

Introduction to Design Futures

Meredith Davis

This is the introduction to a series of briefing papers on trends shaping the context for design in the coming decade. It is intended to inform design professionals and educators of processes and concepts adressed by successful design practices.



While it is exciting to confront the new challenges of emerging practices and the expanding influence of design, it is also difficult to maintain professional currency under rapid change. In response to designers' anxiety and self-described challenges regarding their place in the future (Design Census, 2017), AIGA undertook an effort to define the changing context for professional practice. The association identified seven trends in today's design practices that have long arcs and significance for the future of professional work and education. They are neither predictions of distant possibilities nor minor modulations in style or culture. They are not aspirations for the field as yet unrealized. For many, the examples represent transitional spaces for moving into new practices. Overall, these trends recognize current evidence of conditions and opportunities that are very likely to deepen and evolve over the coming decade.

The intent of these AIGA briefing papers is to help designers and educators anticipate and prepare for the future, to lead change in their offices and schools, and to make each phase of their careers a learning opportunity rather than a fixed reality. These discussions acknowledge continuing competencies that uniquely qualify design professionals for future work. More germanely, however, they identify new mindsets, knowledge, and skills that traditionally trained designers must acquire to transition successfully to the aspects of professional work that are likely to dominate the field in the future. For colleges and universities, these papers encourage design faculty to realign curricular content with emerging models of practice that will shape their students' fifty-plus-year careers.

Where will designers work in the future?

Among the information AIGA reviewed in this effort was the U.S. Bureau of Labor Statistics 2016–2026 projection of employment, which describes disappointing growth for traditional graphic design practices. Overall, the bureau predicts growth in all sectors of employment at 7 percent.¹

On the other hand, work in print and online publishing that requires a 2-year design degree is expected to decline by 14 percent, with a loss of 2,000 design positions. Graphic design and corporate identity work that requires a 4-year bachelor's degree will grow at 4 percent, below the national average, with only 11,100 new positions added to the current workforce across the next decade. The bureau also estimates that 18 percent of the graphic design workforce is self-employed, suggesting that projects are of limited scale for a significant number of designers. Art direction, which the bureau describes as requiring five years of professional experience, will add only 4,900 new positions by 2026.

At the same time, the bureau predicts that web design and development will grow by 15 percent, adding 24,400 new positions, and that the software industry will grow by 24 percent, adding 302,500 new positions in the coming decade. These are the areas for which today's college design students must prepare through curricula that acknowledge fundamental changes in what work demands. This is also the kind of work, despite educational preparation, to which many practicing designers must transition to sustain their professional careers.²

There are estimates of as many as 2,500 college programs in the United States that teach content related to the field at some level, much of it grounded in principles of traditional graphic design. Some institutions enroll as many as 700 design majors. College design programs, therefore, risk overproducing graduates for types of work designers are unlikely to sustain across their

Introduction to Design Futures 2

 $^{1.\} Bureau\ of\ Labor\ Statistics,\ U.S.\ Department\ of\ Labor.\ "{\underline{{\bf Employment\ Projects-2016-26}}."$

^{2.} Bureau of Labor Statistics, U.S. Department of Labor. "Occupational Outlook Handbook." Retrieved in August 2018.

professional careers. Likewise, there are practitioners who recognize the need to expand their knowledge and skills in order for their offices to evolve with the field.

US Bureau of Labor Statistics Projections for Employment

TYPES OF WORK		% GROWTH	# CURRENT POSITIONS	# NEW POSITIONS
All employment		7%		
Desktop publishing	Print-based and online work Two-year degree	-14%	14,600	-2,000
Graphic design	 Print-based and corporate identity work Four-year degree 20% self-employed 	4%	266,300	+11,100
Art direction	Creative direction Five years of experience	5%	90,300	+4,900
Web design	Networked communication	15%	162,900	+24,400
Software design	Creative aspects of software designProgramming	24%	1,256,200	+302,500

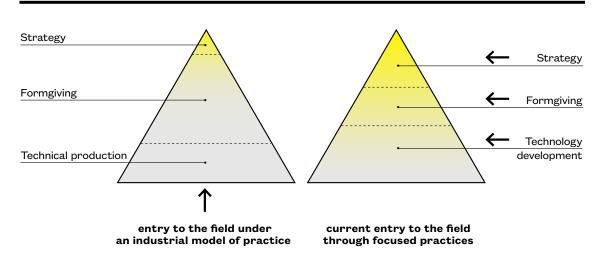
Source of statistics: U.S. Bureau of Labor Statistics Occupational Outlook 2016-2026

Where we came from — During the last century, design focused on improving the appearance and function of messages, products, and environments. Designers valued an object-driven process that addressed one independent physical constraint at a time and for which the stopping condition was "almost perfect," an ultimate refinement of visual attributes. This industrial-age perspective determined where design programs were located within colleges and universities, curricular approaches, and subsequent career pathways for recent graduates in design. Graphic design programs grew in popularity as extensions of fine arts study, quickly outnumbering other visual majors in most institutions.

Early semesters of instruction in these programs emphasized principles of visual abstraction as common to all arts majors. Most graphic design programs defined upper-level courses by medium (typography, photography, etc.) or by the objects designers made (publications, exhibitions, packaging, etc.). Graduates entered the field through the production of more senior designers' work and advanced to formgiving responsibility and client engagement only after demonstrating technical mastery and the ability to follow creative direction, a singular path for most recent graduates. A small number of designers with lengthy careers earned the trust of companies in planning business strategy.

Adjusting to change

The demands of a knowledge economy spawned audience-centered theories of interpretation; raised concern for how complex information systems are planned, produced, and distributed; and highlighted the social, political, and economic consequences of design. The speed of technological change made the stopping condition "good enough for now," knowing new versions would quickly replace their predecessors. And because designers could observe the interactions of people with technology, user-centered approaches and research replaced designer-centered strategies and work based solely on informed intuition.



Rather than follow a singular path of developing responsibility, today's design students often prepare for specialized roles. Technical apprenticeship is less likely to precede formgiving work and strategic design is a growing but distinct area of practice that requires particular knowledge and skills.

Colleges and universities struggled to keep up with this ever-expanding agenda. Many programs responded by adding courses in new practices at the upper end of traditional curricular structures still focused on appearance and function. Programs that were slow in responding to change often saw new technology or business-focused design curricula develop elsewhere in the institution. And despite some efforts to prepare students broadly in both design and business, significant debate arose over the ability of undergraduate design generalists to solve complex problems and to navigate highly politicized business environments.

The profession today — Change continues. In 2016, 80 percent of all work in the United States was in service industries. Management consulting firm McKinsey & Company describes companies, such as Amazon, marketing their ability to deliver products they don't produce through sophisticated service ecologies. Zipcar makes nothing, but provides access to personal transportation for people who don't want to own cars. Anything can become a service in today's marketplace, typically accessed through self-service technological systems. Even work in branding must question traditional strategies built largely for businesses that make physical products and an earlier environment in which designers could control where and when identity elements were seen.

Introduction to Design Futures

Technology plays an outsized role in shaping the future of design. Streaming, cloud processing, machine learning, and augmented and virtual reality challenge traditional notions of information as something material, "fixed" in time and space. The "page" and "edition" today are fluid interactions, often customizable for particular users and purposes. In a universe of big data, people "teach" artificial intelligence through use, continuously updating for increasingly nuanced responses to queries. Emerging models of interaction are conversational. They replace one-directional communication—in which sources control information—with symmetrical exchanges in which providers and users co-create content and form. Devices and displays are simply the means for users entering into real-time interactions with other physical, social, cultural, technological, and economic systems.

Creating the conditions for authentic user experiences in this technology-driven world requires working *with* rather than for people. Planning, facilitation, and research take on greater significance as essential design skills under these conditions. And because design problems are increasingly complex and subject to rapid change among interdependent elements, work at this level requires interdisciplinary collaboration and continuous updating.

Mastery of traditional craft and print production are no longer precursors to designing tools, systems, and strategies. Students enter laterally into different kinds of work and there is too much technical knowledge for production to be a common threshold for formgiving responsibility.

What change means for students and professionals

While there is never-ending pressure to expand students' short-term skills to match qualifications for entry-level employment, college faculty must be cautious not to overload curricula with content of temporary relevance at the expense of more enduring knowledge that transcends a rapidly changing context. At the same time, educators must rethink how to deliver lasting concepts and principles in light of a radically changed landscape for professional practice that bears little resemblance to the past. Curricula must be rethought from the ground up, not modified through endless additions to an industrial-age model.

Further, as practice becomes more diverse and students enter positions with more specialized expectations, college programs must decide what they can and cannot promise students as professionally relevant outcomes of an undergraduate curriculum. The current breadth of advertised outcomes under radically different degree types may be unrealistic. Some content may be better addressed through advanced study at the graduate level, where simply refining traditional skills becomes increasingly difficult to justify given the cost of education. In other cases, liberal art degrees must identify viable missions matched to their limited design requirements. And general education in the humanities, sciences, and social sciences can no longer be a cafeteria of undifferentiated undergraduate offerings to which design faculty pay little attention. Students must understand the modes of inquiry of likely collaborators from other fields and the larger systems in which design problems reside.

Introduction to Design Futures

AIGA's commitment to helping designers and schools adapt

Acquiring this new content for design education and practice is daunting but not impossible. The purpose of the AIGA Design Futures briefing papers is to encourage preemptive curricular planning that positions programs and their graduates competitively for an inevitable landscape of professional practice that bears little resemblance to the work for which many faculty were educated. For professionals, the briefing papers identify areas for continuing education that will sustain viable practices. For recruiters searching for design talent, these discussions describe new competencies that will serve organizations well for the future. AIGA is committed to helping faculty and practitioners in this transition through future resources and programs. It invites ongoing dialogue with members in an effort to share strategies and recommendations.

Each of the following briefing papers defines a trend, cites examples from practice, identifies core concepts and principles, and lists competencies necessary for addressing the trend at the college and professional level. A short list of resources for further reading also appears at the end of each paper. Resources were chosen to address a variety of entry points to new information; some are introductory videos, while others are books or articles from scholarly journals.

Complex Problems
Aggregation and Curation
Bridging Digital and Physical Experiences
Core Values Matter
Resilient Organizations
Making Sense in the Data Economy
Accountability for Anticipating Design Outcomes

AIGA encourages college faculty to use these papers in conversations with their institutions. In its affiliation with the National Association of Schools of Art and Design, the disciplinary accrediting body for higher education, AIGA has negotiated undergraduate and graduate competency standards for design, which can be found on pages 115–119 and 142–142 of the NASAD 2017–18 accreditation handbook.

AIGA also encourages professionals to discuss trends with their colleagues and to provide feedback that will shape AIGA programming.

As always, AIGA invites using these resources to the fullest and welcomes comments and feedback at <u>designfutures@aiga.org</u>. These papers represent a milestone in AIGA advocacy for design and designers.