

Designing Collection Experiences

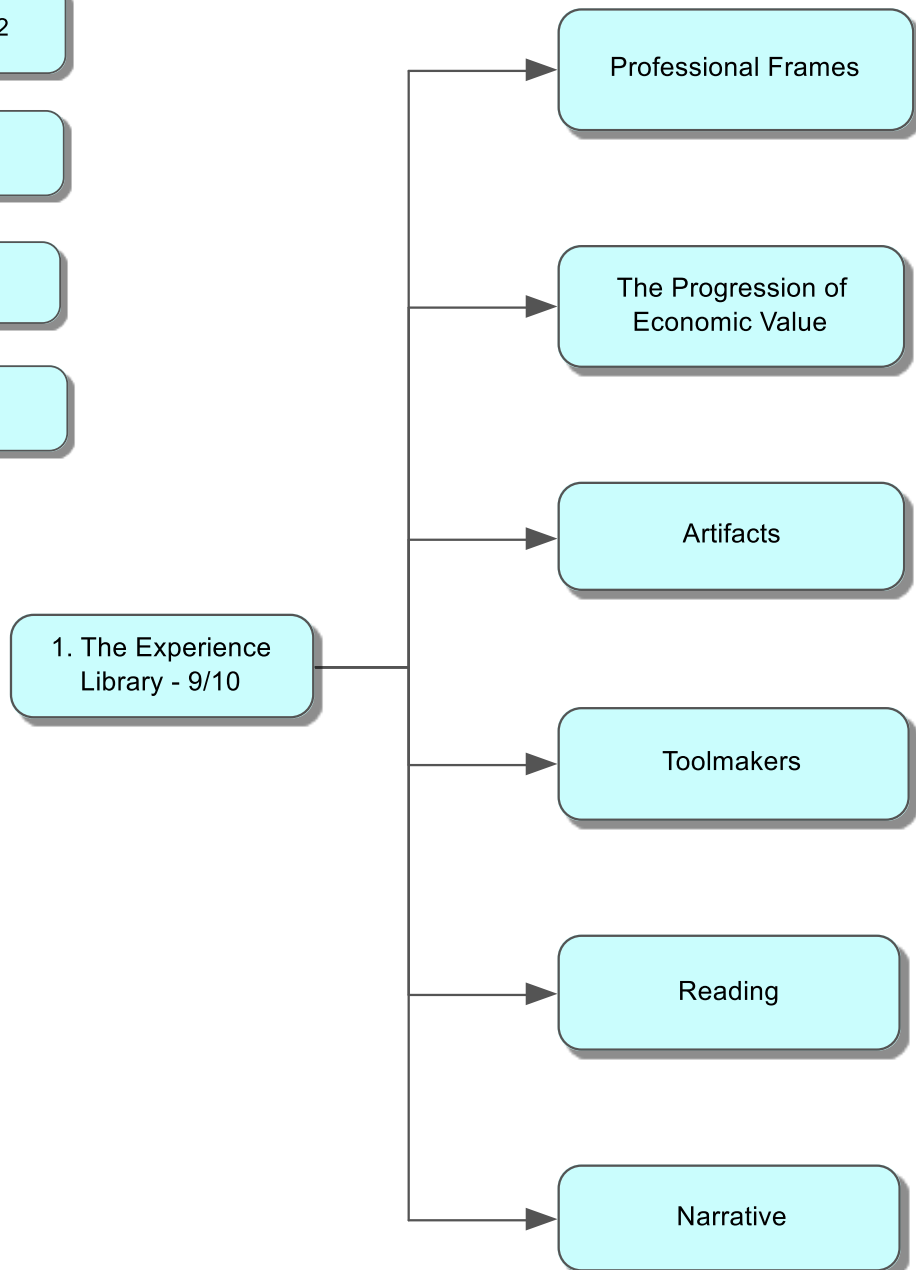
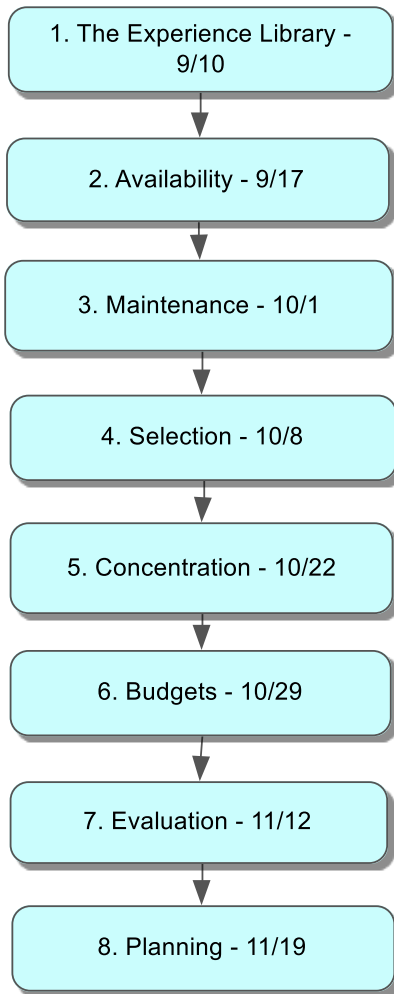
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Terms

Affordance: What we do with an object; generally used in relation to the design of artifacts. For example, here are some affordances of a window: it lets in light; we see through it; if open, it exchanges air; if open wide, it affords passage. An affordance is not merely a feature of an artifact, but a purpose to which the artifact may be put: a relationship between the artifact and the user. Don Norman defines affordance as not just a potential use, but the perception of a potential use: "...the term affordance refers to the perceived and actual properties of the thing, primarily those fundamental properties that determine just how the thing could possibly be used... Affordances provide strong clues to the operations of things. Plates are for pushing. Knobs are for turning. Slots are for inserting things into. Balls are for throwing or bouncing. When affordances are taken advantage of, the user knows what to do just by looking: no picture, label, or instruction needed." (Donald Norman, *The Design of Everyday Things*, 1988, p.9). See Mads Soegaard. "Affordances." *The Encyclopedia of Human-Computer Interaction*, 2nd ed., 2003. <http://www.interaction-design.org/encyclopedia/affordances.html>

Artifact: An object that an individual has shaped or created (designed) for a purpose. For example: a tree limb that a chimpanzee has stripped to use as a tool for retrieving food. We will use an expansive definition of artifact to include objects such as Marcel Duchamp's "Fountain," a urinal which he submitted to a 1917 exhibit as a work of art (it was refused): framing an object as a work of art is an act of shaping. Strictly speaking, an object only qualifies as an artifact if it has an author and a purpose. Both author and purpose may be multiple: New York City, for example, is a human artifact.

Design: We will use the term design in two senses: as the process of designing a purposeful artifact, and as the outcome of that process: the operative instructions and model for the artifact. The process of design always includes both "an intention, plan, or objective" in the "analytical and creative phases." and a "drawing, model, or sketch in the execution phase" (De Mozota, 2003. p. 2). A definition of the design process from the International Council of Societies of Industrial Design (<http://www.icsid.org/about/about/articles31>): "Design is a creative activity whose aim is to establish the multi-faceted qualities of objects, processes, services and their systems in whole life cycles. Therefore, design is the central factor of innovative humanisation of technologies and the crucial factor of cultural and economic exchange... design is an activity involving a wide spectrum of professions in which products, services, graphics, interiors and architecture all take part. Together, these activities should further enhance - in a choral way with other related professions - the value of life... Therefore, the term designer refers to an individual who practices an intellectual profession, and not simply a trade or a service for enterprises." See Brigitte Borja De Mozota, *Design Management: Using Design to Build Brand Value and Corporate Innovation* (New York: Alworth Press, 2003).

Frame: A set of assumptions, definitions, and points of view that characterizes how people understand an issue or sphere of activity. Frames are necessary to organize our perceptions, thinking, and decision-making. As we examine an issue, our frame determines what we look for and how we interpret what we find. Frames are usually taken for granted, and making them explicit can often help us work through difficult problems. Use in place of paradigm, philosophy, system, model, etc. See Donald Schön and Martin Rein, *Frame Reflection: Toward the Resolution of Intractable Policy Controversies* (New York: BasicBooks; 1994).

Meaning: A cognitive process that organizes the elements of experience. (Donald E. Polkinghorne, *Narrative Knowing and the Human Sciences*, 1988, pp. 4-6) We will be concerned with meaning in the psychological sense proposed by Jerome Bruner in *Acts of Meaning* (Cambridge, Mass.: Harvard University Press, 1990): "Given that psychology is so immersed in culture, it must be organized around those meaning-making and meaning-using processes that connect man to culture. Thus does *not* commit us to more subjectivity in psychology; it is just the reverse. By virtue of participation in culture, meaning is rendered *public* and *shared*. Our culturally adapted way of life depends upon shared meanings and shared concepts and depends as well upon shared modes of discourse for negotiating differences in meaning and interpretation." (pp. 12-13). Bruner identifies folk narrative discourse as the key to cultural meaning-making: "This method of negotiating and renegotiating meanings by the mediation of narrative interpretation is, it seems to me, one of the crowing achievements of human development in the ontogenetic, cultural, and phylogenetic senses of that expression." (67)

Narrative: A narrative, as defined for our purposes, is a story that displays some combination of the following characteristics: a series of events happening across time; persons, either real or imaginary, interacting through the events; a deviation from the expected; troublesome complications, typically moral; with the parts constituting a whole. Following Jerome Bruner, I consider narrative to be a primary mode of organizing human experience through shared cultural meaning: *Acts of Meaning* (Cambridge, Mass.: Harvard University Press, 1990), pp. 43-65. I also consider both cultural and personal narratives to be crucial the construction of personal identity and the self. See Jerome S. Bruner, "A Narrative Model of Self-Construction." In *The Self Across Psychology: Self Recognition, Self-Awareness, and the Self Concept*, ed. Joan Gay Snodgrass and Robert L. Thompson, 145-61; Phillip L. Hammack, "Narrative and the Cultural Psychology of Identity." *Personality and Social Psychology Review* (Vol. 12, No. 3, August 2008, pp. 222-247); and Dan P. McAdams and Kate C. McLean, "Narrative Identity." *Current Directions in Psychological Science*, (Vol. 22, No. 3, 2013, pp. 233-238).

Praxis: As defined by Paulo Freire, praxis is "reflection and action upon the world in order to transform it." (Paulo Freire, *Pedagogy of the Oppressed*, 1995, p. 33). The term is associated with Marxist theories of revolutionary change. We will use it here in the sense of what I will call "narrative praxis," generative action in the world based on meanings

represented through narrative identity. "...stories people live by say as much about culture as they do about the people who live them and tell them. Our own life stories draw on the stories we learn as active participants in culture—stories about childhood, adolescence, adulthood, and aging. Stories capture and elaborate metaphors and images that are especially resonant in a given culture. Stories distinguish between what culture glorifies as good characters and vilifies as bad characters, and they present the many varieties that fall in between." (Dan P. McAdams, *The Redemptive Self: Stories Americans Live By*, 2013, p. 284). Our identity and actions in the world are inextricably bound up in the narratives available in our culture and the personal narrative we construct as we make life decisions. See Phillip L. Hammack, "Narrative and the Cultural Psychology of Identity." *Personality and Social Psychology Review* (Vol. 12, No. 3, August 2008, pp. 222-247).

Reader: A person who uses the collections and services of a library to construct meaning. Used instead of more common terms such as "user," "patron," "borrower," "member," or "customer." "Reader" is more evocative of the underlying public purpose of the library and the manner in which people experience it. The use of the term does not exclude texts in the library which are experienced by "listeners" or "viewers," nor activities and services that do not involve texts at all. There is a transformative sense in which texts and communication in all forms are "read" by those who experience them, and it is this experience which underlies the designation of people who visit libraries in person or electronically as "readers." From Elliot Eisner: "...reading is a generic process of decoding the expressive forms created by man, so that the meanings within those forms can be recovered. It is in no way limited to those forms called "words" or "numbers." All of us read so extensively and in so many spheres of life that we often fail to appreciate how extensive and pervasive the process of reading really is." (p. 16) Elliot W. Eisner, "Reading and the Creation of Meaning." In *Reading, the Arts, and the Creation of Meaning* (Reston, Va.: National Arts Education Association, 1978), pp. 13-31.

Rhizome: A free-form category of texts, readers, and/or any other element that is of interest in collections work. Rhizomes do not depend on hierarchical relationships or conventionally organized category schemes, although they encompass the elements in such schemes. They depend on patterns of networked associations that are not necessarily consistent or logical. Rhizomes do not need to be uniformly organized or mutually exclusive. The same element may be in different rhizomes; rhizomes may intersect, nest, and coexist; terms referring to rhizomes may not be parallel. The point is to identify sets of collection elements with critical linkages that prompt meaning and repay attention, rather than to fix a systematic classification of the elements. The World Wide Web is an example of a body of texts organized rhizomatically.

Texts: The physical artifacts that make up a library collection (keeping in mind that electrons are physical). Texts comprise a variety of formats: conventional printed books, e-books, magazines, DVDs, microforms, interactive games, art reproductions, cake pans, data files, and so on. For

convenience, and to emphasize that all "texts" are processed by "readers," I will use "text" as a single term to refer to all library materials in whatever format. Print and electronic texts present signs and symbols which the reader uses to construct meaning, and their care and distribution are the primary focus of collection activities.

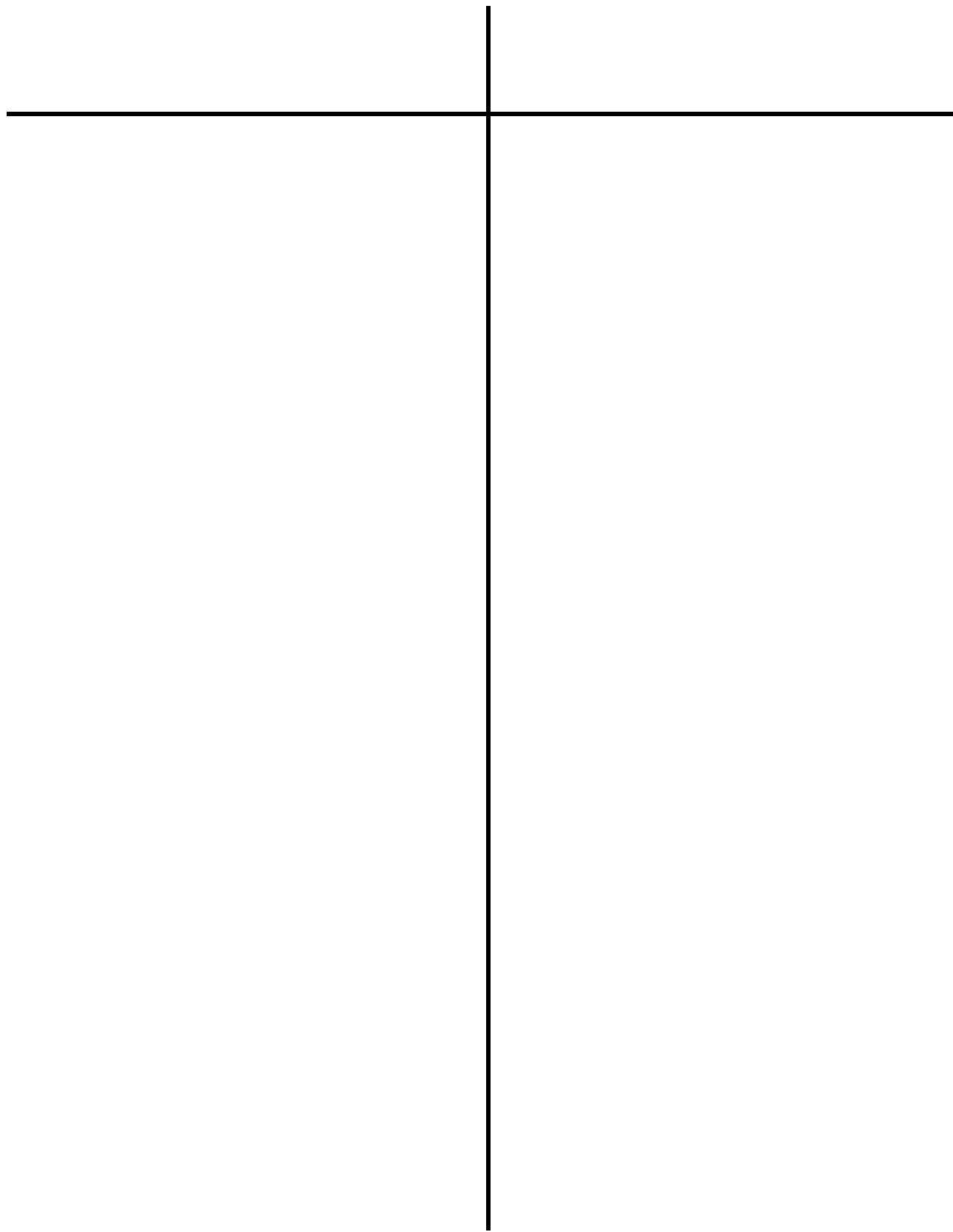
Toolmaking: A metaphor for communication proposed by Michael Reddy to replace the "conduit" metaphor. In the toolmaking metaphor, a sender creates a message consisting of signs and symbols (a tool) that hopefully affords a meaningful representation of reality. The signs and symbols are physically relayed to the receiver, who uses the tool to reconstruct the meaning of the message. The message does not "contain information"; it is only a physical set of signs and symbols. Reddy prefers this metaphor because it places the primary responsibility for the success of the message on the coding and decoding of the message by the sender and receiver, rather than on a non-existing "flow of information" between them. Classical information theory explicitly ignores the communication of meaning, and focuses exclusively on the physical integrity of the signs and symbols as they are relayed from sender to receiver. See Reddy, Michael. "The Conduit Metaphor." In *Metaphor and Thought*, edited by Andrew Ortony, 164-201. 2nd ed. Cambridge: Cambridge University Press, 1993. Available online at <http://www.reddyworks.com/reddy-writes/the-conduit-metaphor>.

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Meet Your Makers

The growing movement to transform libraries from places of consumption to places of creation

By Brian Kenney | Mar 29, 2013

When the Boston Public Library—the first free municipal library—opened its doors in 1854, its mission was to create an “informed citizenry”—think the works of John Stuart Mill, or Cicero in translation. Today, that informed citizen might well be a 14-year-old who’s spent hours in Google SketchUp so he can produce—on the library’s 3D printer—a thimble-sized, plastic head of Yoda.

Even though books are what our public has traditionally wanted most—and what librarians do best—public libraries have never been content to just circulate books or other media. Generations of librarians have developed programs to lift up, educate, entertain, or engage. From offering everything from ESL classes and salsa dancing to workplace readiness workshops and henna tattooing demonstrations, librarians are always reaching into an ever-expanding bag of tricks to meet the needs of their community.

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But in the past 18 months, a growing number of libraries have been taking a much more radical approach: creating “maker” spaces. Based on the idea that libraries are for creation, not just consumption, maker spaces don’t just upend the normal programming model—they have the potential to reinvent the public library.

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The “Maker” Movement

When Westport threw Connecticut’s first Mini Maker Faire in the spring of 2012 over 2,000 people showed up, and library administrators took note. They later invited one of the builders from the Faire to continue his work in the library—he was constructing two 15-foot wooden airplanes—and a maker space was born. What’s impressive is how the library situated its maker space: right on the floor of the library, amidst the books and media, not far from the reference desk, and right in

your face.

The library soon added a MakerBot 3D printer, which uses melted plastic to create objects designed through computer-assisted drawing (CAD). According to Bill Derry, the library’s assistant director, a fourth-grader from Brooklyn, who lived near MakerBot’s Brooklyn shop, was spending the summer in Westport and helped teach them—staff and public alike—how to use the machine.

You certainly don't need a 3D printer to have a maker space, but they have become emblematic of the movement—and the printers have caught the public eye. Even the least techie folks are eager to see one in operation. Westport is now up to two 3D printers, and it utilizes a cadre of volunteer coaches to provide one-on-one sessions to help people get started.

Last month the Chattanooga Public Library hosted a Maker Day featuring a dozen 3D printers, one of which is owned by the library. "The community response was huge," says Corinne Hill, Chattanooga's director. "We had the whole community here. Many people heard about 3D printers but just didn't understand them. They had to see them for themselves."

What interests Hill is the support a maker space can provide to innovators and entrepreneurs. "Chattanooga has always been an industrial town," says Hill. "And the community is looking to technology to replace manufacturing. I think of this as the new industrial revolution."

Ultimate Disruption

What's radical about maker spaces in libraries? Pretty much everything. Maker spaces are messy in a library world that values order, disruptive in a culture run by schedules, chaotic in a profession that did, after all, develop the Dewey Decimal System.

Hill, who has an empty floor she is using for her maker space, says it's up to the community to determine how they use it. The library is there to provide support, but she has no idea what direction it will take.

Maker spaces also utilize STEM skills (science, technology, engineering, and math), skills that public libraries are notoriously poor at supporting. Traditionally staffed by a bunch of English majors, there's not much on our shelves between DK 101 Great Science Experiments and the McGraw-Hill Encyclopedia of Science and Technology. STEM makes us anxious.

And maker spaces are inherently intergenerational in institutions that make rigid distinctions—about place, access, and behavior—based on age. Just how comfortable will most libraries be with an environment in which a fifth-grader collaborates with a 40-year-old?

Finally, maker spaces require libraries to cede space and authority. Maker spaces rely on knowledge that exists within the community, and for these spaces to succeed the library needs to welcome enthusiasts and experts. Yes, some library workers will join in whole-heartedly—but let's face it: most librarians would rather learn how to perform open heart surgery than work a 3D printer.

But whether maker spaces thrive or die isn't the issue. The point is that, letting our communities in and allowing them to shape—or reshape—our institutions, is yet another great survival strategy.