RESILIENCE

lectures/workshops

for

schools, startups, teams, nonprofits,
neighbors, agencies, museums, admins,
universities, businesses, communities

hi@1769.eu

CoPRototyping

Lecture & Workshop

Can businesses profit ~~from~~ with participation? Can nonprofits help people by showing them how to help themselves? Can customers develop a product they need? Can neighbors organize to improve the neighborhood? People with problems are the ones to find solutions! They know their problems from inside. They are the most motivated to overcome their problems. Let's give them tools!

CoPRototyping is when a community of practice (CoP) does prototyping. Tools and principles are arranged into a framework: mindfulness, nature-human-centered, citizen science, design thinking, lean startup, minimal viable, fail fast, flow theory, low-tech, grassroots/ frugal/reverse engineering/innovation, open source, participation, circular economy.

Workshop

The workshop kicks off with a problem: "Why is product x such a flop and how can we make it a success?" "Why are there so many homeless and how can our organization help them?" "What happened to our team and how do we get back the flow?" Various stakeholders, and most importantly the *problem bearers*, participate in the workshop. Empathize, pinpoint root problems, activate creativity, let ideas bubble up, scrutinize them on feasibility and viability, grasp resources, (dis)prove assumptions, prototype, test, iterate. The prototype can become a product, a service, an experience, a startup, an activist group, a technology, a strategy, a study, a PR stunt, a campaign, a policy, a petition, an artwork, a meme or even a movement! Acquire tacit knowledge of group dynamics, team building, conflict, communication, decision-making and ownership.

Team

Stakeholders of the workshop can be c-level, managers, project owners, project managers, designers, developers, engineers, colleagues, facilitators, partners, competitors, critics, curators, scientists, experts, activists, customers, consumers, citizens, neighbors, homeless, laypeople, makers, kids.

Empowerment

What makes this workshop different from other prototyping workshops? The focus is on the empowerment of *problem bearers* such as citizens and consumers. They are far more than just interviewees who are observed and analyzed while doing user tests. They are the source of transformation, the base of innovation! The prototype is open source. All stakeholders are project owners. A participative business model can be developed.

Read more about CoPRototyping: 1769.eu/coprototyping

Duration: 4+ hours / **Age:** 12+ / **Languages:** english, german, spanish

Smart Garden City Design Thinking
Lecture & Workshop

Inflation, rent, stress, traffic, climate. Understanding city problems - finding solutions! How can we come together and improve our quality of life? How can citizens become more self-sufficient, without having time nor space? Can self-sustainability be automated? How can we act locally and connect globally? How can we organize in the neighborhood and live a culture of solidarity? In the pub, as a club, as a CoP (Community of Practice)? What group dynamics do we need to understand to become productive together? Can combining traditional with modern unleash new potentials? Technologies are expensive and complex. How can we simplify, downscale and deploy them for us citizens?

Design Thinking is a method to understand our fellow (human) beings (empathize), to analyze their needs and problems (define), to activate our creativity (ideate) and to find solutions (prototype > test).

Mindmap: aquaponics, artificial intelligence, automation, avataring, biodiversity, bioreactors, circular economy, citizen science, climate change, community garden, community supported agriculture (CSA), CoolSchools, CoPrototyping, do it yourself (DIY), edible city, edible school, farm-to-table, farm.bot, food sovereignty, forest garden, garden city, gentrification, inclusive, inflation, internet of things (IoT), lean, maker culture, minimalism, open source, population density, participation, prepping, quality of life, recycling, resilience, resources, robotics, sustainable development goals, slow food, smart city, smart-irrigation, sponge city, supply chains, urban garden

Duration: 3 hours / **Age:** 12+ / **Languages:** english, german, spanish

Aquaponik

Lecture

Aquaponics combines fish-farming and veggie-growing. It saves water and requires little space. The following topics are covered: Why aquaponics? What is aquaponics? Water-saving, climate resilience, overfishing, biodiversity, carbon-footprint, antibiotics, pesticides, insect vs. fish meal, automated self-sufficiency, CoPrototyping, community supported agriculture (CSA), biochemistry, water quality, internet of things (IoT), history and future, bioreactors

Workshop

We build a simple aquaponics system. We will get to know the principles of programming and microelectronics: Arduino, pump, temperature sensor, PH sensor, solar charge controller, optimize oxygen balance. We can also program the system using Scratch, a programming language for kids.

Prototype

Our aquaponics prototype (xponix 1.0) can be visited in the Prinzessinnengarten. From this project a citizen science group emerged, currently founding the SmartCityFarm e.V. and developing a larger self-sufficiency aquaponics system. Join our CoP!

Duration: 2 hours / **Age:** 12+ / **Languages:** english, german, spanish

Smart-Irrigation

Lecture

Why smart irrigation? Gardening and still going on vacation? Save water, automate self-sufficiency, increase yield, strengthen resilience! The following topics are covered: climate resilience, droughts, food prices, sealed surfaces, sponge city, edible city/school, snack-garden, microclimate, heat waves, evaporative cooling, green chaos, CoolSchools, cognitive development, automated self-sufficiency as grassroots innovation, CoPrototyping and quality of life. We learn about traditional and modern irrigation methods.

Workshop

We build a little, smart irrigation system that saves water and irrigates our snack-plants in the schoolyard, office terrace or garden. Simple programming with Arduino, humidity sensor, pump or valve. We can supply the system with our balcony-power-plant and program it with Scratch, a programming language for kids.

Prototype

Our smart-irrigation-prototype (sí 1.0) can be visited in the Prinzessinnengarten. Join our CoP! Another smart-irrigation-system has been built in the garden of the Manege (Campus Rütli, in collaboration with the Eberswalde University for Sustainable Development and the Technical University of Berlin). The workshop is also provided as teacher training.

Duration: 3 hours / **Age:** 12+ / **Languages:** english, german, spanish

The Positive Design Think Tank
Lecture & Workshop

This workshop is for doomers and preppers. Or those who are a bit worried sometimes. What if.. war escalates? economy crashes? supply chains fail? AI gets out of control? democracy collapses? climate change accelerates? Such questions are legitimate..

..but we don't freeze in fear! Nor bury our heads in sand. Nor fall into a fatalistic worldview. We unite and take action to avert dystopia. With love, creativity and wisdom. We think positive and design a happy future!

Design Thinking is a method that helps us to understand ourselves and fellow (human) beings (empathize), to analyze our/their fears/problems (define), to activate our creativity (ideate) and to find solutions/strategies (prototype > test).

Mindmap: addiction, antibiotic misuse, arms race, artificial (general) intelligence, autonomous weapons, biodiversity loss, bioweapons, blockchain, child labour, climate change, colony collapse disorder, compulsion loop, corruption, cybercrime, deep fake, deforestation, democracy erosion, disaster, discrimination, doomerism, dopamine capitalism, dystopia, economic crisis, ecosystem collapse, ethnocentrism, fake news, famines, fast fashion, fast food, femicide, fossil fuels, gender bias, genocide, gentrification, global supply chain crisis, globalization, great decoupling, guns, hate, high gini coefficient of wealth, homelessness, inflation, intensive livestock, invasive species, loneliness, mass surveillance, micro plastic, misinformation, misogyny, monoculture, monopoly, mutual assured destruction (MAD), nationalism, neo-fascism, nuclear war, oligarchy, opioid epidemic, organized crime, overregulation, pandemics, particulates, pesticides, planned obsolescence, pollution, populism, poverty, prepping, public debt, racism, refugees, resource depletion, riots, sexual harassment, slavery, social injustice, social polarization, stress, sugar, tax havens, technological singularity, terrorism, traffic congestion, troll farms, unemployment, vendor lock-in, violence, war, waste, xenophobia, zoonosis, etc.

Duration: 2 hours (long version) or 1 hour (quick & dirty)
Age: 16+ / **Languages:** english, german, spanish

Walk & Talk
Lecture & Workshop

This workshop is for visionaries. Visionaries about the future. Visionaries about happiness. Visionaries about businesses. We walk around a lake. We walk mindfully, in silence. Walking increases blood circulation to the brain. Nature stimulates creativity. The lake is a metaphor for our mind. The ripples on the water are our emotions, thoughts and ideas. We observe the lake and find out what really matters.

During the walk we stop 8 times:

1. Welcome and introduction
2. We introduce ourselves
3. Everyone presents a vision (a great idea)
4. Everyone asks one question about one vision that was presented previously
5. Everyone takes a position for someone else's vision
6. We vote for the best vision
7. Archery competition
8. Prize-giving and celebration

Every participant prepares a vision (a great idea).

Duration: 3-4 hours / **Age:** 16+ / **Languages:** english, german, spanish

David Zehnter

David is a software engineer, design thinker and maker. Long experience in the industry. Active in sustainable/resilience development. Experiments with automated self-sufficiency. Co-Founder of SmartCityFarm e.V. Wants to contribute to a nature-human-inclusive world.

David has done the above workshops since 2022 for:

Albrecht-Dürer-Gymnasium (Berlin), AWO Spandau, Baufachfrau Berlin e.V., CIEE - Council of International Educational Exchange, CityLAB/Technologiestiftung Berlin, Club Dialog e.V./BFD Büro, Christoph-Ruden-Schule (Berlin), Code Week Berlin (Humboldt Forum), Elbe Schule (Berlin), ESTA Bildungswerk GmbH, Europäische Schule RheinMain (Bad Vilbel), Fichtenberg Gymnasium (Berlin), Freilandlabor Britz e.V., Graf-Anton-Günther-Schule (Oldenburg), Hochschule für nachhaltige Entwicklung Eberswalde (HNEE), Joan-Miro-Europaschule (Berlin), Junge Tüftler gGmbH (Berlin), Kargo Collective e.V., Katholische Schule St. Marien (Berlin), Koordinierungsstelle für Umweltbildung Neukölln, Kunsthalle Mannheim, Manege (Kinder- und Jugendzentrum), Official Language School of Segovia (Spain), Prinzessinnengarten Kollektiv Berlin, Landesinstitut für Schulqualität und Lehrerbildung Sachsen-Anhalt (LISA), The Urban Knowledge Collective (Austria), Una Europa Student Congress (Freie Universität Berlin), University Angers (France), Vereinigung Junger Freiwilliger e.V., VHS Neukölln, Wetzlar-Schule (Berlin), Zukunftskiez Dammweg

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