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1.0 Foundational Toolkit

Introductory Toolkit

What are technology and new media, and how have Black, Indigenous, and disabled communities worked together to shape the way we think about them? This first toolkit introduces some of the foundational ideas you'll need to start answering that question.

Overview

♦ Key Topics/Concepts

Technology, New Media, Arts and Culture, Access, Intersectionality, Solidarity, Anti-Oppression, Disability Justice, Community Leadership, Black Innovation, Indigenous Knowledge, Relationship-Building, Creative Futures

Learning Objectives

- 1. **Re-thinking Technology.** Understand how technology includes both simple tools and complex systems, and why it is relevant to everyone—not only those working in tech or new media.
- 2. **Anti-Oppression Basics.** Be introduced to key anti-oppression concepts and begin to see how they relate to technology and new media.
- 3. **Systems of Power in Tech.** Understand how new media (e.g., digital art, websites, apps, and creative platforms) is made by people and shaped by their values, decisions, and access.
- 4. **Community Innovation.** Learn how Black, Indigenous, and disabled communities have developed creative, community-based approaches to technology and cultural work in response to injustice and exclusion.
- 5. **Shared Leadership & Solidarity.** Begin to understand why supporting leadership in these communities matters, and how their knowledge and practices help guide more just and creative uses of new media.

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Introduction

Introduction

"All technology reflects the society that produces it, including its power structures and prejudices."

Legacy Russell (Black Curator, Writer, Theorist)

You don't need to work in technology or new media to feel the impact of technology. And you don't need to be Black, Indigenous, or disabled, or deeply involved in anti-oppression work, to start asking questions about how technology, power, and access shape your environment.

These forces touch how we create, how we connect, and who gets left out. They shape the stories we tell and the ones that are silenced. And paying attention to them allows us to move with more care, more clarity, and a sense of what's at stake in the world we live in.

Technology shapes how culture is created, shared, funded, and experienced. It influences:

- who gets access
- who is represented
- who is excluded
- who is surveilled

Whether you are sending emails, posting to social media, applying for grants, uploading work to a platform, or organizing a community event, you are already using and being shaped by technological systems.

This introductory toolkit invites you to explore key ideas like access, power, digital equity, cultural erasure, community-led innovation, and creative resistance in new media and technology. Beyond covering new terms and concepts, this toolkit will hopefully encourage you to notice how technology operates around you, and help you make more informed, ethical, and connected choices in your work.

¹Russell, L. (2020). Glitch feminism: A manifesto. Verso.



Why Black, Indigenous, and Disabled Communities?

If you are Black, Indigenous, disabled, Mad, neurodivergent, chronically ill, or part of another marginalized community, you may already be navigating how technology does not meet your needs. You may also be building workarounds, tools, and practices rooted in care, resistance, and survival. This toolkit offers language, structure, and support for that work. It also explains these strategies for those who are learning, not to simplify or translate them, but to help make that labour more shareable, more sustainable, and more widely understood without placing the burden on the people already doing it.

This resource centres Black, Indigenous, and Disabled communities not because their experiences are the same, but because each has developed powerful responses to systemic harm.

Sometimes these responses overlap. Sometimes they differ. These communities do not speak with one voice. They hold different relationships to land, history, and technology. What connects them is that they have all been excluded from dominant systems and have created ways to survive and thrive anyway.

Why Disability Justice

Disability justice is a framework and movement that grew out of the work of queer, trans, Black, Indigenous, and people of colour activists who recognised that the

mainstream disability rights movement, while important, often centred white, middle-class, cisgender men and focused narrowly on legal rights and individual accommodation.

The term and framework were first developed in the mid-2000s by **Sins Invalid**, a disability justice-based performance project founded in 2006 in the Bay Area. Sins Invalid created space for disabled artists of colour and queer and gender-nonconforming disabled people to centre their lived experience on stage and in culture. Their performances wove together art, activism, and political education, making visible the ways ableism is intertwined with racism, colonialism, sexism, and capitalism.

From this work came the articulation of **10 principles of disability justice**, including intersectionality, leadership of those most impacted, anti-capitalist politics, cross-movement solidarity, sustainability, and collective liberation. Unlike traditional disability rights frameworks, which often seek access to existing systems, disability justice insists that systems themselves must transform. It foregrounds values of interdependence, collective care, and cultural leadership by disabled people whose lives sit at the sharpest intersections of oppression.

Rethinking Tech, Culture, and Anti-Oppression

If you are familiar with anti-oppression work but have not applied it to technology, this toolkit will help you see how digital systems are shaped by the same forces as other institutions. If you work in tech or digital media but have not engaged deeply with anti-oppression, this is a space to reflect on who your work centres, who it overlooks, and how your practices might shift.

This first section offers starting points for thinking differently about what technology is, how it shows up in creative and cultural work, and how people across different communities are already imagining and building something more accessible, more just, and more collective.

Reflection Question/s

Take a moment to choose **one question** that feels most relevant to you. You are invited to reflect from your own experience.

- Your Technology Use. What is one technological tool you use regularly in your creative or cultural work, such as Instagram, Zoom, Google Docs, or Eventbrite? Who does it work well for, and who might it leave out?
- **Barriers and Frustration.** Have you ever felt excluded, confused, or unsupported by a digital tool or system? What happened, and how did you respond?

- **Community Innovation.** Can you think of a time when someone in your community created a new way of doing something to make it more accessible, inclusive, or just? What did that look like?
- **Sharing Your Lived Experience.** If you are part of a community that is often excluded from tech or arts spaces, what do you want others to understand about that experience?

You can share with someone, write your thoughts down, or reflect quietly. There are no wrong answers. This is a space to slow down and notice.

Next Section →

Rethinking Technology

Rethinking Technology

"Who determines what is, or isn't, technological? Worse, notions of high-tech or low-tech don't consider a key question: Who gets to make these distinctions? Who determines what's better or worse, and in what circumstances?"²

Animikii (Indigenous Tech Organization)

Technology is often imagined as something sleek, fast, and digital. But there are many ways to define it. Some people think of technology as machines or software. Others understand it as systems, techniques, or tools passed down through generations. When we bring these definitions together, a more foundational idea comes into view:

Technology is any tool, method, or system created to solve problems, meet needs, or extend human ability.

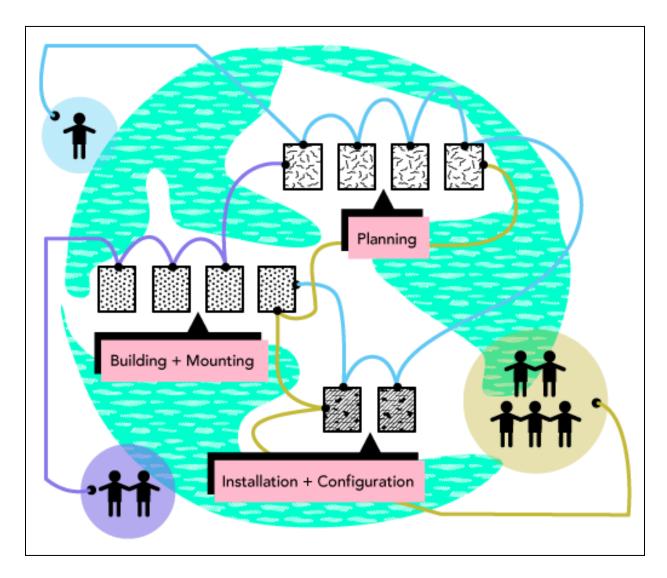
This includes:

- Apps and media platforms
- Mobility aids like wheelchairs or walkers
- Hand tools and kitchen implements
- Public libraries and mutual aid systems
- Phone trees, oral storytelling, and crop rotation

These are all technologies, designed, used, and maintained by people to support everyday life.

² Animikii Indigenous Technology. (n.d.). *Move Slow and Empower People: Animikii's Approach to Indigenous Technology* [Organizational Website]. Animikii Indigenous Technology. Retrieved July 24, 2025, from

https://animikii.com/insights/move-slow-and-empower-people-animikii-s-approach-to-indigenous-technology



Source: https://communitytechnology.github.io/docs/cck/index.html

What's Low-Tech, and Why Does it Matter?

Within this broader definition of technology, some tools and systems are considered low-tech.

Low-tech (short for "low technology") refers to tools, methods, and systems that are *simple*, *dependable*, and often easier to *repair* or *adapt* than more complex or high-tech alternatives.

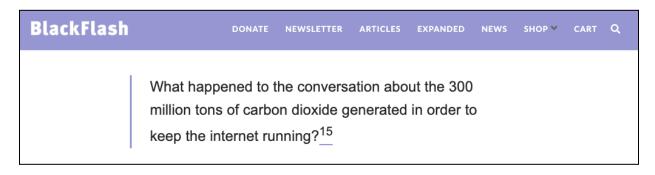
Some low-tech tools work without electricity or internet, but others may rely on basic infrastructure. What makes something low-tech is not the absence of digital parts but the focus on **function**, **flexibility**, and **accessibility**.

Low-tech can include both physical tools and social systems. It reflects resourcefulness, shared knowledge, and the ability to function under different conditions. It often supports many users with minimal cost, maintenance, or training.

Examples of low-tech tools and systems include:

- Paper maps and printed instructions
- Hand tools and mechanical devices
- Bulletin boards and chalkboards
- Plug-in radios and landline phones
- Oral storytelling and memory practices
- Mutual aid networks and phone trees
- Crop rotation systems and traditional land care methods

Low-tech is not necessarily outdated or inferior. These approaches continue to meet real needs across communities, especially when high-tech systems are inaccessible, too expensive, or unreliable. Many artists and organizers turn to low-tech tools not just because of limitations, but because they offer **reliability**, **cultural relevance**, and **creative possibility**.



Source: https://blackflash.ca/expanded/considering-the-space-of-the-online

For example, in "Considering the Space of the Online," her year-long editorial project for *BlackFlash Expanded*, Black artist and researcher **Christina Battle** applied low-tech strategies to address the environmental impact of digital publishing. She pointed out that although the internet often feels invisible, it depends on physical infrastructure such as cables, servers, and data centres that use electricity and natural resources. Every website visit consumes energy to store and deliver content.

In collaboration with BlackFlash, Battle helped reduce *Expanded*'s carbon footprint by compressing images, using system fonts, and simplifying page design. The site

³ Battle, C. (2022, February 3). Considering the Space of the Online. *BlackFlash Magazine*. https://blackflash.ca/expanded/considering-the-space-of-the-online

⁴ BlackFlash Expanded is the online arm of BlackFlash Magazine, a Saskatchewan-based contemporary art magazine.

reflects an older style of web design, with its stripped-down aesthetic, but this appearance is part of a deliberately contemporary approach.

By using what might seem like old media forms to address the urgent environmental costs of digital culture, Battle demonstrates that low-tech choices are **not** outside new media but a critical mode **within** it. Her project reframes innovation as a matter of ecological responsibility and challenges artists to consider how their work looks, functions, and circulates online.

This kind of approach illustrates how **low-tech thinking can create new and more intentional ways of engaging with technology**. As technology becomes more complex, it can also become more abstract, less accessible, and more resource-heavy. By recognizing low-tech approaches as part of the broader definition of technology, we can open up ways of working that are more grounded, more sustainable, and more connected to lived experience.

Technology Is Not One-Size-Fits-All

The purpose of *Terra Firma* and its resources is not to promote low-tech over high-tech, or vice versa, but to consider the full range of tools, methods, and systems available to us when working toward **technological equity and justice**.

Different contexts call for different approaches. In our resource on **harm reduction in new media**, we will explore the complexities and contradictions that can arise in digital work and examine strategies for navigating them with care, accountability, and imagination.

Everyone Engages with Technology



A photo of Tangled's Director of Programming, Sean Lee, sitting in the gallery. He is below Margeaux Feldman's 'Soft Magic' installation, which has the word 'Affirm' written above many affirmation cards hung up with string lights. To the left is a TV screen, and to the right is an altar arranged on a plinth. Credit: Tangled Art + Disability.

You do not need to be a tech worker to work with or contribute new ideas to technology.

Anyone who:

- Uses tools
- Adapts or repurposes systems
- Shares knowledge
- Gives feedback or asks questions

... plays a role in how technology functions and who it works for.

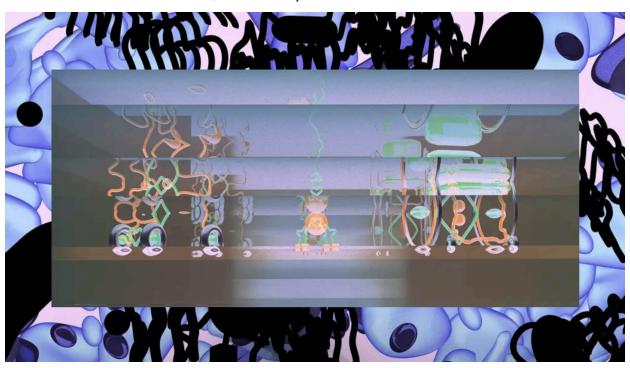
Outside of studios and labs, technology takes shape in **homes, classrooms, neighbourhoods,** and **creative spaces**. It is made through everyday use and problem-solving.

And, beyond the hardware and software, technology carries **ideas**, **values**, and **relationships**.

At the same time, **the power to shape technology is not distributed equally**. Some people have more influence over how technology is designed, funded, or governed. Others are left responding to tools that were built without their input. Still, people outside of traditional tech roles shape technology through how they use it, question it, and work around its limits.

As we've hopefully established, technology is not only technical. It is also **social**, **cultural**, and **political**. If you are someone who doesn't focus on the technical side of things, your perspective is not only valid but also deeply valuable. You may be more attuned to how tools affect real life, who they support, and where they fall short. Your questions can open up conversations that technologists might overlook.

What is New Media Art, and Why Does it Matter?



A screenshot of artist Nat Decker's Impossible Products for Fantasy Objects, 2021. Source.

New media refers to a broad spectrum of technologies, platforms, and communication methods that are constantly evolving. In the arts, it is often understood as a genre that brings together artistic practice with technological tools. But the word "new" can mean many different things depending on context.

It can refer to:

• **New and emerging technologies**, such as virtual reality (VR) or blockchain, that change how we interact with digital systems

- New methods within existing technologies, like experimental uses of social media, livestreaming, or video editing
- **Newly popularized tools**, such as artificial intelligence (AI), that have existed for years but are only now becoming more widely used
- The broader recognition of marginalized technologies, developed by or for communities historically excluded from dominant tech spaces—such as oral mapping systems, DIY networks, or accessibility-focused innovations

New media is not only about working with digital tools. It also means rethinking how art is made, experienced, shared, and sustained using a mix of technologies that may be new in form, context, or visibility.

How Technology Shapes Creative Practice

Technology influences what artists make, how they share it, and who can engage with it. It brings up important questions:

- Who has access to creative tools and platforms?
- Whose stories are amplified, and whose are ignored?
- What infrastructures support or limit creative expression?
- How can artists build systems that work for more people, not fewer?

In our own work, we have seen artists develop powerful and responsive methods using both digital and non-digital tools. Many are building local networks, using analog tools for connection, or designing systems with specific access needs in mind. These approaches are often more adaptable, sustainable, and grounded in lived experience than what is often labeled as innovation.

We Encourage Your Reflection and Participation!

This toolkit invites you to notice the technologies already shaping your work and to see your role in shaping them as part of your creative practice. It is built from the understanding that artists, cultural workers, and communities are already innovating, even if they are not always recognized as technologists.

We hope this section supports you in naming what you already know, valuing the tools you already use, and imagining what else might be possible when we define technology on our own terms.

Anti-Oppression Basics

Anti-Oppression Basics

"We cannot talk about the history of oppression without talking about how Black and Indigenous bodies were used as laboratories in terms of doing global colonial warfare."

- Aimi Hamraie

Understanding Oppression

To understand *anti-oppression*, we must first understand *oppression*. Many people think of oppression as individual prejudice or unfairness, but it is more than that. Oppression is a **system of power** that advantages some groups while disadvantaging others. It is embedded in laws, institutions, and cultural norms, and it shapes access to safety, land, wealth, education, and recognition.

Some argue that this is all in the past and that people today should simply take personal responsibility. But oppression is **historically rooted and ongoing**. Policies and structures created long ago continue to shape outcomes today. Trauma and dispossession are carried forward, just as privilege and wealth accumulate. Even when laws change on paper, the conditions created by inequality remain.

Oppression compounds across generations in a way that can be compared to interest on debt. Once a debt exists, it grows whether or not anyone adds to it. In the case of oppression, this "debt" was never voluntary; it was **imposed on entire communities** through land theft, slavery, residential schools, and discriminatory laws. Each generation inherits not freedom but an expanding burden as the "interest" builds over time.

At the same time, people resist. They fight for land back, revive languages, demand justice, and create alternatives. You could understand these actions as similar to "paying down" what was imposed, since they lighten the load for the next generation. Yet this comparison is not exact.

Paying down a financial debt assumes both that the debt is legitimate and that repayment keeps you within the very **system** that created it. **Oppression** is different: the burden was never truly the responsibility of those who carry it, but it has been

⁵ Hamraie, A., Lynx, A. A., Smith III, B. J., Brathwaite-Shirley, D., & Decker, N. (2023, November 18). Hybrid Dependencies: Crip Technoscience, Disability Justice, and Intersectionality in New Media and Beyond [Online Panel]. https://interaccess.org/event/2023/hybrid-dependencies-crip-technoscience-disability-justice-and-intersectionality-new-media

framed as such by **oppressors and oppressive systems**. And, although some communities have had to focus on survival and managing within systems that constrain them, many others work to **reform**, **transform**, or **break free** from those systems altogether. Resistance is not just about carrying a burden more efficiently; it is about creating conditions where the burden itself can be lifted.

Reflection Question:

• Can you think of an example in your family or community where advantages or disadvantages seemed to "carry forward" over time?

Key Takeaways:

- Oppression is structural, not just individual acts of prejudice.
- Historical harms do not disappear; they shape conditions in the present.
- Privilege functions like inherited assets, while oppression functions like inherited debt.

Turtle Island Histories and Legacies

On Turtle Island (also known as North America), these patterns are undeniable. **Colonization** displaced Indigenous peoples through forced removals, broken treaties, and outright theft. Settlers profited from farms, industries, and cities built on stolen lands, while Indigenous nations were confined to reserves, many of which still lack clean water or face environmental destruction. The impacts are not only historical; they continue in present-day land disputes and the criminalization of Indigenous land defenders.

The residential school system offers another example. For more than a century, Indigenous children were taken from their families, punished for speaking their languages, and subjected to abuse. Although the schools have closed, the damage remains. Survivors live with deep trauma, and their children and grandchildren inherit the loss of language, cultural knowledge, and family bonds. This is **transgenerational trauma** (also called intergenerational trauma), where harm does not stop with one generation but continues to shape community life.

The same logic applies to the Sixties Scoop and contemporary child welfare systems. Thousands of Indigenous children were adopted into non-Indigenous homes, and today Indigenous children remain vastly overrepresented in foster care. This is not a matter of "bad parenting" but of systemic bias and chronic underfunding of Indigenous communities, which makes poverty appear as neglect in the eyes of the state.

Anti-Black racism is equally embedded in these histories. Enslavement existed in both French and British colonies on this land. After abolition, Black communities continued to face segregation, exclusion, and violence. Today, Black people are still disproportionately incarcerated, racially profiled, and discriminated against in employment. **Equal rights on paper do not erase unequal outcomes** that result from centuries of enforced inequality.

Oppression is also gendered. Indigenous women, girls, and Two-Spirit people face disproportionately high rates of violence and disappearance. This violence is not incidental but linked to colonial systems, underfunded services, and the risks created by resource extraction economies. The National Inquiry into Missing and Murdered Indigenous Women and Girls concluded that this ongoing crisis amounts to **genocide**.

Reflection Question:

 Where do you notice, in your everyday life, that some people seem to move through the world with more safety or ease than others?

Key Takeaways:

- Oppression on Turtle Island includes land theft, cultural genocide, slavery, and gendered violence.
- These systems continue today in land disputes, child welfare systems, mass incarceration, and disproportionate violence.
- Equality on paper is not the same as equity in lived experience.

Wisdom, Allyship, and Shared Responsibility

"Desire-centered research does not deny the experience of tragedy, trauma, and pain, but positions the knowing derived from such experiences as wise. This is not about seeing the bright side of hard times, or even believing that everything happens for a reason ... a desire-based framework is about working inside a more complex and dynamic understanding of what one, or a community, comes to know in (a) lived life."

- Eve Tuck, "R-Words: Refusing Research," 2014

It is important not only to name oppression and systemic violence but also to consider how people resist and respond to them. Thinkers like **Eve Tuck** and **Paulo Freire**

⁶ Tuck, E., & Yang, K. W. (2014). R-words: Refusing research. *Humanizing Research: Decolonizing Qualitative Inquiry with Youth and Communities*, *223*(2014), 248.

remind us that while trauma must not be romanticized or glorified, living under oppression can also produce forms of insight, creativity, and knowledge about how power works. The oppressed often develop a kind of wisdom that comes from survival, from recognizing injustice, and from imagining alternatives. **Their voices, strategies, and analyses are central to any meaningful practice of anti-oppression.**

At the same time, the responsibility for dismantling **oppression** cannot be placed only on those who endure it. Expecting people who are already carrying the weight of trauma and inequity to also lead every fight for justice adds another layer of burden. **Allyship is crucial.**

"Being an ally is about disrupting oppressive spaces by educating others on the realities and histories of marginalized people."

- Montreal Indigenous Community Network⁷

In the context of **anti-oppression**, an **ally** is someone who benefits from systems of privilege but commits to standing with those who are disadvantaged by them. An ally does not speak over the people they are trying to support. Instead, they **listen**, **learn**, and **act** in ways that support the leadership and goals of oppressed communities. They challenge injustice within their own circles and use their access to resources, safety, or influence to help shift conditions for their oppressed peers. Anti-oppression is most effective when it is a shared project of **accountability**, where the oppressed are centred but not left to do the work alone.

Understanding oppression in this way makes clear that anti-oppression is not about blaming individuals for history. It is about recognizing that structural problems require structural solutions. That means supporting Indigenous sovereignty and land rights, addressing anti-Black racism in policing, education, and employment, and resourcing culturally grounded healing from intergenerational trauma.

Reflection Question:

• Thinking about your own circles (e.g. family, workplace, neighbourhood), where do you see opportunities to interrupt unfairness or to share power differently?

Key Takeaways:

- Those most affected by oppression hold crucial knowledge for undoing it.
- Trauma should never be romanticized, but resilience carries wisdom.
- Allyship means privileged groups share responsibility for structural change.

⁷ Swiftwolfe, D. et al. (2019). "Indigenous Ally Toolkit," Montreal Indigenous Community Network. https://gallery.mailchimp.com/86d28ccd43d4be0cfc11c71a1/files/102bf040-e221-4953-a9ef-9f0c5efc3458/Ally email.pdf

Key Terms

Here are some key terms to help you start navigating anti-oppression. Think of them as **starting points** rather than finalized tools. The language will keep changing as communities grow and redefine their struggles, and part of the work is staying open, curious, and willing to keep learning.

Word	Definition	Examples	
Power	The ability to influence outcomes and shape conditions. Practicing power means making choices that open opportunities for some while closing them for others.	Practicing against a pipeline, but the government approves it anyway. This shows power being used to	
Privilege	Unearned advantages that make life smoother for some and harder for others. Recognizing privilege means noticing where systems treat you with trust or ease while others face barriers.	Two teens shop in the same store. Security follows the Black teen but ignores the white teen due to stereotypes about Black teens being more prone to stealing. Privilege is at work because racial stereotypes shield one from suspicion while exposing the other to it.	
Unlearning	Recognizing old patterns that are harmful and actively changing them. It means refusing to let myths or stereotypes shape your actions.	A science teacher realizes they've sidelined Indigenous students' knowledge by treating land-based observations as "less scientific" than lab results. They shift their approach, inviting Elders to co-teach lessons and valuing Indigenous science. This is unlearning in action because the teacher recognizes their old patterns of behaviour as harmful,	

		and corrects them according to new realizations.
Cultural appropriation	Taking from a culture without consent, credit, or benefit. Practicing respect means ensuring knowledge, traditions, or art stay connected to and benefit the people who created them.	A non-Indigenous clothing company copies traditional Indigenous beadwork patterns and sells them for major profit while the Indigenous artists they stole from continue to struggle to survive on their artistic practice because colonization devalues their artistic ability and limits their access to markets and capital.
Intersectionality	The way multiple systems of oppression overlap to create unique barriers. Practicing intersectional awareness means noticing how race, gender, disability, and other identities combine in people's lives.	Black women brought a case of workplace discrimination. The court ruled there was no race discrimination because Black men were hired, and no gender discrimination because white women were hired. By looking at race and gender separately, the court ignored how Black women were excluded on the basis of both, at the same time. This overlapping discrimination is what Kimberlé Crenshaw later named intersectionality.
Lived experience	Knowledge gained from directly navigating oppression. Respecting it means treating people's stories as expertise, not anecdotes.	At city council, a wheelchair user explains why the library's steps block access in winter. Their account is compelling and detailed because of their experience with the issue. Their direct experience with the barrier, or "lived experience" gives their perspective more insight than

		someone looking in from the outside.	
Participatory action research (PAR)	Research carried out with communities rather than on them. Practicing PAR means shifting control of questions, data, and results to the people most affected.	A group of researchers want to study disability, so they work with disabled activists from the very beginning. The activists help decide what questions to ask, how to collect information, and how to share the results. The disabled activists guide the process so the research meets their needs and creates real change, instead of being used as subjects for the researchers' benefit.	
Consultation	Sharing decision-making with the communities most affected. Practicing consultation means listening, adapting, and giving real influence instead of token input.	A school board works with Indigenous Elders to design curriculum. Elders choose what languages and histories are included, ensuring education reflects community knowledge.	
Access	The ability to participate fully without barriers. Practicing access means designing spaces, tools, and systems so inclusion is the norm, not an afterthought.	A Deaf student joins an online class. Without captions, they're excluded; with captions, they can contribute and participate. A simple design choice decides whether they can join in.	
Accountability	Taking responsibility for harm and working to repair it. Practicing accountability means acknowledging damage and committing to concrete change.	Survivors of residential schools testify about abuse. The government apologizes, provides adequate compensation, and funds additional support for the survivors. It doesn't undo the	

		harm, but it begins to repair trust between them.	
Intergenerational / Transgenerational Oppression	The way oppression's effects—like trauma, poverty, and exclusion—are passed down. Recognizing it means seeing how past injustices shape present lives.	were excluded from mortgages	
Allyship	Choosing to stand with those facing oppression, without taking over. Practicing allyship means using privilege to challenge barriers while centring those most affected.	In a university meeting, a nondisabled student insists captions be added to livestreams, then defers to Deaf classmates on how to make it work. This is allyship: support without speaking over.	
Consent	Clear, informed, and voluntary agreement. Practicing consent means respecting people's right to decide what happens with their knowledge, bodies, or stories.	Researchers want to record traditional songs. They present the idea to an Indigenous council, who set conditions before giving approval. The decision is collective, informed, and free.	
Transformative justice	Addressing harm by healing and changing the conditions that allow it, rather than relying on punishment. Practicing it means recognizing cycles of inherited violence and breaking them by prioritizing healing and accountability over punishment and alienation.	After a fight at a racialized high school, families, staff, and students hold a community healing circle with the fighting parties. Instead of suspensions or calling the police, they agree on steps for conflict resolution. The process heals relationships and changes conditions that fuelled the conflict.	

Systems of Power in Tech

Systems of Power in Technology

"Zeros and ones, if we are not careful, could deepen the divides between haves and have-nots, between the deserving and the undeserving — rusty value judgments embedded in shiny new systems."

- Ruha Benjamin

Computation, Algorithms, and Resources

At their core, computers are machines that follow instructions. **Computation** means carrying out those instructions step by step to solve a problem. This could be adding numbers, sorting a list, or recommending the next video on a streaming platform.

An **algorithm** is just a set of rules for getting something done. Some are simple, like a recipe for baking bread. Others are very complex, like the systems used by search engines to rank results or by facial recognition to make predictions. What matters is that algorithms are made by people, trained on data from society, and run inside systems built by companies and governments. This means they often repeat the same biases, priorities, and exclusions that already exist in the world.

"algorithmic oppression is not just a glitch in the system but, rather, is fundamental to the operating system of the web." ⁹

Safiya Umoja Noble

It is also important to remember that technology (even "cloud"-based technology) depends on real materials. Phones, laptops, and servers need minerals like cobalt, coltan, and lithium. Much of the world's cobalt, which is used in batteries for smartphones and electric cars, comes from Congo. Mining there often involves child labour, unsafe conditions, and environmental destruction. This shows how today's high-tech devices are tied to older patterns of exploitation, where wealth and progress in some places are built on harm and poverty in others.

Running all this technology also takes huge amounts of power and water. **Data centres**, the large buildings full of servers that run the internet and Al systems, use millions of litres of water every day to stay cool. Many are placed near communities that already struggle with access to clean water, or in regions hit hard by drought. When water is taken to cool servers instead of used to meet community needs, it

⁸ Ruha Benjamin, The New Jim Code.

⁹ Safiya Noble, Algorithms of Oppression: How Search Engines Reinforce Racism

becomes a form of **environmental racism**. Indigenous, Black, disabled and poor communities often carry the heaviest costs of keeping the digital world running.

"The cloud is not weightless; it is not amorphous, or even invisible, if you know where to look for it. The cloud is not some magical faraway place, made of water vapour and radio waves, where everything just works. It is a physical infrastructure consisting of phone lines, fibre optics, satellites, cables on the ocean floor, and vast warehouses filled with computers, which consume huge amounts of water and energy and reside within national and legal jurisdictions."

- James Bridle

Understanding algorithms as human-made, socially shaped, and dependent on physical resources helps explain why scholars such as **Safiya Umoja Noble** say they are never neutral. Algorithms are designed within systems of power. As a result, they can repeat inequalities, or, if built differently, help create fairer futures.

Algorithms, Bias, and Control

Technology is often described as neutral, but research shows it is not. In *Algorithms of Oppression* (2018), scholar **Safiya Umoja Noble** shows how search engines do not just reflect the world, they shape it. At one point, searching "Black girls" online brought up mostly pornography and racist stereotypes. This was not an accident. It was the outcome of commercial choices built into algorithms. Noble argues that this is not a glitch but "fundamental to the operating system of the web."¹¹

Another issue is who controls the flow of information. A small number of tech corporations own the platforms, search engines, and ad systems that decide what we see online. They profit from clicks, views, and ad sales, not from fairness or accuracy. The result is a system where marginalized groups are more likely to be misrepresented, targeted by surveillance, or excluded altogether.

Reflection Question 1:

 When you search online or scroll social media, what kinds of stories or images come up most often? Which voices seem missing?

Key Takeaways:

¹⁰ James Bridle, Notes from "New Dark Age: Technology and the End of the Future (London: Verso Books, 2018), 7.

¹¹ Safiya Noble, Algorithms of Oppression: How Search Engines Reinforce Racism

- Algorithms are made by people, and they carry social bias.
- Corporate control of information shapes what is seen or hidden.
- Algorithmic oppression is built into systems, not just errors.

Colonization, Data, and Indigenous Sovereignty

For Indigenous peoples, technology links directly to the history of colonization. Just as land and resources were taken without consent, so too is data often collected and used without Indigenous control. Scholars working on **Indigenous Data Sovereignty** argue that data is not just abstract numbers. It is part of cultural identity, governance, and community survival.

To address this, Indigenous researchers and leaders developed the **CARE Principles**: Collective benefit, Authority to control, Responsibility, and Ethics. These principles set rules for how Indigenous data should be collected, stored, and shared. They challenge the idea that all data should be "open" and available to whoever wants it. Instead, they affirm that communities have the right to decide what happens to their own knowledge.

There is also growing work on **decolonial AI**. This approach asks what it would look like if artificial intelligence were built on Indigenous worldviews, values, and priorities, rather than only Western frameworks.

Reflection Question:

 Can you think of a time when knowledge from your community, family, or culture was used or shared without credit or consent? How might it feel if the community could decide how it was used?

Key Takeaways:

- Data collection can repeat colonial patterns of taking without consent.
- The CARE Principles call for collective benefit and community control.
- Decolonial technology values many worldviews instead of one "universal" model.

Ableism, Disability Justice, and Technology

Disabled scholars and activists point out that technology often reinforces ableism. For example, a study of blind and low-vision workers in tech found that companies promised inclusion, but daily barriers remained. Accessibility features were treated as "add-ons" rather than built-in design. This "access paradox" shows how institutions talk about inclusion but rarely change their core structures.

In *The Future Is Disabled* (2022), writer **Leah Lakshmi Piepzna-Samarasinha** imagines futures built with disability at the centre, not as an afterthought. This vision is not just about ramps, captions, or compliance. It is about rethinking society itself: guaranteed income, housing, food, water, and education made available to all. Technology, in this vision, is not about making disabled people "fit in" but about creating systems that expand what is possible for everyone.¹²

Disabled perspectives remind us of a larger truth. As **Eve Tuck** and **Paulo Freire** also argue, people most impacted by oppression often hold deep knowledge about how to undo it. But they cannot be the only ones doing this work. **Allyship** is key. Those who hold privilege must share responsibility by challenging bias, changing practices, and using resources to support justice.

Reflection Question:

 Where in your daily life do you see technology designed mainly for "typical" users? How might those designs change if disabled people led the process?

Key Takeaways:

- Disability justice requires more than surface-level accessibility.
- Disabled futurisms imagine collective care and access for all.
- Allyship means privileged groups share responsibility for change.

Technological Justice

Tech justice is the idea that technology should be designed, used, and governed in ways that promote fairness, equity, and care. It recognizes that technology is not neutral. Every tool, from a smartphone to a ticketing system, is shaped by choices about whose needs matter and whose do not. Tech justice asks us to notice these choices, challenge harms, and imagine alternatives that centre communities rather than corporations.

For Black, Indigenous, and disabled thinkers, tech justice means connecting technology to histories of oppression and survival. This includes the mining of minerals in Congo, the theft of Indigenous lands and data, and the ableist design of everyday tools. It also means recognizing how communities use technology creatively, from Indigenous media labs to disability-led design, to resist exclusion and build new futures.

For artists, arts workers, and cultural workers, tech justice is about asking: How do the tools we use in cultural spaces shape access and participation? Who benefits from the systems that circulate art, and who is left out? By paying attention to these

¹² Leah Lakshmi Piepzna-Samarasinham, The Future Is Disabled (2022)

questions, cultural workers can link their creative practice to struggles for equity in technology more broadly.

Reflection Question:

• Where in your own cultural practice do you see opportunities to use technology differently, in ways that align with values of justice and care?

Key Takeaways:

- Tech justice means technology that promotes equity and care, not profit and exclusion.
- It connects to broader histories of colonization, racism, and ableism.
- Cultural workers have a role in noticing, challenging, and reshaping how technology is used.

Community Innovation

Community Innovation

"Before seeking new design solutions, we look for what is already working at the community level. We honor and uplift traditional, indigenous [sic], and local knowledge and practices." ¹³

- Design Justice Network Principles

Black, Indigenous, and disabled communities have long developed creative, community-based approaches to technology and cultural work in response to injustice and exclusion. These initiatives remind us that innovation is not simply about producing new tools or platforms, but about re-shaping relationships, responsibilities, and maintaining cultural survival. Community innovation, in this sense, is a practice of justice.

We have already noted how **lived experience** generates knowledge, and how **allyship** asks those with privilege to share responsibility instead of leaving the burden to communities most impacted. These concepts come into sharper focus when we look at how communities are already leading in re-imagining technology. Here are some examples of them doing just that.

Historical Examples

Community innovation in technology is not new. Long before the language of "tech justice" emerged, Black, Indigenous, disabled, and queer communities were developing systems to meet their own needs under conditions of exclusion. These histories show that technology is not only about devices or software, but also about infrastructures of care, survival, and knowledge.

Indigenous land knowledge systems are among the oldest examples of technological innovation. Practices such as controlled burning, water management, seed selection, and star-based navigation were sophisticated systems for sustaining ecological balance and cultural survival. These technologies were relational, built on protocols of reciprocity and stewardship, and refined through intergenerational teaching. Colonization often criminalized or suppressed them: for instance, banning Indigenous burning techniques in favour of fire suppression policies.

Today, climate science has confirmed the effectiveness of these practices in preventing wildfires and sustaining biodiversity. Recognizing them as technologies

¹³ The Design Justice Network. "Design Justice Network Principles." Accessed Sep 2025, https://designjustice.org/read-the-principles.

shifts our definition of innovation, showing that complex problem-solving has always existed outside Western industrial frameworks.

In the 1960s, the **Student Nonviolent Coordinating Committee (SNCC)** developed communication strategies using mimeograph machines and radio networks to spread information about protests, voter registration, and political education across the American South. These relatively low-tech systems were essential infrastructures of the civil rights movement, allowing organizers to bypass mainstream media and state censorship. SNCC's work demonstrated how Black activists turned everyday tools into powerful instruments of mass communication, setting precedents later echoed in digital activism.¹⁴

During the same period, **Deaf communities** were hacking existing telephone infrastructure to build TTY (teletypewriter) networks. By repurposing mainstream technologies to create accessible communication, they laid the groundwork for relay services still in use today. This was not charity or accommodation, but disability-led innovation that changed how communication systems operate globally.

In 1969, the **Black Panther Party launched its Free Breakfast for Children Program**, which quickly scaled to feed tens of thousands of children daily. Coordinating volunteers, kitchens, and supply chains was as much a technological achievement as a social one. The program proved that community-led logistics could transform public health and education, and it directly influenced the development of U.S. government school breakfast programs.

In the 1980s and 1990s, during the height of the **HIV/AIDS crisis**, queer and HIV-positive communities used early digital platforms (bulletin boards, listservs, and chat rooms) to share life-saving information. These forums circulated treatment updates and care strategies often ignored or censored by mainstream medical and media institutions. They became some of the first large-scale examples of online mutual aid, where grassroots knowledge and lived experience were mobilized to save lives and build solidarity across borders.

In Northern Ontario, Keewaytinook Okimakanak (KO), a Tribal Council representing remote First Nations, created the **Kuhkenah Network (K-Net)**, meaning "everybody's network." What began in 1994 as a dial-up bulletin board system to connect high-school students studying away from home soon became a regional digital hub. Communities with little more than a single payphone or trail radio began exchanging messages, posting notices, and creating personal homepages. By the late 1990s, KO partnered with schools, governments, and industry to expand connectivity and training, building a not-for-profit, community-controlled internet service. In 2001,

https://thefunambulist.net/magazine/22-publishing-struggle/power-people-black-panther-pre-digital-age-radical-media-jane-rhodes

¹⁴ Jane Rhodes (2019). "Power to the People: the Black Panther and the Pre-Digital Age of Radical Media." *The Funambulist*. Issue 22.

MyKnet.org emerged as its web-based platform, hosting tens of thousands of Indigenous homepages. These pages became vital for keeping families connected, sharing teachings from the land, announcing births and deaths, and building community infrastructures online. MyKnet.org remains a striking example of Indigenous-led digital innovation, proving that community ownership and cultural grounding can shape technology for resilience and belonging.¹⁵

By the late 1990s and early 2000s, disabled activists such as **Mia Mingus and Alice Wong** were using blogs and digital platforms to create archives of disability justice.

Mingus's *Leaving Evidence* and Wong's *Disability Visibility Project* continue to shape the frameworks of disability culture and activism, while **Christine Miserandino**'s "**Spoon Theory**" blog gave disabled communities and allies a framework for discussing chronic illness and energy. These projects did more than share stories; they laid the groundwork for the forms of remote access and mutual aid that many non-disabled people came to rely on during the pandemic. As **Leah Lakshmi Piepzna-Samarasinha** has argued, disabled people pioneered remote work, online gatherings, and digital interdependence long before 2020. Yet when institutions adopted these practices at scale during the pandemic, they rarely credited disabled innovation — and as restrictions eased, many rolled back these systems, leaving disabled people excluded again. This cycle shows how disabled knowledge is often extracted in moments of crisis but ignored in the long term.

Taken together, these examples demonstrate that innovation often begins at the margins. Indigenous land practices, Black freedom movements, Deaf-led communication hacks, disability justice platforms, and queer mutual aid networks all expanded what counts as technology. Each responded to exclusion not by waiting for inclusion, but by inventing systems of survival and care. These histories remind us that the roots of today's digital justice movements are deep, and that technological futures are always being built from the ground up.

Recent Examples

Data for Black Lives (D4BL)

Founded by Yeshimabeit Milner, Data for Black Lives is a Black-led movement that challenges how data systems reinforce racism. Predictive policing software disproportionately targets Black neighbourhoods; credit scoring models restrict economic mobility; and hiring algorithms reproduce bias. D4BL not only exposes these harms but also builds alternatives where Black communities lead the collection, analysis, and application of data.

¹⁵ Budka, P., Bell, B., & Fiser, A. (2009). MyKnet.org: How Northern Ontario's First Nation Communities Made Themselves At Home On The World Wide Web. *The Journal of Community Informatics*, *5*(2). https://doi.org/10.15353/joci.v5i2.2449

This is a model of Participatory Action Research (PAR): the people most affected by harmful systems shape the questions, methods, and outcomes. D4BL reframes data from a tool of surveillance and exclusion into a resource for empowerment and change.

Reflection Questions:

- Does my practice or organization centre the expertise of communities most impacted by the issues it engages with?
- How familiar am I with data stewardship as shaped by Black, Indigenous, and disabled communities, and what steps can I take to bring my work into alignment with these approaches?

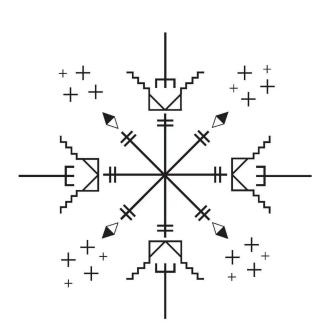
Key Takeaways:

- Data practices can reproduce racism or advance justice.
- Black-led initiatives reclaim data as a tool for empowerment.
- PAR ensures that communities most impacted co-lead research and decision-making.

Indigenous Al

Kite

Iktómiwiŋ (My Grandfather's Vision), 2023



For any instrument(s).

Instructions

Choose a side to begin from. Decide or mark what each symbol means to you.

Perhaps it means the transformation of knowledge through unknowable means. Perhaps a visit from a being too awe-full and power full to understand. Perhaps it reaches through time and space and changes those who see.

Iktómiwiŋ appears in the high branches of the trees, like soft spider dance, the border of knowability, thunder lightning spirit escapes with only brief perception like a spider's soft kiss against sun-winded skin on the longest day of the year, unfolds her legs across a grove of trees, barely visible through piercing sun-rays, she gives you the gift of terrorwonder unveiling outwards endlessly into the star-paved, ghost-tearstainedtrail.

Play each symbol from outside of the score inward.

Sustain the lowest note on your instruments until all instruments do the same.

Play from each symbol from the inside of the score outward.

Play only notes in a chosen mode, returning to the lowest every now and then. Play in any octave, at any tempo.

If one instrument is playing, focus on the lower end of the instrument. If more than one instrument is playing, choose different registers, using the highest notes sparingly.

Imagine each symbol moves through the human/instrument body as if the instrument is the lowest part of a rock formation, where meaning emerges in rumbles, long and deep currents, sometimes too low to be percievabe, but sound is constant and takes no breaks. Let all notes sustain and reverberate as if infinitely.

Suzanne Kite, Iktómiwiŋ (A Vision of Standing Cloud), 2023. Source.

The Indigenous Protocol and Artificial Intelligence Working Group brings together Indigenous artists, technologists, and knowledge keepers from across Turtle Island and beyond. Rather than asking how Indigenous peoples can adapt to AI, they ask how AI itself might be accountable to Indigenous lifeways. Their work is pan-Indigenous, drawing from global philosophies and traditions to shape technology differently.

The group pushes us to consider questions often ignored in mainstream AI ethics: What protocols are needed in AI? How might AI impact Indigenous communities? Why should Indigenous peoples be at the forefront of shaping its development? These questions matter because AI already influences policing, healthcare, education, and environmental governance — all areas central to Indigenous sovereignty and survival.

Reflection Question: If you use AI or digital tools in your practice, have you informed yourself about its main impacts to indigenous communities and consulted indigenous community members? If so, what responsibilities come with them? Whose values and protocols should guide their use?

Key Takeaways:

- Al use requires Indigenous consultation because it directly impacts sovereignty, knowledge systems, and community wellbeing.
- Protocols of consent, reciprocity, and responsibility from Indigenous traditions provide guidance for ethical Al design.
- Indigenous leadership ensures AI development is accountable and rooted in justice rather than extraction.

Indigenizing Arts Education



Indigenizing Arts Education (@indigenizingartsed) is an Instagram account created by Indigenous arts educator Emi Aguilar. The project began as a way to resist the elitism and exclusivity they encountered in teaching, where Indigenous voices were sidelined. Instagram, often dismissed as casual or commercial, became a tool for creating an accessible, community-driven space where Indigenous art educators share knowledge on their own terms.

This platform demonstrates how everyday technology can be reclaimed for decolonial pedagogy. It functions as both archive and gathering space: a digital repository that preserves Indigenous teaching practices while making them accessible to educators who wish to disrupt colonial frameworks in their classrooms.

Reflection Question:

What everyday technologies (from social media to email lists) could you repurpose in your practice to challenge exclusion and open access to knowledge?

Key Takeaways:

- Everyday digital tools can act as powerful sites of Indigenous pedagogy and stewardship.
- Supporting informal, community-driven hubs of Indigenous knowledge is as important as resourcing formal educational spaces.

Remote Access



A vibrant stage with two DJs performing, colorful lights, and a large screen displaying lyrics. Audience members are visible in the foreground. <u>Source</u>.

Remote Access is an event series co-founded by Kevin Gotkin and the Critical Design Lab that re-imagines cultural gatherings through disability justice. Its crip nightlife parties and online events integrate captions, ASL interpretation, audio description, and access doulas into the design of the event. These features are not afterthoughts but part of the aesthetic and social core.

Remote Access highlights how disabled communities have long pioneered remote participation and collective access. By treating access as cultural and creative, the series demonstrates that accessibility is not a compliance checklist but a foundation for new forms of gathering. To extend its impact, the organizers also created a **participation guide** — a practical document that cultural organizations can use as a reference if they want to design similar accessible events.

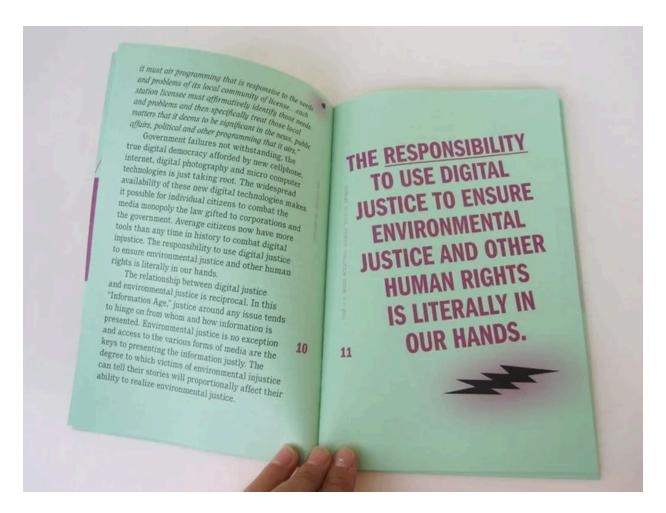
Reflection Question: When you plan cultural events or programmes, do you consider access as part of the creative design, or only added afterwards? What are some ways you can incorporate accessibility and disability justice at the beginning of events?

Key Takeaways:

- Remote Access shows how access can shape cultural events as aesthetics.
- Disabled leadership reframes accessibility as creative, not just functional.
- Its event participation guide offers a replicable resource for organizations.

• Cultural workers can design events where access is foundational.

Detroit Digital Justice Coalition (DDJC)



An open zine with a large quote that reads, "The responsibility to use digital justice to ensure environmental justice and other human rights is literally in our hands. <u>Source</u>.

The Detroit Digital Justice Coalition (DDJC) brings together community organizations serving racialized communities that have been excluded from corporate tech. They operate according to a set of Digital Justice Principles (access, participation, common ownership, and healthy communities) and run DiscoTechs ("Discovering Technology" fairs), hands-on workshops where community members learn and teach one another.

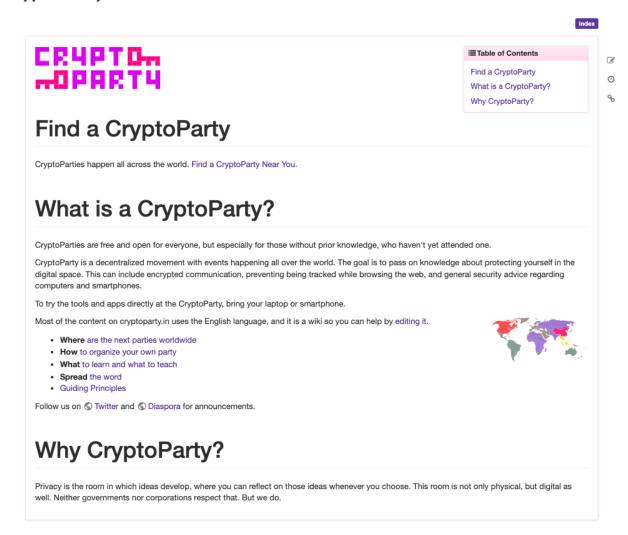
By treating communication as a human right, DDJC reframes digital literacy as essential to cultural and civic life. Their model shows how communities can demystify technology, resist exclusion, and create infrastructures rooted in equity rather than profit.

Reflection Question: If you were to host a DiscoTech in your own context, what kinds of skills, tools, or knowledge would your community most want to share and learn?

Key Takeaways:

- Tech literacy is a right, not a privilege.
- Peer-to-peer teaching makes learning accessible and empowering.
- The Digital Justice Principles provide a framework cultural workers can apply to their own practices/organizations.

CryptoParty



A screen capture of the CryptoParty website. Source.

CryptoParty is a global, volunteer-run network of informal gatherings where people share digital security skills like encryption, password management, and anonymous browsing. It is not rooted specifically in Black, Indigenous, or disability justice

communities, and it is not focused solely on the cultural sector. Even so, it offers essential tools that these communities and cultural workers can use to protect themselves against surveillance and online harm.

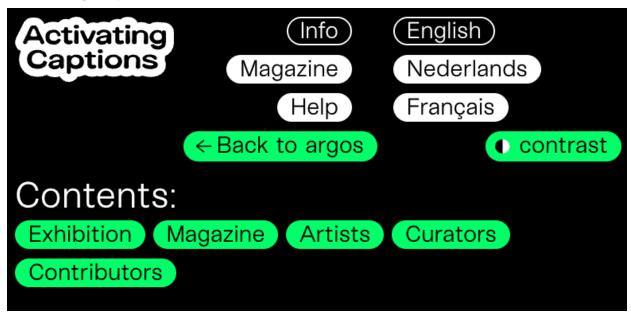
Its peer-to-peer model of knowledge sharing lowers barriers to crucial digital literacy, reminding cultural workers that access is not only about connectivity but also about safety and confidence online. A notable feature of CryptoParty is its publicly available guides for hosting events, which function like an algorithm or model that can be adapted anywhere — from neighbourhood centres to arts organizations.

Reflection Question: What security practices could you share with colleagues, students, or audiences to help them feel safer participating in digital and cultural life?

Key Takeaways:

- Artists and arts workers can model CryptoParty's peer-to-peer teaching to share digital safety knowledge.
- Building cybersecurity into cultural work protects privacy, trust, and creative labour.
- The adaptable structure of CryptoParty shows how digital literacy can be embedded into cultural programming.

Activating Captions



A screen capture of the Activating Captions website. Source.

Activating Captions is a contemporary art project and online platform that treats captioning not just as a technical add-on for accessibility but as an artistic practice in its own right. Developed with contributions from artists such as Shannon Finnegan, Jordan Lord, Eduardo Andres Crespo, Park McArthur, Liza Sylvestre, Alison O'Daniel, Constantina Zavitsanos, Carolyn Lazard, and Alex Dolores Salerno, the project curates videos, commissioned texts, and installations that experiment with the expressive and cultural potential of captions. One striking example is Finnegan's site-specific work on the facade of the ARGOS building, which brought captions into physical space and reframed them as public art.

By positioning captions as both critical and creative, Activating Captions highlights how standard practices often carry limitations, leaving out tone, atmosphere, and cultural nuance. For Deaf, disabled, and hard-of-hearing communities, captions are about aesthetics, identity, and culture as much as access. The project makes this visible, transforming captions into a site of experimentation, humour, and poetry.

Reflection Question: How might rethinking captions as an artistic medium, rather than a purely functional tool, change the way you approach accessibility and Disability Justice?

Key Takeaways:

- Accessibility tools like captions can hold cultural and expressive value.
- Centring Deaf and disabled communities means designing access on their terms.
- Re-imagining accessibility can expand artistic and cultural possibilities.

Closing

Together, these initiatives remind us that community innovation is not only about tools, but about justice. For cultural workers, these case studies offer both inspiration and responsibility: to recognize community leadership, adapt practices in context, and ensure that justice, not profit or convenience, guides how we engage with technology.

FT: Conclusion

Conclusion

"[Technology allows us] to bring together sound and haptics, to help us talk about difficult topics, to share knowledge we want to pass down, and also to maybe train people in the act of decolonial activity." ¹⁶

Bobby Joe Smith III

As Bobby Joe Smith III reminds us, technology is never neutral. It can reproduce systems of harm, but it can also open space for connection, accountability, and decolonial activity. How we design, use, and share technologies is always tied to questions of justice, care, and responsibility.

This toolkit has offered ways to see technology differently: to recognize how oppression shapes its foundations, and to notice how communities most impacted by harm are also those leading innovation, resilience, and cultural survival. These insights invite us to approach technology as relational work, grounded in collective values rather than extractive logics.

- Technology reflects systems of power
- Access and justice are practices, not checklists
- Responsibility asks who technology serves and sustains
- Communities at the margins lead innovation for just, sustainable technology; it's crucial to offer solidarity to them by getting involved with and refining how we understand ethical technology.

Taking up this work means slowing down, reflecting, and building together. It means asking not only what technology can do, but what it should do, and for whom. It also means imagining and creating futures where technologies are rooted in justice, interdependence, and collective flourishing.

This is a beginning, not an end. May these tools and ideas support you in questioning, adapting, and building with care, so that technology becomes a practice of liberation, accountability, and cultural stewardship.

¹⁶ Hamraie, A., Lynx, A. A., Smith III, B. J., Brathwaite-Shirley, D., & Decker, N. (2023, November 18). Hybrid Dependencies: Crip Technoscience, Disability Justice, and Intersectionality in New Media and Beyond [Online Panel]. https://interaccess.org/event/2023/hybrid-dependencies-crip-technoscience-disability-justice-and-intersectionality-new-media

Disability Justice Futures

Disability Justice Futures

This toolkit invites you to explore how disability-led innovation has shaped new media, technology, mutual aid, accessible design, and futures where access and solidarity benefit all communities.

Overview

♦ Key Topics/Concepts

Disability justice, collective access, interdependence, bodymind, Crip, Mad, access intimacy, access rider, access guide/menu, Crip technoscience, disability-led innovation, mutual aid tech, technological refusal, refusal as design, Crip time, slow tech, accessibility, radical access, access friction, community protocol, AIDS activism, ACT UP, curb cut effect, Independent Living (IL), universal design, ASL, LSQ, BSL, audio description, ALT text, screen readers, plain language, CART captioning, notetaking, sensory-friendly design

Learning Objectives

- Understand accessibility and disability justice as they relate to technology.
 Explore accessibility as both a set of tools and a framework grounded in the politics of access, care, and participation. Understand disability justice as an intersectional framework led by disabled BIPOC that centers collective liberation, interdependence, and systemic transformation. Learn how both apply to technological and new media contexts.
- 2. **Identify how ableism shapes technological systems.** Recognize how ableism is embedded in the design, distribution, and governance of technologies: physical, digital, cultural, and institutional. Analyze how the absence or failure of accessibility supports reflects deeper systemic exclusion, particularly for Black, Indigenous, Mad, and disabled communities.
- Learn from disability-led technological practices. Explore how disabled and Mad communities innovate through mutual aid, bodymind knowledge, and adaptive practices. Understand access hacks, low-tech tools, and community protocols as examples of crip technoscience that challenge dominant ideas of innovation.
- 4. Examine accessibility as relational and multifaceted. Move beyond individual accommodation models to see access as an evolving, collective practice that spans physical, sensory, cognitive, emotional, financial, cultural, and linguistic dimensions. Reflect on how access is shaped through relationships, trust, and shared responsibility.

- 5. **Reflect on care, time, and interdependence in tech design.** Engage with concepts like crip time, slow tech, and access intimacy to challenge dominant tech values like urgency, optimization, and individualism. Consider how interdependence and sustainability can transform how we design and interact with technology.
- 6. **Imagine liberatory tech futures shaped by disability justice.** Envision technological spaces grounded in justice, not just inclusion. Consider how abolitionist design, trauma-informed approaches, technological refusal, and decolonial practices open up new possibilities for cultural sovereignty, safety, and collective access.

Proceed to the toolkit →

DJF Toolkit

Disability Justice Futures

"Through the digital, we make new worlds and dare to modify our own." "

Legacy Russell

This toolkit is called *Disability Justice Futures* because it is rooted in the idea that accessibility is not only about fixing problems in the present but also about imagining and building new worlds. The title points to the belief that disability justice is not just a response to exclusion but a practice of shaping collective futures.

The word *futures* reminds us that **there is not only one way forward.** There are many possible futures, and disabled people, especially Black and Indigenous disabled people, are already creating them through art, care, resistance, and technology. This toolkit is an invitation to think of accessibility not as a checklist, but as part of worldbuilding: the ongoing work of designing environments, cultures, and technologies that allow all of us to thrive.

Accessibility ⇔ Disability Justice

"Disabled people are experts and designers of everyday life." 18

- Aimi Hamraie & Kelly Fritsch

Accessibility is most often understood as the removal of **barriers** that prevent disabled people from participating in society. In the 1970s and 1980s, disabled **activists** organized publicly and visibly to demand structural change: curb cuts, ramps, elevators, Braille signage, captioning, and accessible public transit. In Canada, the **Charter of Rights** (1982) created new legal grounds to challenge discrimination. In the United States, the Americans with Disabilities Act (1990) followed years of protest, including the Section 504 sit-ins of 1977, when disabled activists occupied federal buildings until accessibility regulations were enforced.

Yet it is equally important to recognize the **unrecorded** forms of activist work that have always existed. Long before accessibility became a legal mandate, disabled people built informal **networks** for survival: creating sign languages in their communities, organizing home care collectively, teaching one another to navigate inaccessible systems, and building spaces of joy and art outside of institutions. These acts of everyday **resistance**, particularly within Black and Indigenous disabled

¹⁷ Russell, L. (2020). Glitch feminism: A manifesto. Verso.

¹⁸ Hamraie, A., & Fritsch, K. (2019). Crip Technoscience Manifesto. Catalyst: Feminism, Theory, Technoscience, 5(1), Article 1. https://doi.org/10.28968/cftt.v5i1.29607

communities, often went unacknowledged but remain central to how disabled people have survived and thrived.

Disability justice emerged in the mid-2000s through **Sins Invalid**, a disability arts collective founded in 2006 in the San Francisco Bay Area. Co-founder Patty Berne, along with other queer, trans, Black, Indigenous, and people of color with disabilities, articulated a new **framework** that named the limits of the disability rights movement. The principles of disability justice emphasized **intersectionality**, collective liberation, and cross-movement solidarity, affirming the value of all bodies and minds.

To put it simply:

- Accessibility focuses on technical solutions and legal compliance.
- **Disability justice** centers culture, politics, and relationships.
- Accessibility asks: Can you enter the space? Disability justice asks: Does the space reflect equity, care, and the leadership of marginalized people?

Both accessibility and disability justice are essential. Accessibility ensures that **barriers** are removed and rights are protected. Disability justice ensures that access is not reduced to compliance but connected to **imagination**, survival, and thriving. Together they inform one another: accessibility opens doors, and disability justice builds the **worlds** inside.

Accessibility as an Expansive Concept

"Conversations about disability often rely on the idea of accessibility as a set of particular, preset interventions, but accessibility requires great flexibility. It demands a malleable infrastructure that shifts, in real time, with the needs of the community." ¹⁹

Carolyn Lazard

Accessibility is often understood to be limited to specific supports related to physical disabilities: ramps, elevators, captioning, and screen reader compatibility. These interventions remain crucial, yet they do not capture the full scope of barriers that shape participation in digital and cultural life. Accessibility has many forms that extend beyond these familiar standards.

Some less-discussed types are outlined below.

¹⁹ Lazard, C. (2019). Accessibility in the Arts: A Promise and a Practice (K. Adeyemi, Ed.). Recess. https://promiseandpractice.art/

Financial accessibility recognizes that cost is itself a barrier. New media platforms, subscription models, or specialized hardware like VR headsets can be prohibitively expensive. For Black, Indigenous, and disabled artists, financial precarity is often heightened by systemic inequities, and even receiving payment can endanger disability benefits. Accessibility here means reducing costs of entry, offering sliding scales, and designing compensation practices that do not penalize disabled creators.

Temporal accessibility calls attention to time as a resource that is unequally distributed. Events scheduled without considering time zones, caregiving responsibilities, or cultural observances can exclude many people, especially disabled and Indigenous participants. Accessibility means offering asynchronous participation, on-demand content, and flexible engagement windows that respect people's different temporal realities.

Psychological accessibility insists that emotional and mental safety are as vital as physical entry. Racism, ableism, and systemic violence are often replicated in digital environments, making them unsafe for marginalized users. Trauma-informed design, content warnings, and strong anti-harassment policies are forms of access that protect participants' psychological wellbeing.

Geographical accessibility highlights the structural inequalities that come with place. People living in rural or remote areas, especially Indigenous communities, often face unreliable internet and underfunded digital infrastructure. Accessibility here requires community-based hubs, downloadable content, and advocacy for public investment in infrastructure.

These types of accessibility demonstrate that accessibility is not only about physical infrastructure but about economic, cultural, emotional, geographical, and linguistic dimensions of life. They overlap with one another, and with more familiar types of access, to shape how people experience participation in digital and new media contexts.

For a fuller overview, including physical, cognitive, technological, sensory, social, and other forms of accessibility, see the comprehensive table below.

Type of Accessibility Description (Definition / Barrier / Ideas for Improvement Examples)

Physical Accessibility Barriers related to mobility, vision, Ensure all digital platforms and hearing, or other physical new media projects (e.g., VR, disabilities that affect access to interactive art) are new media and digital spaces. WCAG-compliant. Provide captioning, notetaking, recordings, ASL, and LSQ for virtual In Canada, Black, Indigenous, and disabled individuals often face and immersive events. compounded barriers, especially Collaborate with disability justice those living in rural or remote organizations to ensure communities where physical and accessibility standards are met. digital infrastructure is limited. Consider access for people who use assistive technology when creating interactive and VR-based content. Financial Barriers related to both the cost of Provide free or low-cost access to Accessibility accessing new media platforms digital events, tools, or platforms (e.g., subscription fees, VR for marginalized communities. hardware) and how Black, Offer sliding scale or honoraria Indigenous, and disabled artists are payments for artists to avoid compensated in digital spaces. negatively impacting disability benefits. Financial precarity is often Create public or subsidized access heightened by systemic inequality, to costly new media tools (e.g., VR, and Black and Indigenous artists AR equipment) through with disabilities may risk losing partnerships with libraries or benefits (e.g., disability pensions) if cultural organizations in Indigenous they are paid above certain limits. and Black communities. Support equitable payment structures and consult with Black, Indigenous, and disabled artists on fair compensation practices. **Cultural Accessibility** Barriers related to the erasure or Center Black, Indigenous, and misrepresentation of Black and disability voices in the creation of Indigenous cultures in new media, new media content. as well as a lack of cultural Collaborate with Indigenous and sensitivity in how content is created Black artists and cultural leaders to or shared in digital spaces. develop culturally relevant and respectful content, ensuring that Indigenous languages, practices, Indigenous communities in Canada face unique challenges with digital and knowledge systems are cultural sovereignty, and many included. disabled creators face exclusion Respect Indigenous data from mainstream narratives. sovereignty in digital media and

		ensure that disabled communities are involved in the creation and curation of digital works. Incorporate cultural protocols into new media projects.
Cognitive Accessibility	Barriers related to cognitive or neurological differences, especially when engaging with overstimulating or overly complex new media (e.g., virtual reality, augmented reality, or interactive media). Digital and new media platforms can be overwhelming for those with sensory sensitivities or cognitive disabilities, particularly in underrepresented communities.	 Ensure that new media platforms and digital spaces provide sensory-friendly features, such as calm settings, simple navigation, and options to disable certain overstimulating elements. Offer multiple content formats (e.g., audio, text, and video) and provide clear instructions or guides in accessible language. Partner with Black, Indigenous, and disability organizations to develop content that considers cultural and cognitive accessibility.
Technological Accessibility	Barriers related to limited access to technology or high-speed internet, particularly in rural and remote areas (e.g., northern Indigenous communities in Canada), as well as limited digital literacy in underrepresented communities.	 Collaborate with local Indigenous and Black-led organizations to provide access to technology and digital literacy training. Work with libraries, community centers, and other public resources to offer VR/AR tools and digital platforms to underrepresented communities. Create low-tech alternatives, like mobile-friendly versions of new media platforms or downloadable content, to accommodate users with limited internet access.
Temporal Accessibility	Barriers related to the scheduling of events or the availability of digital content, especially when time zones, caregiving responsibilities, or cultural observances within Black, Indigenous, and disabled communities in Canada are not considered.	 Offer on-demand and asynchronous content for new media experiences, allowing users to engage at their convenience. Ensure that virtual events are available across time zones, especially considering rural and Indigenous communities in different regions of Canada.

		Avoid scheduling events during significant cultural or religious observances and consider flexible access windows for disabled participants.
Psychological Accessibility	Barriers related to the emotional and psychological safety of Black, Indigenous, and disabled communities in digital spaces, including experiences of racism, ableism, and systemic violence. Digital spaces can amplify these harms if they aren't moderated or designed with trauma-informed principles in mind.	 Develop trauma-informed digital environments by implementing clear anti-racism and anti-ableism policies, with active moderation in digital spaces. Provide content warnings for potentially triggering material and offer mental health resources for participants. Partner with Black, Indigenous, and disability justice groups to ensure that new media platforms are culturally safe and emotionally supportive for marginalized users. Offer anonymous participation options and clear mechanisms for reporting abuse or harm.
Sensory Accessibility	Barriers related to sensory processing differences, including those experienced by autistic, neurodivergent, and other disabled individuals. Digital spaces and new media projects often rely on intense visuals, loud audio, or overwhelming interfaces that can create sensory overload and exclude participation. Sensory barriers disproportionately affect racialized neurodivergent individuals, who may already experience systemic exclusion from accessible digital and cultural spaces.	 Design new media projects with sensory-friendly options, such as adjustable lighting, sound customization, and reduced visual clutter. Provide alternative formats for digital content, including text-based descriptions, customizable captions, and audio descriptions. Ensure virtual and interactive spaces include sensory-friendly modes that allow users to control visual and auditory stimuli. Collaborate with neurodivergent and disabled artists to develop accessibility guidelines that prioritize sensory needs in digital storytelling and immersive experiences.

Geographical
Accessibility

Barriers related to location, particularly for Black, Indigenous, and disabled communities in rural or remote areas, where access to high-speed internet or the technology needed to participate in Partner with public institutions, new media is limited. Many Indigenous communities in Canada organizations to provide face these challenges due to underfunded infrastructure.

- Provide downloadable content and low-bandwidth versions of digital media to ensure access for users with limited internet connections.
- libraries, or Indigenous technology hubs in remote communities.
- Work with national and provincial initiatives to advocate for better digital infrastructure in underfunded areas.

Linguistic Accessibility

Barriers related to language exclusion, especially in predominantly English or French digital spaces, where Indigenous languages or dialects, as well as accessible language for disabled users, are not supported.

- Offer multilingual content and translation services, including Indigenous languages and dialects, in digital and new media projects.
- Provide ASL (American Sign Language), LSQ (Langue des signes québécoise), and plain language versions of all media.
- Ensure that written, visual, and auditory content is accessible by using plain language, simplifying complex ideas, and removing jargon to make content easier to understand for people with varying literacy levels or cognitive disabilities. This is especially important in digital spaces where instructions, guidelines, and media often use inaccessible technical or complex language.
- Use glossaries in workshops, educational materials, and digital content to define key terms and concepts, particularly those related to technology, new media, or specific cultural contexts. These glossaries should be created in consultation with Black, Indigenous, and disability communities to ensure they are culturally relevant, inclusive, and accessible to participants from different backgrounds and with varying levels of familiarity with the subject matter.
- Provide special terms to CART (Communication Access Realtime Translation) captioners and notetakers in advance of events, especially Indigenous terms, names, or culturally specific phrases that may be unfamiliar. This ensures that notes, captions,

		and transcriptions are accurate and accessible to all participants, particularly those from Black, Indigenous, and disability justice communities. • Ensure that online platforms allow for language flexibility (e.g., multiple languages, captioning, and translation options) and engage with cultural and disability organizations to co-create language access strategies that center the linguistic needs of Black, Indigenous, and disabled communities.
Social Accessibility	Barriers related to feeling excluded or unwelcome in digital spaces that are predominantly white or able-bodied, where Black, Indigenous, and disabled communities may face discrimination or a lack of representation. In Canada, the colonial legacy has further marginalized these communities in mainstream cultural spaces.	 Prioritize anti-racism and anti-ableism training for digital content creators and platform moderators. Ensure that Black, Indigenous, and disabled voices are centered in new media projects, and actively recruit contributors from these communities. Create safe, identity-affirming digital spaces where marginalized communities can participate without fear of harm or exclusion. Develop targeted outreach and marketing strategies to engage these communities meaningfully.
Educational Accessibility	Barriers related to lack of digital literacy or unfamiliarity with new media tools, especially for Black, Indigenous, and disabled communities in Canada who may have historically been excluded from technological advancements and digital arts education.	 Offer digital literacy workshops and accessible educational materials tailored to Black, Indigenous, and disabled communities. Collaborate with community organizations to provide step-by-step guides and tutorials for engaging with new media platforms. Ensure that educational content is available in multiple formats (e.g.,

		videos, easy-to-read guides, translated materials) and consider offering peer-led education programs within these communities.
Safety of Digital Spaces & Risk Tolerance	Barriers related to privacy, conflict, data security, online harassment, and surveillance, and other forms of harm — which disproportionately affect Black, Indigenous, and disabled communities in Canada. These groups face heightened risks in digital spaces where systemic racism, ableism, and colonial violence are perpetuated. If safety is not addressed, these communities will be excluded from participating in new media spaces.	 Ensure strong privacy protections and data security measures (e.g., comply with PIPEDA, Canada's privacy law) on new media platforms. Implement clear anti-harassment policies and offer robust moderation tools to protect marginalized users from online abuse. Provide anonymous participation options and clear guidelines for reporting harm. Use secure, culturally sensitive platforms that protect against surveillance, especially for Indigenous users concerned with data sovereignty. Offer content warnings and trauma-informed practices to prioritize the emotional safety of Black, Indigenous, and disabled participants.

Some Practical Tools & Tips on Accessibility

Accessibility requires time, resources, and funding. While it is sometimes treated as optional or "extra," it is in fact essential for equitable participation. Investing in accessibility is not only a matter of justice but also a matter of effectiveness: when accessibility is prioritized, events run more smoothly, participants feel supported, and outcomes improve.

This is often called the **curb cut effect**. Curb cuts were originally created to support wheelchair users, but quickly proved useful for parents with strollers, delivery workers, travelers with luggage, and many others. The same applies to digital and cultural accessibility practices: captions help Deaf participants and also support people learning English or attending in noisy spaces; breaks help disabled people regulate energy and also prevent burnout for everyone.

Accessibility Support	Direct Support for Disabled Communities	Curb Cut Effect (Broader Benefits)
CART Captioning	Enables Deaf and hard-of-hearing participants to follow live conversations	Captions remain useful in recordings, create searchable transcripts, support language learners, and help people in noisy environments
ASL/LSQ Interpretation	Provides full participation for Deaf communities who use sign language	Strengthens communication clarity for all; recordings with ASL remain accessible for future audiences, including those unable to attend live
Audio Description	Makes visual information accessible for blind and low-vision participants	Supports audio-only participants, people multitasking, and enhances recorded archives with fuller context
Mandatory Breaks	Allows participants with fatigue, chronic pain, or neurodivergence to rest and regulate	Prevents burnout, improves focus, and sustains energy for all attendees and staff
Prepared Materials (slides, glossaries, notes)	Supports interpreters, captioners, and disabled participants who need advance processing time	Helps all attendees prepare, improves retention, and strengthens the quality of event recordings and transcripts
Plain Language and Clear Speech	Makes complex information accessible for people with cognitive disabilities or lower literacy	Benefits everyone by reducing jargon, increasing clarity, and making materials reusable in teaching and outreach
Visual Descriptions	Ensures blind and low-vision participants, or those joining without video, receive full context	Improves comprehension for everyone, enhances recordings, and supports audiences who later engage with materials without visuals

Flexible Scheduling / On-Demand Access	Supports disabled participants with variable energy levels or caregiving responsibilities	Expands participation across time zones, makes events accessible to those with busy schedules, and builds long-term digital archives
Accessible Platforms and Assistive Tech Support	Ensures compatibility with screen readers, alternative input devices, and adaptive software	Improves usability and navigation for everyone; future-proofs platforms for evolving technologies
Accessibility Training for Staff and Contributors	Builds knowledge to meet the needs of disabled participants effectively	Improves facilitation and communication for all, ensures consistency across future events, and strengthens organizational capacity

When advocating for accessibility resources, it is important to name and budget (and maybe advocate for budget increases to) specific costs and responsibilities in advance. Doing so ensures that accessibility is built into planning rather than treated as an afterthought.

Sample Accessibility Plan and Budget

Accessibility requires intentional planning and dedicated funding. Building a clear budget for accessibility ensures that it is treated as a core part of event design and not as an afterthought.

Area	What It Covers	Estimated Budget	Notes
Personnel	CART captioners, ASL/LSQ interpreters, notetakers, audio describers	\$1,500-\$2,000	Always budget for at least two interpreters for sustainability
Preparation	Staff time for preparing glossaries, advance materials, and liaising with accessibility teams	\$500	Reduces stress and errors during live events

Technology	Captioning software, transcription tools, assistive listening devices, adapted presentation platforms	\$500	One-time or renewable license fees
Breaks and Scheduling	Paid staff time to allow for extended event schedules that include breaks	\$200	Reflects added labor for longer sessions
Training	Workshops for staff, moderators, and contributors on accessibility best practices	\$1,000-\$1,500 annually	Shared resource across multiple events
Feedback and Evaluation	Gathering, analyzing, and integrating accessibility feedback	\$250	Supports continuous improvement
Contingency	Unexpected accessibility needs (e.g., last-minute interpreter, translation, adaptive tech)	10–15% of budget	Flexibility is key

These are sample rates only; actual costs will vary depending on new updates, region, and specific needs.

It is essential to **reach out for quotes and guidance as early as possible**, as accessibility support is not just about budgeting, but also changing logistical habits and processes to properly integrate new accessibility considerations.

It can feel difficult to reach out to different vendors and establish new frameworks for accessibility, but the **effort pays off**. Over time, you will build trusted working relationships, clearer processes, and a strong foundation that makes each new event easier and more sustainable.

Sample Advocacy Letter for Increased Accessibility Budget

At times you may need to **advocate** for additional accessibility funding with your supervisor, board, or funders. To support you in that process, we've provided a ready-to-use template you can adapt for your needs.

Dear [Insert Board Member's Name / Funding Body Representative],

I am writing to request [insert amount or range, e.g. "\$20,000-\$25,000 annually"] in additional funding to strengthen accessibility in our upcoming [insert program/project/event series]. Accessibility is not optional: it's a fundamental right for disabled people to participate fully in cultural and community life. At the same time, accessibility investments benefit all participants, a reality often described as the curb cut effect.

We are seeking support for accessibility measures such as:

[insert requests + who it directly supports + curb cut effect]

For example, CART captioning directly supports Deaf and hard-of-hearing participants while also creating transcripts that benefit language learners, people in noisy environments, and future archives.

I urge you not to fall for the fallacy of running more events by spending less on accessibility. Cutting accessibility not only increases burnout for staff and participants, but also prevents us from making the most of each program. A well-supported and accessible event has greater reach, higher quality recordings and transcripts, stronger participation, and deeper community impact than a larger number of inaccessible events.

By planning and budgeting for accessibility, we ensure that disabled communities are not excluded, and we also strengthen the sustainability and effectiveness of our programs.

I ask for your support in approving a dedicated accessibility budget line of *[insert amount]* for *[insert project/program]*. Please let me know if you would like a more detailed breakdown or if you would like to see examples of how these supports have transformed past events.

Thank you for your consideration.

Sincerely,
[Insert Your Name]
[Insert Your Title/Role]
[Insert Organization Name]

Change through advocacy often requires multiple tries and ongoing commitment. You may not get what you're pushing for initially. Be prepared to talk with stakeholders on an ongoing basis. But please feel encouraged that you are starting or continuing the conversation!

Conclusion

Disability Justice Futures is about reimagining the world and also about reshaping our daily practices. It reminds us that accessibility is not only a technical checklist but a living practice of interdependence, care, and equity. It asks us to dream beyond compliance toward futures where Black, Indigenous, and disabled communities are not only present but leading, creating, and thriving.

At the same time, Disability Justice Futures is deeply practical. It is about scheduling breaks, budgeting for accessibility, paying fairly, building safer spaces, and respecting cultural protocols. These everyday choices are the building blocks of the futures we imagine.

The work of disability justice requires both vision and discipline. It is the courage to imagine new worlds and the commitment to build them step by step. If we can hold imagination and practice together, we can create spaces where survival is possible, where dignity is honored, and where justice is woven into every layer of culture and technology.

Harm Reduction in New Media

Harm Reduction in New Media

Technology can cause harm, but it's also a tool for survival and community-based innovation. This toolkit draws on harm reduction principles developed by queer/trans, Black, Indigenous, and disabled people to explore how we can reduce harm in technology and use it to build stronger, more connected communities.

Overview

♦ Key Topics/Concepts

Harm reduction, trauma-informed design, digital safety, data healing, transformative/restorative justice, calling in, calling out, consent-based tech, mutual aid, community guidelines, collective care, psychological access, content warnings, peer support, community moderation, accountability, surveillance, privacy, cybersecurity, CryptoParty, encrypted communication, data protection, secure access, anonymity, digital self-defense, anti-carceral tech, crisis response tools, abolitionist digital strategy, cultural harm, doxxing

Learning Objectives

- Understand harm reduction as a community-based framework. Learn the
 roots of harm reduction from queer, trans, Black, Indigenous, and disabled
 communities. Understand it as a strategy for care, autonomy, and survival in the
 context of ongoing systemic harm.
- 2. **Identify how technology emerges from, causes, and amplifies harm.**Recognize how new media can reproduce violence through surveillance, algorithmic bias, misinformation, burnout, and online harassment. Reflect on how these harms impact marginalized users differently.
- 3. **Explore how communities use technology for survival and care.** Examine how mutual aid networks, DIY tech, and community-designed safety tools reduce harm and increase connection, access, and support.
- 4. **Apply harm reduction principles to tech use, design, and moderation.** Use values like consent, transparency, choice, and non-judgment to assess and shape how technologies are developed, shared, and facilitated in community spaces. Explore community-based approaches such as refurbishing hardware, using open-source software, and sharing freeware to increase access while reducing dependence on extractive or surveillance-based tech systems.
- 5. **Build awareness of privacy and cybersecurity as harm reduction.** Learn foundational digital safety strategies including encryption, data consent, secure communication, anonymity, and surveillance resistance. Understand

- how these tools support safety and dignity, especially for people at risk of violence or criminalization.
- 6. **Imagine safer and more connected technological futures.** Reflect on what it might mean to create tech spaces grounded in care, access, and community protection. Envision futures where harm reduction shapes the values and practices of technology itself.

Proceed to the toolkit →

HRNM Toolkit

Harm Reduction in New Media

"Harm reduction is what we do with each other, for each other."²⁰

- Abdul-Aliy A. Muhammad

History of Harm Reduction

Harm reduction began as a public health framework in the context of the HIV/AIDS crisis. In the 1980s and 1990s it was not governments or institutions leading the way but communities themselves. **Black, queer, Indigenous, and disabled people** organized needle exchanges, distributed condoms, ran phone trees, and created support groups at a time when these practices were considered illegal or unacceptable. They pushed forward regardless because their survival and the survival of their communities depended on it. These efforts were acts of collective care in the face of criminalization, stigma, and systemic neglect.

The principle was simple but powerful: **meet people where they are, reduce risk where possible, and value every life.** Harm reduction recognized that people would continue to use drugs or engage in other stigmatized behaviors whether or not society approved. This was not only because people wanted to, but also because stopping suddenly is often unrealistic and unsafe. Gradual change, including safer practices or reduced use, is necessary for gradual healing. Harm reduction reframed survival as a process, not a single moment of choice.

Safe consumption was central to this work. Needle exchanges, supervised injection sites, and condom distribution reduced the spread of HIV, hepatitis, and overdose deaths. These interventions mattered because they treated survival as non-negotiable. They affirmed that people deserved dignity and safety even when living their lives in ways that society sought to punish and the importance of community support through challenging, imperfect conditions.

²⁰ What Would an HIV Doula Do? & Visual AIDS (Eds.). (2021). HARM REDUCTION IS NOT A METAPHOR: Living in the 21st Century with Drugs, Intimacy, and Activism. MoMA PS1. https://visualaids.org/uploads/projects/HarmReductionZine.pdf



A poster, illustrated by Michael DeForge, that reads: "Save our sites! I support harm reduction in my neighbourhood." There are colourful flowers, buildings, naloxone kits, and needles in the image.

"So what is harm reduction, or rather, how do we reduce harm? Well, I always like to start with systems, because our entanglement with them starts at the colonization of stolen Indigenous land and the brutal enslavement of kidnapped Africans, some of whom were thrown overboard and murdered at sea during the middle passage."²¹

- Abdul-Aliy A. Muhammad

A Response to Systemic Oppression

Equally important, harm reduction made clear that root harms were not the fault of individuals but the result of **systemic conditions**. Poverty, racism, colonization, ableism, homophobia, and inadequate health care all shaped why people turned to certain survival strategies. By naming these forces, harm reduction shifted the focus

²¹ What Would an HIV Doula Do? & Visual AIDS (Eds.). (2021). HARM REDUCTION IS NOT A METAPHOR: Living in the 21st Century with Drugs, Intimacy, and Activism. MoMA PS1. https://visualaids.org/uploads/projects/HarmReductionZine.pdf

away from blaming individuals and toward challenging the structures that created risk in the first place.

The results were profound. Where harm reduction was implemented, infection rates and overdose deaths dropped. Just as importantly, harm reduction reshaped the culture of care. It showed that when communities lead, even under the threat of punishment, they build trust, resilience, and survival strategies that institutions eventually catch up to. What began as illegal acts of mutual aid are now recognized as some of the most effective public health practices in history.

Harm Reduction as an Expandable Framework

Today, the same principles are being extended beyond HIV/AIDS and drug use. They can be used to inform movements for **technological harm reduction**, where communities work on digital platforms to reduce harassment and surveillance. They also shape **transformative justice**, which builds responses to violence without relying on punishment or exclusion.

This is not about erasing the original and continued work related to frontline work on the streets but seeing it as an important model for leadership, community work, and collaboration.

Across all these contexts, harm reduction remains rooted in Black, queer, Indigenous, and disabled leadership, and in the conviction that survival, dignity, and healing come before compliance or respectability.

Reflection Question: How does remembering the leadership of Black, queer, Indigenous, and disabled communities in harm reduction change the way we think about who should lead present-day conversations about accessibility, digital safety, and justice?

Cultural Stewardship in Tech

Cultural Stewardship in Tech

Culture is shaped not only by what we create and share, but by how we build and use technology itself. This toolkit explores cultural stewardship within new media and tech, drawing on Black, Indigenous, and disabled leadership to think critically about responsibility, knowledge, and the futures we design.

Overview

♦ Key Topics/Concepts

Cultural stewardship, cultural appropriation, cultural erasure, data stewardship, Indigenous data sovereignty, cultural protocols, community authorship, authorship and ownership, cultural sovereignty, ethical design, consent-based storytelling, Al, algorithm, algorithmic bias, Al training data, data scraping, machine learning, dataset, metadata, open-source tools, extractive technologies, archival justice, platform governance, CARE Principles

Learning Objectives

- Define cultural stewardship in technology and media. Understand cultural stewardship as the practice of care, responsibility, and accountability in how technologies are designed, used, and shared. Apply this to digital tools, media platforms, and Al systems that influence how cultures are represented and circulated.
- 2. **Recognize how technology carries and shapes culture.** Explore how design choices, algorithms, and platform structures reflect cultural values. Understand how these systems affect whose cultures are seen, distorted, excluded, or commodified.
- 3. **Identify cultural appropriation and erasure in tech spaces.** Examine how cultural knowledge is copied, decontextualized, or extracted in digital and AI environments. Understand appropriation as a form of structural harm that disconnects culture from its people and protocols.
- 4. **Understand data stewardship as a cultural issue.** Recognize that data and metadata are not neutral. Learn why community control over archives, platforms, and infrastructures is vital, especially when AI systems are trained on cultural material without consent.
- 5. Learn from Black, Indigenous, and disabled models of stewardship. Engage with approaches rooted in protocol, consent, authorship, and cultural survival. See how these communities protect knowledge and create alternatives to extractive tech systems.

6. **Explore tools and frameworks that support cultural stewardship.** Get introduced to platforms and design practices that center sovereignty and accountability, including Mukurtu CMS, the CARE Principles, open-source tools, and ethical data guidelines that address cultural misuse and algorithmic appropriation.

Proceed to the toolkit →

CST Toolkit

Cultural Stewardship in Tech

"Indigenous cultures are living and evolving entities, and [Indigenous] Protocols are required for new situations."²²

- Indigenous Protocols for the Visual Arts, 2021

Cultural stewardship is the practice of caring for cultural knowledge, practices, and creations in ways that respect the people and communities they come from. It is not necessarily about ownership but about responsibility. To steward culture is to ask how knowledge should be cared for, who has the right to guide its future use, and what responsibilities come with sharing it.

Communities have always practiced cultural stewardship:

- Indigenous nations have maintained languages, stories, and ceremonies through protocols that have existed for generations.
- Black communities have preserved oral histories, music traditions, and community archives in the face of erasure.
- Disabled communities have passed down access innovations and collective care practices that make survival possible.

Each of these examples resists dispossession by centering sovereignty, reciprocity, and respect.

When technology enters the picture, stewardship becomes even more urgent. Digital tools have the power to spread cultural knowledge far beyond its original context. They can support preservation and revitalization, but they can also create new forms of harm. Technology is never neutral. It carries cultural values, and without safeguards, those values often reflect extraction, profit, and control rather than care or justice.

Some of the most common cultural harms in digital and technological spaces include:

 Appropriation and Misrepresentation: Indigenous stories or art being digitized and circulated without permission, often stripped of their cultural meaning.

²² Canadian Artists Representation / Le Front des Artistes Canadiens (CARFAC). (2021). Indigenous Protocols for the Visual Arts: A practical guide for navigating the complex world of Indigenous Protocols for Cultural Expressions in the Visual Arts sector. Canadian Artists Representation / Le Front des Artistes Canadiens (CARFAC).

- **Erasure:** Search engines and social media algorithms amplifying dominant cultural content while pushing Black, Indigenous, disabled, queer, and trans voices to the margins.
- **Data Colonialism:** Tech companies collecting and profiting from community data without consent, treating cultural knowledge as raw material.
- **Environmental Harm:** The extraction of minerals for digital devices, often from Indigenous lands, connects technological growth to cultural dispossession.

Each of these harms shows how culture itself can be put at risk when treated as a commodity. What may look like innovation can in fact reproduce colonialism, racism, and ableism on a digital scale. Cultural stewardship is therefore necessary to shift how technology is designed and used.

Stewardship in technology asks us to slow down and ask questions, including:

- **The Beneficiaries.** Who benefits from a digital project?
- Who We Consider Experts. Who has been consulted?
- **Protocols & Controls.** Who controls the data, and whose protocols are respected?

By grounding technological work in stewardship, organizations and individuals can move from extraction to reciprocity, from erasure to visibility, and from profit-driven design to community-led innovation.

Reflection Question: Which of the cultural harms listed above do you see most clearly in your own digital or creative environments? How could cultural stewardship change the outcome?

Data from Black, Indigenous, Disabled, and Arts Perspectives

Data is often described as numbers, statistics, or information stored in digital systems. But from the perspective of Black, Indigenous, and disabled communities, data has always been much more than that. Data can be stories, songs, oral histories, access practices, or patterns passed down across generations. In the arts, data can also be creative works, processes, or embodied knowledge carried through performance and craft. Data is not neutral information. It is knowledge that is deeply connected to culture, history, and power.

• For **Black communities**, data may include archives of survival and resistance built in the face of erasure. Oral traditions, music, and community records have long served as living databases. Yet formal institutions often ignored or

misrepresented this data, leaving communities to protect it themselves.

- For many **Indigenous folks**, data is inseparable from sovereignty. Languages, ceremonies, and ecological knowledge are forms of data that are governed by cultural protocols, and Indigenous data sovereignty asserts the right of nations to control how that knowledge is stored, accessed, and used.
- For **disabled communities**, data can include the innovations developed through lived experience: access practices, collective care networks, and sensory knowledge that rarely fit into institutional definitions but are essential for survival.

The arts also offer a vital perspective on data. Artists transform data into forms that communicate, question, and imagine. An artwork might draw from archives, transform statistics into images, or embody community memory through performance. Artistic practices remind us that data is not just raw material for analysis. It is alive, relational, and always shaped by perspective and intent.

Understanding data in this broad sense is critical because technology increasingly relies on it. From artificial intelligence to social media algorithms to biometric systems, data is the foundation on which digital tools are built. Yet if we treat data only as numbers or content to be extracted, we risk repeating harms: erasure of Black, Indigenous, and disabled knowledge, surveillance of marginalized communities, and exploitation of cultural materials without consent.

To approach technology responsibly, we must recognize that **all types of data are cultural**. They carry histories, protocols, and responsibilities. From a cultural stewardship perspective, handling data requires the same care as handling stories, ceremonies, or artworks. It means asking: Who created this data? Who has the right to use it? Who benefits, and who is harmed? These questions are essential if we want digital technologies that do not simply reproduce systemic oppression but instead reflect justice, accountability, and community values.

Reflection Question: Think of the kinds of data you interact with daily. How might they be shaped by culture, and what responsibilities come with handling them?

Questions to Ask and Answer in Cultural-Technological Practices

Consent and Transparency

• Have we asked for **clear, informed consent** before collecting, storing, or sharing community knowledge or data?

- Are collaborators fully aware of how their contributions will be used, and do they have the **power to say no**?
- Are we treating consent as an ongoing process rather than a one-time form or checkbox?

Community Sovereignty

- Who owns and controls the data once it is collected?
- Does the community have the right to set limits on access, distribution, or reuse of their cultural knowledge?
- Are we respecting **Indigenous data sovereignty**, which asserts that Indigenous nations control their own cultural and digital resources?

Compensation and Value

- Are we paying collaborators fairly for **every stage of labor**, including consultation, planning, and follow-up, not only for final outputs?
- Have we budgeted for **compensation that matches the expertise** of Black, Indigenous, and disabled collaborators?
- Are we avoiding extractive practices such as "consultation without pay" or expecting unpaid emotional or cultural labor?
- Have we ensured that credit, authorship, or acknowledgment accompanies payment so that collaborators are **recognized as knowledge producers**?

Reciprocity and Benefit

- How does this project directly benefit the community contributing knowledge or data?
- Are there **reciprocal practices** in place, such as resource sharing, co-authorship, or community access to results?
- Have we centered the needs and priorities of Black, Indigenous, and disabled collaborators, or are we primarily serving institutional goals?

Accessibility and Accommodation

- Is the data collection or sharing process **accessible to disabled participants** (captioning, screen-reader compatibility, plain language, multiple formats)?
- Have we budgeted for accessibility supports as part of the project infrastructure?
- Are we prepared to adjust timelines, formats, or platforms to meet collaborators' access needs?

Accountability and Repair

- What **mechanisms exist for feedback** if the community feels misrepresented or harmed?
- Who in our organization is **responsible and accountable** for upholding community guidelines and cultural protocols?
- If harm occurs, what is our plan for **repair, restitution, and change of practice**?

Long-Term Care and Stewardship

- How will the data or cultural material be stored, and for how long?
- Who will be responsible for **maintaining and protecting** the archive or database in the future?
- Have we ensured that the community retains the ability to update, withdraw, or restrict their contributions over time?

Preparing for Collaboration with Black, Indigenous, and Disabled Partners

One of the most important foundations of cultural stewardship in technology is working and learning directly with the communities you wish to engage with.

Collaboration with Black, Indigenous, and disabled artists, knowledge keepers, and community members requires careful preparation. It cannot begin from a place of assumption or convenience. Instead, it must be rooted in respect, equity, and accountability.

Too often, organizations reach out for partnerships without doing the work to ensure that the environment is ready for meaningful collaboration. This results in harm, disappointment, or extractive practices. A more just approach requires planning and capacity-building in advance.

It is important to recognize that **many forms of preparation are projects in their own right**.

Developing an internal accessibility framework, building long-term relationships, or conducting anti-oppression training are not quick tasks. They require time, funding, and commitment. Unfortunately, arts funding models often prioritize flashy, one-time events while neglecting the less visible but essential work of creating sustainable systems of access and equity.

For these reasons, organizations must plan carefully and advocate for funding that supports not only programming but also the underlying structures that make collaboration safe and effective.

Accessibility & Accommodations Framework

The first step is to be ready with a **framework for accessibility and accommodations**. Every collaborator should know that their access needs will be taken seriously and that there is a process in place for requesting and implementing supports. This framework should also include a budget line so that accessibility is treated as part of the project's infrastructure, not as an optional or last-minute add-on. Communicating a willingness to adjust schedules, formats, or platforms is equally important.

Safer Space Framework + Community Guidelines

The second step is to establish a **safer space framework** supported by **clear community guidelines**. A safer space framework is not a guarantee that harm will never occur, but it is a commitment to reducing risks, responding with care, and creating an environment where people can participate without fear. Every collaborator should know in advance what behaviors are expected, what will not be tolerated, and what processes are in place if harm occurs.

Community guidelines can include expectations around respectful communication, anti-racism, anti-ableism, consent, and confidentiality. These guidelines set the tone for collaboration by clarifying how participants will treat one another and how conflict will be addressed if it arises. A safer space framework should also include a **conflict resolution process** that is transparent, fair, and rooted in accountability rather than punishment. This may involve naming a point person for conflict resolution, outlining steps for raising concerns, and committing to follow up on issues in a timely way.

As with accessibility, safer space practices require resources. Building time for orientation, conflict resolution, and feedback sessions should be included in project planning. Safer space work is not an afterthought, it is part of the infrastructure that makes collaboration possible. Communicating a willingness to pause, listen, and adapt in order to prevent or repair harm is just as important as delivering content.

Anti-Oppression & Anti-Racism Training

Equity also requires organizations to prepare their staff. **Anti-oppression and anti-racism training** should take place before the collaboration begins, and training should be updated and ongoing throughout one's collaborative career. Prioritize training led or co-developed with the communities most affected by these issues. This creates a shared baseline of awareness and accountability, helping prevent microaggressions or systemic biases from being reproduced inside the project. Naming a specific staff member as the accountability lead ensures that accessibility and equity commitments are monitored and followed through.

Clear Scope & Objective

Clarity is another essential element. When inviting a collaborator, organizations should present a **clear objective** and a **defined scope of work**. The collaborator should understand what is being asked of them, what the project hopes to achieve, and how the outcomes will benefit both the organization and the collaborator. Importantly, collaborators must be invited to weigh in on these outcomes, since genuine collaboration means sharing power over the direction of the work.

Fair Compensation

Fair compensation is critical. Many organizations undervalue early stages of collaboration, such as consultation, brainstorming, or relationship-building. These phases require labour and expertise and should be paid accordingly. To support this, budgets must account for **every stage of work**, not just the final deliverable. Exposure is never adequate compensation.

Building Trust Over Time

Building trust requires time. Wherever possible, establish a **prior relationship** with collaborators before inviting them into major projects. If that is not possible, propose a **pilot or consultation phase** so that both sides can test the relationship, learn each other's ways of working, and adjust before committing to long-term collaboration. This builds mutual respect and confidence.

Mutual Benefit

Finally, collaboration should be framed as **mutually beneficial**. Too often, organizations focus only on what the project will achieve for them. It is essential to identify how the collaboration will serve the collaborator and their community. Organizations must also remain open to adjusting their own goals in response to what collaborators identify as valuable.

To summarize, before reaching out to a Black, Indigenous, or disabled collaborator, be prepared with:

- A clear accessibility and accommodation framework
- Anti-oppression training for all staff
- A clear objective and scope of work
- Fair pay for every stage of labor
- A **prior relationship** or pilot phase to build trust
- A commitment to **mutual benefit** and shared power

Reflection Question: What are some ways your organization can shift from only funding one-time projects to investing in the long-term systems of accessibility, training, and relationship-building that make true collaboration possible?

Action Toolkit

Action Toolkit

How do we move from ideas to action? This toolkit offers ways to apply principles of disability justice, harm reduction, cultural stewardship, and new media solidarity in the arts and culture, helping you build and actively advocate for more just and community-rooted practices within the sector.

Overview

♦ Key Topics/Concepts

Access audit, access checklist, access rider, alt text, plain language, image description, accessible PDF, captioning, CART, ASL, LSQ, open letter, public statement, petition, peer-to-peer learning, internal memo, ADKAR, SWOT analysis, stakeholder map, power analysis, workback schedule, living document, feedback loop, community agreement, facilitation, conflict resolution, accountability process, sustainability planning

Learning Objectives

- Learn how specific tools can support access and cultural accountability. Get familiar with tools like access riders, access checklists, alt text, plain language, and community protocols. Understand how these support access, consent, and relational responsibility.
- 2. **Understand how advocacy tools are used to build collective pressure.** Study examples of open letters, public statements, petitions, and internal memos. Learn what they are for, how they work, and what makes them effective or harmful.
- 3. **Get introduced to change frameworks used in organizations.** Explore tools like the ADKAR model, SWOT analysis, and stakeholder mapping to understand how change happens over time, where power sits, and where influence can grow.
- 4. **Deepen awareness of planning and follow-through tools.** Learn about simple tools like workback schedules and living documents that help support sustainable, flexible commitments without burnout or rigid timelines.
- 5. **Reflect on your role and readiness in movement-based work.** Consider your relationship to accountability, capacity, and collective responsibility. Learn how to assess when to lead, when to follow, and how to stay in community over time.

- 6. **Get introduced to conflict resolution strategies for community spaces.** Learn foundational approaches to navigating disagreement, harm, and accountability in collaborative work. Explore strategies like pause points, third-party facilitation, and community agreements as alternatives to punishment or avoidance.
- 7. Learn how to use these toolkits as foundations for workshops or education spaces. Understand how to adapt and share the material from these toolkits in your own context. Explore ways to build lesson plans, host discussions, or co-learn with others using accessible, community-informed formats.