 climate solutions website</u> and initiatives can help you and students think about those you might partner with locally.
- Embed a <u>stewardship</u>, service, or <u>community science project</u> in your curriculum sequence so students engage in hands-on, evidence-based solutions—such as <u>caring for a local garden or ecosystem</u>, engaging in evidence-based political action, conducting an energy audit of business or government sites, participating in tree planting efforts, etc.

#### ALSO SEE STEM TEACHING TOOLS:

- #12 Climate Science Ed
- #57 Place-Based Science Ed
- #67 Justice-Centered Phenomena



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# REFLECTION QUESTIONS

- What community-based organizations, agencies, tribes or businesses might you approach and partner with for field-based, locally-relevant climate solutions learning?
- How can you address the social and emotional dimensions of learning about climate science? How can you provide students with experiences for meaningmaking and grief processing as it connects to taking action?

## **Attending to Equity**

- Communities of color are the most vulnerable to extreme weather events such as fires, flooding, and hurricanes.
  <u>Toxic plants and facilities often reside in</u> <u>these communities</u>, which are increasingly likely to be breached by fire and/or flood.
- Students of color are underrepresented in environmental careers, such as green building or wind and solar research, manufacturing and maintenance.
- Explore global climate change from the perspective of settler-colonialism. Disrupt climate change narratives—including those focused on solutions—that center on white saviorism and romantic narratives of hope.
- In instructional efforts, focus on how nondominant communities have developed solutions and built resilience in the face of climate change impacts. Focus on the perspectives, values, and goals held by the most impacted communities.



STEMteachingtools.org/brief/68



# STEMTeachingTools.org

Free Teacher Learning Resources to Support NGSS Implementation

#### What Are They?

The National Research Council's A Framework for K-12 Science Education and the resulting Next Generation Science Standards (NGSS) represent a new vision to help all students understand the natural and built world. As educators realize this new vision, many problems of practice come up.

STEM Teaching Tools are co-authored by teachers and researchers to illuminate these issues and give advice about how to accomplish specific pieces of the NGSS. The resources are short, direct, easily shareable, and offer links to other useful tools.

#### WHY THEY MATTER TO YOU

- Teachers need tools to reflect on how their teaching aligns with the NGSS & NRC Framework vision. These teacher learning resources have been designed to be easily shared with others.
- District staff & PD providers can use these tools in professional development to support implementation of the new vision.
- School leaders can use the tools to understand crucial aspects of the new vision for K-12 science education and then implement plans to support teachers' professional growth.

FUNDED BY THE NATIONAL SCIENCE FOUNDATION THROUGH THE RESEACH+PRACTICE COLLABORATORY







STEMteachingtools.org/link/PDFcollection

# Download PDFs of all our tools at



# WASHINGTON STUDENTS FOR WASHINGTON JOBS

The Washington State Opportunity Scholarship (WSOS) builds pathways into high-demand careers through financial aid and support services.

#### THE OPPORTUNITY SCHOLARSHIP HAS FOUR UNIQUE SCHOLARSHIPS.

#### The Baccalaureate Scholarship

**(BaS)** provides up to \$22,500 in financial aid and access to career-launching support services for students pursuing high-demand STEM and health care majors at any eligible public or private college or university in Washington state.

#### The Career and Technical Scholarship (CTS) supports

students pursuing a certificate, apprenticeship or degree at Washington's 34 community and technical colleges in high-demand trade, STEM and health care fields. Scholars are eligible to receive up to \$1,500 each quarter.

#### The Rural Jobs Initiative

**(RJI)** supports students in rural communities pursuing eligible CTS programs. Recipients receive \$3,500 in the first quarter, \$2,500 in their second quarter and \$2,000 per quarter thereafter.

#### The Graduate Scholarship

**(GRD)** supports students pursuing a career as a nurse practitioner in a medically underserved area. Recipients receive up to \$25,000 over three years. Washington state employers are eager to hire qualified talent, and Washington students are capable and ready to succeed. WSOS removes barriers to education and helps Washington students find their pathway to high-demand careers in Washington state.

#### OUR MODEL AND IMPACT

Businesses in Washington state are eager to fill trade, STEM and health care jobs. In the next decade, most jobs in our state will require postsecondary education, especially those paying a living wage. Yet, there are barriers in Washington that limit people's access to the training and education they need to fill the jobs that power our economy.

Opportunity Scholars receive financial assistance, career training and mentorship services that uniquely position them to meet our state's workforce shortages. The state of Washington amplifies our impact by matching every dollar raised.

#### **OUR SCHOLARS ARE:**



57% women67% first-generation college students70% students of color

#### **BACCALAUREATE SCHOLARS**



2x as likely to graduate in four years, as compared to their peers. Five years after graduating, recipients earn an average of **\$90K**, which is 2x what their family made when they entered college.

#### **CAREER AND TECHNICAL SCHOLARS**



Earn **3x** what their family made when they entered college, making an average salary of **almost \$60K** within one year of graduating.



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