Civic Intelligence

Civic Intelligence describes how well groups of people address civic ends through civic means. It asks the critical question: *Is society smart enough to meet the challenges it faces?* Civic intelligence requires learning and teaching. It also requires *meta-cognition* — thinking about and actually improving how we think and work together.

The Commons

The human genome, seeds, and groundwater should belong to everybody —not corporations. The public library, community garden, farmer's market, and land trust are familiar and highly effective local Commons. The emerging commons sector provides benefits that corporations can't provide such as healthy ecosystems, economic security, stronger communities and a participatory culture.

The Good Life

People who hope for a better world feel the need for a shared vision of The Good Life. The environmental crises of the planet require a broad vision of a good life that harmonizes human aspirations and natural limits. A framework for the modern good life should be based on some form of humanism with room for a spiritual dimension that does not seek domination.

Social Dominance Attenuation

Social dominance is at the heart of many of humankind's most shameful enterprises. It is sustained through ideology, economics, policy, education, the media, social perception and interactions, culture, and technology. Understanding how social dominance is maintained can provide important clues as to how it can be countered.
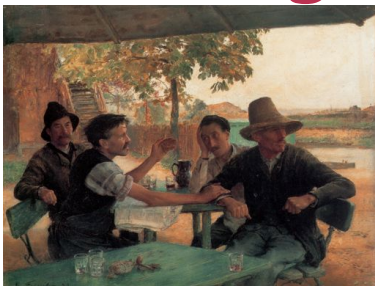
Health as a Universal Right

The worldwide health care crisis is profound. Each day 9,000 people die from AIDS and 11,000 children die from malnutrition. We need to redirect our resources from activities that exacerbate the crisis to ones that overcome it. Ideologies, ingrained habits, and pursuit of short-term "self-interest" work against the establishment of Health as a Universal Right.

Global Citizenship

Citizenship is the formal relationship between a person and a country and often is described in terms of rights and responsibilities. Its site has shifted from the Greek city-state where the idea first took hold to the modern nation-state. Citizenship often determines access to health care, education, and other rights — rights that arguably should be universal. The journey towards global citizenship will be incremental, perennial, lurching, and will be met by setbacks as well as successes.

Political Settings

Political action venues are changing with the proliferation of new kinds of nongovernmental organizations, the broadening reach of the Internet, and the actions of governments. Political Settings are the basic physical units of collective political action. The idea of political settings opens the door to exploration of evolving civic intelligence exemplified by political actions from below.

Social Responsibility

Having social benefits as part of an organization's mission, does not guarantee positive achievements. Any organization with a shared vision of Social Responsibility needs to deliver what it promises. Activism on behalf of principles other than self-interest or convenience is necessary to remind organizations of their Social Responsibility, and to prevent other organizations from losing touch with theirs.

Matrifocal Orientation

Because almost all societies are androcentric (male centered), women's needs, interests, ideas, and perspectives on the world are often ignored or trivialized. Matrifocal communities are organized around values traditionally seen as "feminine" such as peace, nurturance, cooperation, and care for others. A Matrifocal Orientation that gives voice to women's perspectives would go a long way toward creating a just and peaceful world for all. A Matrifocal Orientation presumes that women's interests are not special interests, but human interests.

Collective Decision Making

Divided decision making can disrupt personal relationships, fragment communities, and compartmentalize organizations. Resolving serious issues in communities for the long term, requires the collective voices of individuals, experts, organizations and creative thinkers. To work together constructively, people from diverse knowledge cultures need to accept the legitimacy of people from others.

Memory and Responsibility

Although the evils of the past continue to haunt us in the present, society is often unable or unwilling to deal with historical injustice. The function of Memory and Responsibility is to promote healing, to study history to avoid future problems. The intent is not to blame or punish but to encourage people to reason together and strive for reconciliation.

Working Class Consciousness

Global consciousness, solidarity, and collaboration among working people around the world are critical for addressing the challenges that the working class faces. One important tool in addition to collective action is the use of film, art, and media technology. The training of workers for this work requires an international campaign in collaboration with labor at all levels. The need to defend communication rights and protections is fundamental, as is education and direct action.

Back to the Roots

Humankind has altered the world socially and materially incredibly over the years. This has created a chasm between our present status and our "roots" which are closer to nature and closer to the source and sustenance of our lives. Going Back to the Roots is not intended to be a nostalgic trip: discovering, cultivating and building on our "radical center" can be a wellspring for creative preparations for the future.
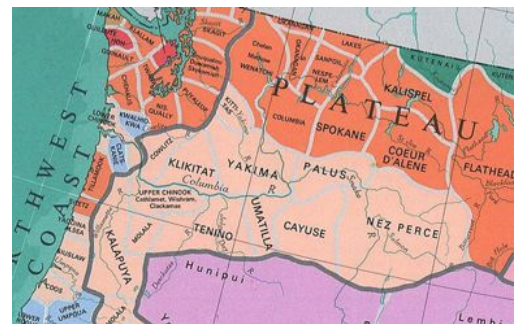
Demystification and Reenchantment

Our political, economic, and technological systems have become mysterious while the real mysteries no longer carry deep meaning and connection with people and the natural world. Demystification and Reenchantment are needed to convey a perspective that invites, encourages, and supports liberated engagement in the human enterprise.

Translation

People who speak different languages cannot understand each other without benefit of Translation. A related problem arises when people think they're speaking the same language when they're not. Here "language" is applied broadly. Translation takes place when any two worlds of discourse are bridged. Think about the critical role of Translation and, if possible, become a translator or — when the need arises — a person who can help bridge a gap of understanding.

Linguistic Diversity

Over the last century, many of the world's languages have disappeared. When a language is lost, part of the world's knowledge and culture is lost. Losing our Linguistic Diversity diminishes our ability to perceive and think about the world in a multi-faceted and rich way. Due to their knowledge and expertise, linguists are at the forefront of the struggle for Linguistic Diversity. All of us, however, have important roles in preserving and enhancing Linguistic Diversity.

Education and Values

Even when not pursued deliberately, education promotes and replicates values. Yet, neither the explicit nor the implicit promulgation of values is typically designed with thought to the appropriateness of these values for the future. Educational institutions, teachers, parents, concerned citizens and students themselves must work to uncover and understand the values that are being taught as well as to design the entire educational experience to foster those values that will help make for a sustainable and healthy future.
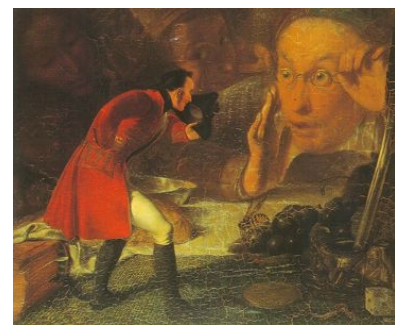
Dematerialization

The production and consumption of products is destructive to the environment and contributes to poverty and hunger. Dematerialization means using fewer natural resources, using more recycled resources, and extending the life of products. The growing role of knowledge, information, and culture should make it possible to displace materials and energy more intelligently and ingeniously, thus allowing us to satisfy basic human needs with fewer resources.

Transforming Institutions

Social institutions often deliver services from their operational center out to people in distant regions. In some cases these institutions protect and maintain their existence without regard for those they were intended to serve. This results in exploitation and destruction of the environment and communities. Institutions should develop new sustainable relationships; establish transformative change; and create flexible management models.

Teaching to Transgress

Students identify with good teachers and value their knowledge highly. This might mean, however, that students might be reluctant to "go against" the teaching of their mentor/hero/professor. Teaching to Transgress actively questions and tests society's "received wisdom." Teaching to Transgress helps instill the idea that societies must change and that we all have responsibility for promoting that change.

Fair Trade

Production, trade and retailing of goods and services worldwide are increasingly concentrated under the control of a few corporations. The growing Fair Trade movement is based on reciprocal benefits and mutual respect; fair prices paid to producers; workers have the right to organize; national health, safety, and wage laws are enforced; and products are environmentally sustainable and conserve natural resources.

Sustainable Design

Human welfare depends on using the Earth's resources, material cycles, and biological processes, but current approaches are blind to their destructive effects on the Earth. We need to consider each building or product as an intervention in the Earth's cycles and processes, and in the human culture of needs and techniques. The ethic of Sustainable Design is not only that future existence should be possible, but that it should exhibit justice and beauty for humans and for the rest of nature.

Anti-Racism

Efforts to create desirable societies are hindered by privilege, fear, and prejudice across race, caste, and ethnic divisions. As with gender divisions, race, caste, and class hierarchies often intertwine to erode the effectiveness of organizations. Anti-Racism has two dimensions: Anti-Racism through awareness and Anti-Racism through action. An anti-racist orientation to social change can help organizations challenge policies and practices that mask power, exploitation, and resource grabbing.

Spiritually Grounded Activism

Some social change agendas and strategies are derived from sacred texts, religious doctrines and traditional spiritual practices. Grounding one's public engagement in this way can lead to productive and insightful action. Remember that ritual, sacred or secular, can strengthen bonds among organizers and provide the respite necessary to keeping on with the work of change.
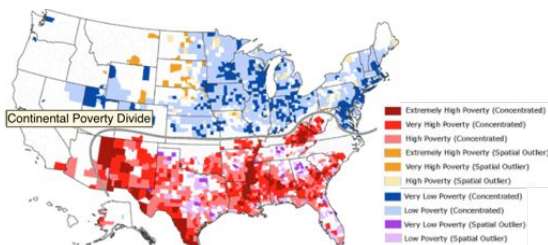
Cyberpower

Digital inequality often affects the same people as traditional inequalities such as poverty, oppression, discrimination, and exclusion. With Cyberpower individuals, groups and organizations use digital tools for their own goals. Cyberpower also means using digital tools as part of community organizing and development, when Cyberorganizers help people gain Cyberpower.

Earth's Vital Signs

We need a revolution of decision making and awareness in order to tackle the complexity and urgent nature of our environmental problems. Earth's Vital Signs are indicators of ecological health or the earth's capacity to accommodate human demands. Human decisions about how to live on earth currently drive unsustainable trends. They can also help us change course.

Big-Picture Health Information

Real change in improving health means shifting away from expert clinical opinion only and towards awareness of the effect of environment. Demand and produce health information that identifies environmental and social causes of ill-health. Analyze the links between causes and solutions, and bring individuals, communities and governments together in putting the solutions into effect.

Whole Cost

We leave our mark on the world through the clothes we buy, the food we eat, the cars we drive, the way we dispose of our waste, or how we work and play. The price tag on a product can hide environmental abuse, or aspects that are harder to quantify such as the loss of cultural heritage. The amount on a price tag doesn't represent all the present or future costs. Knowing the Whole Cost of a good or service can be educational and it can inspire action.

Indicators

When people in the community identify Indicators that are important to them, they are more likely to carry personal and operational meaning than when social scientists identify constructs that are significant only to an academic community. The real work begins after the Indicators have been identified. The Indicators must be measured, discussed, and publicized. Ultimately they can be used to develop policy and projects that address them.

Public Agenda

The issues receiving "public attention" change dramatically from day to day giving us little time to actually think about one issue, before another takes its place. Who decides what issues are important, what issues are on the public agenda? The public agenda ought to be more than the set of issues that people have in their heads at any given time. We need to think about what issues belong on the Public Agenda and what we can do to put those issues there and keep them there.

Democratic Political Settings

People low on the social scale are often barred from political meetings. And for many reasons women, poor people, and others may not voice their views in meetings. New and reformed settings can establish a base of democratic experience for change in older, powerful settings. New settings that are open and democratic can give people who have never been invited to express their ideas an opportunity to gain experience and confidence.

Big Tent for Social Change

When groups work on social issues without learning what other groups are doing, opportunities for cooperation are lost. Worse, groups that should be working together sometimes argue over fine points. Bringing groups together in a Big Tent event like the World Social Forum fosters better understanding of the enormity of the world's problems. It can also encourage collaboration and cautious optimism.
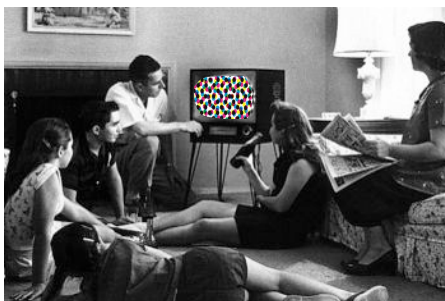
Opportunity Spaces

Opportunities are critical as they help determine possible paths to the future. Opportunities can include classes and seminars, volunteer positions, jobs, timely announcements, contests, access to the media, mentoring, scholarships, grants and others. It is imperative to devote attention and resources to help create new (and improve existing) Opportunity Spaces for people and communities who need them.
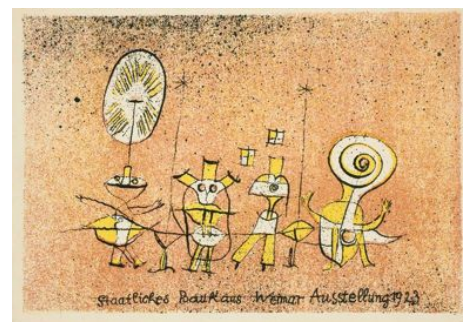
Strategic Capacity

Occasionally, a small group with meager resources fighting a powerful foe wins. One famous example is David vanquishing Goliath. Thousands of other struggles — against poverty, against oppression, against environmental degradation — retell this with equally improbable outcomes. Groups are more likely to have Strategic Capacity if they are imaginative and reflexive, have diverse membership, ties to many networks, and knowledge of various tactics and strategies.

Media Literacy

Media Literacy allows us to critically view media and to evaluate the role that media play in our lives. Media Literacy helps develop awareness of our roles as active agents when engaging media. We must arm all people with the knowledge, skills, and values that Media Literacy provides. We need to grant people access to new technology and information about its workings and ideological implications and to develop alternative communication systems.

Participatory Design

Many artifacts and systems do not appropriately address the needs of the people for whom they are designed. This can be avoided if the users of the systems (such as information and communication systems, buildings, and city plans) and those who will be affected by the systems are integrated into a Participatory Design process in an open and authentic way.

Citizen Science

The role of science will become more critical in the years ahead, as health care, energy, resources, and the global environment become more problematic. Science needs greater participation from people, and people need a greater voice in science. Citizens, policymakers, and professional scientists all benefit by integrating scientific knowledge and local knowledge to bear on the problems that they experience.

Mobile Intelligence

We can't think or act intelligently in relation to the world if we think statically. The problem is that we think that things change, one-at-a-time when things are constantly in flux. The answer changes while you're still trying to understand the question. One of the main points of Mobile Intelligence is encouraging positive possibilities that the new technology opens up, such as emergency communications.

Techno-Criticism

An unquestioning reliance on technology can create a culture where people expect technological solutions to all problems. Technology can put decisions in the hands of the technologists, degrade public discussion, and divert attention, discussion, and funds. It often alters power relations between people, generally amplifying the power for some. We need to understand and anticipate to some degree the effects of specific technological artifacts and the broader implications as well.

World Citizen Parliament

Governments and corporations have forums that further their interests. Civil society must create institutions that are strong enough to assert theirs. The deliberative bodies that we develop are likely to be advisory at the onset but hopefully will lay the groundwork for a more integrated and influential World Citizen Parliament as time goes on.

Economic Conversion

Why is US military spending at cold war levels despite the fact that the most pressing 21st century threats to security are not effectively addressed by military force? Economic Conversion is the process of efficiently transferring people and facilities from military-oriented to civilian-oriented activity. Given the urgent need to redirect the nation's attention and resources to address the economic and security realities of the 21st century, Economic Conversion has never been more important.

Strengthening International Law

No reliable system of global governance exists that is respected and satisfies concerns about accountability, participation, and transparency. Yet disturbingly, political leaders resort to war as the way to resolve international conflict. Preventing this in the future will require an ethos of responsibility and a willingness to rely on cooperative and nonviolent means to resolve conflict. Strengthening International Law will be critical for moving toward a less violent, more equitable, and more sustainable future for the whole of humanity.

International Networks of Alternative Media

A handful of Western-based transnational corporations control most media programming. They emphasize entertainment and news acceptable to business and Western foreign policy. A global network of communications activists, advocates, and researchers is working to reform the mainstream media and to construct alternative media. Alternative media projects not only serve people; they also demonstrate what democratic media might look like.

Design Stance

How can people or organizations focus notions, wishes, and urges into specific, meaningful steps? Design Stance suggests a productive mode of thinking in which issues are approached with the stance of the designer: construct, in imagination assisted by concrete representations, ways to intervene in the world for the better. Assume few limits at the start, and iteratively modify and evaluate. When the right balance of timeliness and effectiveness presents itself, follow Samuel Mockbee's advice: *Proceed and be bold.*
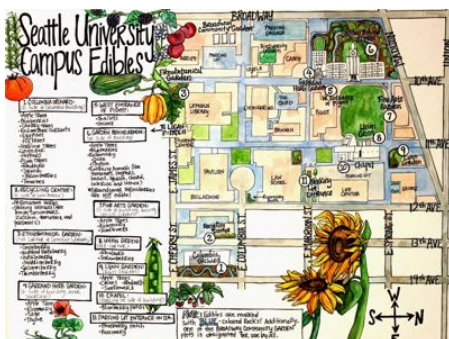
Open Action and Research Network

As problems become more and more intractable, more—and more diverse—people much work together. While diversity is a necessity and can be a source of strength, it introduces problems that can worsen if we don't address them effectively. We must acknowledge the importance of Open Action and Research Networks while resolving the issues and building on the incipient wisdom.
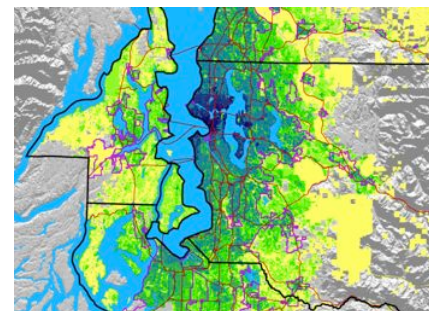
Alternative Progress Indicators

Economic indexes that measure the well-being of nations, markets, corporations, individual people, and society as a whole are expressed only in monetary terms and miss several important factors; they need to factor in information on positive factors such as volunteering and housework and negative factors such as pollution and crime.

Meaningful Maps

To improve the world, we must understand the situation, highlight the important factors, and help others to understand the issues. Meaningful Maps can provide a clear focus for relevant information. Groups need to use their resources carefully to achieve the maximum impact. They also want to communicate their concerns and encourage others to support their work.

Citizen Access to Simulations

Simulations can help illuminate long-term consequences of major public decisions on land use, transportation, and the environment. Citizen Access to Simulations can provide powerful capabilities for informing community discussions, particularly if the results are presented using the same indicators that were used in a participatory community and civic indicators project.

Culturally Situated Design Tools

Bridging the "digital divide" often means that the technology-rich side brings gadgets to the technology-poor side. This can have the unfortunate side-effect of devaluing local knowledge and expertise. Culturally Situated Design Tools can use computer simulations of cultural practices (such as cornrow hair styling, urban graffiti, beadwork, breakdance, and Latino drumming) to "translate" local knowledge to their high-tech counterparts in math, computing, or media.

Conversational Support Across Boundaries

We must often work together across organizational and other boundaries to solve problems. However, since other groups have different knowledge, norms, and expectations, conversations can be difficult. It is important for people on both sides to have cooperative conversations. Time, space, means, and motivation, must be provided. Payoffs must accrue to the parties for solving shared problems, not for proving that the other party is to blame.

Truth & Reconciliation Commissions

Societies recovering from wars and other traumas, can make a bad situation worse by focusing on blame or punishment. New models of adjudication and problem solving are emerging. Some communities are restoring long-standing healing and cleansing traditions. Others are creating Truth and Reconciliation Commissions to provide contact across previously insurmountable barriers of hostility. This can inspire traditional enemies to build a newly shared investment in the future.
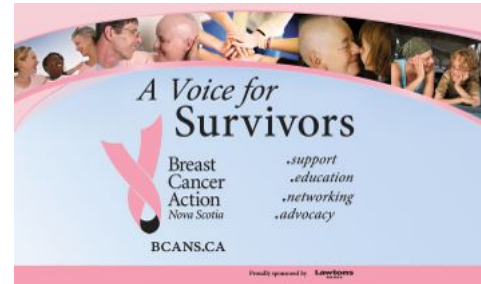
Online Deliberation

People deliberating in groups are often plagued by personality clash and rivalries. Also, without structure, discussions can become random and rambling, or dominated by powerful individuals. To overcome these problems, systematic rules have been created to facilitate meetings that encourage fair decisions. Now is the time to develop Online Deliberation applications that provide tools to conduct effective deliberative meetings when getting together in-person is difficult or costly.

Alternative Media in Hostile Environments

People in oppressive regimes can be harassed, beaten-up, imprisoned or even executed for possession or circulation of forbidden information, literature, or drawings. Journalists face grave challenges and require an extensive collection of techniques to get the news out. Alternative Media in Hostile Environments focuses on journalism during hostile conditions in which citizens have a greater need to engage with forbidden knowledge and share it with members of their community.

Mutual Help Medical Websites

People suffering from chronic medical conditions need information and the support of others who share their problems. A web community can be a powerful source of collective intelligence, of comfort, wisdom, friendships and material assistance. Trust must built in stages through communication, privacy, and planning. Moreover, the organizers and the community itself should work together to build "thick trust" through collaborative activities.

Indigenous Media

The lack of participation and influence by indigenous communities in media production results in reduced diversity of ideas and perspectives. This can result in lack of political participation and knowledge about rights. It lessens opportunities to engage in politics or to assume responsibilities in government. Indigenous people who are denied their voice will find it difficult to fight oppression, work with allies, or maintain their culture.

Peace Education

The energy devoted to Peace Education, whether in history classes or through the allocation of government or university funds, is miniscule. Since peace and justice are intertwined, Peace Education requires that people also learn about achieving justice. Schools can teach negotiation skills and empathic respect for different perspectives, using in-class simulations, theater, and other action-learning methods.

Intermediate Technologies

Often the simplest level of technology that can achieve the intended purpose in a particular location will be the most relevant. Intermediate Technologies are particularly useful to underdeveloped rural areas, which lack the expertise or infrastructure to operate and maintain high technology. Communities need to collaborate with specialists to map out needs, infrastructure and culturally relevant solutions.

Durable Assets

Durable Assets can empower people and communities to be self-sufficient even in times of hardship. Development practitioners, community members, and individuals can consciously pursue the acquisition and sustainability of Durable Assets. Government should develop initiatives to enable individuals and communities to acquire Durable Assets and to protect those they already own.

Public Library

Obstacles to diversity of ideas and freedom of thought are obstacles to human development, whether in wealthy countries, rich in Internet connections, or in rural regions, lacking roads and electricity. The Public Library enjoys broad public respect and support, and promotes principles central to democracy and development. These principles include intellectual freedom, access to information and to ideas both fashionable and unfashionable, and serving the needs of the under represented.

Digital Emancipation

Digital *Emancipation*, as opposed to digital *inclusion*, aims at income generation and identity development rather than "bridging the digital divide." While access to digital networks is increasing, there is less confidence and verified outcomes related to job opportunities, entrepreneurship, solidarity, and organization of civil society. Digital Emancipation refers to the liberating potential of policy and technological options.

Community Networks

Community Networks must help support two capabilities. The first is supporting and sustaining the social networks of clubs, organizations, associations, groups, agencies, families and individual citizens. The second is enabling effective organization, planning and enactment of local campaigns when threatened from outside.

Online Community Service Engine

An Online Community Service Engine contains generic services that communities need to sustain themselves. These include user management; communication and dialogue; information and publishing; community awareness; calendaring; work group support features; and monitoring and statistics. An Online Community Service Engine should be able to connect with modules that support for specific groups such as educational or deliberative facilities.

Community Currencies

People have always traded with each other, using various ways to represent and store value. In complex capitalist societies, money encourages growth, accumulation, and new forms of wealth and power concentration. Community Currencies can offer a solution for local markets deprived of or unserved by national financial policy. If successful, they can promote local projects and put them on the road to a hopeful and fruitful future.

Transparency

Lack of accountability encourages corruption. Journalists, business people, government officials, activists, educators and "ordinary" people are affected by corruption and can play a role in its prevention. Transparency ensures that how things work is not hidden or inaccurately portrayed. Using traditional and newer forms of media and communication, we can raise awareness about the importance of transparency initiatives and enforcement while exposing and defying corruption at all levels.

Privacy

Everybody has information, activities, thoughts, and events that they'd rather keep private. But marketeers, security forces, and criminals are uncovering and exploiting these secrets, leading, sometimes to harassment or even torture or death. We need to be aware of the importance of Privacy and work to protect privacy rights and resist privacy invaders.

Media Diversity

Democratic societies rely on diversity of viewpoints and ideas for the intelligence, engagement, enthusiasm and wisdom that they need to stay alive. At the same time people all over the world are receiving more and more of their information from the mass media, whose control is becomingly increasingly concentrated in the hands of a few giant corporations. Citizens — and government — must be vigilant to ensure that citizens have access to Media Diversity of opinions.

Ethics of Community Informatics

Community informatics combines information and communication technologies, community development, and community-based research to help improve community life, especially in excluded communities. A Community Informatics Ethics that ensures that community members can find, use, and control information tools while building relationships among themselves can result in stronger, more self-sufficient, and engaged communities.

Free and Fair Elections

The process by which the votes are gathered and counted is critical to claims of legitimacy and to the faith of the people in their government. While vote counting sounds easy, ensuring accuracy is not. Some of the obstacles are due to human error, while others result from intentional manipulation and intimidation. In democratic societies everybody has the responsibility to help ensure Free and Fair Elections.

Equal Access to Justice

The principle of full and equal access to the justice system faces opportunities and challenges from new technologies. While technology can provide new pathways it can also exacerbate existing barriers or create new ones. Technology can allow people to use their home, library, or community center to find out about, initiate or respond to law related requirements, and communicate and exchange documents less expensively, using less time and effort. Equal Access to Justice can empower people to be part of creating their own just societies.

E-Consultation as Mediation

In good public consultations knowledge is transferred between citizens and government as they learn from each other. E-Consultation can be seen as a Mediation process which is run in stages. At the beginning issues and needs can be collected from stories in forums and social media. Policymakers need to better understand people's needs, life experiences, and preferences in order to participatively design solutions to social problems.

Participatory Budgeting

Budget development is often thought of as a dry, technical task, best left to "experts." But budgets are critical tools through which social values are expressed. Developing a budget, with its criteria and categories, is a "political" act. Participatory Budgeting helps to bring in people who generally don't participate in the process. There are now many successful examples in which whole communities play substantial roles in the budgeting process.

Transaction Tax

An international Transaction Tax could help the global good by raising substantial funds to support the Millennium Development Goals set by the UN. New technology and communications systems as well as the Internet make it possible to collect the tax efficiently and make avoidance difficult. Disparities between rich and poor could be reduced and the poor would bear a smaller tax burden relative to their incomes.
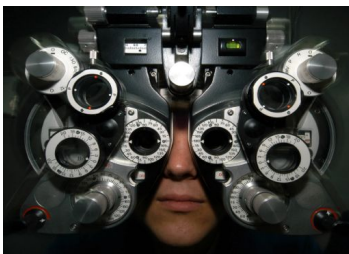
Powerful Remittances

People leave poor countries in search of jobs. Village cultures and families have adapted to this and to the significant sums of money sent home. Information technology innovation can reduce remittance transfer costs and improve transparency. Financial institutions could offer matching funds for investments while non-profit foundations working with migrant groups could set up alternative transfer networks.

Positive Health Information

Health information in the developed world often depicts health in terms of vigilance against external, uncontrollable forces. This fosters distrust and dependency on a high-tech, commodity health system. Positive Health Information is built on the fact that people are inherently healthy. It inspires trust in the body's ability to heal itself, once a healthy path has been taken.

Accessibility of Online Information

Digital "divides" are based on economics, gender, race, class, ability, or other factors. We can view these divides in two ways — accessibility *to*, and accessibility *of*, information and communication technologies. Accessibility means being able to connect to the network society. It also means that these technologies are accessible to those with disabilities. We must find ways to design for accessibility at the onset. Accessibility affects us all: Some of us directly; all of us indirectly.

Open Access Scholarly Publishing

Due to industry consolidation and skyrocketing profits, the cost of journals and books has become outrageous. But even without profits, many people would still not be able to gain access to needed information. We need to create and improve online materials that are freely available and avoid the costs and gate-keeping of traditional publishers.

Mobile ICT Learning Facilities

In many countries, the lack of access to Information and Communication Technology is an acute problem. Just as the mobile library brings books to those who lack access, traveling computer laboratories with computer literacy educators as drivers can play similar roles. In South Africa, the Discovery Mobile bus travels to communities and gives people the opportunity to interact with science and technology exhibits.

Grassroots Public Policy Development

Policy helps address issues related to living together in a complex society. Ironically, *public* policy development is very *unpublic*. It's often silent, invisible, and developed behind the scenes. We must advance Grassroots Public Policy Development which is distributed throughout the body politic in civil discourse, research, and inclusive and creative deliberation.

Multi-Party Negotiation for Conflict Resolution

Is it possible to shift conflict creatively to achieve real change? Recently people have begun to imagine solutions to conflicts in which constructive win/win solutions replace the win/lose model. To generate lasting change, use an imaginative array of strategies and skills including negotiation, multi-party processes, and cross cultural dialogue.

Users' IT Quality Network

Competitive software suppliers need demanding customers who can articulate sophisticated user requirements for the software they use in their daily work. Economic forces make it very important to support the articulation of end-user quality demands through initiatives in workshops, offices, schools and universities. If a Users' Information Technology Quality Network already exists in your region, support it by participating. If it does not exist, take part in forming one.

AcademicTechnology Investments

Segregation of disciplines and institutions hinder innovation, learning, and research in higher education. Institutions need to explore opportunities enabled by information and communication technologies for new partnerships. These incorporate interaction with others around the world via conferencing, learning objects, and high performance computing. Fostering transparency and accountability can encourage a dedicated sense of mission.

Wholesome Design for Wicked Problems

According to Horst Rittel "wicked problems" are resistant to the rationalist approach to planning and design of large-scale systems. There are, however, ways forward. The first is to shift the goal of action on significant problems from "solution" to "intervention." Instead of seeking the answer that totally eliminates a problem, one should recognize that actions occur in an ongoing process, and further actions will always be needed.

Voices of the Unheard

Despite the significant effort that goes into decision making and design, bad decisions and designs are often made because a critical and relevant perspective was not heard. This is especially true if the perspective is that of a stakeholder. Remind people of voices that aren't present through procedures, diagrams, or, even, songs.

Design for Unintended Use

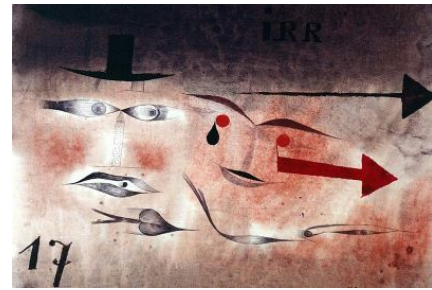Designable, open technology invites ongoing creative use, which in turn drives further evolution and development. The solution is to intentionally Design for Unintended Use. Users should be able to expand the scope and breadth of the system without demanding too much structure and administration. The high-level design principles must be developed and expanded, through a variety of experimental and other approaches.

Civic Capacities

Illiteracy, a lack of information, poverty, political marginalization, or other factors can block the paths to social and economic empowerment. To overcome this we must encourage and develop the Civic Capabilities of individuals and communities to actively create the lives they hope to live. Direct interaction with officials, engagement in cooperative and adversarial politics, and affiliation with other advocacy groups can bring about accountability and increased governmental responsiveness.

Strategic Frame

The complexity of the world with its multiplicity of perspectives can confuse our attempts to interpret it. A Strategic Frame is a word, phrase, or slogan that encourages people to see things in a certain light. When developed collaboratively, a Strategic Frame can also be a useful tool for groups. In addition to understanding frames that influence thoughts and actions, activists are interested in frames that help build coalitions or otherwise motivate useful mobilizations.

Value Sensitive Design

Human values should be actively considered in the design and development of information and communication systems. Increasingly, it is through these systems that people engage in dialog, educate their children, gain access to resources and systems of justice, conduct business, participate in government, and perform other essential activities. Value Sensitive Design provides theory and methods to account for human values in a principled and systematic manner throughout the design process.

Future Design

By acting as though the future will never arrive and things will never change, we are creating the future with the seeds that we are sowing today. The purpose of Future Design is to get people actively engaged envisioning better futures and making plans on how to get there. Through "rehearsing for the future" we hope to create possible scenarios that could become the positive "self-fulfilling prophecies" of tomorrow.

Experimental School

Schools with unchanging assumptions can't meet society's changing needs. This is unfortunate now when the need for public problem-solving is most acute. An Experimental School attempts to accomplish positive aims while adopting experimentation as a guiding orientation. The key concepts are respect for learning, reflection, and faith in the importance of reasoning and, especially, reasoning together.

Service Learning

While community issues are often not addressed due to lack of resources, higher education often focuses on abstractions. It can miss the myriad issues that are literally all around them. Service-learning connects traditional learning and research to practical projects. In relation to the online world students could maintain web sites for non-profit organizations, train agency representatives to maintain their own sites, and train community members to access and evaluate online information.

Citizen Journalism

Citizens need information about the political, economic, and cultural systems that structure their lives. This is usually produced by journalists — *but citizens can be journalists*. The beauty of Citizen Journalism is that it only requires: citizens with dedication, skills, and access to networks, and an audience for the news they produce. Citizen Journalism represents an important opportunity for the realization of democratic change.

Document Centered Discussion

Groups need to deliberate around documents. Distributed asynchronous interaction allows more time for reflection, revision, and information seeking; the ability to accommodate conflicting schedules; and easier access, storage, and search of digital archives. Groups can discus the document as a whole or parts of it. The document may be fixed or evolving, but the document should remain central.
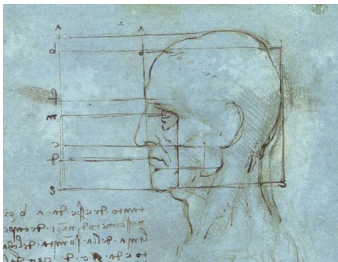
Citizen Diplomacy

The unique powers of individuals to help overcome antagonism between nations by calming tempers, building ties, promoting reason and dialogue, or healing wounds is rarely acknowledged or promoted. Citizen Diplomacy offers the promise of peace by building on actual, hopeful and optimistic face-to-face encounters by citizens of the designated enemy states.

Mirror Institutions

Organizations and other institutions that are responsible for important decisions and policy development can violate the public trust or otherwise wield illegitimate power. Mirror Institutions are those institutions that *reflect* or *reflect upon* other institutions or other realities. Mirroring implies copying — but generally *copying with changes* made to one or more aspects of the original in the process.

Patient Access to Medical Information

Patient access to medical records can bridge between medical science and its practice as the patient experiences it. Let the public, patients, clinicians, and other healthcare providers have up-to-date, interactive access to accurate medical information. Use robust systems to protect privacy and confidentiality. Above all, educate and encourage practitioners and the public in patients' use of online medical records to actively manage their health.

Citizenship Schools

Finding lasting, democratic solutions to deep and complex problems requires citizenship skills. Some are learned in daily life. Others, like deliberating, defining problems, collaborating on projects, organizing, and understanding public institutions and processes are not basic. We need Citizenship Schools in local communities and on the Internet in which citizens can come together with each other and with skilled practitioners and learn from each other.

Community-Building Journalism

How do activists and those interested in movements or communities of practice get a sense of best practices, underlying philosophies, strategies, leadership, key institutions and organizations, useful resources and tools, and current work? Developing journalism and communication venues that present in-depth news, events, and developments in a field is essential. And covering key organizations and institutions can help offer a map and guide.

Informal Learning Groups

Overemphasis on formal education can overshadow more appropriate learning methods. This is especially true for adults with limited time or money. Informal Learning Groups can support life-long learning, skill-building, and curiosity. Community leaders, self-help groups, development agencies, and employers can help launch educational projects that encourage a culture of participatory learning to meet community needs.

Appreciative Collaboration

People working toward some common good can become discouraged when they experience the gritty reality of bringing it about. When the group visualizes the positive contribution that its work will make, it will approach its work with optimism and hope. Appreciative Collaboration encourages us to see the beauty in our collaborations, so we can release the creativity that comes from a compelling vision of a future worth working for.

Sustainability Appraisal

The adoption and use of information and communications technologies (ICT) present critical challenges to small non-profit organizations. The complex, interconnected mix of factors is often confusing. The idea of *sustainability* can be used to orient a holistic sense-making framework. Sustainability Appraisals promote inclusion and collaboration, and the facilitative approach can lead to empowerment and organizational learning.

Shared Vision

A vision should express values, purpose, and aspirations for a better future in simple terms that everyone can understand as the basis for participation in the group. Developing a Shared Vision may be the single most important task for the group to accomplish at the outset. It will guide strategy development, decision-making and goal-setting of the group or organization and for individual projects that the group undertakes.

Community Animators

Development professionals often find it difficult to adequately assess the broad spectrum of problems a community faces — or the various assets the community has to work with. This often means that development schemes are mismatched with the community's needs, abilities and liabilities. Community Animators can act as critical links and local citizens can often better activate a community to realize change than an outsider.

Online Anti-Poverty Community

Because anti-poverty advocates and activists often don't have the education and training resources or communications they need, their opportunities for building communities are limited. At the same time, poor and marginalized people don't have the information they need to exercise control over their lives or get the resources they need. The most effective online anti-poverty communities are defined and created by advocates and poor people to address needs as they arise.

Sense of Struggle

Many of the strongest forces in the world must be challenged. A Sense of Struggle can unite a group striving for positive social change. A Sense of Struggle lies between optimism and despair. We need to cultivate a Sense of Struggle and, at the same time, make it easier for those who are involved in the struggle. According to Frederick Douglass, "If there is no struggle, there is no progress."

Self-Help Groups

Individual capacity among poor peoples in the developing world (particularly women) to establish credit and develop self-sufficient businesses is often unrealized. Organizing groups to secure collective and individual credit, and skills training, can assist peoples in accessing the capital they need to start small businesses and help build livelihoods for families and communities. Self-Help Groups offer one approach to create associations for some of the most economically marginalized groups within society.

Self-Designed Development

Development initiatives are often designed and implemented by outside professionals, politicians and wealthy elites. Neither community empowerment nor fundamental sustainability plays a central role in many of these interventionist projects. Communities must take the opportunity to proactively assert their own paradigm and to exert their own sense of identity and influence in the face of outside forces attempting to define their collective futures.

Engaged Tourism

At its worst, tourism devastates ecosystems, displaces communities, causes pollution, promotes drug and sex-trafficking, restricts access to clean water, and degrades culture. A westerner's perception of travel often is oblivious to foreign cultures or different lifestyles. Engaged Tourism shifts from fun abroad to meaningful experiences. In fact, engaged tourists can help re-establish values, culture, and status of people adversely affected by commercial tourism.

Appropriating Technology

"Ordinary people" can be producers of technology and science. Latino "street mechanics" created the Low Rider car and Black teenagers created the "scratch" sound of rap. Appropriated technology can help the disenfranchised gain social power. We can encourage marginalized groups to strive towards positive "hybridity," create community technology centers, and train engineers and designers to think about appropriation by users as a positive goal.

Control of Self-Representation

Whether through speech, story, or image how people are represented influences how they're perceived and treated. Non-whites, incarcerated, sick or starving people, disaster victims, uneducated, aged, and rural people as well as many others marginalized by gender or ethnicity are misrepresented. One cannot fully control self-representation but it can be addressed. The first step is increasing awareness of the problem; the second is analysis; the third is action.

Homemade Media

Capturing an image or conversation encourages reflection and introspection yet people outside the major spheres of power have little access to the technologies and tools of self-expression. Although this can be harmful to those people, others are deprived of enriching stories and perspectives. Homemade Media helps build confidence and self-esteem as well as employment skills. Anybody with a story to tell can benefit from Homemade Media.

Arts of Resistance

Repression and other forms of injustice and other social ills are often overlooked, or seen as inevitable. Art can be used to deliver a message of inspiration and information for the disempowered. Art can convey beauty, love and joy. It can also convey justice, fairness, dignity and resistance. The future itself is a plastic medium, a canvas that we all help paint. Arts of Resistance can be seeds that helps people understand their situation and how they might work to improve it.

Labor Visions

As companies move jobs away from unionized workplaces, fewer workers have health insurance and pay has stagnated. New technology has helped businesses create huge multinationals that move jobs to where labor costs are the lowest. Unions are working with others to form support networks for all workers. Labor Visions, based on humane values, solidarity and local community, can motivate a union movement that transcends borders and involves all workers and their allies.

Universal Voice Mail

Even in this very wired age, the lack of a telephone number can be a real problem. Universal Voice Mail is a low-cost solution for those unable to afford their own telephone. Potential users include the homeless, the working poor, people fleeing domestic violence, or those otherwise in need of confidentiality. Universal Voice Mail should be available as an alternative to telephone service so that all people have a reliable point of contact and a link to their community.

Power of Story

The ancient art of storytelling needs to be rediscovered and updated. Stories help humankind to understand and reframe the meanings that undergird their existence. We can use new technologies to weave words and images, scientific information and poetic inspiration, and incorporate multiple voices to tell multi-faceted stories of our earth communities. As Thomas King tells us, *The truth about stories is that's all we are*.

Public Domain Characters

Humankind has created a magnificent pantheon of fictional and not-so-fictional characters. Sadly, this legacy may be lost as corporations increasingly own the rights. The natural processes of creating, sharing, and building on stories has been degraded into a process of claiming stories as private property. The development and sharing of Public Domain Characters can help reclaim these timeless functions.

Everyday Heroism

In the media, heroes are usually richer, stronger, and better looking than *ordinary* people. And the situations in which the heroes find themselves are *not* ordinary. This makes people feel that their own lives are unimportant. No matter what the movies tell us, however, most real heroes are *ordinary*. We need media that involves *ordinary* people and *everyday* lives. Celebrate the heroes among us and strive to be one. Remember: *Speak the truth even if your voice shakes*.

Telecenters

Across the globe new information and communication technologies (ICT) are increasingly perceived as essential to citizenship. In the same way that public libraries increased participation for the socially excluded through universal access to knowledge, so too can Telecenters that provide free or inexpensive ICT facilities. Remember that numerous preconditions must be met before Telecenters can effectively meet their objectives.

Thinking Communities

Creative thinking is essential for self-realization and for finding sustainable solutions to the problems of our complex global society. A worldwide network that supports Thinking Communities needs to be created that links affordable locations where people can concentrate and work on individual — as well as collective — creative projects. These communities would allow their members to concentrate deeply, while also allowing them to meet peers who are working on their own projects.

Great Good Place

Around the world people have forgotten how to "hang out" with friends, a lost art that refreshes the spirit and sometimes leads to social action as well. People need places other than their home or workplace where they feel comfortable without spending much money. They can be cafes, plazas, community centers or simply places with chairs or benches. They can be privately owned but they must support community needs for them to serve as Great Good Places

Soap Operas with Civic Messages

People all over the world face important life decisions with inadequate information and social pressure to behave in certain ways. Policy makers, media producers and community activists must present that information in forms that are accessible and acceptable. Soap Operas with Civic Messages weaves health and other socially responsible information into soap operas without compromising the compelling everyday drama that the genre exemplifies.

Emergency Communication Systems

Disasters require the attention of every level of society, including individuals, families, and neighborhoods as well as city, state, national, and international agencies and organizations. The content of Emergency Communication Systems and the dynamic and flexible flow of information through them are critical at every stage, including policy development, preparation, search and rescue, recovery, and reconstruction of vital infrastructures.

Community Inquiry

Communities face challenges in areas of health, education, economic development, sustainable environments, and social order. But regardless of the difficulty of these challenges, a necessary condition for addressing them is for communities to find ways for members to work together. Community Inquiry provides a theoretical and action framework for people to develop shared capacity and work on common problems in an experimental and critical manner.

Illegitimate Theater

Theater, viewing and participating in performances, is an ancient yet vital cultural force. Theater — particularly its "illegitimate" forms — can punctuate the ordinary and evoke new and unexpected experiences. Anybody can practice Illegitimate Theater that causes ripples in the everyday stream of life. It can be used to provoke emotional reactions, discussion or reflection. It can even help foster social change and the democratization of culture.

Environmental Impact Remediation

Although information and communication may seem abstract and immaterial, the systems that support them are built with solid things whose manufacture and disposal is often accompanied with environmental damage. We must acknowledge the environmental impact of these systems and devise strategies towards minimizing their negative effects. One group, Free Geek, uses volunteer labor to give new life to discarded technology by reusing and recycling.
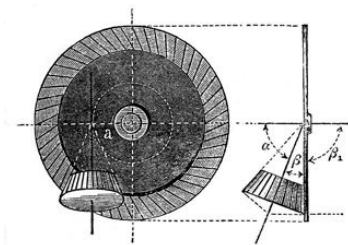
Open Source Search Technology

If the gatekeeping of commercial search engines is not balanced with open and accountable public approaches, the ability to find non-commercial information or that which is critical of governments and other powerful institutions could disappear. Open source, public search engines using open classification systems could solve this problem. It could open a new wave of experimentation in accessing information and serve as a reminder that access to information is a sacred human right.

Socially Responsible Video Games

Video games can be violent, sexually explicit, exploitive, and commercialistic. Whether or not they lead to anti-social behavior and attitudes, the idea presents intriguing possibilities. Ideally they could help teach people about real-world issues in compelling ways. And models and simulations provide ways for people to explore situations that can't be experienced directly — like the future.

Open Source Everything

High profits for corporations can mean low benefits for consumers, workers, and the environment. In many areas, including scholarly publishing and the development of educational materials and software, an "open source" process can be an effective alternative. Open Source Everything can be used to meet needs where the social and environmental costs of market-driven competition outweighs the benefits.

Power Research

Powerful people and organizations tend to abuse their power. Without understanding who has power, how the power is wielded, and how that power can be kept within legitimate boundaries, people with less power can be ignored, swindled, lied to, led into war, or otherwise mistreated. Research power — what it is, how is it organized and applied, and who has it. Make the findings available and share the techniques that help people initiate their own power research projects.

Citizens' Tribunal

Powerful countries sometimes ignore international law and other norms of acceptable behavior. NGOs and other groups face tremendous hurdles when challenging these actions. Citizens' Tribunals, such as the World Tribunal on Iraq condemning the US invasion of Iraq, are part legal proceedings, part theater, and part publicly speaking "truth to power." In spite of many challenges, a Citizens' Tribunal can be a powerful tool.

Whistle Blowing

Corporations may flaunt the law or ethical guidelines by harassing employees, ignoring safety considerations, or dumping toxics. Governments of course are also guilty of various crimes. Whistle Blowers expose problems by making hidden incidents or documents public. Although society benefits from Whistle Blowing, whistle-blowers are often punished for their efforts. There are many ways, however, to prevent whistle blowers from becoming martyrs.

Tactical Media

The circulation of information about social struggles is a fundamental aspect of successful political interventions and deserves careful planning. Tactical Media are practices that engage with the production of counter-information and with its modes and dissemination possibilities. Examples of TM range from Do-It-Yourself radio shows to humorous pranks used to spark discussions about social issues.

Media Intervention

Whether news, "reality" TV, police dramas, talk shows, or commercials, corporate media is a seamless and impenetrable wall that is protected from citizen intrusion. People and organizations who struggle to interject alternative messages into the public consciousness via the media are often ignored or rejected. By nudging the media into new directions, Media Intervention is one tactic to fight this particular and ubiquitous form of censorship .

Peaceful Public Demonstrations

Although demonstrations are disparaged by politicians and the media their existence is sometimes the deepest expression of those whose rights or sensibilities are being ignored. It is hard to deny the reality of thousands of people in the streets peacefully marching, with banners and signs, music, costumes, and noisemakers. Peaceful Pubic Demonstrations need to be tied to broader strategies that include building activist networks that persist beyond the protest itself.

Activist Road Trip

Travel offers immeasurable insights if people are receptive to them. The trouble is, of course, that it's possible to travel all around the world and not get anywhere at all. The Activist Road Trip pattern is used whenever activism is combined with travel. Activist Road Trips can be long or short; meditative or obstreperous. One doesn't have to physically travel very far to find unexplored regions sometimes in one's own region or city.

Follow the Money

"Deep Throat" was the mysterious character who said "Follow the money!" in *All the Presidents Men*, a movie about the Watergate scandal in the United States. The trail of a corrupt operation can often be determined by tracking and publicizing the source and use of money. Following the money is a simple, valuable, and sometimes dangerous approach to uncovering corruption.

Retreat and Reflection

The non-stop barrage of mass media promoting corporate messages is never far away. How can people even *hear themselves think* under such conditions? Engagement and retreat form an eternal cycle that we ignore at our own peril. People need time to think, to step back and to recharge their batteries. Retreat and Reflection are necessary complements to engagement; both are necessary in the struggle to create a better world.