Instructions & Ground Rules

1. Use the "sticky note" icon on the left to post thoughts & ideas.
2. Edit your sticky notes by double-clicking (please only edit your own).
3. That's all!

visual learning examples: modelmywatershed.org, https://river-runner.samlearner.com/

https://app.buildfire.com/shortLinks/224a8faa-ffce-11ed-8fd4-12565309935d which is under the GRDA app available in the app stores

order from chaos -- excel or white board: actors (naïve and engaged), behaviors we WANT from them, barriers to success, benefits of success & levers to achieve that behavior.

then, figure out the methods to reach them and create the change

Q1: Within the context of land & soil systems, what are innovative ways to engage:

1) Emerging professionals
2) Underserved, grassroots, & indigenous communities?

Create a Partners list to show connections and pull in engaged parties. Example: https://climateactionkc.com/partners

Providing a program with basic skill sets required on and off the field.

Engage in advocacy around climate, environmental issues, and especially environmental justice. Real action in tandem with research can be exciting and good for engagement.

engage with local elementary/high schools - providing an early introduction to importance of soil

Local gatherings/events to inspire and incentivize people

Focus on applied science that involves under-served producers directly

Consider the language "new professionals" or "emerging professionals"; "young professionals" creates a bit of a barrier

The relationship should be of peers. The scientific community can offer a lot to indigenous communities but also needs to learn a lot from them who have centuries of experienc

Use of social media platforms (youtube, instagram, facebook)

use social media platforms

Mobilize and engage key influencers and thought leaders who can highlight these messages and become spokespersons

Let's find ways to work with youth in BIPOC communities, getting them involved in learning what we do.

student Artist Cohort that creates art that tells the story of successful sustainable agricultural projects in communities, researchers, organizations.

offer hackathon and innovation contests

Explain and make clear the direct connection between soils and climate change - billboards, social media, tiktok, campaigns

diversify conference speakers to include more underserved, grassroots, and indigenous speakers [leaders]

Network of low-cost soil moisture and temperature monitoring system

Engage with Indigenous groups and communities and collaborate on land/soil assessments, monitoring, research projects. Include Indigenous knowledge systems.

In Canada, we are working to develop and expand "Living Labs" led by or partnering with Indigenous groups with many activities around soil health and soil carbon.

provide young professional workshops

Pass the 'mic' to these communities

create trainings for digital skills that are free, self-paced and available online, perhaps in more than one language

provide webinars and online courses for young professionals

Mentorship Oppurtunites for youth

Engage with young professionals in groups, so they are with their peers and can feel comfortable with participating rather than intimated by more experienced professionals.

invite to conferences, engage one-on-one

Within the American Society of Agricultural and Biological Engineers (ASABE), we have YPC (with more than 1000 members) that we can utilize to develop networks.

Develop a volunteer mentor-mentee program.

Q2: What skills should the network activities focus on building for the next generation of land & soil systems enthusiasts?

Soil health assessments

QGIS software training and applications

Networking

Design thinking skills -- for co-designing

Developing nature-based climate solutions through soil

understanding the interconnectedness between soil, water, society, climate, and development

soft skills including leadership and communication skills

Writing about research for non-academic audiences (e.g the public, farmers, or policy-makers)

Bringing in curiosity raising demonstrations that emphasise importance of on field problems and their solutions.

build systems thinking knowledge

software and programming skills

Programming Skills

Search Optimization Skills

science knowledge + social problems solving

communication skills to present research to general public

Training on understanding the importance of the land and the soil and how it benefits us.

GIS, Data Science, Programming

interpersonal skills of working with BIPOC communities from a position of listening and understanding

Community networks/ community support networks.

Collaboration and communication

Outreach, communication and inclusion

Digital Communication

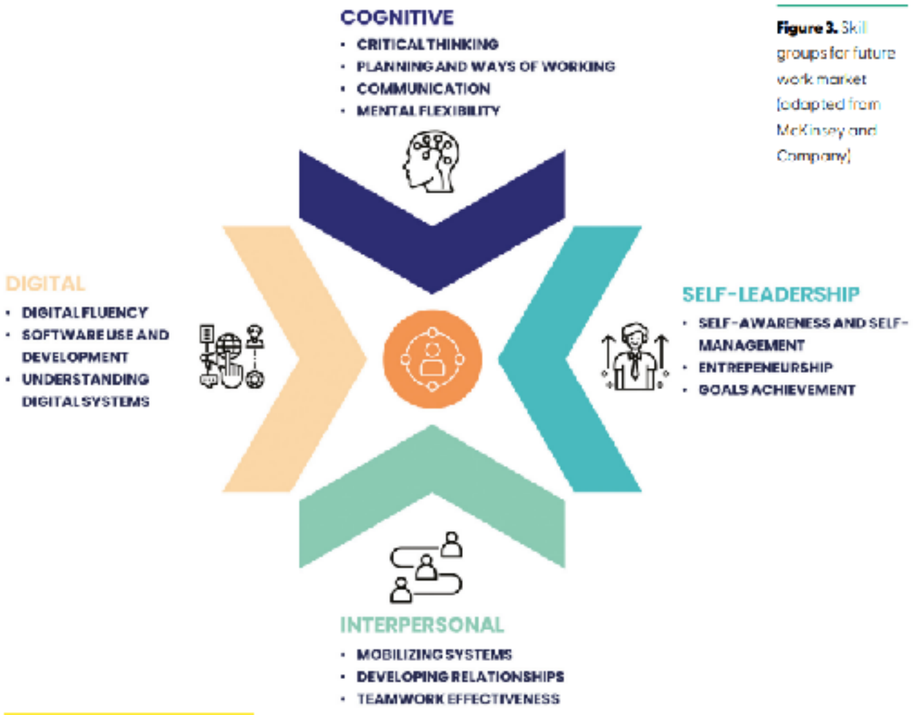


Figure 3. Skill groups for future work market (adapted from McKinsey and Company)

Q3: What activities will build capacity for the next generation of land & soil systems enthusiasts?

Organize in person workshops

visual images and animations for easier conveyance of knowledge.

regional [international] workshops for farmers to support local implementation of improved practices and build a support network, congruently

Central depository where information can be easily share

Workshop(s) on how soils do work - focused on soil health components that cover needs for farmers, restoration professions, and water quality professionals, etc.

Provide opportunities for international collaborations

Connect with state agencies who are providing resources and workshops for farmers

Publishing in open-access journals

Show students the real life stories of impact of land and soil practices. Storytelling is key

Artist Cohort through storytelling from communities / climate activism projects with mentors/ collaborate with ag student clubs

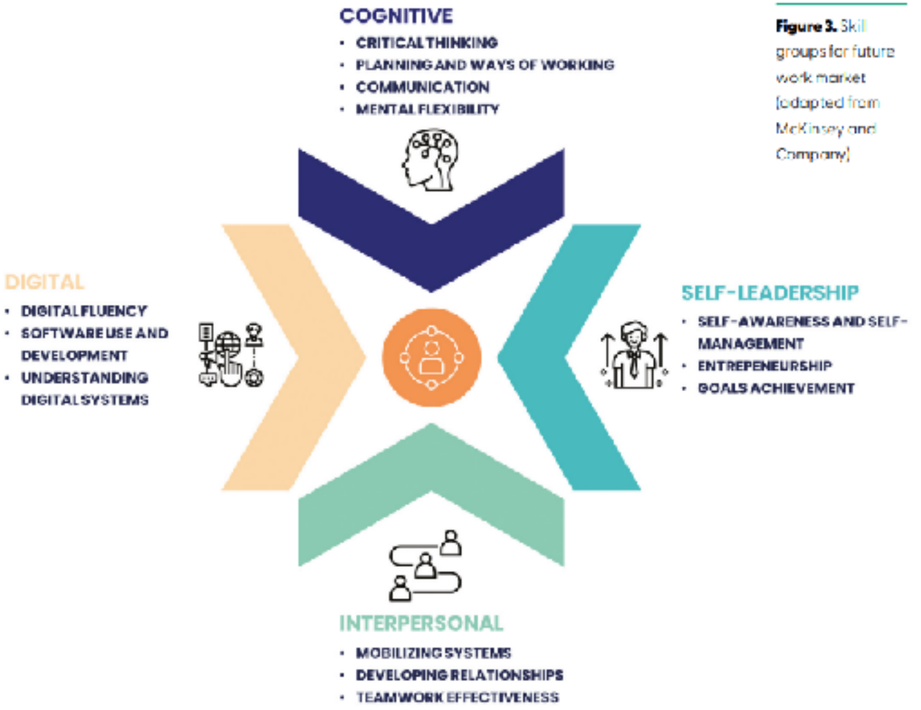


Figure 3. Skill groups for future work market [adapted from McKinsey and Company]

Q4: What network activities can be led by:

1) Young professionals
2) Underserved, grassroots, & indigenous communities?

Early Career path journey: how to get there

mentor-pairing program

Low-cost of attendance conferences. Not all employers are willing to pay conference fees, especially for a non-senior employee

create community events/celebrations like "substainabilty days" that feature community members and showcases the work they are doing and brings people together.

"Science at the Capitol" or city hall, etc. Anything that can connect young scientists with policy makers

Being given a role in a climate activism project that provides mentorship but also responsibility in that role.

Workshops for working with Indigenous, under-served, & grassroots groups that are led by leaders in those groups

Using metrics to track progress on projects

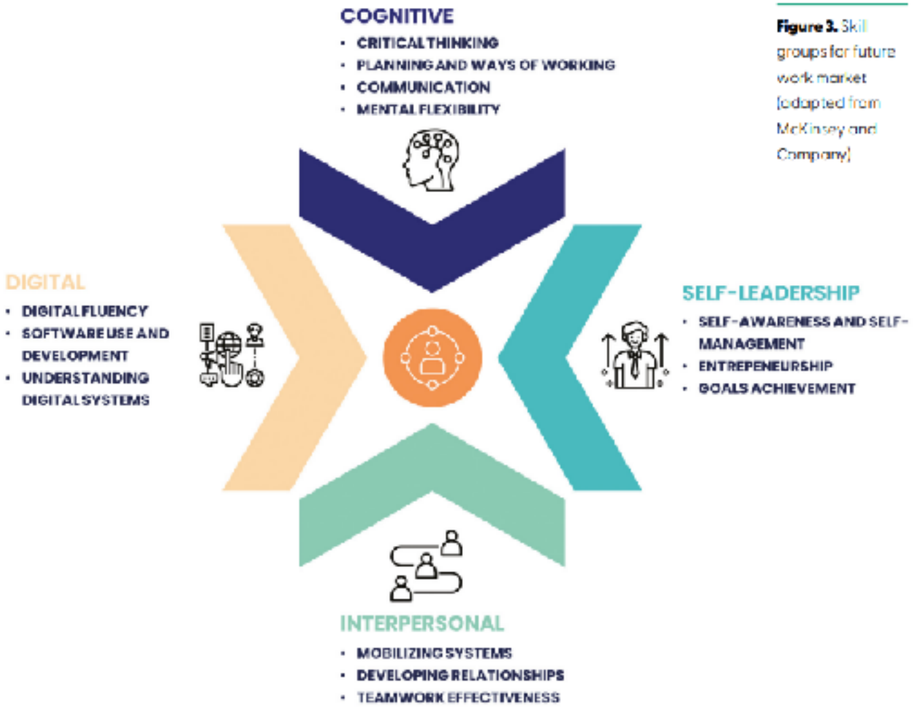
stories on how indigenous communities are fighting climate change while protecting there land

indigenous communities can lead knowledge sharing workshops about their land management practices with other communities.

an email address, possibly connected to S for SN, that allows professionals/network members access to scientific journals/current research

Have students in this sector create programs as a part of their capstone/thesis

Professional network newsletters that give job/internship opportunities, stories of successful projects, volunteer opportunities, connection opportunities.



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