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Interdisciplinary by Design

Envisioning Libraries in 2050

When I imagine the library of 2050, I think about the world it will inhabit: one grappling with cascading challenges of climate instability, health crises, technological disruption, and deepening inequality. These are wicked problems—intertwined, dynamic challenges that demand solutions cutting across disciplines, geographies, and perspectives.

Libraries have a critical role to play in this future. To truly make an impact, they stand at the threshold of evolution and transformation. The library of 2050 could become a platform for co-creation and connection—a place where ideas collide, perspectives integrate, and solutions take shape. This is what I think of as being interdisciplinary by design: intentionally building services, spaces, and networks to foster creativity, collaboration, and integration at every level.

Being interdisciplinary by design implies more than facilitating connections among academic fields—it's about embedding that integrative spirit into every aspect of what libraries do. This includes how we curate collections, engage communities, organize, and build partnerships. It represents a shift in mindset: from supporting research to actively co-shaping it, from providing access to tools and information to enabling action, and from teaching and learning to fostering agency and empowerment. At its core, it reflects a belief that every interaction, every service, and every resource can be thoughtfully designed to connect people, ideas, and disciplines in meaningful and transformative ways.

At the heart of this vision is a simple idea: the library's greatest value is not in what it holds but in how it connects. Information in 2050 will likely be more abundant than ever, but abundance doesn't guarantee understanding or application. Libraries could act as knowledge integrators, weaving together disparate datasets, code, publications, methodologies, and insights into cohesive frameworks that guide decision-making and inspire new directions.

Imagine a library helping an interdisciplinary team tackling food security. It doesn't just provide access to research on agriculture, economics, and public health—it synthesizes resources and analysis into a living map, highlighting connections, gaps, and opportunities. This is where libraries can excel: helping people see the big picture, uncovering synergies, and translating complexity into clarity. To be interdisciplinary by design would mean turning the library from “the heart of campus” into a *collaborative nerve center*—a place where the tools of integration are embedded in the very fabric of how work happens.

In 2050, libraries could also become spaces—both physical and virtual—where people come together to solve tangible problems, not just work on assignments. Imagine global

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collaboration hubs that blend the tactile energy of a workshop with the technological power of hybrid meetings. These hubs could be equipped with immersive visualization tools, real-time translation, and facilitation resources to help diverse teams move seamlessly from brainstorming to prototyping. More importantly, they could encourage serendipity and spark creativity. Just as the best coworking spaces bring freelancers and startups together to collaborate, library hubs would bring researchers, policymakers, community leaders, and everyday citizens into the same room—or digital space. A climate scientist might meet a local farmer and leave with new insight. A high school student could stumble into a workshop on AI ethics and leave inspired to study the intersection of computer science and social justice, or perhaps the role of technology in addressing bias.

Enterprising libraries are uniquely positioned to embrace the transformative potential of interdisciplinary accelerators—programs modeled on innovation accelerators that guide teams through the messy process of turning ideas into impact. Libraries could host accelerators centered on the Sustainable Development Goals, urban resilience, or pressing local challenges, providing not only space and resources but also mentorship, structured guidance, and connections to external partners.

Or imagine a solution sprint on water scarcity: researchers, engineers, and community leaders come together for two weeks of intense collaboration, supported by the library's facilitators, knowledge maps, and tools. By the end, they've developed a prototype for a scalable irrigation system—or maybe a policy framework that transforms local water management. This could be the power of being interdisciplinary by design: creating processes that help teams think boldly, move quickly, and stay grounded in real-world needs.

Living knowledge ecosystems are another exciting possibility. These ecosystems could integrate datasets, publications, and tools into dynamic, evolving resources tailored to specific global challenges. They'd go beyond providing access and synthesis, enabling collaboration and continuous learning—curated with intention and action in mind. For instance, a knowledge ecosystem on climate adaptation might include everything from historical weather data to policy guides to community storytelling platforms. It could grow as users contribute their own findings and experiences, evolving alongside the challenges it addresses. Libraries, as stewards of these ecosystems, could help ensure they remain inclusive, accessible, and pragmatic.

All of this—global hubs, accelerators, living ecosystems—depends on the people who make it happen. The library staff of 2050 would need to be as interdisciplinary as the challenges they support. They could navigate the intersections of different fields, foster collaboration, and use multidisciplinary tools to bring people together. This work seems to call not only for new skillsets—such as facilitation, systems thinking, and data fluency—but also for new mindsets that embrace experimentation, empathy, and adaptability. Perhaps libraries will offer team science facilitation as a core service. Whether it's training interdisciplinary groups in project management, helping them organize knowledge-generating workflows, or teaching the art of cross-disciplinary diplomacy, libraries can help ensure that collaboration is as seamless as it is productive.

Of course, none of this will happen overnight. Becoming interdisciplinary by design is a long, nonlinear, continuous journey, and it starts with small, deliberate steps. A library could begin by rethinking how it operates—embracing the mindset and practices of an

interdisciplinary team itself. By modeling collaboration, integrating diverse perspectives, and aligning around shared goals, the library creates a ripple effect that inspires new ways of working and engaging. Fostering meaningful change begins with transforming how we think, work, and connect.

At its core, being interdisciplinary by design is more than solving complex problems. It imagines new possibilities, creating spaces and processes where collaboration feels natural and empowers people to tackle challenges together. Libraries have long been rooted in the service of knowledge, but by embracing the intersection of interdisciplinarity and wicked problems, we can ensure that knowledge serves humanity for generations to come.

This is the library I imagine, the library I want to be part of, and the library I hope to help design. A library where ideas thrive, connections flourish, and the future is not merely a reaction to external pressures and challenges, but one that is actively shaped to become more inclusive, innovative, interdisciplinary, and interconnected for everyone. *~*