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Chapter 1 : Sustainability - Wikipedia

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Learn about values, principles, and assumptions that guide community health and development efforts. What do we mean by values, principles, and assumptions? It comes from and is guided by values, principles, and assumptions that spring from our backgrounds and cultures, from our experiences, and from our conscious decisions about what is right. These values, principles, and assumptions shape our vision of the world as it should be, and motivate us to try to make it so. The terms values, principles, and assumptions are sometimes used as if they all mean the same thing â€" the underlying truths on which we base our dealings with the world. The importance of knowing the difference is understanding your own motivation, and acting accordingly. Values Values are our guidelines for living and behavior. Each of us has a set of deeply held beliefs about how the world should be. For some people, that set of beliefs is largely dictated by a religion, a culture, a peer group, or the society at large. For others, it has been arrived at through careful thought and reflection on experience, and is unique. For most of us, it is probably a combination of the two. Values often concern the core issues of our lives: In the case of the Community Tool Box team, they are the underpinning of our understanding of community health and development, the truths that shape both our reasons for doing the work, and the work itself. Moral and ethical principles are where values come in. These principles grow out of deeply held beliefs and values, and are often the principles upon which community work is founded. Devotion to democratic process, to equity and fair distribution of resources, to a reasonable quality of life for everyone, to the sacredness of life, to the obligation of people to help one another â€" these all come not from logic or scientific experiment, but from a value system that puts a premium on human dignity and relationships. At the same time, people may hold the same principles, but interpret them through different value systems. Two individuals may both believe, for instance, that all humans are created equal. For one, this may mean that she has a duty to treat everyone as an equal, and to try to gain equity for all. Even scientific principles are, in some sense, based on values. The use of the scientific method, the adherence to empirical evidence i. Many people around the world subscribe to different values, which place much more importance on religious or cultural traditions than on the work of science. Assumptions Assumptions are the next level of truths, the ones we feel we can take for granted, given the principles we have accepted. Assumptions are often unexamined. It is nevertheless true that we all bring assumptions to what we do, and the Community Tool Box team is no exception. What follows are some of the core values, principles and assumptions on which the Community Tool Box is based. The lists are not meant to be comprehensive, and are not necessarily in order of priority. Our values are a reflection of the way each of us sees and addresses the world. Although values can and do change as people grow and learn, there are some basic values that most people hold: These and a number of other values are held by the majority of people in most societies, and are often the foundation of laws and social norms. Here are some of the values behind the Community Tool Box: Everyone has a right to a decent quality of life. This is a core value for most people involved in community health and development. It states that the prerequisites for health in a community are peace, shelter, enough food, adequate income to support individuals and families, a stable ecosystem, sustainable resources, social justice, and equity. Everyone is worthy of respect and equal consideration. Fairness demands that everyone affected by research or by an issue â€" all stakeholders â€" should have the opportunity for either direct participation or representation in planning , implementing, and analyzing the resulting research or intervention. Community work, in whatever field, should be about creating new situations with the people affected, not about doing things for or to them. Although the reasoning behind them may â€" and usually does â€" grow out of our value system, they are generally practical, and aimed not at guiding our overall thinking and behavior, but at putting them â€" and our values â€" to work in the real world. Community work is far more likely to be successful if it involves all stakeholders from the very beginning. This is the principle that derives from the value concerning the fairness of involving everyone affected by an issue. This participatory process results in more ideas, more widespread support, the possibility of avoiding errors because of ignorance of community history or past performance, and ownership of the resulting action by everyone affected. Leadership from within the community should be encouraged and nurtured. Positive community change is more likely to occur, and more likely to continue, if it is built from within. The leaders for this work should come from the community, because they know the community so well, because they have the credibility that community membership brings, and because they have so much interest in success. It is also a matter of fairness â€" it is only right that people should control their own fates. Community work takes careful planning at every stage of the process. Assessment and issue identification, strategic planning, implementation, evaluation, and maintenance of effort all have greater chances of success with collaborative planning. This principle is reflected in the large number of sections that discuss planning. Evaluation is absolutely necessary, and useful in many ways, although probably most useful as a tool for improving your effort. It can show where changes are needed, pinpoint problems and strengths, suggest additional action, and provide accountability. A formative evaluation â€" one that carefully examines the process and content of your effort, compares it to what was supposed to occur, and analyzes the results of what you did in light of how you could improve on it â€" can tell you whether parts of the process or the goals need to be changed in order for the effort to become more effective. A summative evaluation â€" one that simply decides whether you did well or not, essentially focusing only on accountability â€" is far less helpful. A summative evaluation can often stop an effort in its tracks, when all it needs to become successful is a relatively minor change in execution. You should be constantly doing your best both to adapt your effort for greater effectiveness and to keep your ultimate goal in sight. Time is of the essence. Always allow enough time for things to happen, both in your planning and in your implementation. That means factoring in how long it actually takes to get an effort or program started: Recruiting a participatory planning team Developing a plan Getting the people, the space, the equipment and materials, and whatever else is needed in place Finding funding or other resources Carrying out the actual work Designing, implementing, and analyzing an evaluation Making the changes suggested by the evaluation, and then doing it all again Allowing enough time also means allowing time in your effort for the desired results to occur. In some public health programs, for instance, it may take years to know whether a particular method of prevention has been truly successful. Legislators may see an employment training program as a simple matter of unemployed people learning a particular skill â€" similar to taking a course for a set number of weeks. Teaching all the basics in addition to the job skill in question may take a great deal longer than policy makers intend, but will be more effective in the long run. Aim high, but be honest with yourself and others about what you can actually do, and how much time it will take. Trying to carry out a project without the resources you need is a recipe for failure. It makes far more sense to scale back your intentions, or to allow more time to get what you need than to go into an effort ill-equipped to carry it off. Community action should take place at the level and time to make it most effective. The level of community action refers to where the action is aimed. By the same token, your effort should occur at the best time for it to have the desired effect. This may mean coordinating it with regular legislative procedures the issuing of a state budget, for instance , with a particular season timing a fundraising effort for homeless families to coincide with the winter holidays , with a similar national or international effort e. Community intervention should be replicable and sustainable. The basic elements of the intervention should be effective â€" perhaps with some adaptation to a different community or population â€" anywhere, and you should be able to explain exactly how it works, so that someone else can set it up and run it in another situation. For an intervention to be sustainable, you have to be able to continue to operate it for the long term. That leads to the next principle: Community work is never done. To really bring about change in a community, you have to keep at it indefinitely. Sometimes, it might seem that altering your purpose will make it more palatable and less controversial, and will make your life easier. If these need to change because of changes in circumstances or community needs, then they should.

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The integrity of your cause and your organization is worth far more, and will contribute far more to your effort, than any short-term financial or public relations gain. The real goal of community work is positive social change. The ideal, in most cases, is to improve the quality of life for a particular group, or for everyone, in the community. This often means changing some fundamental aspects of the way the community thinks or functions â€” its attitude toward domestic violence, for instance, its commitment to education or to environmental preservation, its consumption of alcohol or unhealthy food, or its concept of social justice. If you can help the community change its attitudes and behaviors in positive ways, it will become a better place for everyone to live. If we start with that assumption, it becomes easier to establish common ground, and to begin to work together. Demonizing those we disagree with is easy and often satisfying, but it leads nowhere. Assuming instead that others want many of the same things we do can lead to cooperation on some issues, and can at least start a dialogue on others. In the quest for equity in a community, we often come up against attitudes that seem mean and unfeeling. In many cases, however, these attitudes are the result of people in different circumstances having little contact with one another. If people are treated with respect, they usually respond the same way. The Golden Rule is generally a good guideline, not only morally and ethically, but practically. Coalitions, partnerships, and collaborations are built one relationship at a time. It may be relatively easy to bring a number of people and groups together around an issue, but getting them to stay and work together is another matter. The relationships that they build with one another are the glue that can make that happen. House of Representatives, used to say that all politics was local. What he really meant was that all politics was personal, that alliances are built relationship by relationship. This is the reason that a shared vision is so important in community work, but it also hold true on the individual level. An individual or community has to be able to imagine the future in order to make it happen. People working together are better off and more successful than people working alone. In summary Underlying every section of the Community Tool Box are the values, principles, and assumptions that the Tool Box team uses to guide its work. These have to do largely with the fundamental dignity and worth of all people; the ability of â€” and necessity for â€” communities to solve their own problems and produce their own leaders; the ethical and practical necessities of health and community work; and the need for positive social change.

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Chapter 2 : Exposure to Environmental Contaminants | EPA's Report on the Environment (ROE) | US EPA

This article discusses the possibility of integrating deep ecology (DE) and animal rights (AR) perspectives within environmental education (EE) and education for sustainable development (ESD).

Initially, Sen argued for five components in assessing capability: In addition, the approach has been operationalised with a high income country focus by Paul Anand and colleagues. The approach emphasizes functional capabilities "substantive freedoms", such as the ability to live to old age, engage in economic transactions, or participate in political activities ; these are construed in terms of the substantive freedoms people have reason to value, instead of utility happiness , desire-fulfillment or choice or access to resources income , commodities, assets. Poverty is understood as capability-deprivation. It is noteworthy that the emphasis is not only on how humans actually function but also on their having the capability, which is a practical choice, "to achieve outcomes that they value and have reason to value". This approach to human well-being emphasizes the importance of freedom of choice, individual heterogeneity and the multi-dimensional nature of welfare. In significant respects, the approach is consistent with the handling of choice within conventional microeconomics consumer theory , although its conceptual foundations enable it to acknowledge the existence of claims, like rights, which normatively dominate utility-based claims see Sen Functionings[edit] In the most basic sense, functionings consist of "beings and doings". Examples of functionings can vary from elementary things, such as being healthy, having a good job, and being safe, to more complex states, such as being happy, having self-respect, and being calm. Moreover, Amartya Sen contends that functionings are crucial to an adequate understanding of the capability approach; capability is conceptualized as a reflection of the freedom to achieve valuable functionings. Eating , starving , and fasting would all be considered functionings, but the functioning of fasting differs significantly from that of starving because fasting, unlike starving, involves a choice and is understood as choosing to starve despite the presence of other options. Capabilities[edit] Capabilities are the alternative combinations of functionings that are feasible for a person to achieve. Formulations of capability have two parts: In sum, having a lifestyle is not the same as choosing it; well-being depends on how that lifestyle came to be. This book explores the interconnected concepts of person, responsibility and freedom in economics, moral philosophy and politics. It tries to reconcile the rationality and morality of individuals. It presents a methodological reflection phenomenology versus Kantian thought with the aim to re-humanise the person, through actions, and through the values and norms that lead to corresponding rights and obligations that must be ordered. The book extends the capabilities approach in a critical form. In particular, it considers freedom in relation to responsibility, that is, the capacity of people to apply moral constraints to themselves. Agency[edit] Amartya Sen defines an agent as someone who acts and brings about change, whose achievement can be evaluated in terms of his or her own values and goals. For example, when a person chooses to engage in fasting , they are exercising their ability to pursue a goal they value, though such a choice may not positively affect physical well-being. Concern for agency stresses that participation , public debate, democratic practice, and empowerment , should be fostered alongside well-being. That is, in order to be agents of their lives, people need the freedom to be educated, speak in public without fear, express themselves, associate, etc. She claims that a political order can only be considered as being decent if this order secures at least a threshold level of these 10 capabilities to all inhabitant. More recently, the approach has been criticized for being grounded in the liberal notion of freedom: Moreover, the emphasis on freedom betrays a profoundly modern orientation. Both propositions cannot hold. Being able to have good health , including reproductive health ; to be adequately nourished ; to have adequate shelter. Being able to move freely from place to place; to be secure against violent assault , including sexual assault and domestic violence ; having opportunities for sexual satisfaction and for choice in matters of reproduction. Senses, Imagination, and Thought. Being able to use the senses, to imagine, think, and reasonâ€”and to do these things in a "truly human" way, a way informed and cultivated by an adequate education , including, but by no means limited to, literacy and basic mathematical and scientific training. Being able to have pleasurable experiences and to avoid non-beneficial pain. Being able to have attachments to things and people outside ourselves; to love those who love and care for us, to grieve at their absence; in general, to love , to grieve , to experience longing, gratitude , and justified anger. Supporting this capability means supporting forms of human association that can be shown to be crucial in their development. This entails protection for the liberty of conscience and religious observance. Being able to live with and toward others, to recognize and show concern for other humans, to engage in various forms of social interaction ; to be able to imagine the situation of another. Protecting this capability means protecting institutions that constitute and nourish such forms of affiliation, and also protecting the freedom of assembly and political speech. Having the social bases of self-respect and non-humiliation; being able to be treated as a dignified being whose worth is equal to that of others. This entails provisions of non-discrimination on the basis of race, sex, sexual orientation, ethnicity, caste, religion, national origin and species. Being able to live with concern for and in relation to animals, plants, and the world of nature. Being able to laugh , to play, to enjoy recreational activities. Being able to hold property both land and movable goods , and having property rights on an equal basis with others; having the right to seek employment on an equal basis with others; having the freedom from unwarranted search and seizure. In work, being able to work as a human, exercising practical reason and entering into meaningful relationships of mutual recognition with other workers. Although Nussbaum did not claim her list as definite and unchanging, she strongly advocated for outlining a list of central human capabilities. For one, it requires specifying the context of use of capabilities, which could vary. Also, Sen argues that part of the richness of the capabilities approach is its insistence on the need for open valuational scrutiny for making social judgments. He is disinclined to in any way devalue the domain of reasoning in the public sphere. Instead, Sen argues that the task of weighing various capabilities should be left to the ethical and political considerations of each society based on public reasoning. Measurement of capabilities[edit] The measurement of capabilities was, in the early days, thought to be a particular barrier to the implementation and use of the approach. However, two particular lines of work, in research and policy have sought to show that meaningful indicators of what individuals and in some cases governments are able to do can be developed and used to generate a range of insights. In , the UN Human Development report published the first such exercise which focused on health, education and income which were equally weighted to generate the Human Development Index. At the same time, and subsequently, researchers recognizing that these three areas covered only certain elements of life quality have sought to develop more comprehensive measures. The earliest work in this project developed a set of around 50 capability indicators which were used to develop a picture of quality of life and deprivation in the UK. In a series of papers, they have shown that both their primary data and some secondary datasets can be used to shed light on the production and distribution of life quality for working age adults, those in retirement, very young children, those vulnerable to domestic violence, migrants , excluded traveler communities and the disabled. They use these applications to argue that the capability framework is a particularly good fit for understanding quality of life across the life course and that it provides a relatively universal grammar for understanding the elements of human well-being. Well-being has several dimensions of which monetary factors are only one. They are nevertheless an important one, since richer economies are better placed to create and maintain other well-being-enhancing conditions, such as a clean environment , the likelihood that the average person will have a right to 10 years or more of education, and lead a comparatively long and healthy life. Well-being will also be increased by institutions that enable citizens to feel that they control their own lives, and that investment of their time and resources will be rewarded. In turn, this will lead to higher incomes in a virtuous circle. Critique of output-based measures[edit] The use of GDP and GNP as an approximation of well-being and development have been critiqued widely, because they are often misused as indicators of well-being and human development when in fact they are only telling about the economic capacity of a country or an average income level when expressed on a per person basis. In particular, feminist economics and environmental economics offer a number of critiques. Critics in these fields typically discuss gender inequalities, insufficient representation of environmental costs of productions and general issues of misusing an output-based measure for unintended purposes. In sum, the conclusion of Capabilities Approach is that people do not just value monetary income, and that development is linked to various indicators of life satisfaction and hence are important in measuring well-being. Development policies strive to create an environment for people to live long, healthy creative lives. Environmental critiques Another critique by Waring is that the output-based measures ignore negative effects of economic growth [19] [21] and so commodities that lower social welfare, such as nuclear weapons, and oil extraction which causes spills, are considered a good input. The "anti-bads" or the defensive expenditures to fight "bads" are not counted as a deduction in accounting systems p. Goals for more growth should specify more growth of what and for what" p. Kuznets provides the example of the process by which farmers devote time and energy to bringing virgin land into cultivation. In companies, capabilities are included in Key Development Indicators , or KDIs as measures of development, including employee development. The purpose was to create an indicator of human development, especially one that would provide a general assessment and critique of global human development to shed light on persistent inequality, poverty and other capability deprivations despite high levels of GDP growth. Capabilities-based indices[edit] The following are a few of the major indices that were created based on the theoretical grounds of Capabilities Approach. Human development index[edit] The Human Development Index takes into consideration a number of development and well-being factors that are not taken into account in the calculation of GDP and GNP. The Human Development Index is calculated using the indicators of life expectancy, adult literacy, school enrollment, and logarithmic transformations of per-capita income. This index is used in unison with the HDI and therefore also captures the elements of capabilities that the HDI holds. Nussbaum, a; Nussbaum, b; Sen, ; Sen, The GEM focuses particularly on the relative empowerment of women in a given country. This composite measurement uses three dimensions: The HPI is a "nonincome-based" measure of poverty p. Human poverty can be interpreted as deprivations to lead a long healthy and creative life with a decent standard of living. It is seen as an alternative to existing preference-based measures of health-related quality of life for example the EQ-5D that focus on functioning, [34] [35] and can be applied within the framework of quality-adjusted life years QALYs. It is evident that these measures are very subjective, but this fact is in the essence of defining quality of life according to Nussbaum and Sen. Nussbaum refers to Sen in saying that, although measures of well-being may be problematic in comparative, quantifiable models due to their subjective matter, the protection of and commitment to human development are too important of matters to be left on the sidelines of economic progress. Well-being and quality of life are too important to be left without intentional focus towards political change. Some merits associated with this approach to measuring well-being are that it recognizes the importance of taking account of the results of social arrangements in judging them and the need to pay attention to the well-being of the people involved when judging social arrangements and their results. Sen argues that we may "want to pay attention not just to "aggregate" magnitudes, but also to extents of inequalities in happiness". The utility calculus can essentially be unfair to those who have come to terms with their deprivation as a means for survival, adjusting their desires and expectations. Resource-based approaches[edit] Another common approach in conventional economics, in economic policy and judging development, has traditionally been to focus on income and resources. These sorts of approaches to development focus on increasing resources, such as assets, property rights, or basic needs. Arguably, the main difficulty in a resource- or income-based approach to well-being lies in personal heterogeneities, namely the diversity of human beings. All sorts of differences, such as differences in age, gender, talents, etc. Additionally, other contingent circumstances which affect what an individual can make of a given set of resources include environmental diversities in geographic sense , variations in social climate, differences in relational perspectives, and distribution within the family. Furthermore, there are things people value other than increased resources. In some cases, maximizing resources may even be objectionable. As was recognized in the Human Development Report , the basic objective of development is to create an enabling environment for people to live long, healthy, and creative lives. This end is often lost in the immediate concern with the accumulation of commodities and financial wealth that are only a means to expansion of capabilities. Overall, though resources and income have a profound effect on what we can or cannot do, the capability approach recognizes that they are not the only things to be considered when judging well-being, switching the focus from a means to a good life to the freedom to achieve actual improvements in lives, which one has reason to value.

Chapter 3 : Environmental adult education - Wikipedia

Derrick is seven months old has begun to use the consonant sounds of b, d, m, and g in combination with vowel sounds, such as saying "ba-ba-ba." Derrick has entered the language stage known as babbling.

He calls this approach to management "a very democratic idea" in which "wildlife belongs to all people" and says that "regulated hunting, fishing and trapping provide the way to manage those species and also provide revenue to pay for their conservation. It is flawed, inadequate and poorly constructed, with a biased historical basis and a misguided ethical premise. Hunters have traditionally claimed that their "sport" supplies the funding for conservation efforts nationwide. In fact, recent studies demonstrate that 94 percent of total funding for wildlife conservation and management comes from the nonhunting public. But hunters make virtually all decisions regarding wildlife management. Two principles routinely overlooked include the stipulations that wildlife resources are a public trust and that science is the proper tool to discharge wildlife policy. Letters to the board and recommendations from wildlife biologists are ignored, no members of the nonhunting community sit on the board and public commentary is rarely allowed. The department is biased toward special interest groups who recklessly kill wildlife with no regard for conservation principles or the rights of the nonhunting constituency. The trustees of Burlington College had a fiduciary responsibility for the fate of the college. They purchased the diocese land, and they sold it. But none of those would have destroyed the college if the trustees had done their job. No fundraising to service the debt, no fundraising to bring the original diocese building up to code, no fundraising for scholarships, no fundraising to create a viable endowment. Their only actions were to sell off the most valuable assets of the college and to stand by and not lift a finger while the college administration pilfered a restricted gift meant to provide scholarship aid to deserving students. The debt did not lead to the demise of Burlington College; the trustees did. However, as a member of the Champlain Senior Center, I object to the breezily condescending tone. Armchair exercise keeps us limber. Some of us dance more than the hokey pokey with Bhutanese seniors to promote friendship, and our Bhutanese neighbors are avid card players. Then there are sing-alongs, talks about poetry and fiction, and lessons in American Sign Language. Lunch is not just a balanced and nutritious meal; it is about conversation. We talk about family, health, the weather, and local and national politics. We are Vermonters, after all. These conversations have a common denominator: Many cultures value that experience; ours does not. Presently children as young as 16 may be charged as adults for any crime. The decision on where to file is solely that of the prosecutor. Recently prosecutors, to their credit, have begun filing most cases in Family Division. However, a significant number of and year-olds are still prosecuted as adults. The result of a conviction is an adult criminal record, which makes it difficult, if not impossible, for youth to access employment, public housing and college loans. Advocates have been seeking this change for more than three decades. There are numerous people to thank, notably Reps. Dick Sears of the Senate Judiciary Committee. This change recognizes principles of adolescent brain development and the overwhelming number of studies that show far better results when the justice system treats children as children and not adults. Bob Sheil Sheil is a former juvenile defender for the State of Vermont. I predict that, if built, the new mall will be just as hollow and empty as the current mall is today. The inability to practice foresight management and the failure to see the relationship between construction, development and urban planning can spell generations of awkward inner-city navigation, wasteful domino-like spending and inconvenience compounded with inherent missed opportunities for community-enriching growth. People seem to be either completely for or against the mall project. Also imagine telling Don Sinex and his architects to go back to the drawing board with sustainability as the main focus, not only for materials and building practices, but also conceptually for the basis of aesthetic design. The entire shape and vibe of the mall complex would change. Now imagine the entire country watching: A community acts as a progressive lens for development and sets a new standard for sustainable construction. As a culture, we need this. As a progressive city with a strong sense of community, we have the power and duty to ask these questions and the right to the answers. His project may in the end be a good one, but it should be built according to our laws, not his. Our thoughtful and established zoning law allows downtown development up to 65 feet. Developers can earn up to 40 feet of additional height and other bonuses by providing the community with valuable things such as senior housing, parking, energy efficiency and art. Instead, the city rolled over twice and committed to giving Sinex the right to build up to feet without any incentive to give back by earning height bonuses. The elephant in the room is that, per the predevelopment agreement, building height limits downtown more than double from 65 to feet, and the height bonuses to provide special values to the community are abandoned. Our zoning laws are a promise to the community. When the city makes special deals with any developer for radical and wholesale changes to zoning law, that promise to the community is broken.

Chapter 4 : The Significant 7: Principles of Functional Training for Mature Adults

The following seven principles of functional training for older adults emerge from empirical evidence and insights gleaned over years of working with a variety of older clients. This article also reviews some of the most significant research findings on the topic and provides practical recommendations in areas where the evidence is unclear or.

Effective and responsible community engagement requires careful monitoring of the professional ethics of a process. Some guiding principles can help, in my experience. Distinguishing between community engagement and communication. Reaching and engaging hard-to-reach groups and individuals. Encouraging and resourcing sustainability debates. Actively pursuing community education and capacity-strengthening to offer local people genuine opportunities to explore the implications of sustainability agendas and develop an interest in exploring options they might not have previously considered. Helping local people understand the implications of the discourses about sustainability and growth issues and building community capacity about options. Addressing issues of cultural diversity by actively engaging culturally and linguistically diverse CaLD communities. Finding ways to target non-English-speaking and other cultural groups and build bridges between and among cultural groups to open up a community conversation about options. This has significant resource implications in terms of translation and interpretation of all processes. Processes employed with non-English speakers must not be seen as abbreviated or lesser than processes for English-speaking community members. This will require a deep understanding of evidence-based research on effective engagement with children and young people. An integrated processes that clearly indicates when and how community information and opinions will be taken into account to influence decisions at key target dates and deadlines. Feedback loops and governance structures established so that community members can see how their views are being taken into account and track their influence and voice. Representativeness and tracking of community engagement activities and successes. Ensuring that participants are representative of the wider community; developing and using deliberative democracy and other emerging processes that enhance representativeness; regular monitoring of representativeness issues and including ways to increase representativeness. Relationships between and among various advisory groups, servicing and governance structures. Developing clear draft terms of reference for each advisory group, including draft working protocols, assisting groups in refining these terms of reference and protocols and establishing clear reporting and liaison relationships between those groups and the project management, the ongoing community engagement strategy, as well as between those groups. Finding ways to maintain community interest and involvement over a long period, perhaps by tying processes to established community events and activities. Evaluation proposals for community engagement. Creation and maintenance of clear evaluation frameworks for the community engagement. Born in mid-winter in a freezing mining town in northern Canada, Wendy Sarkissian had the good sense â€" or good fortune â€" at 25, to migrate to Australia. Having spent almost all of her working life in Australia, she is a planner who specializes in social planning, housing density and community engagement. She has coauthored three new books: An exhausted but nevertheless enthusiastic owner-builder, Wendy lives with her husband in an eco-village in Nimbin. She is currently writing a novel about a developer in Vancouver who accidentally becomes the owner of a piece of flood-prone coastal land with warring neighbours, native land claims and complex politics.

Chapter 5 : 12 Principles of Child Development and Learning that Inform Practice | NAEYC

Adult Education in the Eastern Arctic as if Community Mattered There are many different models of adult education, rooted in particular values, objectives, and pedagogical principles, which align with different overall approaches.

Leading 20th century proponent of Kantianism: Professor Elizabeth Anscombe Kant, unlike Mill, believed that certain types of actions including murder, theft, and lying were absolutely prohibited, even in cases where the action would bring about more happiness than the alternative. For Kantians, there are two questions that we must ask ourselves whenever we decide to act: If the answer is no, then we must not perform the action. Again, if the answer is no, then we must not perform the action. Kant believed that these questions were equivalent. Kant believed that there was a supreme principle of morality, and he referred to it as The Categorical Imperative. The CI determines what our moral duties are. What is an imperative? An imperative is a command. So, "Pay your taxes! Another example, your father says, "if you are hungry, then go eat something! What is the connection between morality and categorical imperatives? Morality must be based on the categorical imperative because morality is such that you are commanded by it, and is such that you cannot opt out of it or claim that it does not apply to you. How does the categorical imperative work? The categorical imperative has three different formulations. That is to say, there are three different ways of saying what it is. Kant claims that all three do in fact say the same thing, but it is currently disputed whether this is true. The second formulation is the easiest to understand, but the first one is most clearly a categorical imperative. Here is the first formulation. A maxim is the rule or principle on which you act. For example, I might make it my maxim to give at least as much to charity each year as I spend on eating out, or I might make it my maxim only to do what will benefit some member of my family. The command states, crudely, that you are not allowed to do anything yourself that you would not be willing to allow everyone else to do as well. You are not allowed to make exceptions for yourself. For example, if you expect other people to keep their promises, then you are obligated to keep your own promises. More accurately, it commands that every maxim you act on must be such that you are willing to make it the case that everyone always act on that maxim when in a similar situation. For example, if I wanted to lie to get something I wanted, I would have to be willing to make it the case that everyone always lied to get what they wanted - but if this were to happen no one would ever believe you, so the lie would not work and you would not get what you wanted. So, if you willed that such a maxim of lying should become a universal law, then you would thwart your goal - thus, it is impermissible to lie, according to the categorical imperative. It is impermissible because the only way to lie is to make an exception for yourself. Kant also has something to say about what makes someone a good person. Keep in mind that what is said below has to do with how one evaluates people, not actions. This chart should help explain the basics. Kant argues that a person is good or bad depending on the motivation of their actions and not on the goodness of the consequences of those actions. By "motivation" I mean what caused you to do the action i. Kant argues that one can have moral worth i. This may sound odd, but there is good reason to agree with Kant. I look around for what would be the most fun to do with it: I decide that what would be really fun is to give the money to charity and to enjoy that special feeling you get from making people happy, so I give all my lottery money away. According to Kant, I am not a morally worthy person because I did this, after all I just did whatever I thought would be the most fun and there is nothing admirable about such a selfish pursuit. It was just lucky for those charities that I thought giving away money was fun. Moral worth only comes when you do something because you know that it is your duty and you would do it regardless of whether you liked it. A reason why Kant is not concerned with consequences can be seen in the following example. Imagine two people out together drinking at a bar late one night, and each of them decides to drive home very drunk. They drive in different directions through the middle of nowhere. One of them encounters no one on the road, and so gets home without incident regardless of totally reckless driving. The other drunk is not so lucky and encounters someone walking at night, and kills the pedestrian with the car. Kant would argue that based on these actions both drunks are equally bad, and the fact that one person got lucky does not make them any better than the other drunk. The same reasoning applies to people who act for the right reasons. If both people act for the right reasons, then both are morally worthy, even if the actions of one of them happen to lead to bad consequences by bad luck. Consider the case described above about the lottery winner giving to charity. Imagine that he gives to a charity and he intends to save hundreds of starving children in a remote village. The food arrives in the village but a group of rebels finds out that they have food, and they come to steal the food and end up killing all the children in the village and the adults too. The intended consequence of feeding starving children was good, and the actual consequences were bad. Kant is not saying that we should look at the intended consequences in order to make a moral evaluation. Kant is claiming that regardless of intended or actual consequences, moral worth is properly assessed by looking at the motivation of the action, which may be selfish even if the intended consequences are good. One might think Kant is claiming that if one of my intentions is to make myself happy, that my action is not worthy. This is a mistake. The consequence of making myself happy is a good consequence, even according to Kant. Kant clearly thinks that people being happy is a good thing. There is nothing wrong with doing something with an intended consequence of making yourself happy, that is not selfishness. You can get moral worth doing things that you enjoy, but the reason you are doing them cannot be that you enjoy them, the reason must be that they are required by duty. Also, there is a tendency to think that Kant says it is always wrong to do something that just causes your own happiness, like buying an ice cream cone. This is not the case. Kant thinks that you ought to do things to make yourself happy as long as you make sure that they are not immoral i. Getting ice cream is not immoral, and so you can go ahead and do it. Many actions which are permissible but not required by duty are neutral in this way. According to Kant a good person is someone who always does their duty because it is their duty. It is fine if they enjoy doing it, but it must be the case that they would do it even if they did not enjoy it. The overall theme is that to be a good person you must be good for goodness sake. His argument for this is summarized by James Rachels as follows: After all, it is not as though people would stop believing each other simply because it is known that people lie when doing so will save lives. For one thing, that situation rarely comes upâ€”people could still be telling the truth almost all of the time. Even the taking of human life could be justified under certain circumstances. Take self-defense, for example. Maxims and the universal laws that result from them can be specified in a way that reflects all of the relevant features of the situation. Consider the case of the Inquiring Murderer as described in the text. Suppose that you are in that situation and you lie to the murderer. This maxim seems to pass the test of the categorical imperative. Procedure for determining whether a proposed action violates CI1: I am to do x in circumstances y in order to bring about z. I am to lie on a loan application when I am in severe financial difficulty and there is no other way to obtain funds, in order to ease the strain on my finances. Everyone always does x in circumstances y in order to bring about z. Everyone always lies on a loan application when he is in severe financial difficulty and there is no other way to obtain funds, in order to ease the strain on his finances. Could I rationally act on my maxim in the PSW? If we get a no answer to either, we must reject the maxim and try to find another one on which to act. The maxim fails because I must answer "no" to the first question: I could not rationally act on the maxim in the PSW. There are two reasons Kant states for this: Lying on a loan application would not get us anywhere in a world where everyone always lied when under similar circumstances. The second part of the test is the "contradiction in the will test. The next example is supposed to illustrate a failure of this test. In order to advance my own interests, I will not do anything to help others in need unless I have something to gain from doing so. The PSW will contain a law of nature of the form: To advance his own interests, everyone always refrains from helping others in need unless he has something to gain from doing so. Now Kant would say that there is no problem in conceiving such a PSW in fact, those of a cynical bent might think that the PSW is no different from the existing world. Applying the first question of the procedure, we see that we cannot answer no to the first question: However, according to Kant the second part of the test fails: I could not rationally choose the PSW, because "a will which resolved itself in this way would contradict itself, inasmuch as cases might often arise in which one would have need of the love and sympathy of others and in which he would deprive himself, by such a law of nature springing from his own will, of all hope of the aid he wants for himself

Chapter 6 : Principles of Life Span Theories | Healthy Living

Who cares whether the earth was created in seven days if seventy species disappear every day? The answer is, of course, that many people care about religious matters. And perhaps care, like love, is not a finite resource.

The aging of our global population and the significant increase in numbers predicted over the next 20â€”30 years Pew Research Center offers a unique opportunity and challenge for fitness professionals. Personal trainers who are so determined to create the most effective and functional program that they compromise safety must change their approach if they want to continue working with this population. Some trainers make no distinction between their , , , and even year-old clients and use the same program for them all. The result is a routine that shifts erratically between safe and unsafe, effective and ineffective. On the other end of the spectrum are trainers who worry so much about injuring a mature client that they play it extremely safe, providing a virtually ineffective program. None of these approaches is optimal or even acceptable. As a personal trainer, how do you determine the most appropriate and effective methods for training mature clients? The following seven principles of functional training for older adults emerge from empirical evidence and insights gleaned over years of working with a variety of older clients. This article also reviews some of the most significant research findings on the topic and provides practical recommendations in areas where the evidence is unclear or equivocal. Assess and Prioritize 1. Assess, prioritize and train all components of function. Mature adults want and need to improve or maintain their functional abilities. However, it appears that traditional training methods, such as resistance training, may not be effective. Analysis showed very strong post-training improvements in impairment-level factors, such as strength, joint range of motion, aerobic capacity and body composition. However, improvements in function measuresâ€”such as gait speed, chair rise time, stair climbing, balance and weighted-lifting tasksâ€”were inconsistent and not as strong. The authors noted that the subjects who improved most on impairment-level factors were not necessarily the ones who improved most on functional measures. Latham and colleagues took this approach one step further and analyzed only randomized controlled trials that used progressive resistance training PRT â€”considered the gold standard by manyâ€—as the intervention. All subjects were 60 or older. The findings confirmed what Keysor and Jette had suggested a few years earlier: Strength gains do not equate to similar functional gains. The above findings may surprise you. However, an adequate understanding of function puts these findings in perspective. Strength is not function. Strength is merely one albeit an important one of many components that contribute to functional ability. Consider the evidence for muscular power. The data consistently show that muscular power has a closer relationship with functional performance than does muscular strength. There are two reasons for these findings: Many daily tasks rely on power for successful completion e. Power is a combination of two functional components strength and contractile velocity. The results will show you which functional components to work on first and how to prioritize the rest. Well-rounded routines may be fine for many populations, but older adults need a focused and prioritized routine. A basic PAR-Q may be sufficient for a or year-old-client, but when a client is over 50, or especially over 70, you need to obtain a thorough health history and discuss medical issues and training goals with the client. This information gathering will indicate which functional assessments are needed. It is beyond the scope of this article to describe the bevy of assessments available, but ideally you will be knowledgeable and qualified enough to perform many different kinds of assessments that address the components of function. With the validation of new protocols e. Make Purposeful Decisions 2. Make educated and thoughtful decisions. Fitness professionals have more training options than ever and therefore must prudently select methods, techniques, specific exercises, progressions, equipment and environments. If you do a proper and thorough assessment, this task becomes significantly easier. The client, however, is going to commit a limited amount of time to exercising. In fact, this population is the most heterogeneous of any age group and brings to the table tremendous diversity in terms of functional abilities, chronic diseases, experiences and other factors. Cookie-cutter programs are therefore the least likely to be effective. Variety for its own sake is likely to backfire in the long term. You need to be able to explain precisely why you are including a particular exercise for an older adult and how you are asking the client to perform it equipment, sets, reps, resistance level, speed, body position, etc. If not, you are not making a purposeful decision and must return to your assessment and educate yourself on the needs of the client. Train in Three Planes 3. To prepare for functional demands, integrate movement patterns by training in all three planes. People reach, bend, lean, turn, twist, stoop and change directions constantly. We all continually face challenges in the frontal, sagittal and transverse planes. Why, then, are exercises for older adults so one-dimensional? Are our bodybuilding roots still a heavy influence? While functional training methods and tools are becoming more popular, the majority of the industry still seems to focus on the aesthetic goals of younger clients. This means using machines or free weights to isolate individual muscle groups for maximum hypertrophy. But heavy strength training is not necessarily the answerâ€"there are other options. One case in point comes from Joseph F. In his recent book, Bending the Aging Curve: The Complete Exercise Guide for Older Adults Human Kinetics , Signorile explains the importance of using multiplanar exercises and describes an interventional approach for turning fitness gains into functional gains. He describes a periodized model in which a physiological training cycle is followed by a translational motor learning cycle. The physiological training cycle focuses on improving primary components of fitnessâ€"such as strength, flexibility and aerobic capacityâ€"through traditional methods. The translational training cycle focuses on increasing functional capacity through multidimensional motor-control tasks of increasing complexity. Strategies for increasing task complexity include using multiple joints, shifting to dynamic tasks, altering the base of support, adding object manipulation, using multiple directions and multitasking. The basic stationary lunge is an example. During the physiological training cycle, the lunge can be performed in a typical manner, using dumbbells for extra resistance as needed, because the focus is simply on building strength in the lower extremities. Complexity can be accomplished by making the lunge multidirectional; requiring the client to pick up and put down an object such as a telephone book with each lunge; or asking her to respond to changing verbal demands. Given the growing evidence that PRT is not the optimal method for improving function, then utilizing a multiplanar approach to improve motor control and train additional components of function appears warranted. Supplement and Complement With Isolation 4. Make isolation-type movements a supplementary or complementary component of the program rather than its primary component. Ask yourself this question: Are the biceps important in functional tasks? Without biceps strength, it would certainly be hard to pull a lawnmower or open a door. And lifting a jug of milk, carrying luggage or virtually anything for that matter , vacuuming or even pulling on a pair of pants would become much more difficult or even impossible. Therefore, for someone who lacks enough biceps strength to perform these or other functional tasks, doing biceps curls is functional exercise. What about doing leg extensions to strengthen the quadriceps? Or shoulder presses to improve deltoid strength? As discussed earlier, using isolated PRT techniques for individual muscle groups offers some benefits for combating sarcopenia, building strength and, to a lesser degree, improving function. Isolation-type movements are best for improving the strength of a targeted muscle group, yet strength is only one of the components that you must address. Therefore, it is advisable to use isolation-type movements when indicated. For example, a client who struggles or is unable to rise independently from a chair is probably suffering from a lower-extremity strength deficit. In this case it is advisable to perform some isolation movements to build strength in the quadriceps, glutes, hamstrings and calves for a short period of time. Have mature clients perform exercise movements in the seated position only when absolutely necessary or when it serves a specific purpose. Seated exercise interventions have proved to be inferior to standing weight-bearing exercise interventions in several areas, including mobility and balance Vogler et al. Mobility is a critical component for the continued health and longevity of mature adults. It is also a critical component of life satisfaction for many mature adults. Loss of mobility usually means loss of independence. Related to this is the risk of falling. Falls are a significant threat to the mature population and often lead to hospitalization, long-term care or death Rubenstein Performing exercises in a standing, weight-bearing position whenever possible will help improve mobility and reduce fall risk. Standing uses many more muscle groups than sitting and is a more complex neuromuscular challenge that requires greater degrees of strength, proprioception, center-of-gravity control and postural stability. A recent literature review on effective balance training protocols Sherrington et al. Train and challenge the base of support e. Modify or reduce the use of the upper body such as hands. Of these three, training center-of-gravity control is the only one that can be addressed in a seated positionâ€”and the level of challenge is much lower than it is when standing. For example, seated exercises may be purposeful when a client is becoming fatigued; a client is not ready for higher-level progressions involving postural position or cannot adequately control center of gravity e. Order the training session components according to the energy level they require. Place more complicated, multicomponent movements earlier in the routine and less complicated, isolation-type movements later. During the course of a session, it is typical for energy and focus to wane as muscle and mental fatigue set in. With mature clients, a potentially dangerous scenario can ensue when this loss of energy and focus interacts with poor functional capabilities, with the result being greater risk of injury discussed further in principle 7. The longer the session, the more likely that attention and performance deficits will occur. Much of the personal training industry has moved to shorter and minute sessions instead of the traditional minute session.

Chapter 7 : Capability approach - Wikipedia

parents or other caregiving adults through warm and responsive interactions in which support, coaching, and modeling are provided to facilitate a child's ability to understand, express, and modulate thoughts, feelings, and behavior.

History[edit] Environmental adult education is a relatively new and unique field of study and practice. Using a community-based method, educators listen and respect the input of learners and all participants are considered essential. The United States was one of the first countries to officially recognize environmental education. During a joint Houseâ€"Senate session in , Congress acknowledged the importance of environmental education, and in passed the Environmental Education Act , which established the Office of Environmental Education. EAE recognized as distinct field of study Late s: EAE focus on learner experience Late s, Early Focus shifted to how to teach EAE United Nations Educational, Scientific, and Cultural Organization UNESCO hosted conference on adult education with EAE being one of the 33 workshops presented Earlier environmental education initiatives[edit] According to the UNESCO Web site,[citation needed] in it organized the first intergovernmental conference aimed at reconciling the environment and development, now known as "sustainable development". This document included seven proclamations and 26 principles "to inspire and guide the peoples of the world in the preservation and enhancement of the human environment. The product of the International Workshop on Environmental Education, this charter built upon the Stockholm Declaration by adding goals, objectives and principles for environmental education programs. This document updated and clarified the Stockholm Declaration and the Belgrade Charter by including new goals, objectives, characteristics, and guiding principles of environmental education. Methods[edit] Educators in this field of study consider environmental problems with a holistic approach that combines social, political and environmental concerns into community dilemmas. This connection allows adult learners to understand the core causes of major environmental issues and the resulting social inequalities. This method also allows educators to stress the importance of instilling environmental awareness so that learners do not forget their relationship with the natural world. To summarize the methods of adult environmental education training, environmental adult educators strive to instil learners with: This means that the organized learning can take place in many forms including vocational education, literacy education and on the job training. The government - through its Ministry of Education - integrated environmental education in schools, including tertiary education institutions, while partners such as media outfits deliver meaningful environmental concepts to targeted audiences and the general public. You may improve this article , discuss the issue on the talk page , or create a new article , as appropriate. February Learn how and when to remove this template message Conservation education and governmental agencies such as the Forestry Service and the Environmental Protection Agency EPA were established to educate adults in broad areas of the environment. The Nature Conservancy , originally the Ecological Society of America, was formed in with the missions of supporting ecologists and preserving natural ecosystems. The 4-H Organization was also established to reach adults by educating youth in areas of new agricultural technology and environmental awareness. The Peace Corps , established in , has worked to incorporate adult environmental education and conservation practices into its international programming.

Chapter 8 : Fall Courses - English | Colorado State University

She is also co-author of an award-winning book on medium-density housing design, Housing as if People Mattered: Illustrated Site-Design Guidelines for Medium-Density Family Housing. Wendy holds a doctorate in environmental ethics from Murdoch University and a Masters of Town Planning from Adelaide University.

Sustainable development The name sustainability is derived from the Latin sustinere tenere, to hold; sub, under. Sustain can mean "maintain", "support", or "endure". Components[edit] Three dimensions of sustainability[edit] A diagram indicating the relationship between the "three pillars of sustainability", in which both economy and society are constrained by environmental limits [18] Venn diagram of sustainable development: One such pillar is future generations, which emphasizes the long-term thinking associated with sustainability. A study from pointed out that environmental justice is as important as sustainable development. The simple definition that sustainability is something that improves "the quality of human life while living within the carrying capacity of supporting eco-systems", [34] though vague, conveys the idea of sustainability having quantifiable limits. But sustainability is also a call to action, a task in progress or "journey" and therefore a political process, so some definitions set out common goals and values. More than that, sustainability implies responsible and proactive decision-making and innovation that minimizes negative impact and maintains balance between ecological resilience, economic prosperity, political justice and cultural vibrancy to ensure a desirable planet for all species now and in the future. More recently, using a systematic domain model that responds to the debates over the last decade, the Circles of Sustainability approach distinguished four domains of economic, ecological, political and cultural sustainability ; [42] this in accord with the United Nations , Unesco , Agenda 21 , and in particular the Agenda 21 for culture which specifies culture as the fourth domain of sustainable development. Rather, it involves treating all four domainsâ€"economy, ecology, politics and cultureâ€"as social including economics and distinguishing between ecology as the intersection of the human and natural worlds and environment as that which goes far beyond what we as humans can ever know. Human sustainability can be achieved by attaining sustainability in all levels of the seven modalities. Shaping the future[edit] Integral elements of sustainability are research and innovation activities. A telling example is the European environmental research and innovation policy. It aims at defining and implementing a transformative agenda to greening the economy and the society as a whole so to make them sustainable. Research and innovation in Europe are financially supported by the programme Horizon , which is also open to participation worldwide. Additionally, instigating innovative and sustainable travel and transportation solutions must play a vital role in this process. Resilience-thinking evolved from the need to manage interactions between human-constructed systems and natural ecosystems in a sustainable way despite the fact that to policymakers a definition remains elusive. It is also concerned with commitment from geopolitical policymakers to promote and manage essential planetary ecological resources in order to promote resilience and achieve sustainability of these essential resources for benefit of future generations of life? In nature, the accounting occurs naturally through a process of adaptation as an ecosystem returns to viability from an external disturbance. The adaptation is a multi-stage process that begins with the disturbance event earthquake, volcanic eruption, hurricane, tornado, flood, or thunderstorm , followed by absorption , utilization , or deflection of the energy or energies that the external forces created. History of sustainability The history of sustainability traces human-dominated ecological systems from the earliest civilizations to the present day. Coal was used to power ever more efficient engines and later to generate electricity. Modern sanitation systems and advances in medicine protected large populations from disease. In the late 20th century, environmental problems became global in scale. In the 21st century, there is increasing global awareness of the threat posed by the human greenhouse effect , produced largely by forest clearing and the burning of fossil fuels. The focus ranges from the total carrying capacity sustainability of planet Earth to the sustainability of economic sectors, ecosystems, countries, municipalities, neighbourhoods, home gardens, individual lives, individual goods and services[clarification needed], occupations, lifestyles, behaviour patterns and so on. In short, it can entail the full compass of biological and human activity or any part of it. To shed light on the big picture, explorer and sustainability campaigner Jason Lewis has drawn parallels to other, more tangible closed systems. The environmental impact of a community or of humankind as a whole depends both on population and impact per person, which in turn depends in complex ways on what resources are being used, whether or not those resources are renewable, and the scale of the human activity relative to the carrying capacity of the ecosystems involved. Careful resource management can be applied at many scales, from economic sectors like agriculture, manufacturing and industry, to work organizations, the consumption patterns of households and individuals and to the resource demands of individual goods and services. This formulation attempts to explain human consumption in terms of three components: The equation is expressed: The most prominent among these concepts might be the Circular Economy , with its comprehensive support by the Chinese and the European Union. There is also a broad range of similar concepts or schools of thought, including cradle-to-cradle laws of ecology, looped and performance economy, regenerative design, industrial ecology, biomimicry, and the blue economy. These concepts seem intuitively to be more sustainable than the current linear economic system. The reduction of resource inputs into and waste and emission leakage out of the system reduces resource depletion and environmental pollution. However, these simple assumptions are not sufficient to deal with the involved systemic complexity and disregards potential trade-offs. For example, the social dimension of sustainability seems to be only marginally addressed in many publications on the Circular Economy, and there are cases that require different or additional strategies, like purchasing new, more energy efficient equipment. Sustainability measurement Sustainability measurement is the quantitative basis for the informed management of sustainability. They are applied over a wide range of spatial and temporal scales. Companies such as Lieef www.

Chapter 9 : Small Is Beautiful: Economics as if People Mattered by Ernst F. Schumacher

CHAPTER 2 INTERVIEWING AND THE HEALTH HISTORY 23 The health history interview is a conversation with a purpose. As you learn to elicit the patient's history, you will draw on many of the interpersonal.

Importance of Monitoring Human Exposure Trends in human exposure are important for several reasons: Understanding the extent to which human populations are being exposed to environmental contaminants helps identify: Contaminants of potential public health concern. For example, children may have disproportionately heavy exposures to environmental contaminants because they drink more water, breathe more air, and eat more food per pound or kilogram of body weight than adults. They may also be more vulnerable to some environmental contaminants at certain stages of development. Top of Page Measures of Human Exposure Human exposure to environmental contaminants can be measured in the ambient environment air, water, land , at the point of human contact, or after contaminants have entered the human body through entry portals such as the eyes, skin, stomach, intestines, or lungs. Different approaches are used to measure or estimate exposure, each with advantages and disadvantages. These approaches include ambient concentration measurements, exposure modeling, personal monitoring, and biomonitoring. Measurement of ambient concentrations provides information about how much of a contaminant is present in the environment air, water, or soil , but not how much of the contaminant humans actually come in contact with. In some cases, ambient concentrations may be modeled or estimated rather than measured. This type of exposure estimate has provided a valuable foundation for many of the regulatory and non-regulatory actions that have been taken to limit exposure to ambient contaminants. Measurements of ambient concentrations of contaminants are presented in Air , Water , and Land indicators, but cannot be directly linked with the biomonitoring indicators presented to address the ROE exposure question. This approach requires data on contaminant levels where people live, work, and play, as well as knowledge of their day-to-day activities. With personal monitoring, an individual wears a monitoring device during normal day-to-day activities. Personal monitoring provides valuable insights into the source of contaminants to which people are being exposed. It is most commonly used in workplaces. A challenge with personal monitoring as with biomonitoring is ensuring that the extent of sampling is sufficient to be representative of the population being studied. No national-scale personal monitoring data are available. Measurements are most commonly made in blood or urine, but can also be taken from a variety of other body compartments, such as feces, breast milk, hair, nails, and exhaled air, as well as tissues obtained through biopsy or autopsy. Several environmental contaminants, including heavy metals, some pesticides, and other persistent organic pollutants, can accumulate in the body. Biomonitoring has been used to characterize exposure to lead and some other metals for a number of years. More recently, advances in biomonitoring have enabled measurement of many other environmental contaminants. By directly measuring contaminants or their biomarkers in human fluids or tissues, biomonitoring takes into account the complex set of physiologic and metabolic factors that govern how contaminants are absorbed and distributed within the body. Measurable levels of many of these contaminants appear in at least some subset of the populations tested. Together, these indicators enhance understanding of the extent to which exposure to individual substances has occurred on a national scale. Although ROE biomonitoring indicators show the relative amounts of environmental contaminants in people and in subpopulations over time, by themselves, biomarkers of exposure do not: Provide information about the contaminant source. Predict whether the presence of the contaminant in the body will result in biological alterations or harmful health effects, either acting alone or in combination with other contaminants. Provide information on when, where, and how exposure occurred. Explain possible differences among some subpopulations. Also, there are still many contaminants for which no biomonitoring indicators exist, and others that are simply not feasible to analyze using current technology or data collection methods. These include radon, most criteria air pollutants e. In many cases, biomonitoring for these contaminants is either cost-prohibitive or not yet technologically feasible.

DOWNLOAD PDF SEVEN LENSES OR ENVIRONMENTAL PRINCIPLES AS IF ADULTS MATTERED

Biomonitoring methods are constantly evolving, so exposure indicators may be added over time as data become available. EPA anticipates adding several contaminants to the ROE biomonitoring indicator suite in future years. Top of Page References [1] Landrigan, P. Public health issues and challenges for risk assessment. Principles for evaluating health risks in children associated with exposure to chemicals. Environmental Health Criteria Contact Us to ask a question, provide feedback, or report a problem. Report on the Environment.