

ACLA COURSE STUDY GUIDE

Climate Communication & Storytelling

Tell climate stories that move people — from data visualization to narrative strategy to media engagement.

Mr. Tendai Mukamuri · Intermediate

6 modules · 28 lessons · 6 weeks

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Course information

Course	Climate Communication & Storytelling
Instructor	Mr. Tendai Mukamuri
Level	Intermediate
Structure	6 modules · 28 lessons · 6 weeks
Assessment	Module quizzes (pass mark 60%) and a final test (pass mark 80%). Certificate issued on final success, verifiable at acla.io/verify .

What you will be able to do

1. Explain why factual accuracy alone rarely changes minds, and apply the psychological and behavioural science that shapes how people process climate information.
2. Segment audiences by values, worldview, and existing attitudes, and design messages and messengers matched to each segment.
3. Apply framing theory to choose language, metaphors, and terminology that build understanding rather than resistance.
4. Construct compelling, ethical climate stories using narrative structure, character, place, and stakes — balancing urgency with hope and agency.
5. Produce and evaluate visual, data-driven, and digital storytelling formats, including infographics, short-form video, and interactive data visualisation.
6. Engage journalists and media outlets effectively, pitch climate stories, and recognise and counter climate misinformation.
7. Design advocacy and behaviour-change communication campaigns using recognised funnels and evaluation frameworks.
8. Demonstrate applied competency through six module assessments and a cumulative final examination.

How to use this study guide

This guide is the complete companion to the Tapi Learn mobile course. Each chapter corresponds to one course module and reproduces every lesson in full, including the key takeaways. Read a lesson in the app, then revisit the same text here to revise; the structure and headings match the in-app lesson reader. After finishing a module, take the module quiz in the app (60% to pass), and after all modules, the final test (80% to pass) to earn your verified ACLA certificate of completion.

Module 1: Foundations of Climate Communication

Climate communication is the interdisciplinary practice of conveying climate science, risks, and solutions to non-specialist audiences in ways that are accurate, accessible, and...

4 lessons · 8m

1.1 What Is Climate Communication?

Climate communication is the interdisciplinary practice of conveying climate science, risks, and solutions to non-specialist audiences in ways that are accurate, accessible, and motivating. It sits at the intersection of science communication, journalism, psychology, marketing, and the arts. Unlike climate science, which focuses on generating and validating knowledge, climate communication focuses on how that knowledge is received, interpreted, and acted upon by people whose decisions are shaped as much by values, identity, and trust as by data.

1.2 The Science-Action Gap

Decades of survey research show that most publics worldwide accept that climate change is happening and is human-caused, yet this awareness does not automatically translate into personal or political action. Researchers describe this as the 'science-action gap' or 'value-action gap'. A major driver of the gap is psychological distance: climate change is often perceived as temporally distant (a future problem), spatially distant (happening elsewhere), socially distant (affecting other people), and uncertain (a probabilistic risk rather than a felt experience). Effective communication works to close this distance by making climate change feel local, personal, present, and certain enough to warrant action, without resorting to exaggeration.

1.3 A Brief History of Climate Communication

Public climate communication has evolved through several broad phases: an early scientific-consensus phase following the 1992 Rio Earth Summit and the founding of the IPCC in 1988; a 'balance as bias' media phase in the 1990s–2000s when journalistic norms of presenting 'both sides' created a false sense of scientific disagreement; a post-2006 mobilisation phase associated with documentaries, NGO campaigns and the growth of dedicated climate desks in major newsrooms; and a current phase shaped by social media, youth-led movements, solutions journalism, and increasingly severe and visible climate impacts. The IPCC's Sixth Assessment Report cycle (2021–2023) and successive UN Climate Change Conferences (COPs) have driven a shift toward communicating not only risk but also feasible pathways and just transitions, reflecting growing recognition that hope paired with credible solutions motivates engagement more reliably than fear alone.

1.4 Core Principles of Effective Climate Communication

Across the major communication guides — including CRED's guide to communicating climate change and Climate Outreach's principles for engaging audiences — a common set of evidence-based principles recurs: know your audience before crafting a message; select a messenger the audience already trusts; connect the issue to what the audience already values; make abstract risks concrete and local; tell human stories rather than reciting statistics alone; give people a credible sense of agency; and use group and social norms to reinforce new behaviours. These principles will be unpacked in depth across Modules 2 through 6. . Case Studies Recommended Video Resources (YouTube)

Module 2: Understanding Your Audience and Framing Climate Messages

The Yale Program on Climate Change Communication, together with George Mason University, developed the 'Global Warming's Six Americas' segmentation model, which groups audiences...

5 lessons · 10m

2.1 Audience Segmentation: Global Warming's Six Americas

The Yale Program on Climate Change Communication, together with George Mason University, developed the 'Global Warming's Six Americas' segmentation model, which groups audiences into six segments based on their beliefs, attitudes and behaviours: Alarmed, Concerned, Cautious, Disengaged, Doubtful, and Dismissive. Each segment requires a different communication strategy, the Alarmed segment typically needs mobilisation and specific action steps, while the Dismissive segment is unlikely to be persuaded by climate-framed messaging at all and may respond better to co-benefit framings such as cost savings, health, or energy security. Segmentation research consistently finds that the 'movable middle', the Cautious and Disengaged segments represents the largest opportunity for communicators, since these audiences are neither strongly opposed nor strongly mobilised.

2.2 Values, Worldview and Cultural Cognition

Cultural cognition theory, associated with legal scholar Dan Kahan and colleagues, finds that people tend to interpret scientific evidence in ways that align with their cultural worldview and group identity, rather than processing it as neutral information. Individuals with more individualist, hierarchical worldviews tend to be more sceptical of regulation-implying risks such as climate change, while those with more communitarian, egalitarian worldviews tend to be more accepting of the same evidence. For communicators, this means that simply repeating scientific facts to an audience whose identity feels threatened by the implied policy response can backfire, a phenomenon sometimes called the 'boomerang effect'. Framing solutions in ways that are compatible with an audience's existing worldview (for example, emphasising innovation and free enterprise for individualist audiences, or collective stewardship for communitarian audiences) tends to be more effective than a one-size-fits-all message.

2.3 Framing Theory in Practice

Framing refers to the selection and emphasis of certain aspects of an issue over others, shaping how audiences interpret it. Linguist George Lakoff's work on framing shows that even factually accurate statements can reinforce an opponent's frame if they use the opponent's language (for example, debating 'carbon tax' on cost terms already primes a negative economic frame). Gain-framed messages (emphasising benefits of acting) and loss-framed messages (emphasising costs of inaction) can both be effective depending on context; research generally suggests gain and efficacy-focused frames work better for encouraging preventive, everyday behaviours, while loss frames can be effective for one-off, high-stakes decisions when paired with clear efficacy information. Terminology matters: studies comparing 'climate change' with 'climate crisis', 'global warming' and 'climate emergency' show that stronger terms can increase perceived urgency among already-concerned audiences but may alienate sceptical audiences by seeming exaggerated, reinforcing the need to match terminology to the audience segment identified in Section 2.1.

2.4 Messengers and Trust

Trust in the messenger frequently outweighs the content of the message itself. Local weather presenters, faith leaders, health professionals, farmers, military leaders and business figures often carry more credibility with specific audiences than climate scientists or environmental NGOs, precisely because they are perceived as in-group and non-partisan on the issue.

2.5 Common Pitfalls to Avoid

Frequent communication failures include: fear appeals presented without a corresponding sense of efficacy (which can produce denial or numbness rather than action); heavy reliance on scientific jargon and statistics divorced from lived experience; single-narrative messaging that assumes all audiences share the same values; and inadvertently reinforcing a sceptical audience's frame by repeating denialist claims, even in order to rebut them. . Case Studies Recommended Video Resources (YouTube)

Module 3: The Craft of Climate Storytelling

Narrative transportation theory holds that when audiences become absorbed in a story, they are less likely to counter-argue against its implicit claims than when presented with...

5 lessons · 10m

3.1 Why Stories Work: The Science of Narrative

Narrative transportation theory holds that when audiences become absorbed in a story, they are less likely to counter-argue against its implicit claims than when presented with direct persuasive appeals or statistics. Neuroscience research, notably by Paul Zak and colleagues, has linked emotionally engaging narratives to the release of oxytocin, a neurochemical associated with empathy and trust, and has shown that character-driven stories are recalled and retold far more reliably than lists of facts. For climate communicators, this means that a single, well-told human story can achieve what pages of statistics cannot: it can make an abstract, global phenomenon feel immediate, embodied, and personally relevant.

3.2 Core Elements of a Climate Story

Effective climate stories typically combine five elements: a relatable character or protagonist whose experience anchors the story; a specific place that grounds the story in a real, identifiable setting; a clear conflict or disruption — the climate impact itself; stakes that make clear what is gained or lost; and a resolution that shows change, response, or a path forward.

3.3 The Climate Story Arc

Adapting classical dramatic structure (Freytag's pyramid) to climate storytelling produces a five-stage arc: (1) Setting the scene establishing character and 'normal life' before disruption; (2) Disruption — the climate impact enters the story; (3) Rising tension — the struggle, including relevant scientific context woven in naturally; (4) Turning point — a decision, intervention or emerging solution; and (5) Resolution and call to action — what changed, and what the audience can do next. This structure is illustrated in Figure 3.1.

3.4 Balancing Urgency and Hope

Research on 'doom and gloom' messaging shows that stories which communicate only crisis, without any pathway to agency, risk producing psychological numbing, avoidance, or fatalism sometimes termed 'climate anxiety' or 'eco-anxiety' at the individual level and 'issue fatigue' at the audience level. Solutions journalism and constructive storytelling approaches counter this by pairing honest acknowledgement of severity with credible evidence of response and progress, without minimising the scale of the challenge. This does not mean avoiding difficult truths; it means ensuring that difficult truths are not the only note a story strikes.

3.5 Ethical Storytelling

Climate stories frequently involve vulnerable or affected communities, particularly in the Global South and among Indigenous peoples, small island states, and low-income populations who contribute least to emissions but bear disproportionate impacts. Ethical storytelling practice requires informed consent from subjects, avoiding exploitative or 'poverty porn' style imagery, giving affected people agency and voice in how their story is told (rather than speaking only about them), and crediting and compensating local contributors and fixers fairly. . Case Studies Recommended Video Resources (YouTube)

Module 4: Visual and Digital Storytelling

Dual coding theory holds that information processed through both verbal and visual channels is encoded more richly in memory than information delivered through either channel...

5 lessons · 10m

4.1 Why Visuals Matter

Dual coding theory holds that information processed through both verbal and visual channels is encoded more richly in memory than information delivered through either channel alone, which explains why visual content is consistently associated with higher recall and higher social-media engagement than text alone. For an issue as abstract and geographically dispersed as climate change, visuals play an outsized role in making impacts and solutions tangible.

4.2 Photojournalism and Visual Ethics

Climate visual communication has historically relied on a narrow set of recurring images most notably polar bears on melting ice that research shows have become so overused they now read as generic symbols rather than evidence of specific, local impact, and may even reduce perceived personal relevance for some audiences. Visual journalism practitioners increasingly favour images that show people (not only landscapes or wildlife), specific and identifiable places, and both impacts and solutions in action, such as renewable energy installations, community adaptation projects, or affected communities exercising agency. Ethical visual practice requires the same standards of consent, dignity, and context discussed in Module 3: avoiding staged or misleading imagery, providing accurate captions and context, and ensuring subjects are not exploited for shock value.

4.3 Principles of Data Visualisation

Effective climate data visualisation follows several core principles: choose the chart type that matches the data relationship (for example, line charts for trends over time, choropleth maps for geographic variation, and small multiples for comparison across categories); minimise 'chart junk', unnecessary decoration that does not convey information; use colour deliberately and accessibly, including colour-blind-safe palettes and sequential colour scales for continuous data such as temperature; and always label axes, units, and sources clearly to preserve trust and allow independent verification. Communicators should also be alert to how visualisation choices, such as truncated axes or non-uniform time intervals, can inadvertently or deliberately mislead audiences, and should adhere to professional data-journalism ethics that prioritise accuracy over dramatic effect.

4.4 Short-Form Video and Social Media Storytelling

Platforms such as YouTube Shorts, Instagram Reels, and TikTok have become major channels for climate content, particularly for reaching younger audiences. Effective short-form video typically establishes a hook within the first three seconds, uses on-screen text for accessibility and muted viewing, favours a single clear message per video rather than multiple points, and closes with a specific, shareable call to action. Research comparing formats finds that long-form YouTube video tends to sustain more in-depth educational and activist content, while short-form video on Instagram, TikTok, and YouTube Shorts reaches broader and more varied audiences but with more variable framing, including, at times, content that questions climate science, reinforcing the importance of proactive, high-quality short-form content from credible communicators.

4.5 Interactive and Immersive Formats

Interactive formats such as scrollytelling articles, data-driven web maps, and 360-degree or virtual-reality experiences allow audiences to explore climate data and stories at their own pace and from a personalised entry point (for example, entering a home address to see local projected impacts). While resource-intensive to produce, these formats have demonstrated strong engagement and shareability when built around a genuinely explorable, personally relevant dataset rather than a novelty interaction. . Case Studies Recommended Video Resources (YouTube)

Module 5: Media, Journalism and Public Engagement

Climate coverage today spans traditional newsrooms with dedicated climate or environment desks, digital-native outlets, freelance and independent journalists, and citizen and...

5 lessons · 10m

5.1 The Contemporary Media Landscape

Climate coverage today spans traditional newsrooms with dedicated climate or environment desks, digital-native outlets, freelance and independent journalists, and citizen and community journalism enabled by mobile technology and social platforms. Global journalism collaborations such as Covering Climate Now bring together hundreds of newsrooms worldwide to coordinate coverage around key moments, such as UN Climate Change Conferences, recognising that climate change as a 'beat' benefits from cross-outlet collaboration rather than pure competition.

5.2 Building Relationships with Journalists

Effective media engagement rests on relationship-building before a story is needed: understanding a journalist's beat and recent coverage, offering genuinely newsworthy angles rather than generic press releases, providing accessible spokespeople and data, and respecting deadlines and embargoes. A well-crafted pitch identifies a clear news hook (why this story, why now), offers a human angle alongside data, and anticipates likely journalist questions with prepared, evidence-based responses.

5.3 Constructive and Solutions Journalism

Constructive journalism applies rigorous reporting standards to responses and progress, not only to problems, asking not just 'what is wrong' but 'what is being done about it, and how well is it working'. The Solutions Journalism Network defines this as reporting that is evidence-based, examines results (including limitations and failures), and avoids promotional 'puff piece' framing. For climate communicators, partnering with solutions-oriented outlets and providing evidence of measurable outcomes, not just good intentions increases both journalistic and public credibility.

5.4 Misinformation and Disinformation

Climate misinformation ranges from outright denial of warming to more prevalent contemporary tactics: downplaying human causation, exaggerating scientific uncertainty, questioning the efficacy or necessity of solutions, and attacking the credibility of messengers rather than the evidence itself. 'Prebunking' or inoculation theory, developed in psychological research, proposes that exposing audiences in advance to a weakened version of a misleading argument, along with the techniques used to construct it (such as false balance or cherry-picking), builds resistance to the misinformation when it is later encountered, often more effectively than debunking after exposure.

5.5 Public Engagement Beyond the Newsroom

Beyond mass media, direct public engagement formats include town halls, citizen assemblies (deliberative processes in which randomly selected citizens develop policy recommendations after hearing balanced expert testimony), community and local-language radio, and participatory art and cultural events. These formats are particularly valuable for reaching audiences underserved by mainstream media and for building the kind of two-way dialogue that one-way broadcast communication cannot achieve. . Case Studies Recommended Video Resources (YouTube)

Module 6: Advocacy, Behaviour Change and Campaign Design

Campaign design commonly adapts marketing funnels (such as AIDA — Awareness, Interest, Desire, Action) to social and behaviour-change communication. This module presents a...

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6.1 From Awareness to Advocacy: The Behaviour-Change Funnel

Campaign design commonly adapts marketing funnels (such as AIDA — Awareness, Interest, Desire, Action) to social and behaviour-change communication. This module presents a five-stage adaptation: Awareness (the audience learns the issue exists), Interest and Understanding (the audience engages with why it matters and how it connects to them), Desire and Motivation (the audience wants to act, often linked to values and social norms), Action (the audience takes a specific, defined step), and Advocacy (the audience continues to act, and begins to influence others), illustrated in Figure 6.1. A frequent design error is treating awareness-raising as sufficient on its own; research consistently shows that awareness alone rarely converts to sustained action without accompanying motivation, clear and specific action steps, and social reinforcement.

6.2 Individual Behaviour Change vs. Systemic Advocacy

Climate communication campaigns generally pursue one of two complementary but distinct goals: individual behaviour change (encouraging specific personal actions such as diet shifts, energy use, or transportation choices) and systemic or policy advocacy (mobilising public pressure toward corporate, institutional or government decisions with larger-scale impact). Behavioural science evidence suggests that individual-action campaigns are most effective when they are specific, feasible, and reinforced by visible social norms (for example, showing that a behaviour is already common among peers), while advocacy campaigns are most effective when they translate broad public concern into a specific, addressable decision-maker and a clear, time-bound demand. A recurring critique in the field is that an exclusive focus on individual behaviour change can inadvertently shift responsibility away from the systemic and institutional actors with the greatest capacity for emissions reduction; effective campaign design generally combines both levels rather than treating them as mutually exclusive.

6.3 Designing a Theory of Change

A campaign theory of change articulates the logical chain connecting communication activities to intended outcomes: it specifies the target audience, the desired attitude or behaviour shift, the mechanism by which communication is expected to produce that shift (for example, increased perceived social norm, increased perceived self-efficacy, or increased trust in a messenger), and the indicators that will demonstrate success. Clearly specifying this chain before launching a campaign allows for meaningful evaluation and course-correction.

6.4 Evaluating Campaign Effectiveness

Robust campaign evaluation distinguishes between output indicators (such as reach, impressions, or media mentions), outcome indicators (such as measured shifts in attitude, intention, or self-reported behaviour), and impact indicators (such as documented emissions reductions or policy adoption). Communicators are encouraged to set indicators at the design stage, use control or comparison groups where feasible, and report honestly on results that fall short of targets — mirroring the same evidence-based standards applied to solutions journalism in Module 5. . Case Studies Recommended Video Resources (YouTube)

Final Assessment & Certificate

The final test draws on questions from every module. The pass mark is 80%. When you pass, Tapi Learn issues a certificate of completion bearing your name, the course title, your final score, a unique certificate number and the signature of the CEO of the Pan African Network for Climate Action (PANFCA). Each certificate carries a verification URL (acla.io/verify/<number>) so employers and partners can confirm its authenticity. You can download the certificate as a PDF directly from the app at any time, and your progress and certificates are backed up to the cloud under your email address.

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