# Community engagement in fire preparedness:

# It's how that matters

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As wildfires increasingly affect us in Oregon, more people and organizations are working to create fire-adapted communities. A fire-adapted community is aware of its risks and takes collaborative actions to reduce the likelihood of losses. Practitioners support fire-adapted communities by connecting people to information, resources and networks. This is often described as public outreach, community engagement, communication or resident education.

If this is part of your job, you may have experienced some of the following challenges:

- You have hosted educational events and put out messaging about defensible space and home hardening. Some local people have been involved, but it's always the same few.
- There was a lot of interest in fire preparedness after a fire happened nearby, but a few years later, people seemed to have other priorities.
- Your area has harder-to-reach populations, and you are wondering how to best connect with them.
- You want to prevent community members from experiencing a trauma response, but you're uncertain how to reach people effectively without triggering strong emotional reactions.

This primer responds to these challenges. It is for any community wildfire practitioner who wants to further develop their skills and tools for engaging people in their place. It focuses on wildfire preparedness with adult community members at local levels, although it is relevant to multiple contexts. It highlights selected concepts and practices that may help you overcome challenges, deepen relationships, support shared learning and even make the work more fun and meaningful.

After reading this primer, we hope that you will see the differences between traditional and more engagement-focused approaches, and undertake engagement that serves whole communities, uses the science of how adults learn and incorporates traumainformed practices.



We hope this resource sparks curiosity and new ideas.

While reading, you may consider:

- How might you share this information with your local colleagues and partners?
- Where might you try a new approach or technique in the next six months?
- What kinds of further training or experiences might help grow your engagement skills?

#### WHAT IS ENGAGEMENT?

Engagement describes active community participation in wildfire preparedness, wherein local people are key partners alongside government agencies and authorities. It means that solutions and actions are shared through interaction, mutual learning, and relationships. In contrast, more passive involvement consists of community members receiving information from authorities through messaging (such as through brochures, public service announcements, informational events). Engagement still involves expertise and education, but it's a shift in mindset from information delivery and one-way communication toward a more balanced sharing of knowledge and decision-making among everyone involved.

The spectrum of participation can be useful for understanding engagement. This describes how public participation in decision-making can range from lower-participation (information provision) to higher-participation approaches (decisions are made by the public). An engagement approach would focus on involvement, collaboration and empowerment of all involved (*Figure 1 below*).

It's important to note that not every moment is right for in-depth engagement. For example, emergency communications are usually directive because they provide crucial information to protect life and safety in timesensitive situations. Or, there may be extreme power disparities or conflicts that make it difficult for people to interact effectively, and mediation or negotiation may be more appropriate.

As you consider trying engagement approaches, you also might feel intimidated. Being a community wildfire practitioner is important and exciting, but not always easy. You are likely trying to do a lot across a large area with limited time and resources. You may feel rushed or uncertain of what approaches will be the most effective. Outreach and engagement are often not well-funded compared to on-the-ground wildfire mitigation

**ENGAGEMENT** 

Interaction, mutual learning and building relationships to facilitate the sharing of solutions and actions.

Inform







Figure 1. Spectrum of participation. Credit: Oregon State University.

**Empower** 

Consult

Collaborate

activities. Many of us do not have special training or extensive experience on how to do engagement, and available social science about it is not always accessible or easy to put into practice. Also, local leaders or other practitioners often already have established informationdelivery approaches, and some community members may be expecting and most comfortable with those.

Further factors to consider are trauma and safety. If individuals have had experiences with wildfire or smoke that were physically or emotionally harmful, their functioning and well-being may be affected in ways that can make it hard to engage on wildfire preparedness.

# Despite these obstacles, engagement approaches are worth trying because:

- Research across numerous social science disciplines finds that engagement approaches can be inclusive and effective.
- These approaches work because they can allow participants to ask questions, test assumptions and ideas, and decide for themselves how to apply new knowledge within their social and local contexts.
- Engagement can also help bring together diverse resources and assets, accomplishing more than one or a few entities could alone.
- Engagement efforts that deliberately use a traumainformed approach can also support participants who have had previous adverse experiences and help prevent re-traumatization.

To try new practices, you don't have to start from square one or throw out everything you already have planned. You can consider how to incorporate a few new engagement practices, learn what fits you and your communities best, and adapt as you go.

# UNDERSTANDING AND WORKING WITH WHOLE COMMUNITIES

The social and cultural diversity of wildfire adaptation: Moving beyond 'the general public'

In your role supporting community wildfire preparedness, who are you trying to serve? We often use the term "the general public," but this can be an overgeneralization. Wildfire affects a diversity of populations across a range of places from rural to urban.

Even within a small geographic area, there can be great differences in culture, income, livelihoods, lifestyles and connections to the land.

Engagement approaches targeted to the specific qualities of the individuals and communities at hand (the "social context") are more likely to result in fire-adapted actions. Social context can include peoples' characteristics, backgrounds and their personal situations:

- Demographic characteristics such as age, race/ ethnicity, gender, disability, language spoken and citizenship status.
- Socioeconomic characteristics, like income level, employment status, educational attainment, geographic location and housing type.
- Motivations, values, beliefs and worldviews.
- Social cohesion, or the extent of connectedness and solidarity across different social groups.
- Where people seek information and how communication takes place.
- Level of trust in authorities such as government agencies and other organizations working on wildfire-related issues.
- Prior experience with wildfire and smoke events in the area.
- Existing knowledge of fire preparedness.

Outreach about wildfire that considers this social context when developing risk reduction actions can be more effective. Outreach about wildfire that doesn't take these qualities into account may not lead to change. Your efforts simply may not reach people at all, for example, if they don't use popular information channels; or if they aren't accessible, such as an event held during the day when many community members are unable to leave their jobs to attend. Or, they may not result in action because they don't address other barriers. One example of this could be a training on home hardening in a lower-income community that does not describe affordable options or provide financial support.

Another pitfall is assuming that community members have no or little pre-existing knowledge about wildfire risks and how to prepare. Social science research in many communities has shown that residents of fireprone areas are often aware of their risk of wildfire.

#### UNDERSTANDING SOCIAL CONTEXT

Assessing community social context helps you build the engagement strategies most likely to reach people. Whether you are a lifelong resident of your area or working in places where you do not have much history, there are ways to learn more about local characteristics. Deliberately seeking information and listening to learn can reveal new ways of seeing your community.

Using a combination of information sources will yield the best results. Secondary statistics alone may not tell the full story of demographics, especially in rural, remote or underserved communities. Incorporating qualitative data alongside secondary data can help create a more complete picture. Some ways to gather information include:

- Access existing data: Statistics on demographic, economic and other conditions are available at geographic scales such as counties, places, tribal areas, ZIP codes and congressional districts. The American Community Survey of the U.S. Census Bureau provides annual data profiles that easily summarize local trends. County/community planners, social service providers and economic development practitioners may be helpful in obtaining and organizing these data.
- Gather new information: Social science data collection approaches such as interviews, focus groups and surveys can be used in numerous ways. These methods are typically best for learning about perspectives, needs, desires and areas of commonality and difference. Students and teachers from local high schools or colleges may be interested in helping with data collection projects. Think beyond natural resource and fire organizations — consider, for example, real estate agents, faith leaders, school administrators or business owners as sources of information.
- Understanding prior experiences: Learning about prior major events can help increase awareness of local concerns and the trauma history of the area. This includes wildfire and smoke events as well as other natural disasters, social unrests or crimes. Newspaper archives and oral history interviews are helpful sources for this information.
- Listening and building relationships: Building and sustaining relationships is crucial to helping communities become more fireadapted. Relationships help create mutual understanding. This can include spending time at community events and getting to know different groups and organizations (such as faith-based, ethnicity-focused and age-based organizations). This can help you better understand who people trust, where they receive information and what their priorities are. It can especially help with reaching beyond the most visible members of a community and diversifying who you reach in fire adaptation efforts.

#### **SOCIAL CONTEXT**

Specific qualities of individuals and communities that can shape how they may approach fire adaptation.



# **The Fire-adapted Communities Pathways Tool**

Social scientists and leading practitioners developed a tool to tailor fire adaptation practices and resources to the local social characteristics of a place. It can help you define a community or communities, identify key characteristics and learn about possible paths to fire adaptation that have been tried in other places with similar characteristics.

https://fireadaptednetwork.org/ resources/fac-pathways-tool/

# **WORKING WITH SOCIAL CONTEXT: MOVING BEYOND ONE-SIZE-FITS-ALL APPROACHES**

Understanding your community's social context allows you to tailor your engagement approaches so they reflect different peoples' needs, strengths, priorities and concerns. This is similar to a strategy in communications and marketing called "audience segmentation," which uses selected criteria to divide target audiences into smaller subgroups and design targeted messages most likely to appeal to each of them. But to practice engagement, we go beyond designing messages to developing approaches that involve shared learning and decision-making.

Wildfire practitioners may opt for more generalized, broad approaches if they are trying to be efficient with limited resources, or because they don't have a good sense of the local cultures and groups within a community and how they could best segment those. However, generic messages and strategies may fail to resonate if they are not specific enough to the audiences you're intending to engage. Strategies that make the information personally relevant to the audience can increase information retention and lead to better results when it comes to taking action. Here are some considerations for tailoring your engagement:

# **CULTURAL VALUES CAN DETERMINE DIFFERENT APPROACHES**

All people and communities have cultural identities that influence their values, perspectives, preferences and ways of being. When working with a community on wildfire adaptation, try to identify engagement approaches that will align with various local cultural norms and practices.

For example, prior research has found that some communities centered around natural resource-related industries may have cultural values of self-reliance, resourcefulness and individual freedom. Some landowners in these communities may want to use their own resources and expertise to voluntarily carry out fuel treatments on their properties. Rather than attending an event to receive basic information about defensible space or government assistance, they might prefer informal peer learning or resource-sharing opportunities with each other and trusted local organizations.

# **EXAMPLE IN ACTION:**

# **Lone Pine Rangeland Fire Protection Association**

The Lone Pine Rangeland Fire Protection Association is a voluntary group of landowners who come together to respond when wildfires start in their rural area. Using their local knowledge, equipment, and resources, they are often first on scene and can help put a fire out or keep it small.

This shared effort has also extended into wildfire preparedness and land management. Lone Pine RFPA members partnered with several natural resource agencies to design a fire prevention and management plan covering 60,000 acres. This allowed them to apply for funding as a group and be more successful in obtaining resources to cut juniper, thin forested areas, manage slash and install fuel breaks and water sources.

The Lone Pine RFPA's approach to shared fire prevention and management works well because it draws on local residents' shared motivations, culture. skills and resources to protect their land and ranching livelihoods from wildfire.

Information prepared in collaboration with Katie Wollstein, OSU Extension Service.



Lone Pine RFPA members participate in a training. Photo credit: Katie Wollstein, © Oregon State University.

In contrast, some communities may be used to working with structures and rules. These can be communities with homeowners' associations or prior experience with formal planning processes. They may be more interested in creating codes, ordinances or Firewise USA™ designations.

In working with cultural values, however, it's important to avoid too many assumptions or stereotypes. For example, a common refrain is that people new to a fire-prone community aren't aware of the fire risk. This may or may not be true, depending on where they previously lived, or their own values around emergency preparedness. Information-gathering as described above can help explore these kinds of assumptions.

#### **ENGAGEMENT AT MEANINGFUL SCALES**

A common challenge in fire-adapted communities is where to focus efforts, especially if the community in question is geographically large or socially diverse. For the purposes of tailoring engagement, working at smaller or more localized scales can be effective for several reasons. One is that people often make sense of and act on new knowledge by applying it within their local contexts. This means using their networks to exchange information and work together, incorporate practices that make sense for their specific environmental and social conditions, and find local solutions to barriers. In some communities, place attachment can be a strong motivator of action. This refers to the emotional and cognitive experiences that people have with a place, their "ties" to it and how they define it.

Examples of a smaller scale are a neighborhood or manufactured home community, a sub-watershed, or a certain portion of a county, for example, where there are some commonly understood geographic boundaries around an area and some social commonalities among people within it.

#### Community engagement in these places could center around:

- What people like about living there.
- Shared priorities for mitigating risk across a common environmental context.
- How they define their community (social or geographic factors).
- How they prefer to communicate with each other.

- Their established trust in resident leadership systems and local fire protection districts.
- Where they often gather (someone's house, a grange, a school, a church or a restaurant)

# INTEGRATING FIRE PREPAREDNESS WITH OTHER VALUES AND NEEDS

As fire practitioners, it's easy to view the whole world with our fire goggles on: We see wildfire preparedness as a top priority. However, for many people, it is just one of the many concerns they are juggling. They have other values, needs and motivations.

One common way of thinking about this is Maslow's Theory of Human Motivation, represented here in a ring model that accounts for personal and cultural differences among communities (Figure 2 below). By recognizing that wildfire preparedness is just one of many needs that community members are responding to, we can:

- 1. Have more understanding about the relative importance of that work for those we serve, and;
- 2. Explore how preparedness might interact with other needs (social, financial, etc.) that our communities are experiencing.

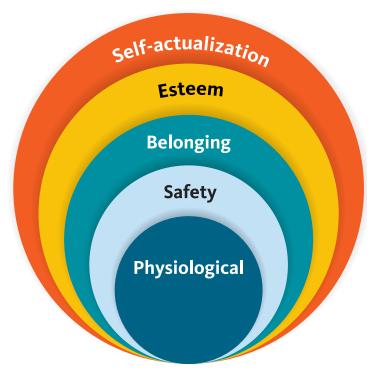


Figure 2: Ring model of Maslow's Theory of Human Motivation. Credit: Marta Sher, stock.adobe.com

How and when people satisfy these different needs may vary depending on their social, cultural and personal contexts. The ring model can help us understand potential needs of community members and how to address barriers to their full participation in wildfire adaptation. Barriers can include struggling to put food on the table, coping with physical or mental health issues, facing the threat of deportation, or coming up with enough money to pay the rent. Although basic needs often must be satisfied before an individual can be effectively engaged in learning, this is not always the case. In communities that have had firsthand experience with fire, wildfire preparedness may be a higher priority. In these communities, individuals may be more willing to participate in wildfire adaptation even if other needs are partially or completely unmet.

Some social science research has shown that individuals can be more likely to take fire preparedness action when they are able to integrate it with their other needs. In other words, how does fire preparedness relate to their everyday lives and what they care about? Further, these studies suggest that actions that reduce uncertainty and offer specific, near-term benefits are most readily adopted. Altogether, this means that engagement focused just on reducing wildfire risk may not be effective. Highlighting other possible outcomes, such as improved disaster preparedness, cost savings, aesthetics or wildlife visibility can be helpful. In addition, people are often motivated by hearing about action and results: What is being done already? What have the results been?

# **WORKING WITH VULNERABLE COMMUNITIES**

Wildfires don't affect everyone equally. Some communities experience more frequent fires than others, and physical safety is a major concern for people in those areas. Some populations also have fewer resources to prepare for and recover from fire. They may be more vulnerable to adverse effects such as health impacts from smoke. Demographic and socioeconomic characteristics — like age, gender, ethnicity, race, income, wealth, health, housing type, and educational level — make a difference in how people experience a fire and how they cope. Researchers often refer to this as social vulnerability to wildfire.

When engaging with vulnerable community members, keep in mind that they may not prioritize wildfire issues

# **EXAMPLE IN ACTION:**

**READY NOW: Neighborhoods Organized for Wildfire** 

In 2020, the Almeda Fire deeply affected the Southern Oregon communities of Talent and Phoenix. In response, a new organization called Firebrand Resiliency Collective emerged. This group used a "Zone Captains" program to ensure that community recovery was directly informed by wildfire survivors in collaboration with government officials. It was organized through neighborhood-level "zones," or scales that resonated with how people identified with a place, such as a specific manufactured home park, neighborhood or business district.

This approach, which leveraged existing relationships and trusted networks, has also carried over to community preparedness for future fires. Firebrand's Ready NOW program launched in 2023 to support resident leaders in developing fire-adapted communities on their terms within those socially defined areas on the landscape. The program provides community listening sessions, community-wide and individual home assessments, resource navigation assistance, neighborhood level GIS work, and other services in a localized and community-driven way. This includes helping community members decide if they would like to pursue a formal Firewise USA® designation or organize in a less formal way, depending on the shared concerns, priorities, risks and resources of the people living in that place.

Information prepared in collaboration with Tucker Teutsch, Firebrand Resiliency Collective.



Community members identify areas of concern with high wildfire risk. Photo credit: Firebrand Resiliency Collective.

because they are focused on meeting their immediate needs for well-being, as described above. Activities such as wildlife preparedness involve longerterm planning for physical safety in the future. But people may not have the capacity today to deal with their safety in the long term because they are focused on their immediate safety.

We often have limited influence on the structural or bigger-picture issues that affect basic needs and immediate safety. However, there are ways to adapt your engagement to accommodate underserved individuals and families. Providing resources and services for vulnerable community members can reduce barriers and support their participation. These could include, for example, providing evacuation go-bags to take home from a training, or offering child care during a community meeting (see list at right).

You may also consider how your engagement events can nurture some of the higher-level needs of your community, such as social and self-esteem needs. This can increase participation and promote learning. Importantly, a traumainformed approach can help account for how historical marginalization and oppression may affect some community members, and establish an environment that values their experiences and needs.

Making events culturally and linguistically inclusive can go a long way towards showing care for these community members. Partnering with a trusted community-based organization can help ensure that your content is suited for the people you are trying to reach. This is also important because different cultures can have different ways of learning. These partner organizations may help adapt your approach in that light.

# **RELATIONAL ENGAGEMENT: CREATING LONG-**TERM PARTNERSHIPS

Relationships are critical for fire-adapted communities. Relational approaches to community fire adaptation invite us to view residents as partners in this work, rather than passive targets of messaging. Relationships also invite us to work with residents' strengths, skills and needs. They encourage stronger networks and connections among community members.

#### WHAT DOES IT MEAN TO TAKE A RELATIONAL APPROACH?

A traditional approach to wildfire preparedness might position community wildfire practitioners and other fire professionals as the main decisionmakers, authority figures and responsible parties. The public, by contrast, is relegated to important yet limited roles of creating defensible space and hardening their homes.

When we take a relational approach, we discover that there are more active roles for community members that can help us collectively achieve more fireadapted communities. To invite residents into these more active roles, we need a new approach that shifts authority, responsibility and decision-making towards collaboration and shared responsibilities.



# **Examples of services and** resources that support community participation

- Providing a hot meal or catering.
- Offering stipends to offset the costs of participation, such as travel and child care, and compensating people for their time.
- Organizing events in locations easily accessible by public transit or in spaces that are commonly frequented by the target community.
- Hosting your event alongside and at another event or community service, such as religious services, a food bank or a school function.
- Creating materials in target languages and offering language interpretation.
- Providing materials and events that are accessible for people with hearing, vision and mobility limitations.
- Pooling donations from local businesses or volunteer labor to help reduce or remove costs for activities such as creating defensible space.

#### **RELATIONAL APPROACHES**

Relationship-based efforts where practitioners, traditional authorities and community members share learning and responsibility, and each has active roles.

How do we make that shift? It's all about relationships. Relational approaches focus on building strong, meaningful relationships, teamwork and trust between different groups with varying skills, authority and goals. A relational approach to solving wildfire challenges means that we support residents in recognizing their decision-making power and the critical role they play in wildfire adaptation. We empower them as they take action. It means working shoulder-to-shoulder with community members with respect and appreciation for what they bring to the table. Applying a relational approach is also an effective trauma-informed strategy. What are the key aspects of relational approaches?

# **LONG-TERM ENGAGEMENT AND ACCOUNTABILITY**

A relational approach sees interactions with and among community members as a step along the spectrum of participation, wherein connections deepen and resident involvement and leadership increase over time. A long-term approach can also benefit practitioners by expanding their knowledge and sense of possibility.

Research has shown that consistent rather than sporadic or one-time contact between wildfire practitioners and community members makes a difference in how likely people are to trust the practitioners and undertake and sustain fire-preparedness actions. Showing up repeatedly and following through on promised resources or actions demonstrates accountability. You can do this by developing a long-term engagement strategy, versus planning single events or resources. Share updates in accessible, transparent formats.

# **Actions that support long-term engagement:**

- Organizing partnership groups that meet regularly and create shared plans.
- Hiring positions and dedicating resources for community engagement, including an emphasis on trauma-informed approaches.
- Developing and sustaining multiple lines of communication with community members.
- Transparently updating plans, activities and outcomes on accessible platforms.
- Deliberately evaluating, learning and documenting lessons as you go.

# **EXAMPLE IN ACTION:**

Pineros y Campesinos Unidos del Noroeste wildfire campaigns

Before and during fire season, Pineros y Campesinos Unidos del Noroeste organizes an annual wildfire campaign for seasonal and migrant agricultural workers in the Willamette Valley. The workshops are tailored to meet the needs of their target audience, which is a primarily Latino immigrant population who work outdoors, speak Spanish and rent their homes or live in employer-owned housing. These characteristics make "generic" wildfire preparedness information less relevant, and highlight the need for culturally, linguistically and topically focused information for a particular group of people.

To tailor to their audience, PCUN hosts workshops in areas frequented by the farmworkers and their families, such as farm operations, churches, schools and other community spaces. Food, like tortas or tacos, is provided for attendees. Bilingual and bicultural facilitators offer the information primarily in Spanish and present it through a variety of different methods, both written and spoken, for participants who may not be able to read or prefer learning through different mediums. This includes a tailored guide about wildfire safety and preparedness created by PCUN and OSU Extension Service.

Information prepared in collaboration with Kayla Bordelon, OSU Extension Service.



Organizers from PCUN share information about smoke and wildfire preparedness over a torta lunch at a farm operation in the mid-Willamette Valley. Photo credit: Kayla Bordelon, © Oregon State University.

You can also consider developing goals and intermediate steps that break the work of supporting communities on their pathway to fire adaptation more bite-sized. This can help you plan for and write grants. You can accomplish small wins, building off those and learning from them. This also allows you to adapt and tailor community engagement to meet evolving needs over time. Needs will naturally look different as community members grow skills and implement actions.

#### **COMMUNITY AGENCY**

When wildfire preparedness efforts feel top-down, we run the risk of making residents feel disengaged or disempowered. Community agency refers to the ability of local people to make decisions about wildfire risk reduction and share responsibility for outcomes. This means that their perspectives, values and concerns are not only considered, but that community members feel empowered to take ownership of initiatives, engage in decision-making and contribute to the overall success of the effort. Agency and power-sharing are both key trauma-informed strategies. This requires collaborating professionals to reflect critically on when and how to make space for community members to participate in decision-making and leadership of wildfire resilience efforts.

#### **SHARED LEARNING**

Another key aspect of a relational approach is that everyone involved is learning together. As science communicator Faith Kearns describes, "the practitioner is not seen as the ultimate authority but instead understands that they have much to learn from those they are working with. ... Too frequently, communicators are placed or place themselves in expert roles that do not acknowledge the understanding and wisdom of 'nonexperts.'" Learning from each other requires active and deep listening, curiosity, reflection and a willingness to adjust existing knowledge or beliefs in response to new information or experiences.

It can help to create purposeful, task-based opportunities to learn from community members. You can do this by designing community meetings with built-in opportunities for dialogue with residents, organizing workgroups that include community member participation or creating dedicated positions such as community liaisons with the capacity to plan long-term community engagement. Over time, these efforts might help your colleagues and peers see the value in shared learning with community members.

# **DELIVERING WILDFIRE EDUCATION PROGRAMS WITH IMPACT**

# **Learner-centered education: Moving beyond** 'information delivery'

In this section, we focus on best practices for developing and delivering impactful adult education programs about wildfire preparedness. In your work, you are likely asked to organize community meetings or give presentations about wildfire risk reduction. Often, we tend to default to delivering a talk or lecture, sometimes accompanied with PowerPoint slides. We see this as an efficient method to disseminate our expertise to the participants.

There's just one problem, though: Telling people things doesn't always go hand in hand with learning. When we simply disseminate our expertise, we're unwittingly employing the "information deficit model." This assumes that if learners just had the right information, they would make decisions aligned with that knowledge. Unfortunately, it is not that simple. Research in adult learning demonstrates that the process works best when it considers learner motivation, learners' previous knowledge and the opportunity to apply new ideas in a relevant context.

Another important factor is learners' own cultures, which can shape how people receive information and if they feel included and supported in the learning experience. Educational efforts that incorporate people's backgrounds and perspectives, rather than solely those of the instructor(s) or assumed dominant culture, may be more effective at engaging diverse cultures.

Furthermore, people make decisions about risks such as wildfire based on a long list of factors such as their understanding of the threat, their past experiences, how much they trust the information or people giving advice, their capacity to plan for future risk if they are preoccupied with daily struggle and whether they think the benefits of the change will outweigh the costs.

So, how do we help people make decisions about managing risk? It starts with moving beyond the deficit model. Thankfully, there is a robust body of educational science on how people learn that gives us ideas for different ways to approach adult engagement. Here, we will provide some context for how adults learn, and suggestions for designing effective education efforts.

#### **HOW DO PEOPLE LEARN?**



Learning is an active process that builds on what we already know and experience. People have existing knowledge shaped by their personal experiences, culture, values, education and more.

To learn something new, one needs to connect and reshape that information to make it fit into the frameworks that they already have. Because information gets reshaped in the brain, even if you share the same information with a group of people, they may all understand and connect with it in different ways.

For wildfire engagement, activities that use and build on what people already know can encourage them to try new ideas. This will help them learn better than just delivering information to them. It also means providing relevant examples that put information into context. This can help support the development of "shared mental models," meaning more alignment between what the instructor is attempting to convey and what a learner interprets.

#### **ADULT LEARNERS**

Adults are self-directed learners who bring knowledge and experiences that can add value to the learning experiences of their peers. They are often motivated by applied problem-solving that is relevant, practical and immediate. Additionally, adults can thrive in collaborative and interactive learning environments, valuing opportunities for discussion and sharing perspectives. Interaction allows for questions, clarifications, trust and relationship-building.

Given the diversity of adult learners, teaching strategies are most effective when they meet adult learners where they are and build on their previous knowledge and experience. Adult learners tend to disengage when asked to learn things they already know. In the context of wildfire, research also suggests that adults seek information that is clear, high-quality, logical and consistent. This helps reduce uncertainty and encourages action.

# **EXAMPLE IN ACTION:**

The Mt. Hood Corridor Wildfire Partnership

The Mt. Hood Corridor Wildfire Partnership includes a mix of both wildfire mitigation and response practitioners as well as neighborhood leaders who participate in regular meetings to coordinate riskreduction efforts. This gives community members a platform to voice the priorities and concerns of their communities.

The partnership emerged in response to local concerns about gaps in the communication infrastructure that limit access to emergency notifications during firerelated power outages. Agencies took notice and funneled resources into developing a partnership in which residents and wildfire practitioners could collaborate to develop solutions that work for the local community. Inviting local residents into decisionmaking spaces also allows them to "see behind the curtain." They can observe how professional emergency management and wildfire agencies operate and collaborate. This creates better understanding of biggerpicture efforts that are not always visible to the public. Mt. Hood Corridor residents have reported that this deeper understanding of how the professionals operate gives them a sense of relief and allows them to focus on risk-reduction efforts within their sphere of control (working on the home ignition zone, for example, and encouraging action in their neighborhoods).

Information prepared in collaboration with Kayla Bordelon, OSU Extension Service.



Members of the Mt. Hood Corridor Wildfire Partnership conduct a collaborative neighborhood assessment of wildfire risk to help residents acquire Firewise status. Photo credit: Brentwood Reid, Clackamas Fire.



Learning is more likely to occur when learners are motivated and their interest is sustained. One way to motivate participants is by distributing a survey to ask about their prior knowledge, skills and interests in the topic. You can send out a registration survey before you host an event, for example. Use the information you gather to tailor the content to their level of experience and areas of interest. Include relevant examples, case studies and scenarios (real or hypothetical) to make content relatable. Registration surveys are also a good opportunity to share objectives in advance, so that learners know what to expect. At the beginning of your programming, consider working with participants to establish common goals and group norms that promote a collective responsibility for learning.



# **TEACHING TIP #2** Representing information

Learners perceive and comprehend information differently depending on their sensory and cognitive abilities, cultural backgrounds, and prior knowledge and experiences (experiential, professional or academic). You can connect new information to learners' prior knowledge and experiences through analogies, examples and storytelling. Prior to the event, consider recruiting a trusted community member or local landowner to share their experience related to the content. Whenever possible, make cross-curricular connections to other relevant topics and modify content so that it reflects learners' personal interests and cultural backgrounds so they can "see" themselves in the presentation of information.



# **TEACHING TIP #3 Applying & expressing** new knowledge

Transforming new information into usable knowledge is an active process. Consider making space for this knowledge construction to happen by giving learners opportunities to develop new ideas through expression and problem-solving activities. Guide learners by prompting "stop and think" moments to check progress and offer guided support by incrementally introducing more complex tasks to apply new information in relevant contexts. Create opportunities for active participation, such as peer interactions or group activities, as well as opportunities for personal reflection and sharing. This is an opportunity to reinforce learning objectives by offering tailored feedback to meet learners where they are.



The "Incendio aquí!" wildfire preparedness quide is tailored to Oregon's Spanishspeaking agricultural workers and renters.

# LEARNING DESIGN: HOW TO DEVELOP AND DELIVER EFFECTIVE WILDFIRE **EDUCATION PROGRAMS**

When developing education programs, starting with the end goals in mind can help ensure that the learning will be impactful and relevant. By first identifying the most important knowledge, skills and attitudes that you want your learners to develop, you can create a learning plan that will support learners in meeting those objectives.

"Understanding by Design," or UbD, is an educational design framework that can help you develop learning objectives, measure whether learners are progressing towards those goals and create learning activities that support them along the way. In this section, we'll walk through the three building blocks of the UbD model and offer examples of how it can help you develop impactful wildfire education programs for those you serve.

# **STEP 1: DEVISE LEARNING OBJECTIVES**

Learning objectives are concise, measurable and attainable statements that describe what you want learners to know or be able to do after an educational experience. Setting quality learning objectives helps program organizers target the most important knowledge and skills they want participants to acquire and use those as a "north star" to guide development of the learning activities (as described in Step 3). Learning objectives also support learners to take control of their learning because they know the program's purpose.

To develop learning objectives for wildfire education programs, you can start by asking yourself: What do you want participants to be able to do as a result of this program? For instance, you may want homeowners to be able to effectively prioritize home improvement projects for their own homes that will increase ignition resistance. Actionable learning objectives have three components:

- 1. An action word (verb)
- 2. Specific content that you want learners to acquire (can include knowledge, skills, attitudes)
- 3. The context in which learners should be able to apply the new knowledge or skill.

Using the previous example, we can write a learning objective that states: By the end of this session, participant homeowners will be able to effectively prioritize (action word) home hardening recommendations (content) on their own homes (context) that will increase ignition resistance. As another example, for a field-based defensible space session, a learning objective might be: By the end of the workshop, participants will be able to systematically identify (action word) structure ignition vulnerabilities (content) in each zone of defensible space during a Home Ignition Zone assessment (context).

# UNDERSTANDING **BY DESIGN**

A framework for planning and assessing educational programs that focuses on learner understanding.

# **STEP 1:** Devise learning objectives that:

- Establish what learners should know and be able to do by the end of the program
- Are appropriate for the learners and feasible for the timeframe

Guiding question: What do we want learners to be able to do as a result of this experience?

# STEP 2: Plan assessments that are:

- Ongoing throughout the program
- Low stakes
- Of varying types
- Aligned with the learning objectives

# **STEP 3:** Develop learning activities that:

- Are hands-on and minds-on
- Encourage exploration
- Are aligned with the learning objectives

Guiding question: What learning activities will help learners progress towards meeting the learning objectives?

It is common for practitioners to focus on objectives related to understanding, increased knowledge and awareness. For example, As a result of the training, participants will gain increased awareness of available grants and resources for wildfire preparedness.

However, these knowledge-based objectives do not fully describe what a learner will actually be able to do and why. If you find yourself using "understand" in your learning objectives, ask yourself why the learners need to understand the given topic in order to put knowledge into action. Often, this can reveal a more specific and measurable action. For example, the previous example might be more actionable if modified: As a result of the training, participants will be able to select (action word) relevant grant opportunities (content) from the state database (context) and apply for them (action word) through the online portal.

#### STEP 2: IDENTIFY WAYS TO ASSESS LEARNING

Actionable objectives also are desirable because they make clear what has been learned. This means that they are relatively easy to observe and measure, which is important for assessing learning. Once you have established learning objectives, the next step is to ask, how will we know that learners are making progress towards meeting these objectives? In answering that question, you can develop ways to assess learning during and after your program. Learning assessment helps instructors get continuous feedback from participants about what resonates and where additional information or reinforcement is needed to achieve learning outcomes. It also supports continual improvement of education programs over time.

It is common to equate "assessment" with tests or surveys. When engaging in learning about wildfire preparedness, however, we are often more interested in action-based learning objectives, meaning that it is most important to measure what learners do as a result of the learning experience (rather than what information they retained).

Measuring skill acquisition can be accomplished organically by providing learners with scenarios or problem-solving activities, which are called "authentic tasks" in the language of learning design. During these tasks, instructors can observe if learners are demonstrating the skills that are described in the learning objectives to assess whether or to what extent

# **LEARNING OBJECTIVES**

Concise, measurable, attainable descriptions of what learners should know and be able to do after your educational program.

they have been met. Instructors may informally note progress, or use a more formal rubric to determine the extent to which a given participant has mastered a new skill. This type of assessment is not only more tailored to skill-based learning outcomes, but it can also feel less "academic" and more appropriate for the free-choice adult learning settings that we operate in as community wildfire practitioners.

Some examples of authentic tasks that might be relevant to your programs could be:

- Conducting a mock home assessment.
- Inviting learners to prepare a short community presentation about a specific component of wildfire risk reduction.
- Providing a scenario that invites participant problem-
- Hosting a work party in which learners undertake defensible space actions.
- Inviting your learners to staff a table at a resource fair and observe how they answer questions posed by attendees.

If you decide to use a survey or written test as part of your assessment process, include questions that link directly to the program's learning objectives. This helps you ensure that results of the test or survey will help you decipher whether learning objectives were met.

#### STEP 3: DEVELOP LEARNING ACTIVITIES

Now that you have strong learning objectives and a way to determine the extent to which learners meet them, it's time to develop the "meat and potatoes" of the education program: learning activities.

We have established that disseminating information does not always lead to learning, so when designing a learning plan, it's helpful to think about how you teach through activities, discussions, scenarios and other opportunities for active participation. In fact, some of these learning activities might also double as a way to assess learning, as described in the prior section.

There are many ways to develop a plan for learning activities. One useful framework for wildfire preparedness learning with adult audiences is an abbreviated experiential learning cycle (Figure 3 at right). Experiential learning creates space for people to learn by doing and reflecting on their experience, thus supporting integration of new information in the brain. The experiential learning cycle is a research-based instructional framework that supports learning through phased activities.

To develop a learning plan using this cycle, you can break your content into subtopics using your learning objectives. Then, you'll use the four phases of the experiential learning cycle to work through each subtopic:

- **1.** Exploration: In this phase, instructors invite learners into a self-directed activity that allows them to get curious about the topic and connect with their prior knowledge. They are encouraged to ask questions, reason and converse with colleagues. Instructors may facilitate this activity through prompting questions and listening, but mostly refrain from delivering content.
- **2.** Concept invention: Once learners are focused on the topic and curious to learn more, instructors can present or otherwise share information. This phase may look like a traditional lesson or could be a hands-on activity like a mock home assessment in which instructors deepen participant knowledge of topic concepts.
- 3. Application: To solidify learning about new concepts, participants then need to apply what they've just learned to a relevant context. For adult learners, it's valuable if they can apply new concepts to reallife situations or scenarios that will help them make decisions about wildfire preparedness outside of the context of the class. For example, you might ask them to take what they've learned about structure ignitability and identify the ignition vulnerabilities of their own house, and mitigation options to address those.
- **4.** *Reflection*: In this final phase, learners are invited to reflect on what they've learned and situate new ideas into their existing frameworks for understanding a concept. It can also be a time to uncover remaining questions or misunderstandings. Reflection can be accomplished through discussions (with partners or small groups), written activities or time for individual thinking.

# **EXPERIENTIAL** LEARNING CYCLE

An instructional model that you can use to plan a series of phased activities based on your learning objectives.

#### FIGURE 3.

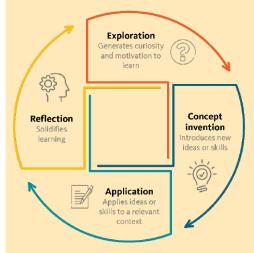


Figure 3. Phases of the experiential learning cycle, abbreviated. Credit: © **Oregon State University** 

This cycle can be repeated multiple times throughout an education program, focusing on one subtopic at a time, with each cycle building on what was learned in the previous. When your learning plan has covered all the material needed to meet your learning objectives, you will know that it is complete.

# TRAUMA-INFORMED APPROACH: SUPPORTING MENTAL AND EMOTIONAL WELL-BEING

Another important aspect of community wildfire education is addressing emotional and mental well-being around the topic of wildfire. This requires a shift away from fear-based approaches, which have long been used to get people to change their behavior or take action.

Potential downsides to fear appeals can be:

- Desensitization: When people encounter frequent fear appeals, they may become less responsive over time, reducing the impact of subsequent messages.
- Backfiring: If the threat seems too extreme or unrealistic, individuals may dismiss it. They may see it as implausible or insurmountable.
- Negative associations: Presenting a product, service or cause with fear can create negative associations. People may avoid engaging with fearinducing content altogether.
- Emotional overload: Fear appeals can evoke strong emotions, which may overwhelm individuals. High levels of fear can impair decision-making and lead to avoidance behavior rather than action.
- Flashbacks: Fear-based approaches can trigger flashbacks to a traumatic event or experience.

#### **TRAUMA**

A response resulting from an event, series of events or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional or spiritual well-being.

Table 1. Common trauma responses

RESPONSE	DESCRIPTION	EXAMPLE
Fight	Fighting a threat	Physically confrontational, angry outbursts, demanding, defiant, blaming, bullying
Flight	Fleeing the threat	Fidgety, unfocused, physically running away, avoidant, procrastination
Freeze	Feeling paralyzed by the threat	Brain fog, numb, apathetic, lethargic, verbally unresponsive
Fawn	Appeasing the threat	Overly helpful; conflict-avoidant; lack of boundaries; unable to express needs, desires or opinions
Collapse	Submitting to the threat	Detached from physical or emotional needs, lack of physical energy, obedience that causes harm, autopilot
Act	Action is prioritized as access to our thinking or rational brain is cut off	Fighting a threat instead of analyzing it first, or rationalizing if the fight response is appropriate

Sustaining behavior change to become more fireadapted can benefit from a trauma-informed approach that supports the emotional and mental well-being of community members.

#### WHAT IS TRAUMA?

When wildfire threatens an individual, their livelihood or community, it can affect physical, mental and emotional health. One of the impacts could be a trauma response. The Substance Abuse and Mental Health Services Administration of the U.S. Department of Health and Human Services defines trauma as resulting "from an event, series of events or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional or spiritual well-being." Trauma responses are a result of adversity that is perceived as a threat and that we feel we have no control over. There are several common trauma responses (see Table 1 on Pq. 16).

*In many circumstances, these nervous system* responses are helpful and ensure our survival. However, when the threat has passed but our nervous system remains in survival mode, it can negatively impact daily life.

For example, if a community member experienced a trauma response due to losing their home in a wildfire two years ago, their nervous system may still be in an activated state today. If they come to a community outreach meeting, they may exhibit symptoms of a flight response: unable to sit quietly through the presentation, restless body language, zoning out during group discussions or getting up and going outside. They may also not have access to their rational brain and not be able to problem solve, reason or have impulse control. As you can imagine, this could lead to disruptions during the meeting. However, if the person is experiencing a trauma response, these symptoms are involuntary and out of their control. Reprimanding them for it could be re-traumatizing.

# **EXAMPLE IN ACTION:**

# **Prescribed fire trainings**

In Southern Oregon's Rogue Valley, many people are interested in using prescribed burning on private land for ecological benefit and wildfire risk reduction. OSU Extension hosts the field-based IGNITE Prescribed Fire Skills Training with partners including the Oregon Department of Forestry and the Rogue Valley Prescribed Burn Association.

These events welcome participants with varying interests and levels of prescribed burning experience to advance foundational skills such as preparing an area for a prescribed burn, monitoring weather, ignition techniques and effective communication. They also create space for partners and participants to learn from one another and to build lasting connections, acknowledging that prescribed burning depends not just on individual skills but also on an active and collaborative community of practice. To this end, the event included guided discussions on how to create a positive and inclusive fire culture, participant-driven group dialogue about prescribed fire's connection to Indigenous cultural burning, team-building activities, time to socialize and network, and a collective visioning process on the future of prescribed fire.

Information prepared in collaboration with Chris Adlam, OSU Extension Service.



Participants engage during a skills-based prescribed fire training. Photo credit: Chris Adlam, © Oregon State University.

#### **TYPES OF TRAUMA**

There are a few different types of trauma depending on the nature of the adverse experiences, who was affected and how they were affected.

- Acute trauma results from a single event.
- Chronic trauma results from a repeatedly occurring event or circumstance.
- Complex trauma can be a result of various diverse events and circumstances, both acute and chronic.
- Individual trauma, wherein the event or circumstance affects only one individual.
- Collective trauma refers to two or more people experiencing a trauma response from the same event or circumstance. Collective trauma often can affect community culture as well by changing beliefs, values, stories and even language.
- Vicarious trauma can occur when a person experiences a threat indirectly through other means, such as supporting a loved one, family member or friend who is directly affected; having a personal connection to a community or region that is threatened; watching a news report; or reading a news article or social media post. The mental health impact of vicarious trauma can be similar to firsthand trauma.

Wildfire can lead to any of the types of trauma because it can affect people and communities in multiple ways. For example, the 2020 Labor Day fires in Oregon likely caused a range of types of trauma. The fires killed nine people and destroyed more than 4,000 structures. They also had economic impacts on the timber and forestry sector, agricultural sector, wine industry, tourism and many other businesses that provide livelihoods for people living in Oregon. The fires also affected the cultural resources of many Indigenous Peoples, and smoke created unhealthy conditions across the entire state. Family and friends who did not live in the region but were worried about their loved ones may have been impacted vicariously. The same is true for those who had ties to fire-affected areas through activities such as recreation or foraging.

#### TRAUMA-INFORMED TOOLS AND STRATEGIES

In community-engagement or educational settings, the main goals of a trauma-informed approach are to create an interaction or environment in which participants as well as the facilitators/educators feel that they are in control of their well-being, do not feel threatened, and can maintain relaxed or regulated nervous systems.

Trauma-informed approaches also consciously seek to prevent trauma responses from happening in the first place and prevent re-traumatization. Re-traumatization is reliving a reaction to a traumatic event by facing a new but similar incident. For example, this could happen if community member who lost their house to fire was shown a video of a house being engulfed in flames in a community meeting.

# Considerations for language and messaging

**Empathy** — Feeling with someone as opposed to for someone. Image yourself in the participant's situation. How would you want someone to speak to you if you were in their situation?

**Cultural humility** — Self-awareness of your own biases, assumptions and values and how they inform your worldview. Don't make assumptions about what may be important to other people or what their beliefs and norms are.

Power sharing — Instead of a topdown approach, invite participants to share their experiences, knowledge and expertise and encourage joint problem-solving. Co-create the flow of the event, such as what time to take a break, small group discussion vs. whole group discussion.

Strengths-based and solutionsfocused approach — Turning the narrative around from focusing on the problem and the negative outcomes to focusing on solutions, individual and community assets, resilience, and reasons for hope.

**Social justice** — Acknowledge that marginalized population groups often bear disproportionate traumatic stress that wildfire may compound. Openly talking about social injustices can support joint problem-solving and taking action that is appropriate for people of all identities.

**Voice, choice, agency** — Signal that everyone is heard, their voice and presence matters, their preferences and challenges are noted, and ensure everyone has a choice over how they can engage with the content, the facilitator and other participants. Share a clear method for how requests can be made for personal comfort and accessibility, such as audio volume, room temperature (if changeable), dimming lighting, etc.

Applying a trauma-informed approach can benefit everyone, regardless of people's trauma history. While therapeutic interventions and treatment strategies are best left to trained mental health professionals, many trauma-informed strategies and tools that can be applied universally. They include:

#### **Self-regulation**

To prevent a stress response during a community meeting or outreach event, it is important for the speakers/facilitators themselves to have a relaxed nervous system. Stress is contagious, and so is calmness. Speaking in a steady, even tone, breathing slowly and deeply, smiling with calm facial expressions and a relaxed body posture sets the tone for all.

You can also provide participants and the facilitators with ample opportunities to regulate their nervous systems before, during and after a meeting. This may look like going for a walk, connecting with nature, breathing exercises, mindfulness, offering plenty of stretch breaks, time to snack and hydrate, tasteful humor and opportunities to stimulate the creative brain (doodling, music, etc.).

In addition, you can create an agenda and distribute it in advance to set the expectations for the shared time. Use a clock that is visible to all so participants can orient themselves to time and know when the next break is.

# Language and messaging

Using inviting instead of directive language can counteract the feeling of having no control. Inviting language includes phrases such as "you are welcome, you are invited, you are encouraged." For example: "You are invited to turn to your neighbor on the left and share any concerns you may have, if any, about creating a defensible space." In contrast, directive language is framed as "you have to, you should, you will." We have sought to model this approach in this primer.

# **Striving for safety**

Guaranteeing a safe space is impossible, since safety looks different for everyone. However, we can implement measures that provide choices, opportunities, and experiences that give people agency over their wellbeing and demonstrate that their voice and experience matters. Invite participants to make proactive choices that meet their needs for safety. For some, that might be sitting near the emergency exit or taking care of their

# **EXAMPLE IN ACTION:**

**OSU Extension Fire Program 2020 post-fire response** 



In 2020, numerous wildfires, referred to as the Labor Day fires, had devastating impacts on many communities and individuals across Oregon. During this time, many were also dealing with the COVID-19 pandemic. To this end, the newly formed OSU Extension Fire Program team found themselves navigating a complex trauma situation. In response, the team collaborated with other Extension colleagues and agency partners to organize a virtual listening session for those affected by these wildfires.

The listening session served as a vital space for people to share their experiences. The facilitators used calm, reassuring language that created an inviting and caring virtual environment. They were empathetic and started the webinar by saying,

"I want to begin by acknowledging that it is an extremely stressful time, with challenges that are affecting some of us in deeper ways than others. Know that you are not alone. In today's session we will come together, and if you are able, we invite you to share your story with us."

The Fire Program team and colleagues followed the listening session with two webinar series: "After the Fire" and "Fire Aware Fire Prepared." Both series aimed to shift the focus toward solution: how do we recover from wildfire and how can we proactively prepare for the next one? They incorporated several trauma-informed tools and strategies into each webinar. For instance, the webinar presenter avoided images or videos that could trigger re-traumatization. They also used inviting phrases such as "you are welcome to" when asking attendees to ask questions and share their knowledge.

Throughout this difficult time, we shared empathy with the attendees as many of us were also impacted by the wildfires and could relate to the stress and trauma of the situation.

Information prepared by Carrie Berger, OSU Extension Service.

basic needs (food, water, bathroom breaks) during the event. If our basic needs are unmet, our nervous systems automatically become dysregulated.

#### **Processing**

This means providing participants with opportunities to process information and experiences. This may look like:

- Verbal processing, which can involve sharing stories or naming strong emotions that may be felt. Validating and normalizing emotions can help counteract feeling isolated in an emotional response. (Ask, for example: By show of hands, who in this room is afraid that wildfire will impact their property in the next three years?).
- Creative processing such as drawing, writing, music, cooking, gardening or any other activity that engages the creative brain. (Some can be built into the event, others can be a recommendation for participants to do outside of the event.).
- Physical processing or moving the body in any way that can help regulate the nervous system such as walking, stretching, playing sports, or practicing yoga or breathing exercises.

Progress, not perfection, is a good mantra to keep in mind when applying a trauma-informed approach. Using even one strategy or one tool is better than using none. This topic is complex and multifaceted, so we encourage you to continue exploring it.

#### CONCLUSION

We hope that these key concepts in community engagement have given you new ideas about how to support your communities in becoming more fireadapted. In this primer, we covered:

- Understanding your communities and tailoring to their needs. This includes identifying individual and community social contexts, recognizing how cultural values can drive different approaches to becoming more fire-adapted, integrating fire preparedness with other needs and reaching historically underserved communities. It's also important to take a relational approach wherein community members, practitioners and authorities share learning and responsibilities, and everyone has an active role to play.
- Engaging adults in learning that leads to impact. This means understanding that adults learn best through interactive, phased activities (the experiential learning cycle) that fit together to meet defined learning objectives. Learning plans are most effective when they focus on learners' acquisition of new knowledge and skills, and include a plan to assess those changes.
- Using trauma-informed approaches to support safety and wellbeing. This recognizes that trauma is a response to something that people experience as physically or emotionally harmful, and that there are different types of trauma and trauma responses. Engagement can be deliberately designed to create environments in which people can regulate their nervous systems and maintain their sense of safety while learning.

Employing the engagement strategies covered in this primer can help your communities achieve a deeper level of learning, lead to more community empowerment and action, and can even make the work more fun. We invite you to continue your engagement journey in any way that makes sense to you — be it exploring the resources below, trying out a new activity in your next event or talking about these concepts with your partners. Taking small steps is a great way to try new things and learn from them.



Thank you for all you do to support fire-adapted communities!

# **EXAMPLE IN ACTION:**

Southern Oregon Wildfire Resilience Education for All training a trauma informed and Indigenous-centered approach to healing

The Southern Oregon Wildfire Resilience Education for All Project is a collective of organizations and agencies working together for wildfire resilience education for all in Southern Oregon and across the state. The partners support K-12 educators by sharing fire lessons and professional development around wildfire education as well as visiting classrooms to conduct fire-related activities. Since the topic of wildfire can elicit strong emotions, staff, coalition partners\* and community stakeholders were invited to attend a one-day trauma-focused training offered by Lomakatsi Restoration Project and Oregon State University Extension.

In addition to sharing trauma-informed approaches educators can utilize with youth or adult audiences, facilitators modeled how to implement the approaches throughout the training. For example, time was split between Indigenous-centered approaches to trauma and healing and Western approaches. Splitting the content supported multiple cultural viewpoints, tools and strategies, and fostered cultural humility and responsiveness.

Power-sharing was integrated by asking the participants which activities they would like to engage in, for how long, and if they preferred small groups, large groups or solo engagement. The participants unanimously agreed that they preferred doing activities in the whole group, and voted on which activities they would like to engage in.

Processing opportunities were provided throughout, in the morning through peer-learning and a talking circle, and in the afternoon through physical and creative processing activities, such as basket-weaving, making dreamcatchers and breathwork.

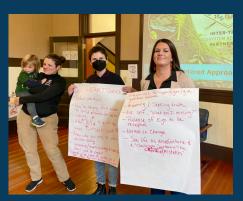
At the start of the training, participants were invited to exercise their voice, choice and agency through taking care of their needs throughout the day and engaging in self-regulation activities as needed. They were encouraged to exercise agency over how they engaged with each other, the content and the activities – whether through self-reflection, sharing with the group, skipping their turn or an activity, or stepping outside to take a break or go for a walk, even if it wasn't during an official break.

At the closing circle, a number of participants commented on the traumainformed approach facilitators used, and noted that they felt more grounded and centered at the conclusion of the training than before, despite the topic of the training.

Information prepared in collaboration with Yasmeen Hossain, OSU Extension Service. Partners in this program are the Southern Oregon Forest Restoration Collaborative, Lomakatsi Restoration Project, Ashland Forest Resiliency, Bureau of Land Management, Science Works Hands On Museum, Southern Oregon Education Services District, USDA Forest Service, Oregon Forest Resources Institute, Oregon State University Extension, and Oregon Natural Resources Education Program.









Photos above: Participants of the Southern Oregon Wildfire Resilience Education for All trauma-informed training for educators. Photo credits: Yasmeen Hossain, © Oregon State University.

#### RESOURCES AND REFERENCES

Here, we list some of the social science studies behind this guide, as well as resources for more learning and exploration.

#### WORKING WITH SOCIAL CONTEXT AND RELATIONAL AND ENGAGEMENT APPROACHES

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#### Resources

- American Community Survey data about local social context: https://www.census.gov/programs-surveys/acs/data. html
- Community Wildfire Mitigation Best Practices Toolbox. This collection of mitigation tips and guidance includes sections on community engagement and social science: https://co-co.org/community-wildfire-mitigation-bestpractices-toolbox/
- Community Wildfire Mitigation Best Practices Training: https://co-co.org/programs/community-wildfire-mitigationbest-practices-training/

- Equitable mitigation program toolkit, Washington Fire Adapted Communities Learning Network. This resource provides suggestions for including traditionally marginalized groups in mitigation: https://www. fireadaptedwashington.org/toolkit/equitable-mitigation-program/
- Capacity Building Through Effective Meaningful Engagement: A Tool for Local and State Governments. U.S. Environmental Protection Agency. This booklet shares how to meaningfully include communities in decision-making: https://www.epa.gov/system/files/documents/2023-09/epa-capacity-building-through-effective-meaningfulengagement-booklet\_0.pdf
- Headwaters Economics. An easy-to-use resource for generating a Census report for your community: https://headwaterseconomics.org/tools/populations-at-risk/
- Fire Adapted Communities Pathways Tool. This resource describes a tool for identifying your community's "type" and designing engagement approaches that will best fit its social context: https://fireadaptednetwork.org/ introducing-the-fire-adapted-communities-pathways-tool/

#### LEARNER-CENTERED EDUCATION

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#### Resources

- CAST Universal Design for Learning: https://udlguidelines.cast.org/
- Liberating Structures. Interactive facilitation approaches for community engagement activities. https://www.liberatingstructures.com/
- The Learning Cycle Explained, The BEETLES Project, the Regents of the University of California: https:// beetlesproject.org/cms/wp-content/uploads/2015/12/The-Learning-Cycle-Explained.pdf
- Culturally Responsive Teaching in Oregon, State Regs Today. Oregon guidance for culturally responsive teaching. Although this is for classroom settings, much of it is applicable to nonformal adult learning as well: https://www.stateregstoday.com/education-science-and-technology/education/culturally-responsive-teaching-inoregon#google vignette

#### TRAUMA-INFORMED APPROACHES

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