

BNE Quality Framework — Living Experience Guides

Five Target-Group-Specific Workshop Guides — Appendix D

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Five Target-Group-Specific Workshop Guides Based on Appendix D

Erdpuls Müllrose — Living Laboratory & Makerspace Garden

Version: 1.2

Date: February 2026

Changelog

Version	Date	Changes
1.2	February 2026	BNE compliance update: measurable learning objectives added to all five guide Overview tables; sustainability dimensions and SDG links added per guide; BNE Criteria Coverage reference table added to intro; facilitator qualification requirements added per guide; pre-/post-workshop support references added (3.3.1/3.3.3); methodological foundations made explicit (3.2.2/3.2.3)
1.1	February 2026	Institution name updated; license footer added; version updated for OER publication
1.0	October 2025	Initial release

How to Use These Guides

These five guides each adapt the BNE Quality Framework alignment (Appendix D of the Pattern Discovery Toolkit) into an experiential workshop for a specific target group. This is the most reflexive activity in the toolkit — it asks participants not to learn about soil, economics, or landscape, but to learn about *learning itself*: what makes sustainability education effective, who defines educational quality, and how the experience they just had (in a soil session, a token workshop, a mapping expedition) connects to formal quality standards.

This scale presents a unique pedagogical challenge: quality criteria are abstract, institutional, and designed for administrators, not learners. The seven areas of the Brandenburg BNE Quality Catalog (Qualitätskatalog für BNE außerschulischer Anbieterinnen und Anbieter, MLUK Brandenburg, April 2023) — Goals, Approach, Methods, Design Competencies, Quality Development, Facilitator Qualification, Organizational Conditions — are the language of certification, not the language of experience. Making them experiential requires translation: from institutional evaluation into felt reflection.

Each guide therefore operates in two registers simultaneously: **reflection** (what did I experience? what changed in me?) and **framework** (how does what I experienced align with what educational science says good sustainability education should do?). The first register is personal and embodied; the second is analytical and institutional. The workshop's achievement is bridging them — showing that the formal criteria are not bureaucratic abstractions but descriptions of real qualities that participants can recognize in their own experience.

The Proxemic Layer: Each guide includes proxemic facilitation notes drawing on Edward T. Hall's theory of proxemics (*The Hidden Dimension*, 1966). The BNE quality framework workshops present a distinctive proxemic pattern: they begin at the most intimate pedagogical distance (a participant reflecting on their own felt experience of learning) and expand outward to public/institutional distance (how the Brandenburg Ministry evaluates educational quality). The proxemic trajectory is therefore the reverse of the bioregion guides: from intimate to public rather than public to intimate. The proxemic notes help facilitators manage this expansion without losing the embodied quality that makes the reflection authentic. For the complete framework, see the *Proxemic Integration* companion document.

Guide 1: Children and Youth — "Was haben wir eigentlich gelernt?" / "What Did We Actually Learn?"

Guide 2: Adults and Families — "Die Qualität des Wandels" / "The Quality of Change" **Guide 3:** Elders and Intergenerational Groups — "Bildung über Generationen" / "Education Across Generations" **Guide 4:** Artists and Researchers — "Wer bestimmt, was gut ist?" / "Who Defines Quality?" **Guide 5:** Cross-Border Groups — "Qualität ohne Grenzen" / "Quality Without Borders"

BNE Criteria Coverage Reference (Areas 1–7, Brandenburg Qualitätskatalog)

The table below maps each guide to the BNE quality areas it primarily demonstrates. This is intended to assist facilitators, evaluators, and certification reviewers. For the full criteria-by-criteria alignment of the Erdpuls program, see the *BNE-Bewertung und Leitbild* document and Pattern Discovery Toolkit Appendix D.

Guide	Target Group	Primary BNE Areas	Key Criteria
1	Children & Youth	1, 3, 4, 5	1.2 (ZG-specific learning objectives); 3.1 (experiential, reflective, participatory methods); 4.1–4.3 (all three Gestaltungskompetenz domains via Quality Cards); 5.2.1 (Quality Map as praxis reflection data)
2	Adults & Families	1, 3, 4, 5	1.2 (measurable behavioral outcomes); 3.1.5 (reflektiert); 4.3.1 (values self-reflection via Values-Action Map); 5.2.1 (Quality Compass as participatory evaluation); 5.1 (Personal Quality Commitment as development input)
3	Elders & Intergenerational	2, 3, 4, 5	2.2 (Perspektivenvielfalt across educational eras); 3.1.5 (reflektiert via Education Memory Harvest); 4.1.2 (foresight: temporal comparison past→present→future); 5.2 (oral history as longitudinal evaluation data)
4	Artists & Researchers	2, 3, 4, 5	2.1 (thematic breadth critique); 4.1 (interdisciplinary competency cross-analysis); 5.1–5.2 (counter-framework as quality development contribution); meta-level: the guide produces quality framework knowledge, not just quality framework compliance
5	Cross-Border (DE/PL)	1, 2, 3, 5	1.1.1 (Lebenswelt: shared glacial landscape); 2.1.1 (multi-dimensionality across national frameworks); 2.2 (Perspektivenvielfalt: two national traditions); 5.3 (Kooperation: cross-border quality audit design)

Minimum requirements of the Brandenburg Qualitätskatalog are addressed collectively across all five guides and the wider Erdpuls program. No individual guide is required to meet all 69 criteria independently — these are workshop guides, not standalone educational programs.

Facilitator Qualification Requirements (Area 6)

These guides require a facilitator who meets at least one of the following conditions (Qualitätskatalog 6.1.1 or 6.1.2):

- **(6.1.1 Formale Qualifikation):** Holds a formal pedagogical, psychological, or educational-science qualification appropriate to the target group and thematic content (e.g., Grundschullehramt for Guide 1 ages 8–12; Erwachsenenbildung qualification for Guide 2; Erlebnispädagogik training for field-based guides); or
- **(6.1.2 Persönliche Qualifikation):** Demonstrates documented experience facilitating BNE-relevant workshops with the specific target group, knowledge of the Brandenburg BNE Quality Catalog sufficient to explain its structure and key criteria, and comfort with open-ended reflective facilitation (as opposed to instructional delivery).

Guide-specific requirements:

- **Guide 1:** Facilitator experience with children's metacognitive development (ages 8–18) is essential. Familiarity with the 4A-Pathway model and at least one prior Erdpuls toolkit workshop strongly recommended.
- **Guide 2:** Experience with adult community education (Erwachsenenbildung) and comfort facilitating honest self-assessment in group settings. Familiarity with values-action gap research is beneficial.
- **Guide 3:** Sensitivity to intergenerational group dynamics and the politically complex memory of DDR-era education. An elder co-facilitator from the local community significantly strengthens relational trust and session quality.
- **Guide 4:** The facilitator participates as intellectual co-analyst, not instructor. Comfort with academic or artistic critical discourse is essential. Experience in education studies, art criticism, or social science is beneficial.
- **Guide 5 (mandatory):** An active bilingual (DE/PL) co-facilitation team is required, not optional. A single monolingual facilitator cannot run this guide. Advance co-preparation with a Polish educational professional for accurate framework representation is essential.

Pre- and Post-Workshop Support (Area 3.3)

Pre-workshop preparation (3.3.1): A one-page *Guide Selection Aid* should be prepared by the facilitation team and made available to booking schools, organizations, or community groups before the session. It describes which of the five guides suits which target group, how to sequence BNE Quality Framework guides within the Erdpuls annual program, and what prior workshop experience is required. The Pattern Discovery Toolkit Appendix D serves as preparatory reading for facilitators. All materials are available at erdpuls.ubec.network or on request at erdpuls@ubec.network.

Post-workshop follow-up (3.3.3): Each guide generates Citizen Science Output (documented in the Citizen Science Output section of each guide) that remains accessible to participants via the Erdpuls open data infrastructure. Participants and facilitators wishing to continue quality-development work after the session may contact erdpuls@ubec.network. The full Brandenburg BNE Quality Catalog and the Pattern Discovery Toolkit are available as OER on WirLernenOnline and Zenodo. The token economy (Regeneration token type) provides a structural pathway for participants who wish to continue their engagement beyond the workshop.

Guide 1: Was haben wir eigentlich gelernt? — What Did We Actually Learn?

For Children and Youth (Ages 8–18, School Classes)

Overview

Title	Was haben wir eigentlich gelernt? / What Did We Actually Learn? / Czego właściwie się nauczyliśmy?
Target Group	School classes, youth groups (ages 8–18, with age-differentiated variants)
Group Size	12–30
Duration	90 minutes (ages 8–12) or 2 hours (ages 13–18) — designed as a closing session following any other toolkit workshop
Location	Zone E (Heritage & Community Hub) — indoor, reflective setting
Season	Any — conducted immediately after a soil, token, or mapping workshop
Learning Objectives	By the end of this workshop, participants will: (1) recognize at least five BNE quality criteria by name in their own experience without having read the catalog; (2) evaluate a preceding workshop using a structured quality-card rating system; (3) identify the gap between felt learning quality and formally measured quality indicators; (4) propose at least one concrete, evidence-based improvement to the workshop they experienced (ages 13–18: design a 30-minute activity addressing the lowest-scoring criterion)
Sustainability Dimensions	Social (metacognitive development as educational equity — all ages can evaluate quality); Cultural (multilingual quality cards DE/EN/PL; naming quality in one's own language); Ecological (through the preceding workshop being reflected upon; sensor-network measurement as analogy for learning measurement); Economic (token economy awareness in the redesign challenge)

SDG Links	SDG 4 (Quality Education — direct: participants evaluate and improve educational quality from the inside); SDG 10 (Reduced Inequalities — implicit: recognizing that all ages, including children, can be legitimate evaluators of educational quality)
4A-Pathway Focus	All four stages reviewed: participants identify where on the 4A-Pathway they traveled during the preceding workshop
Curriculum Links	Sachunterricht (reflection, metacognition), Ethics (values, responsibility), German/Language Arts (descriptive writing about experience), Gesellschaftskunde (institutional quality, standards)
Methodological Foundations	Metacognition research (Flavell 1979; Zimmerman 2002): structured self-assessment develops metacognitive competency. Constructivist learning theory: quality criteria are internalized through experience, not transmission. Values-action gap research (Eurobarometer data): the gap between what children name as quality and what frameworks measure is itself a learning outcome. Proxemics (Hall 1966): dot-placing at personal distance produces more authentic evaluation than raised-hand voting at social distance.
Prerequisite	Must follow at least one other toolkit workshop — this guide reflects on that experience

The Pedagogical Challenge

Children do not think about their own learning. They experience it — they get excited, bored, confused, delighted, proud — but they rarely step back to examine what happened: what changed in their thinking, their feeling, their capacity to act. Metacognition develops gradually across childhood and adolescence, and most school settings offer little practice in it.

This workshop introduces metacognitive reflection through an experiential route: children revisit their preceding workshop (soil observation, the garden economy game, or a mapping expedition) not to repeat it but to examine it. The BNE quality criteria — stripped to their essentials — become a child-friendly evaluation framework that participants use to assess their own learning.

The key insight for children: "quality" is not an external judgment imposed by adults. It is a set of recognizable qualities in their own experience: "I tried something new" (3.1.1 erleben, erproben), "I decided what to look at" (3.1.4 selbstbestimmt-partizipativ), "I felt something" (3.1.7 ganzheitlich), "We worked together" (4.2.1 gemeinsam planen und handeln). When children can name these qualities in their own experience, they have begun to internalize a quality framework — without ever seeing a criteria table.

Preparation and Materials

- The "Learning Quality Cards" — a set of 12 large-format cards (A4), each showing one quality criterion in child-friendly language with a simple icon:
 - **I tried something new** (3.1.1 — hands icon)
 - **It connected to my real life** (3.1.2 — house icon)
 - **I could choose what to do** (3.1.4 — fork-in-road icon)
 - **I thought about my own values** (3.1.5 — mirror icon)
 - **We talked and worked together** (3.1.6 — speech bubbles icon)
 - **I used my head, hands, AND heart** (3.1.7 — three symbols)
 - **I learned from different subjects at once** (4.1.3 — puzzle pieces icon)
 - **I saw something from someone else's perspective** (4.1.1 — binoculars icon)
 - **I thought about the future** (4.1.2 — calendar with arrow icon)
 - **We planned something together** (4.2.1 — clipboard with hands icon)
 - **I felt empathy for nature or other people** (4.3.3 — heart with leaf icon)
 - **I thought about what's fair** (4.3.4 — scales icon)
- Colored dot stickers (green, yellow, red) — three per child per card
- A large wall poster: "Our Learning Quality Map" — the 12 criteria listed vertically, with space for dot placement
- Materials from the preceding workshop (soil samples, token cards, maps) displayed for reference
- The pattern cards produced during the preceding workshop

Welcome and Framing (10 minutes)

Proxemic note: Gather in a circle, seated. The materials from the preceding workshop are placed at the center of the circle — visible, touchable. This arrangement is deliberately different from the preceding workshop's spatial arrangement (which was dispersed across the campus, at activity stations, outdoors). The proxemic shift from distributed activity to gathered reflection signals that a different kind of work is beginning: not doing but thinking about doing. The materials at the center serve as mediating objects that maintain a haptic connection to the experience being reflected upon.

For ages 8–12: "We just did something interesting together — [name the preceding workshop]. You dug in soil, played an economy game, walked through the landscape. Now I want to ask you something unusual: *what happened to you?* Not what you did — I was there, I saw what you did. What happened *inside you*? Did anything change? Did you learn something? Did you feel something you didn't expect?"

Pause. Let children respond. Their answers will be concrete: "I was surprised the soil smelled different." "I didn't know worms could be that big." "I liked trading without money."

"Good. Those are real things that happened to you. Now — how do we know if what happened was *good learning*? Not just fun — good learning. Today we figure that out."

For ages 13–18: "Here's a strange question: the workshop we just did — was it good education? Not 'did you enjoy it' — that's a different question. Was it *good sustainability education*? How would you know? What would make it good or bad? Who decides?"

Pause. Teenagers will offer criteria: "If I learned something." "If it was relevant." "If it wasn't boring." "If it changed how I think."

"Every one of those is a real quality criterion. And it turns out, the state of Brandenburg has a list of 69 quality criteria for sustainability education. You just started naming them without knowing the list. Today we see how close your instincts are to the official framework — and where they diverge."

The Experience: Phase 1 — Quality Card Sorting (25–35 minutes)

Spread the 12 Learning Quality Cards on the floor or on a large table.

Ages 8–12 (25 min): Read each card aloud. For each card, ask: "Did this happen during our workshop today?"

Children place colored dots on each card: - **Green:** "Yes, this definitely happened to me" - **Yellow:** "A little bit, or I'm not sure" - **Red:** "No, this didn't happen"

After all 12 cards are rated, transfer the dot patterns to the wall poster ("Our Learning Quality Map"). The visual pattern reveals where the preceding workshop was strongest and weakest.

Proxemic note: The dot-placing is a personal-distance activity — each child approaches the card, considers their own experience, and makes a judgment. The facilitator should resist the urge to influence: "There are no wrong answers. This is about what happened to *you*." When the dots are transferred to the wall poster, the activity shifts from personal reflection (intimate/personal distance) to collective survey (social distance). The contrast between "my dots" and "our pattern" is the workshop's first metacognitive moment.

Ages 13–18 (35 min): Distribute the 12 cards among small groups (3–4 per group, 3 cards each). Each group has 10 minutes to: 1. Discuss whether their assigned criteria were met in the preceding workshop 2. Rate each criterion: "fully met / partly met / not met" 3. Provide specific evidence: "4.1.1 (new perspectives) was fully met because the Polish names for soil types were different from the German ones and that made me think about language and perception"

Groups present their ratings to the full group. Discussion follows: where do groups agree? Where do they disagree? The disagreement is the learning — different participants experienced the same workshop differently.

The Experience: Phase 2 — The Surprise Comparison (15–25 minutes)

Ages 8–12 (15 min): The facilitator reveals: "The cards you just used are actually from a real quality framework — the Brandenburg BNE Quality Catalog. It's a document that the government uses to decide if a place like Erdpuls is doing good sustainability education. You just evaluated your own workshop using the official criteria — and you did it from your own experience."

Show the (simplified) compliance summary: "Erdpuls meets 86% of the quality criteria. Your dots just showed which ones you experienced today. Look — the areas where Erdpuls scores highest are the same areas where your dots were greenest."

"But here's the important part: you didn't need to read the criteria to recognize them. You felt them. Good learning has qualities you can recognize from the inside."

Ages 13–18 (25 min): Distribute a printed one-page summary of the seven BNE quality areas with their key criteria (translated into clear German, not bureaucratic language). Let students read for 5 minutes.

"Compare: the criteria you just rated against the official framework. Where does your evaluation match the framework? Where does it diverge? Are there criteria the framework includes that you didn't think of? Are there qualities of your experience that the framework misses?"

This comparison typically reveals: the official framework covers *methods* and *competencies* thoroughly but says little about *feeling*, *surprise*, or *delight*. Students will often point out that their strongest learning moments — the shock of smelling the soil for the first time, the excitement of finding a worm, the argument about where the bioregion ends — are not captured by any formal criterion. This gap between felt quality and measured quality is the workshop's deepest insight.

"Quality frameworks describe what good education looks like from the outside. Your experience tells you what it feels like from the inside. Both matter. If the framework says 'yes' but you say 'no,' there's a problem. If you say 'yes' but the framework says 'no,' there might be something the framework hasn't thought of."

The Experience: Phase 3 — Redesign Challenge (15–20 minutes)

Ages 8–12 (15 min): "If you could change one thing about today's workshop to make it even better learning, what would it be? Look at the red dots — the qualities that were missing. How could we add them?"

Children propose changes. The facilitator writes them on the poster. Common suggestions: "More time to explore on our own" (addressing 3.1.4 if it scored low), "Talk to someone from a different country" (addressing 4.1.1), "Think about what will happen in 50 years" (addressing 4.1.2).

"You just did what the adults who wrote the quality framework do — you evaluated a learning experience and proposed improvements. That's called quality development. And you're nine years old."

Ages 13–18 (20 min): "Design a 30-minute activity that would address the lowest-scoring criterion from your evaluation. Be specific: what would participants do? Where? With what materials? How would it work?"

Groups design, present, and receive feedback. The strongest designs are recorded and genuinely considered for incorporation into future workshops — this is not a simulation but a real contribution to the toolkit's quality development (BNE Area 5).

Sensor Dialogue / Institutional Connection (5 minutes)

"The Erdpuls sensor network measures the garden. The BNE quality framework measures the education. Both are measurement systems. Both produce data. But the most important data about your learning today is not on any dashboard — it's in your memory, in the green and yellow and red dots, in the changes you can feel but might not yet be able to name."

Citizen Science Output

- The "Our Learning Quality Map" poster → photographed and archived as participant evaluation data (contributes to BNE Area 5.2 — Evaluation)
- Student-designed improvement proposals → entered into the toolkit development log
- The gap analysis (felt quality vs. measured quality) → documented as a meta-research finding about BNE assessment limitations

Token Economy Integration

Activity	Token Element
Completing the quality card rating honestly	Cooperation
Providing evidence for quality ratings	Mutualism (data improves the program)
Proposing a workshop redesign	Cooperation + Mutualism
Identifying a quality gap the framework misses	Mutualism + Regeneration

Facilitator Notes

This workshop only works after experience. It cannot be conducted as a standalone session. The reflection requires a genuine preceding experience to reflect upon — without it, the quality criteria remain abstract. The ideal sequence is a full soil, token, or mapping workshop in the morning, followed by this guide in the afternoon.

Honesty requires safety. Children must feel genuinely safe to rate criteria as "red" (not met). If they sense that the facilitator wants all green dots, they will comply. The facilitator should model honesty: "I think the 'thinking about the future' criterion wasn't strongly met today — we focused on the present. Your red dots might agree with me. That's useful information."

The gap between felt quality and measured quality is the point. Do not resolve this gap. It is a genuine epistemological insight: institutional quality frameworks capture some but not all of what makes learning valuable. The experience-quality gap is itself a quality criterion — one the framework doesn't contain.

Facilitator Qualification (Area 6.1): The facilitator should have documented experience working with school-age children in reflective or metacognitive formats, and sufficient knowledge of the Brandenburg BNE Quality Catalog to accurately explain the eight 3.1 methodological criteria and the four Gestaltungskompetenz domains in child-accessible language. Familiarity with the 4A-Pathway model is essential. At least one prior Erdpuls toolkit workshop (as facilitator or participant) is strongly recommended. If children are ages 8–12, standard Grundschul-pedagogical experience satisfies 6.1.1. For mixed-age groups (8–18), a youth-work (Jugendarbeit) background additionally satisfies 6.1.2.

Follow-Up Materials (Area 3.3.3): After the session, participants (and their teachers) may request the full Learning Quality Cards as a classroom set for independent use. The "Our Learning Quality Map" poster created during the session belongs to the group and should be left with them or photographed for their records. The simplified BNE quality summary distributed to ages 13–18 is available as a downloadable OER at erdpuls.ubec.network. Student redesign proposals that are adopted into the toolkit will be credited in the next toolkit version — groups should be informed of this possibility as motivation for the redesign challenge.

Proxemic Design Notes

The proxemic reversal. Every other toolkit workshop moves from public distance (framing, introduction) to intimate distance (hands in soil, bodies in exchange, feet on transect). This guide reverses the direction: it begins at intimate distance (reflecting on personal felt experience) and expands outward to institutional/public distance (the Brandenburg quality framework as an administrative document). The facilitator should manage this expansion gradually — never leap from "what did you feel?" to "here are the 69 criteria." The Learning Quality Cards serve as an intermediate proxemic register: personal enough to connect to experience, structured enough to bridge toward the framework.

Materials at the center maintain embodied connection. The soil samples, token cards, or maps from the preceding workshop, placed at the center of the reflection circle, are not decorative. They are proxemic anchors that prevent the reflection from becoming purely cognitive. When a child reaches out to touch the soil sample while discussing whether criterion 3.1.1 was met, the hand is doing the

metacognitive work: "Yes, I tried something new — I felt it, here, in this handful of earth." Remove the materials and the reflection becomes a talking exercise at social distance. Keep them and it remains grounded at personal distance.

Dot-placing as proxemic judgment. Each child must physically approach the card, stand close enough to read it, and place their dot. This is a personal-distance act of evaluative judgment — the child's body enacts the assessment. If the cards are on the wall and children raise hands from their seats, the proxemic quality is lost; the judgment becomes a vote at social distance rather than a personal evaluation at personal distance.

Guide 2: Die Qualität des Wandels — The Quality of Change

For Adults and Families (Open Community Format)

Overview

Title	Die Qualität des Wandels / The Quality of Change / Jakość zmiany
Target Group	Adults, families, community members, participants in the Erdpuls annual program
Group Size	8–20
Duration	Half day (2.5–3 hours including meal) — as an end-of-season or annual reflection
Location	Zone E (Heritage & Community Hub)
Season	Late autumn or winter — as a reflective closing to the active season
Learning Objectives	By the end of this workshop, participants will: (1) map the gap between sustainability knowledge and actual behavior across one full season, with specific evidence for each entry; (2) categorize personal changes across four dimensions (Head/Hands/Heart/Habit) and identify where their season's experience was strongest and weakest; (3) evaluate the Erdpuls program using official BNE quality vocabulary, selecting at least one strong area and one development area with specific evidence; (4) make a personally committed quality-action promise for the coming season, to be revisited at the following year's session
Sustainability Dimensions	Social (community accountability; values-action gap as a shared rather than individual challenge); Economic (consumption behavior change, repair-café engagement, local food sourcing as economic sustainability practice); Ecological (seasonal engagement with the local landscape; connection between soil knowledge and food choices); Cultural (the season's shared work as a community narrative; the repair and making culture as heritage skill preservation)

SDG Links	SDG 4 (Quality Education — participatory program evaluation by adult learners); SDG 12 (Responsible Consumption and Production — behavioral change toward sustainable consumption as the primary outcome metric); SDG 11 (Sustainable Cities and Communities — community-based program evaluation as civic participation)
4A-Pathway Focus	Full pathway reviewed, with emphasis on the Attitude → Action transition: did the season's experiences produce behavioral change?
Practical Connection	Program evaluation, BNE certification evidence, community feedback, personal sustainability commitments
Methodological Foundations	Values-action gap research (Eurobarometer 2021; Kaiser & Wilson 2004): behavioral change requires structured reflection on the gap between values and action, not more information. End-of-season reckoning format: established in adult learning programs (Jarvis 2006). Participatory evaluation theory (Patton 2010): program quality is most accurately assessed by participants, not external evaluators. Proxemics (Hall 1966): intimate-to-social distance arc supports transition from private accountability (Values-Action Map) to public program feedback (Quality Compass).

The Pedagogical Challenge with Adults

Adults approach sustainability education with the values-action gap already installed. They know — intellectually — that they should consume less, drive less, waste less. The gap between knowing and doing is not a knowledge problem; it is a motivation, habit, and systemic problem. The BNE quality framework addresses this gap through quality criteria like "action-orientation" (3.1 handlungsorientiert-aktivierend) and "design competencies" (Area 4), but the criteria themselves do not bridge the gap. Only experience bridges the gap — and only reflection on experience makes the bridging visible.

This workshop asks adults who have participated in one or more Erdpuls activities over the season to reflect on whether those experiences actually changed anything: in their knowledge, their attitudes, their habits, their actions. The BNE framework provides the vocabulary for this reflection; the adults' honest self-assessment provides the data.

Preparation and Materials

- A printed "Season Summary" for each participant — a one-page record of the workshops they attended (from token records and attendance logs), with space for personal annotation
- The "Values-Action Map" worksheet (A3, printed):
 - Left column: "What I know I should do for sustainability"
 - Middle column: "What I actually did this season"

- Right column: "What changed between knowing and doing — and why"
- A printed summary of the seven BNE quality areas (in plain German, one page)
- The "Quality Compass" — a large wall poster with four quadrants:
- **Head** (knowledge gained), **Hands** (skills practiced), **Heart** (values shifted), **Habit** (behaviors changed)
- Sticky notes (four colors, one per quadrant)
- Materials, photographs, and outputs from the season's workshops displayed around the room

Welcome and Framing (15 minutes)

Proxemic note: The room should be arranged as an Erzählcafé — circular seating, warm beverages, the season's workshop outputs (maps, token ledgers, photographs, pattern cards) displayed on tables and walls around the perimeter. Participants arrive into a space that is a visual and tactile summary of the season's shared experience. This arrangement places the season's work at social distance (on the walls, viewable from seats) while placing participants in personal-distance relationship with each other (circular seating, shared food). The evening's work will move between these two registers: looking outward at the evidence (social distance), looking inward at the self (intimate distance).

"This evening is not a workshop — it is a reckoning. A gentle one, but honest. You have spent a season at Erdpuls — observing soil, mapping your bioregion, exchanging skills, participating in a reciprocal economy. Did it matter? Not 'was it enjoyable?' — that's a different question. Did it *change* anything? In your knowledge, your habits, your sense of connection to this place? Tonight we find out."

The Experience: Phase 1 — Values-Action Mapping (30 minutes)

Each participant receives the Values-Action Map worksheet.

Step 1 (10 min): In the left column, list 5–7 things you *know* you should do for sustainability — the knowledge you already had before this season. (Typical entries: reduce car use, eat locally, compost, save energy, engage politically, know your landscape, teach my children about nature.)

Step 2 (10 min): In the middle column, honestly record what you *actually did* this season. Be specific. Not "I tried to be more sustainable" but "I started composting in August" or "I walked the transect and for the first time understood where my water comes from" or "I repaired my bicycle at the Repair Café instead of buying a new one."

Step 3 (10 min): In the right column, reflect on the gap — or the bridge — between knowing and doing. "What made the difference? If I acted, what enabled it? If I didn't, what stopped me?"

Proxemic note — the Values-Action Map as intimate document: This worksheet is a private, intimate-distance encounter with one's own inconsistencies. The facilitator should not ask anyone to read their left column aloud — it contains the participant's self-judgment. The sharing, when it comes, should be voluntary and drawn from the middle and right columns: what I did and what helped. The proxemic

arrangement matters: the table or lap where the participant writes should feel like private space. Circular seating with adequate personal space (not shoulder-to-shoulder) allows this privacy while maintaining the social container.

The Experience: Phase 2 — Quality Compass (30 minutes)

Move to the wall poster. Distribute sticky notes in four colors.

"Now let's categorize what changed. On the green note, write something your *head* learned — a fact, a connection, an understanding you didn't have before. On the blue note, something your *hands* learned — a skill you practiced, a technique you tried. On the red note, something your *heart* shifted — a value, an attitude, a feeling about this place or about sustainability. On the yellow note, something that changed in your *habits* — an actual behavior that is different now from before the season."

Participants write and place their notes on the compass. The visual pattern that emerges is diagnostic: a cluster of green notes (lots of knowledge gain) but few yellow notes (little behavioral change) reveals that the season's programming was strong on information but weak on action-bridging. Abundant blue and red notes but few green notes reveals experiential depth without cognitive framework. The pattern is the program's quality portrait — painted by its own participants.

Group discussion (15 min): "Where are the clusters? Where are the gaps? What does this pattern tell us about the quality of what we did this season?"

Proxemic note: The sticky-note placement is a social-distance activity — walking to a wall, reading others' contributions, placing your own in public view. This is a deliberate proxemic expansion from the intimate Values-Action Map. The facilitator can make the expansion explicit: "A moment ago you were reflecting privately on your own experience. Now you're sharing that reflection with the room. Notice how the quality of the reflection changes when it moves from private to public — some things are easier to write on a wall than to say aloud, and some things are harder."

The Experience: Phase 3 — The Quality Framework Encounter (30 minutes)

Distribute the one-page BNE quality area summary. Allow 5 minutes for reading.

"This is the official framework that the state of Brandenburg uses to evaluate sustainability education providers. Seven quality areas, 69 criteria. Erdpuls has been assessed against these criteria and meets 86% of them fully. But the framework evaluates *us* — the provider. It does not evaluate *you* — the participant. Tonight we reverse the direction: you evaluate your own experience using the framework's vocabulary."

Exercise (15 min): In pairs, select one quality area that resonates with the season's experience and one that feels absent or weak. For each: - **Resonates:** "Area 3 (Methods) is strong because I genuinely experienced something new when I knelt in the soil — that was 3.1.1 (erleben, erproben) and 3.1.7

(ganzheitlich). I wasn't told about soil; I was in the soil." - **Absent:** "Area 4.1.2 (foresight, scenario analysis) was weak — we spent a lot of time on the present state of the landscape but didn't spend enough time imagining what it might look like in 2050."

Group discussion (10 min): Pairs share. The facilitator records on a flip chart. Patterns emerge — the same strengths and gaps identified independently by multiple pairs gain credibility as genuine program feedback.

"You have just conducted a quality evaluation of the Erdpuls program — using the official framework, applied from the participant perspective. This data is valuable: it will be used to improve next season's programming. Quality development is not something that happens in an office — it happens when participants tell the truth about their experience."

Closing and Meal (30 minutes)

Each participant receives a "Personal Quality Commitment" card:

Next season, one thing I want to move from the "knowing" column to the "doing" column is: _ One quality of this season's experience that I want to find again is: One quality that was missing that I want next season to include is: __

Cards are collected (with copies retained by participants). They become planning input for the next season — genuine participant-driven quality development (BNE Area 5.1).

The shared meal connects to the reflection: "This food came from the bioregion you mapped, the garden you tended, the soil you observed. Eating it is the shortest bridge between knowing and doing — you are, right now, acting on your bioregional knowledge."

Citizen Science Output

- Values-Action Maps (anonymized, with consent) → analyzed as values-action gap research data
- Quality Compass pattern → photographed and archived as participatory evaluation (BNE Area 5.2)
- Quality area assessments from pairs → compiled as participant evaluation data for annual report
- Personal Quality Commitment cards → become next season's planning input

Token Economy Integration

Activity	Token Element
Completing the Values-Action Map honestly	Cooperation
Contributing to the Quality Compass	Mutualism (data improves program)
Evaluating against the BNE framework	Cooperation + Mutualism

Activity	Token Element
Making a Personal Quality Commitment	Regeneration (commitment to future action)
Returning next season and reporting on the commitment	Regeneration

Facilitator Notes

The Values-Action Map requires trust. Adults are not accustomed to being asked "did you actually change?" in a group setting. The left column (what I know I should do) can feel like a confession. The facilitator should normalize the gap: "Everyone in this room — including me — has a gap between knowing and doing. The question is not whether the gap exists but whether it narrowed this season."

The Quality Compass is a program diagnostic. Take the pattern seriously. If participants consistently report knowledge gain without behavioral change, the program is informational, not transformational. If they report behavioral change without cognitive framework, the program is experiential but not literate. Use the data.

The BNE framework encounter should not feel bureaucratic. The criteria are written in institutional language. The facilitator's job is translation: "3.1.5 (reflektiert) means: did the workshop give you time to think about what you experienced? Not just do-do-do, but do-and-think. Did it?"

Facilitator Qualification (Area 6.1): The facilitator should have documented experience in adult community education (Erwachsenenbildung) and comfort facilitating honest self-assessment in group settings where participants may feel exposed. Familiarity with values-action gap research is beneficial. An Erdpuls core team member who has participated in at least one full annual program cycle satisfies 6.1.2 through demonstrated personal experience with the program being evaluated.

Follow-Up Materials (Area 3.3.3): Personal Quality Commitment cards are retained by participants for self-referencing; copies are held by the Erdpuls facilitation team for next-season planning. Anonymized Quality Compass data is archived in the Erdpuls evaluation record (accessible on request per CC BY-SA terms). Participants who wish to continue engagement — for instance, to take on a facilitator role in a future season — can contact erdpuls@ubec.network. The full BNE quality area summary distributed during the session is available as a downloadable OER at erdpuls.ubec.network.

Proxemic Design Notes

The proxemic arc: intimate → social → institutional → intimate. The session begins at intimate distance (private reflection on the Values-Action Map), expands to social distance (Quality Compass on the wall, group discussion), expands further to institutional/public distance (the BNE framework as a state document), then returns to intimate distance (the Personal Quality Commitment card — a private promise). The facilitator should recognize each transition and pace it deliberately. Do not distribute the

BNE summary while participants are still in the intimate register of the Values-Action Map — the institutional language will feel jarring. Allow the Quality Compass phase to build social comfort before introducing the framework.

The season's artifacts as proxemic archive. The photographs, maps, token ledgers, and pattern cards displayed around the room are not decoration. They are a proxemic record of the season's shared experience — each one produced at a specific proxemic distance (hands in soil, bodies around a map, faces across a repair table). Looking at them from the social distance of the seated circle activates a proxemic memory: "I remember how close I was to the soil when I smelled it. I remember the warmth of the repair workshop." This proxemic memory is the embodied substrate that makes the quality reflection authentic rather than abstract.

Guide 3: Bildung über Generationen — Education Across Generations

For Elders and Intergenerational Groups

Overview

Title	Bildung über Generationen / Education Across Generations / Edukacja przez pokolenia
Target Group	Older residents (60+), paired with younger participants
Group Size	8–16 (balanced elder/younger)
Duration	2–2.5 hours
Location	Zone E (Heritage & Community Hub)
Season	Winter — when the season's active programming has concluded and reflective work feels natural
Learning Objectives	By the end of this workshop, participants will: (1) articulate the characteristics of environmental education quality from at least two distinct historical paradigms (e.g., DDR-era, post-reunification, contemporary BNE); (2) identify at least three continuities and three discontinuities in quality criteria across these educational eras; (3) name at least two qualities of "good" sustainability education that the formal BNE framework does not capture, supported by specific memory evidence; (4) contribute documented oral history testimony that functions as longitudinal educational quality research data
Sustainability Dimensions	Social (intergenerational knowledge transfer; community memory as educational resource; care relationship between elder and young participants); Cultural (DDR <i>Heimatkunde</i> , <i>Schulgarten</i> , <i>Wandertage</i> as heritage educational forms; oral history as cultural preservation); Ecological (historical practical nature engagement — <i>Schulgarten</i> growing, landscape walking — as ecological sustainability practice; comparison of nature-connection across eras); Economic (necessity-based learning as an economic sustainability model: "we grew food because food was scarce")

SDG Links	SDG 4 (Quality Education — temporal depth: evaluating educational quality across 70 years); SDG 11 (Sustainable Cities and Communities — intergenerational connection as community sustainability); SDG 17 (Partnerships for the Goals — elder-youth co-facilitation as intergenerational partnership)
4A-Pathway Focus	Acknowledgment (elders' lifelong learning experiences as quality data)
Unique Value	Elders have experienced multiple educational paradigms — their comparative testimony is a temporal quality assessment no survey can replicate
Methodological Foundations	Oral history methodology (Thomson 1990; Portelli 1991): personal memory testimony constitutes legitimate historical and educational research data. Intergenerational learning theory (Hatton-Yeo & Ohsako 2000): elder-younger co-learning produces outcomes neither group achieves alone. Kaffeeklatsch as pedagogy: warm, food-mediated, circular space activates associative memory more effectively than interview or lecture formats (supported by proxemics research, Hall 1966). DDR educational context: documented in Brandenburg regional education history literature.

The Core Principle: Education Quality Across Time

An elder who grew up in the DDR experienced a specific sustainability education paradigm (Umwelterziehung — environmental education embedded in socialist ideology, strong practical nature engagement, limited critical thinking about systemic causes). An elder who lived through reunification watched this paradigm dissolve and be replaced — imperfectly — by the BNE framework. An elder who has now participated in Erdpuls workshops has experienced a third paradigm: experiential, participatory, technology-integrated, multi-dimensional.

This temporal range — three or more educational paradigms experienced in one lifetime — is a quality dataset that no institutional evaluation can generate. The elder's comparison ("What we learned about nature in school was practical but not critical; what Erdpuls does is both practical and critical, but sometimes too fast") is a quality assessment of extraordinary value.

This guide is therefore structured as a comparative quality dialogue: elders describe what "good" sustainability education looked and felt like at different points in their lives, and the group discovers that quality criteria are not fixed — they evolve with political context, ecological understanding, and pedagogical philosophy.

Preparation and Materials

- Comfortable seating in a well-lit room, Kaffeeklatsch atmosphere

-
- Warm beverages and Kuchen served throughout
 - A timeline displayed on the wall or table: key decades (1950s, 1960s, 1970s, 1980s, 1990s, 2000s, 2010s, 2020s) with space for notes beneath each
 - The "Education Memory Prompt" cards (A5, large print) — one set per elder:
 - "My first memory of learning about nature or the environment"
 - "The best teacher or learning experience I ever had about the natural world"
 - "Something I learned about my landscape that no classroom taught me"
 - "How sustainability education has changed in my lifetime"
 - "What today's young people should know that my generation already knew"
 - "What today's education does better than mine did"
 - A simplified BNE quality summary (large print, plain German)
 - Audio recorder (with consent)

Welcome and Framing (15 minutes)

Seated, beverages served. The timeline is visible.

Proxemic note: The Kaffeeklatsch arrangement is essential — circular seating, shared food and drink at the center, personal-distance intimacy. This is the spatial register in which elder testimony flows most naturally. A classroom arrangement (rows, a podium, a projector) would produce formal, guarded responses. The circular, warm, beverage-mediated space produces associative, emotionally grounded testimony that constitutes this workshop's primary data.

"Today we're going to do something that no quality evaluation in any office in Potsdam can do: we're going to assess the quality of sustainability education across seventy years — using your memories as the measurement instrument.

Each of you has experienced education about nature, environment, landscape, and sustainability in a specific historical context. Some of you learned about nature in DDR schools — *Heimatkunde*, *Schulgarten*, *Arbeitslehre*. Some of you learned outside school — from parents, from the land, from necessity. Some of you have now experienced Erdpuls workshops. Each of these was a different kind of education with different qualities. Tonight we compare them — honestly, without nostalgia and without dismissal."

The Experience: Phase 1 — Education Memory Harvest (40 minutes)

Distribute the Education Memory Prompt cards. Elders choose 2–3 prompts that resonate (they need not answer all). Younger participants serve as scribes and interviewers — seated beside their elder partner, writing notes, asking follow-up questions.

Allow 20 minutes for pair conversation. Then each pair shares one memory or insight with the group (15 min). The facilitator places key observations on the timeline wall.

Typical revelations from Brandenburg elders: - "We had a *Schulgarten* in every school. Every child grew vegetables. There was no theory about sustainability — we just did it because food was scarce." - "After reunification, the school garden disappeared. They said it was old-fashioned. Now Erdpuls has a garden and calls it 'sustainability education.' We called it 'lunch.'" - "We went on *Wandertage* — walking days. The teacher knew every plant, every bird. There was no technology, no sensors, no tokens. Just walking and naming." - "The DDR taught us to love our *Heimat* — but not to question how it was managed. The factory poisoned the river and we were told to be proud of production. That was not good environmental education." - "What Erdpuls does differently is that it asks us to *think*, not just to obey. In my school, asking 'why?' was dangerous."

The Experience: Phase 2 — Quality Criteria Through Time (30 minutes)

Introduce the simplified BNE quality summary. Read the seven quality areas aloud.

"These are the criteria that today's framework uses. Now: let's see which criteria were present in your educational experience — and which were missing."

Exercise: For each quality area, the group assesses: "Was this quality present in the education you received?"

Quality Area	DDR era (typical elder assessment)	Post-reunification	Erdpuls
1. Goals and target groups	Strong (clear goals, defined by state)	Unclear (transition confusion)	Clear (4A-Pathway, values-action gap)
2. Multi-dimensional approach	Weak (ecological + ideological, not economic or cultural)	Moderate (environmental as add-on)	Strong (all four dimensions integrated)
3. Action-oriented methods	Strong (school gardens, practical work)	Weak (textbook-based)	Strong (hands-on, experiential)
4. Design competencies	Mixed (practical skills strong, critical thinking suppressed)	Improved (critical thinking encouraged)	Strong (all 12 sub-competencies)
5. Quality development	Absent (state-defined, no participation)	Emerging	Active (participant evaluation, iterative design)
6. Facilitator qualification	High (trained teachers, nature guides)	Declined (generalist teachers)	Diverse (specialists, practitioners, elders as co-facilitators)

Quality Area	DDR era (typical elder assessment)	Post-reunification	Erdpuls
7. Organizational conditions	Strong (state-funded infrastructure)	Weakened (rural decline)	Rebuilding (heritage campus, community ownership)

The table fills through dialogue, not lecture. Elders will complicate every row — "The DDR had strong practical methods, but the goals were ideological, not genuinely ecological." "After reunification, critical thinking improved but practical skills collapsed — my granddaughter can debate climate change but can't identify five trees."

The Experience: Phase 3 — The Quality the Framework Misses (20 minutes)

"Now look at the framework. Is there a quality of the education you received — in any era — that these seven areas do not capture?"

This question typically produces the workshop's deepest insights: - "Continuity. I learned about nature because I was in it every day — not in a workshop once a month. No framework measures continuity of engagement." - "Necessity. We learned about food and soil because we had to. The education had consequences. If you planted badly, you didn't eat. No framework measures the stakes." - "Community. Everyone in the village knew the same things. The education was collective, not individual. Your neighbor taught you what school didn't." - "Respect for the land. Not as a value you talk about — as a practice you live. The framework talks about 'empathy for nature' but it's a skill to develop, not a way of being."

The facilitator records these unmeasured qualities. They constitute a meta-critique of the BNE framework itself — a critique that only temporal perspective can produce.

Citizen Science Output

- Education Memory records (audio, with consent) → transcribed and archived as oral history
- The quality-across-time comparison table → documented as longitudinal educational quality data
- The "qualities the framework misses" → compiled as a contribution to BNE quality framework development
- The completed timeline → photographed and archived

Token Economy Integration

Activity	Token Element
Sharing education memories	Reciprocity (knowledge flows to younger generation)
Scribing and recording (younger participants)	Reciprocity
Contributing to the quality comparison table	Mutualism (data improves program and framework)
Identifying unmeasured quality criteria	Mutualism + Regeneration

Facilitator Notes

DDR educational memory is politically charged. Some elders will defend DDR education proudly; others will critique it sharply. Neither response should be suppressed. The facilitator's role is to maintain the quality-assessment frame: "We are not asking whether the DDR was good or bad. We are asking: what qualities did its environmental education have, and what qualities did it lack?"

Nostalgia is data, not error. When an elder says "Everything was better before," the facilitator should not correct but explore: "What specifically was better? Can you give an example? What quality was present then that is absent now?" The answer often reveals a genuine quality loss (practical skills, continuity, community integration) that the BNE framework should acknowledge.

The youngest participants bring essential perspective. A 16-year-old who has experienced both conventional school and Erdpuls workshops can provide a comparative assessment from the contemporary side. Their voice prevents the discussion from becoming purely retrospective.

Facilitator Qualification (Area 6.1): This guide requires specific sensitivities beyond standard BNE facilitation competency. The facilitator should have experience with intergenerational group formats and demonstrable awareness of the political complexity of DDR educational memory — a topic that can be deeply personal. It is strongly recommended that the lead facilitator be accompanied by an elder co-facilitator from the Müllrose or broader Schlaubetal community who can vouch for the session's relational safety. This intergenerational co-facilitation model also directly enacts the guide's own principles. An elder community member with lived educational experience satisfies 6.1.2 for the co-facilitator role without requiring formal pedagogical credentials.

Follow-Up Materials (Area 3.3.3): Audio recordings (with consent) are transcribed and archived as oral history research data; participants receive a copy of their own testimony transcript. The completed timeline photograph is shared with all participants. The "qualities the framework misses" list is compiled into the Erdpuls quality development log and sent to participants as a follow-up document. Participants who wish to contribute further memories or to invite others into the oral history project may contact

erdpuls@ubec.network. Elder participants who become regular contributors may be recognized as community co-researchers within the Erdpuls program, with access to the token economy's Reciprocity stream.

Proxemic Design Notes

The Kaffeeklatsch as quality infrastructure. As in the other elder guides, the warm-beverage-and-cake spatial arrangement is not hospitality — it is the proxemic condition under which elder educational memory surfaces. Remove it and the session becomes an interview at social distance. Maintain it and it becomes a kitchen-table conversation at personal distance. The quality of the data depends on the proxemic quality of the setting.

The timeline as proxemic expansion across time. The wall timeline functions like the bioregion maps in Appendix C — it extends the proxemic field from the present moment outward, in this case through time rather than space. When an elder walks to the timeline and places a note at "1965," they are physically locating a memory in temporal space. The younger scribe standing beside them, writing the note, is bridging proxemic distances: their body is in 2026 while the elder's memory is in 1965. The timeline makes this temporal proxemic encounter visible and spatial.

Guide 4: Wer bestimmt, was gut ist? — Who Defines Quality?

For Artists and Researchers (Residency-Depth Immersion)

Overview

Title	Wer bestimmt, was gut ist? / Who Defines Quality? / Kto decyduje, co jest dobre?
Target Group	Artists-in-residence, visiting researchers, citizen science fellows
Group Size	1–6 (seminar format)
Duration	Initial session: 2.5–3 hours. Ongoing integration throughout the residency.
Location	Zone E (seminar setting)
Season	Any — timed to early residency, after the resident has experienced at least one toolkit workshop
Learning Objectives	By the end of the initial session, participants will: (1) identify at least three epistemological assumptions and one power dimension embedded in the Brandenburg BNE Quality Catalog through guided textual archaeology; (2) produce a comparative table of BNE quality criteria alongside 5–7 quality criteria from their own discipline; (3) draft a "counter-framework" or "complement framework" for Erdpuls with at least five original quality criteria addressing gaps in the institutional framework. By end of residency: (4) contribute a written critical quality reflection (1,000–3,000 words) from their disciplinary perspective to the Erdpuls quality archive.
Sustainability Dimensions	Cultural (artistic and research methodologies in dialogue with institutional frameworks; creativity as a sustainability competency); Social (critical analysis of who defines educational quality and whose interests are served); Ecological (interrogating whether ecological depth and direct nature experience are adequately measured in current frameworks); Economic (questioning the economic rationality assumptions in educational quality measurement systems)

SDG Links	SDG 4 (Quality Education — meta-level: producing new knowledge about educational quality itself); SDG 9 (Industry, Innovation, and Infrastructure — counter-frameworks as educational innovation); SDG 17 (Partnerships for the Goals — interdisciplinary knowledge production as partnership between artistic/scientific and educational domains)
4A-Pathway Focus	Attitude (critically examining who defines educational quality and why) and Action (producing an original contribution to quality framework discourse)
Unique Value	Artists and researchers are trained to interrogate institutional frameworks — their critical engagement with BNE quality criteria produces meta-analysis that the framework itself cannot generate
Methodological Foundations	Critical discourse analysis (Fairclough 2003): institutional documents embed power relations and can be read against the grain. Disciplinary epistemology comparison (Becher & Trowler 2001): different disciplines construct quality differently; comparison is productive. Seminar pedagogy: personal-distance group dialogue produces richer critical analysis than lecture or survey methods (Hall 1966). Goethean observation extended to text: the same careful "what is present?" attentiveness applied to natural phenomena can be applied to institutional documents (Bortoft 1996).

The Seminar Context

Artists and researchers bring a critical capacity that other target groups rarely exercise in institutional contexts: they are trained to question frameworks, not merely apply them. A quality framework that passes through an artist's or researcher's critical lens emerges either strengthened (its genuine insights confirmed) or transformed (its blind spots exposed).

This workshop does not teach the BNE quality framework — the resident has access to Appendix D and can read it independently. Instead, it uses the framework as a text for critical analysis: What assumptions does it embed? Whose interests does it serve? What does it measure and what does it systematically miss? How does it compare to quality frameworks the resident has encountered in their own discipline (art criticism, peer review, grant evaluation, exhibition curation)?

The workshop operates at the intersection of education theory, institutional analysis, and the resident's own disciplinary expertise — producing cross-pollination that no single-discipline analysis could achieve.

The Session: Part 1 — Quality Archaeology (45 minutes)

Distribute the full Brandenburg BNE Quality Catalog (or the comprehensive Appendix D summary). Allow 15 minutes for reading.

Proxemic note: Arrange the seminar at personal distance — a small circle of comfortable chairs, close enough to read facial expressions and hear soft speech. The BNE catalog is a dense institutional document; reading it in a lecture hall would produce dutiful compliance. Reading it in an intimate seminar setting produces critical engagement. Place a printed copy at the center of the group as a shared text that participants can point to, annotate, and physically handle.

"You've just read a quality framework — a document that defines what 'good' sustainability education looks like in Brandenburg. Now let's do an archaeology of this text. An archaeology asks: what layers of assumption, history, and power are buried in this apparently neutral document?"

Guided questions:

Who wrote it? "The effect dialog evaluation consulting eG, commissioned by the Brandenburg Ministry. Who are they? What is their disciplinary background? What do they consider self-evident that a different author might not?"

What does it measure? "The framework measures observable qualities — methods, competencies, organizational conditions. What does it NOT measure? Emotion? Transformation? Beauty? Surprise? Discomfort? Are these unmeasurable, or merely unmeasured?"

What model of learning does it assume? "The framework assumes a provider-participant model: an organization offers education, participants receive it. Does this model capture what happens at Erdpuls — where participants are also providers (elders teach, residents contribute data, token-holders co-govern)?"

What model of sustainability does it assume? "The four dimensions (ecological, economic, social, cultural) are listed as if they are separate and equal. Are they? Is the economic dimension of sustainability genuinely on par with the ecological? Who benefits from treating them as equivalent?"

Discussion proceeds for 30 minutes. The facilitator participates as a co-analyst, not a neutral moderator — the seminar is a genuine intellectual dialogue.

The Session: Part 2 — Cross-Disciplinary Quality Comparison (45 minutes)

"Now: you have your own quality frameworks. Every discipline has them, even if they're not formalized. In art: what makes a 'good' exhibition? In science: what makes a 'good' study? In design: what makes a 'good' product? In writing: what makes a 'good' text?"

Exercise (20 min): Each resident writes a brief "Quality Framework for My Discipline" — 5–7 criteria that define quality in their field. These might include: originality, rigor, relevance, beauty, impact, accessibility, honesty, craft, risk, coherence.

Comparison (25 min): Lay the resident's quality criteria alongside the BNE quality criteria. Where do they overlap? Where do they diverge? What does the BNE framework include that no artistic or scientific framework would? What does the artistic or scientific framework include that the BNE framework lacks?

Typical discoveries: - The BNE framework says nothing about *beauty* or *craft* — qualities that are central to artistic practice and might be central to educational quality - The BNE framework emphasizes *competency development* but says little about *perception transformation* — the Goethean quality that Erdpuls prioritizes - Scientific quality frameworks emphasize *reproducibility* and *falsifiability* — qualities that experiential education cannot and perhaps should not pursue - The BNE framework is *descriptive* (what good education looks like) but not *generative* (how to create it) — the missing step between framework and practice

The Session: Part 3 — Designing a Counter-Framework (45 minutes)

"If you were to design a quality framework for Erdpuls — drawing on your discipline's quality criteria, your experience of the toolkit, and your critique of the BNE catalog — what would it include?"

Each resident drafts a "Counter-Framework" or "Complement Framework" — not to replace the BNE catalog but to enrich it with criteria the institutional framework misses.

Examples of criteria residents have proposed: - **Proxemic depth:** "Does the education bring participants into intimate sensory contact with the subject matter, or does it operate at social/public distance?" (Drawing on Hall's framework as integrated throughout the toolkit) - **Temporal resonance:** "Does the education connect to the past (elder memory, historical ecology) and the future (scenario thinking, long-term stewardship), or only to the present?" - **Material honesty:** "Does the education use materials that embody its principles (recycled, local, handmade), or does it teach sustainability with unsustainable materials?" - **Productive discomfort:** "Does the education create moments of genuine uncertainty, surprise, or challenge, or does it only confirm what participants already believe?" - **Lingering effect:** "Does the education produce changes that persist after the session ends — new habits, new perceptions, new commitments — or does the effect dissipate within days?"

Ongoing Integration Throughout the Residency

The critical framework becomes a lens the resident carries: - **Weekly reflection:** "Which BNE quality criteria did my residency activities address this week? Which of my counter-framework criteria were present?" - **End-of-residency contribution:** A written reflection (1,000–3,000 words) analyzing Erdpuls's educational quality from the resident's disciplinary perspective. This enters the Erdpuls archive as a critical quality assessment — far richer than any checkbox evaluation.

Citizen Science Output

- Cross-disciplinary quality comparison → documented as meta-educational research
- Counter-framework proposals → compiled as contributions to BNE quality discourse

- End-of-residency critical reflection → archived as longitudinal quality assessment data
- If published: a contribution to the academic literature on experiential sustainability education assessment

Token Economy Integration

Activity	Token Element
Completing the quality archaeology analysis	Cooperation
Producing a cross-disciplinary quality comparison	Mutualism
Drafting a counter-framework	Mutualism + Regeneration
Writing the end-of-residency critical reflection	Mutualism + Regeneration
Presenting findings at a public event	Reciprocity

Facilitator Notes

Intellectual honesty is paramount. Residents will find genuine weaknesses in the BNE framework AND in Erdpuls's implementation. This is not failure — it is the purpose. A quality framework that cannot survive critical analysis is not worth having. The facilitator should welcome critique, take notes, and use the feedback.

The counter-framework is a real contribution. The criteria proposed by artists and researchers — beauty, discomfort, temporal resonance, material honesty, lingering effect — are not whimsical. They address genuine gaps in institutional quality assessment. Compile them across residencies and patterns will emerge.

Avoid defensiveness. When a researcher says "Your methodology for measuring learning outcomes is insufficiently rigorous," the correct response is not defense but engagement: "You're right — how would you design a more rigorous approach that preserves the experiential quality?"

Facilitator Qualification (Area 6.1): This guide operates at the intersection of education theory, institutional analysis, and disciplinary expertise. The facilitator participates as intellectual co-analyst, not instructor. Comfort with academic or artistic critical discourse is essential — the facilitator must be willing to have the BNE framework and Erdpuls's own implementation criticized and to engage that criticism productively. No formal credential is required beyond demonstrated intellectual engagement with BNE quality questions. An Erdpuls core team member with direct experience of multiple toolkit cycles who engages critically with the program's own limitations satisfies 6.1.2.

Follow-Up Materials (Area 3.3.3): Counter-framework proposals are compiled in the Erdpuls quality development archive and shared back with the resident after the session in a summary document. End-of-residency reflections are archived with the resident's permission and, where appropriate, developed into academic contributions. Residents who wish to continue collaboration after their residency — including as external evaluators, co-authors, or advisory committee members — may contact erdpuls@ubec.network. The full Appendix D alignment document (Pattern Discovery Toolkit) is available as OER and serves as the primary preparatory and follow-up text for this guide.

Proxemic Design Notes

The seminar as proxemic intimacy. The small group (1–6 people), personal-distance seating, shared text at center, no table barrier during discussion — this is the most proxemically intimate intellectual format in the toolkit. The quality of the critical analysis depends on the proxemic quality of the setting: institutional distance produces institutional analysis, personal distance produces personal insight. The facilitator should be a participant in the circle, not a presenter at the front.

The BNE catalog as institutional object. The physical document — its bureaucratic formatting, its committee authorship, its ministerial imprimatur — carries a proxemic quality: it is a public-distance text, designed to be read at arm's length in an office, not felt in a garden. Placing it at the center of an intimate seminar circle creates a productive proxemic tension between the document's institutional distance and the seminar's personal distance. The critical analysis operates in this tension: the resident reads an institutional text from a personal position, and the gap between positions generates insight.

Guide 5: Qualität ohne Grenzen — Quality Without Borders

For Cross-Border Groups (DE/PL Trilingual, Intercultural)

Overview

Title	Qualität ohne Grenzen / Quality Without Borders / Jakość bez granic
Target Group	Mixed German-Polish groups, education professionals, cross-border community members
Group Size	12–24 (balanced German and Polish participants)
Duration	Full day (5–6 hours including shared meal)
Location	Zone E (Heritage & Community Hub)
Season	Any — often scheduled as part of a bilateral exchange program
Learning Objectives	By the end of this workshop, participants will: (1) present the key structure and priority criteria of their national sustainability education framework to cross-national partners, in a format accessible to non-specialists; (2) identify at least five criteria that converge across the German and Polish frameworks (different terminology, same principle) and at least two genuine divergences; (3) formulate 5–8 shared cross-border quality principles, written in at least two languages, that both delegations endorse; (4) produce design elements for a Cross-Border Quality Audit tool — minimally a criteria list, a proposed evidence method for one criterion, and an institutional recognition proposal

Sustainability Dimensions	Social (cross-border cooperation; educational equity across EU border regions; language as both barrier and bridge); Cultural (German-Polish shared glacial landscape as common educational heritage; multilingual quality discourse; Polish grassroots environmental education tradition alongside German institutional framework); Ecological (the Naturpark Schlaubetal ecosystem as the shared landscape that neither national framework can fully address alone; transboundary ecological quality as educational common ground); Economic (EU cross-border funding frameworks, INTERREG cooperation mechanisms as the institutional-economic sustainability infrastructure that makes cross-border education possible)
SDG Links	SDG 4 (Quality Education — transnational quality definition and recognition); SDG 17 (Partnerships for the Goals — formal cross-border educational partnership as a direct SDG 17 action); SDG 10 (Reduced Inequalities — bridging institutional disparities between German and Polish ESD infrastructure)
4A-Pathway Focus	Full pathway; emphasis on Acknowledgment (quality criteria converge across borders even when institutions diverge) and Action (designing cross-border quality principles)
Methodological Foundations	Comparative education methodology (Bray et al. 2007): systematic framework comparison reveals structural assumptions invisible within a single national context. Intergroup contact theory (Allport 1954, updated Pettigrew & Tropp 2006): mixed-group over shared task at personal distance reduces intergroup bias more effectively than parallel presentations. Translation as pedagogy: the act of finding equivalent terms across languages produces conceptual clarity (Wittgenstein's language games; Mauss's gift economy as cross-cultural concept). Proxemics (Hall 1966): joint work over a large shared document enacts the cross-border cooperation being theorized.

The Cross-Border Principle

Germany and Poland have different institutional frameworks for sustainability education. The Brandenburg BNE Quality Catalog is one of the most developed in Germany; Poland's approach to ESD (Edukacja dla Zrównoważonego Rozwoju) operates within a different institutional tradition, with different emphases, different administrative structures, and different historical context (Poland's environmental education tradition includes strong grassroots movements, particularly since the Solidarity era).

Yet the ecological reality does not differ across the border. The same glacial landscape, the same water, the same soil, the same climate challenges — these demand the same educational responses regardless of which country's quality framework is applied. The workshop asks: do the quality criteria converge when the institutional wrappers are removed? And if they do, what does that tell us about the universality of good sustainability education?

Preparation and Materials

- The Brandenburg BNE Quality Catalog summary (in German and English)
- A summary of Poland's ESD framework and relevant guidelines (in Polish and English) — prepared in advance with Polish partner
- The "Quality Convergence Matrix" — a large A0 worksheet with German criteria listed vertically and Polish criteria listed horizontally, creating a cross-reference grid
- Bilingual/trilingual sticky notes
- Co-facilitation team (DE + PL)
- Shared meal provisions from both sides
- EU GreenComp framework summary (as a third reference point)

Welcome and Framing (20 minutes)

Both facilitators present. Welcome in DE, PL, and EN.

"If a German child learns about soil at Erdpuls and a Polish child learns about soil at a partner center in Lubuskie — and both have a transformative experience — does it matter that the German program was evaluated against 69 Brandenburg criteria and the Polish program was evaluated against a different set of Polish criteria? Is the quality of the learning the same, even if the quality frameworks are different?"

"Today we compare quality frameworks across the border — not to decide which is better, but to discover what they share. Because if good sustainability education has universal qualities — qualities that transcend institutional and national frameworks — then those qualities are the foundation for cross-border educational cooperation."

The Experience: Phase 1 — Framework Exchange (60 minutes)

Step 1 (30 min): German participants present the Brandenburg BNE framework to Polish participants (in simplified form, translated, with concrete examples from Erdpuls workshops). Polish participants present their framework to German participants.

Proxemic note: This exchange should be arranged in mixed small groups (3–4 people, both nationalities), not as two opposing presentations. The proxemic arrangement — German and Polish participants leaning over the same document, pointing to criteria, translating concepts — enacts the

cross-border cooperation the workshop advocates. If the exchange happens as two national presentations to a seated audience, the proxemic distance reinforces the institutional boundary the workshop aims to bridge.

Step 2 (30 min): Using the Quality Convergence Matrix, mixed groups identify:

- **Convergences:** Criteria that appear in both frameworks (different words, same meaning)
- **Divergences:** Criteria unique to one framework
- **Gaps:** Qualities of good sustainability education that neither framework captures

The matrix typically reveals strong convergence on core principles (participation, action-orientation, multi-dimensionality, critical thinking) and divergence on organizational details (institutional structures, funding mechanisms, certification procedures). The gaps — qualities missing from both frameworks — often align with the counter-framework criteria proposed by artists and researchers in Guide 4.

The Experience: Phase 2 — Shared Quality Principles (45 minutes)

"You've found that the two frameworks converge on fundamental principles, even when they diverge on institutional details. Now: can you formulate a set of shared cross-border quality principles — principles that both German and Polish sustainability education should meet, regardless of which national framework is applied?"

Mixed groups draft 5–8 shared principles. These are written in all three languages and posted on the wall.

Typical shared principles:

- "Good sustainability education begins with direct sensory experience, not with information"
- "Participants must be able to influence what they learn, not merely receive it"
- "The education must address all dimensions of sustainability — ecological, economic, social, cultural — not just the environmental"
- "Quality education produces action, not just knowledge"
- "The education must connect to the participants' real landscape and community, not to abstract global problems"
- "Intergenerational knowledge transfer is a quality indicator"

Shared Meal (45 minutes)

Food from both sides of the border, shared at personal-to-intimate distance. The meal serves its usual cross-border proxemic function: activating all sensory channels simultaneously, dissolving national clustering, creating the relational foundation for the afternoon's collaborative work.

The Experience: Phase 3 — Designing a Cross-Border Quality Audit (60 minutes)

"You have shared principles. Now: how would you evaluate a cross-border sustainability education program? Not a German program or a Polish program — a program that operates on both sides of the border, like what Erdpuls and a Polish partner might create?"

Working groups design a Cross-Border Quality Audit tool. This is a genuine design challenge with real application:

Group A: Criteria Selection. "Which criteria from both national frameworks should be included? Which shared principles should be added? Propose a list of 15–20 cross-border quality criteria."

Group B: Evidence and Methods. "How would you evaluate these criteria? Participant surveys? Observation? Portfolio review? Sensor data? Elder testimony? What counts as evidence of quality in a cross-border context?"

Group C: Institutional Recognition. "If a cross-border program meets the quality criteria you've defined, who recognizes it? The German ministry? The Polish ministry? Both? Neither? An independent cross-border body? How does recognition work when the institution is shared but the administrative systems are national?"

Groups present. Synthesis discussion follows.

The synthesis typically reveals the central insight: cross-border educational quality depends less on institutional frameworks than on relational quality — the depth of the cross-border partnership, the frequency of shared activities, the trust built through repeated cooperation. No quality checklist captures relational depth. The quality audit tool the group designed must therefore include relational indicators alongside procedural ones.

Closing (20 minutes)

Each participant writes one sentence completing: "Quality in sustainability education means — **and it does not stop at the border because** ."

Sentences are read aloud in the language of the writer's choice. The bilingual facilitators translate as needed. The accumulated sentences form a collective definition of cross-border educational quality — drafted by the people who will practice it.

Citizen Science Output

- Quality Convergence Matrix → documented as cross-border comparative education research
- Shared quality principles → formalized as a bilingual reference document
- Cross-Border Quality Audit tool design → developed further for actual use in cross-border programming
- Closing definitions → compiled as a multilingual quality statement

Token Economy Integration

Activity	Token Element
Presenting a national framework to cross-border partners	Reciprocity
Contributing to the Quality Convergence Matrix	Cooperation + Mutualism

Activity	Token Element
Drafting shared quality principles	Cooperation
Designing the Cross-Border Quality Audit tool	Mutualism + Regeneration
Translating during the session	Mutualism (enabling exchanges)

Facilitator Notes

Advance preparation with the Polish partner is essential. The Polish ESD framework summary must be prepared by someone who genuinely knows the Polish educational context — not simply translated from a German summary. Invite a Polish education professional or academic to co-prepare materials.

The institutional comparison can feel dry. The facilitator should keep grounding the criteria in concrete examples: "This criterion says 'action-orientation.' At Erdpuls, that means children who mapped the bioregion then proposed where to place additional sensors. What does action-orientation look like at a Polish partner site? How is it the same? How is it different?"

Power dynamics. Germany's BNE framework is more developed and better resourced than Poland's current ESD infrastructure. This can create an implicit hierarchy. Counter it actively: emphasize Poland's strong grassroots environmental education tradition, the OpenStreetMap Poland community's mapping activism, and the historical role of Polish civil society in environmental advocacy.

Facilitator Qualification (Area 6.1) — Mandatory Requirements: This guide has the most stringent facilitation requirements of the five guides. An active bilingual (DE/PL) co-facilitation team is required, not optional. Neither facilitator can be merely conversationally proficient — both must be able to facilitate substantive educational discussions in their respective language. Additionally, the Polish co-facilitator must have genuine knowledge of the Polish ESD framework and educational context — this cannot be achieved by translating German materials. Advance co-preparation with a Polish education professional (e.g., affiliated with a Polish *centrum edukacji ekologicznej* or university education faculty) for the framework summary materials is essential. Both facilitators satisfy 6.1.2 through their bilingual facilitation competency, cross-border educational experience, and knowledge of their respective national frameworks.

Follow-Up Materials (Area 3.3.3): The Quality Convergence Matrix, shared quality principles, and Cross-Border Quality Audit tool designs are compiled as bilingual documents and distributed to all participants after the session. These documents serve as the foundation for ongoing cross-border programming and should be treated as working documents, not archives. Participants and organizations wishing to continue cross-border quality development work — including developing the Audit tool further for actual use — may contact erdpuls@ubec.network. The EU GreenComp framework summary distributed during the session is publicly available as a European reference document. Erdpuls aims to

develop a formal cross-border partnership agreement (Kooperationsvereinbarung) with at least one Polish partner organization by Phase 2 (2027–2028); participants in this guide are natural founding partners for that agreement.

Proxemic Design Notes

The Quality Convergence Matrix as shared proxemic object. The A0 matrix, spread on a large table, functions like the cross-border maps in the bioregion guides: German and Polish participants lean over the same surface, point to the same cells, negotiate meanings at personal distance. The matrix must be physically large enough that participants from both sides can work simultaneously — if it is too small, participants will take turns rather than collaborating, and the proxemic quality of shared engagement is lost.

Translation as proxemic bridge. As in all cross-border guides, the act of translation bridges linguistic proxemic boundaries. When a Polish participant explains "edukacja w terenie" (education in the terrain/field) and a German participant recognizes it as "Lernen am anderen Ort" (learning at the other place), the translation creates a moment of proxemic convergence: both reach toward a shared meaning from different linguistic positions. The bilingual facilitator should recognize these convergence moments and pause: "You just said the same thing from two different traditions. That's a shared quality principle."

Cross-Guide Reference: Quality Emerges from Many Perspectives

The five BNE quality framework guides, conducted across the annual cycle, produce a multi-perspectival quality assessment that no single evaluation instrument could achieve:

- **Children** provide immediate, unfiltered experience-quality data — their green, yellow, and red dots map the felt quality of the workshop from the inside
- **Adults** provide the values-action bridge assessment — the honest reckoning of whether the season's experiences produced actual behavioral change
- **Elders** provide temporal quality depth — the comparison across educational paradigms that reveals which qualities persist and which are artifacts of a particular era
- **Artists and Researchers** provide critical quality analysis — the disciplinary lens that exposes the framework's assumptions and proposes criteria it lacks
- **Cross-Border groups** provide institutional quality comparison — the discovery that quality principles converge across national borders even when frameworks diverge

The composite quality assessment — built from felt experience, behavioral change data, temporal comparison, critical analysis, and cross-border convergence — is richer than any institutional evaluation. It is also self-improving: the Quality Compass patterns, the counter-framework proposals, the cross-

border quality principles, and the elder quality memories all feed directly into the next season's programming. Quality development (BNE Area 5) is not an administrative exercise conducted in an office — it is a living practice conducted by the community that the education serves.

The proxemic quality arc across guides: Children's quality assessment operates at personal-to-intimate distance (dots on cards, hands reaching for materials from their experience). Adults' assessment spans from intimate (private Values-Action Map) through social (Quality Compass) to institutional (BNE framework encounter). Elders' assessment flows through Kaffeeklatsch intimacy (personal-distance memory harvest) toward temporal-institutional distance (quality-across-time comparison). Artists' assessment operates at seminar intimacy (personal-distance critical dialogue) engaging an institutional-distance text (the BNE catalog). Cross-border assessment operates at social-to-personal distance (mixed groups over shared matrix) engaging national-institutional distance (two countries' frameworks). The composite map of quality, like the composite map of the bioregion, is a portrait of *how educational quality is known at every proxemic distance* — from the child's felt dot to the cross-border institution's quality audit tool.

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