

# ARLIS/NA

ART LIBRARIES SOCIETY of NORTH AMERICA

## Art, Architecture, and Design Information Competencies

Graphic Design  
Interior Design  
Photography  
Urban and Regional Planning

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## Introduction

### Purpose

The *Information Competencies for Students in the Design Disciplines*, published in 2006, provided a framework of core information literacy skills for learners.<sup>1</sup> Divided into basic, intermediate, and advanced skills, the intent of this initial report was to assist instruction librarians in the integration of information literacy skills across design and art disciplines. In the past decade, there have been tremendous changes in access to information and in teaching information literacy as well as expanding curriculum in art, architecture, and design. The focus on meta-literacies, including both visual and media literacies, coupled with the 2011 *Visual Literacy Competency Standards for Higher Education* and the 2016 *Framework for Information Literacy for Higher Education (Framework)*, both issued by the Association of College and Research Libraries (ACRL), offer new approaches to how we teach information research skills.<sup>2</sup> These professional reports and the need for increased critical evaluation of information have set the stage for an updated version of the *Information Competencies*.

### Current Context: The State of Higher Education

In the 2010 Association of College and Research Libraries report "The Value of Academic Libraries" Meghan Oakleaf states, "Academic libraries have long enjoyed their status as the 'heart of the university.' However, in recent decades, higher education environments have changed."<sup>3</sup> In this great time of change, librarians must communicate their value to the community served and to their institutions' stakeholders. Library administrators need to demonstrate a return on investment in offered resources and services and to show their impact on users. At the center of this return on investment is student academic success and engagement.<sup>4</sup>

The *Information Competencies* subcommittee believes these updated competencies can help librarians contribute to the conversation about higher education's pedagogical goals and to demonstrate the impact of information literacy instruction on student learning and engagement. In particular, higher education is recognizing the importance of translating what is learned in the studio, the classroom, and the library to real-world skills and metacognitive development that can affect employability. While each institution has unique

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<sup>1</sup> Jeanne Brown et al., "Information Competencies for Students in Design Disciplines," Art Libraries Society of North America, 2006, <https://www.arlisna.org/publications/arlis-na-research-reports/148-information-competencies-for-students-in-design-disciplines>

<sup>2</sup> Denise Hattwig et al., "ACRL Visual Literacy Competency Standards for Higher Education," Association of College & Research Libraries, 2011, <http://www.ala.org/acrl/standards/visualliteracy>; ACRL, "Framework for Information Literacy Standards for Higher Education," Association of College & Research Libraries, 2016, <http://www.ala.org/acrl/standards/ilframework>.

<sup>3</sup> Megan Oakleaf, "The Value of Academic Libraries: A Comprehensive Research Review and Report," Association of College & Research Libraries, 2010, [https://www.acrl.ala.org/value/?page\\_id=21](https://www.acrl.ala.org/value/?page_id=21), 11.

<sup>4</sup> *Ibid.*, 35.

pedagogical aspirations, several key goals permeate the current landscape of higher education. These goals have direct bearing on information competencies, offering librarians the opportunity to showcase their impact and value. The subcommittee has kept these goals in mind when developing our draft competencies.

- Critical thinking
- Effective communication
- Familiarity with diverse fields of knowledge and the ability to make connections
- Solid understanding of the selected field of study
- Understanding of diversity and inclusion and the impact on selected field of study

As higher education institutions across the nation — large or small, public or private — re-evaluate their educational goals, librarians can contribute to the conversation and demonstrate their value. This project is designed to be a framework to demonstrate the specific competencies acquired by learners and hence, address the question: What does it mean to be information literate in art, architecture, and design disciplines?

### Process

This project was developed by a subcommittee of the Art Libraries Society of North America (ARLIS/NA) Research and Information Services Section (RISS) members who recognized the value of the competencies and the need for a revision to reflect current trends and the continually developing pedagogy of both information literacy and art, architecture, and design disciplines. The subcommittee members reviewed the 2006 report, distributed a survey to ARLIS/NA members, and used the results to generate drafts and discussion documents for a working session at the ARLIS/NA 2018 annual conference. Individuals developed competencies for five of the disciplines outlined in the original report: Architectural History, Architecture, Art History, Fashion Design, and Studio Art.

The new structure for the disciplinary competencies aligns with the *Framework's* six key concepts that reflect a more problem-based and active-learning approach to information literacy. Thus, they are highly applicable to the hands-on creative art, architecture, and design educational environments. These six concepts are:

- Authority Is Constructed and Contextual
- Information Creation as a Process
- Information Has Value
- Research as Inquiry
- Scholarship as Conversation
- Searching as Strategic Exploration

The following competencies adapt these *Framework* concepts to closely align with art, design, and architecture disciplinary proficiencies and for learners at undergraduate and graduate levels. In updating these competencies, current curriculum, learning, and institutional outcomes from art, design, and architecture programs across North America were gathered and analyzed for similarities and themes, and many of these shared outcomes and values are reflected here. While drafting these competencies, the subcommittee's goal was not to issue a comprehensive, unyielding document. Rather,

inspired by the adaptability offered by the *Framework* as well as the flexibility required by creative fields, we sought to offer starting points for librarians to build upon. This narrower focus is reflected in the choice of subjects as well — only a select number of disciplines are represented in these competencies, and we actively encourage the addition of more disciplines.

## Essential Questions

### Overview and Purpose

Essential questions are a common practice when approaching instructional planning through backward design and teaching to foster deep understanding. Instructors start by identifying the questions that learners need to answer in order to show a deep level of understanding. Once these questions are identified, instructors can determine the best way to approach teaching content and designing activities that encourage critical, reflective, and creative thinking about research and knowledge creation for both learners and teaching art librarians. This practice empowers learners to think through and articulate their own creative research processes and practices with the guidance of a librarian and emphasizes the choices that learners and practitioners make throughout the creative, research process. Below is a set of questions that were developed in broad terms to apply to any creative discipline that is currently included in this report. They also serve as a supplementary resource for disciplines that have not yet been added to this report. Each question is based on a larger concept that relates to researching in the art, architecture, and design disciplines. These questions are not comprehensive or exhaustive of the questions one could potentially derive from places such as the *Framework* or deeper understanding of creative research practices but are meant to serve as a starting point for instructional design.

### Essential Questions

- How are the creative and research processes intertwined and informed by one another in your discipline? For you personally?
- How are your research questions grounded in the existing state of topical knowledge, unsolved problems, and personal experience?
- What role does personal experience and understanding play in the research and creative process?
- Where can you find information on historic and contemporary artists and designers working in media or conceptual themes similar to your own work?
- What existing interpretive frameworks and theoretical lenses might help you make meaning and contextualize your ideas and questions?
- What questions drive your creative work and how do they evolve over time?

- Where should you start when exploring new ideas that are discipline-specific as well as interdisciplinary ideas?
- How do you determine whether a resource meets a particular information need?
- What visualization and brainstorming techniques will help you engage in the process of exploring, interpreting, and analyzing ideas, knowledge, and creative output in your discipline?
- How do you best define and refine needs and search strategies as needed when searching for creative, educational, historical, or professional resources? How do these approaches vary?
- How will you organize new and existing knowledge in either formal and informal ways?
- How do your search habits allow for discovery of new ideas via browsing, social linking, and exploration?
- What do the different types of authority look like in your particular context or community of practice?
- What happens when one perspective is promoted, and others are left unexpressed within your field?
- How do you critique persuasive, incomplete, prejudiced, or manipulative information, including images, text, and other creative media?
- What are your informed parameters and guidelines for determining authority within your discipline and practice?
- How do you use information, knowledge, and communication effectively to construct your authority and credibility as it pertains to your discipline?
- How does displaying or sharing creative output in one context vs. another create new meaning or understanding of the work?
- Who decides what information gets published and disseminated?
- How have you considered and documented every possible solution and angle from which you might approach a creative project?
- In what ways have you examined your own worldview, assumptions, and biases through collaborative and reflective practices?
- What are the ethical and creative integrity concerns or conventions within your discipline where copyright and fair use are concerned?

- Why and how do our perceptions of disciplinary constructs change over time?
- How would you best recognize the impact and contributions of other thinkers in order to contextualize your creative work and place it in relation to the larger context of art history, ideology, and social communities?

## Information Competencies

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### Graphic Design

#### INTRODUCTION

Graphic design, also called communication design or visual communication design, has the power to shape culture through many venues including engagement with commercial activity and advertising. Through the use of illustration, photography, and typography, graphic designers must not only possess a strong aesthetic understanding of the formal elements, principles of design, and usability, they must also discern how these tools solve communication needs for clients and articulate messages to the general public. It is important that graphic designers appreciate their cultural authority as their work not only participates in but also creates consumer culture. Accordingly, they need to be aware of the social, cultural, and economic environments in which they design.

In addition to these concerns, graphic designers must keep abreast of new digital technologies as they arise, particularly the interactions of screen-based technologies, incorporating them into their practice, and combining them with previous technologies, both analog and digital, to solve visual design problems. Given the prevalence of appropriation within the discipline, it is also necessary for students to understand the difference between appropriation and copying, copyright law, and fair use.

#### NOVICE

##### ***Learners are able to:***

- Analyze, evaluate, and critique graphic design works for successfulness of communication and aesthetics
- Identify, define, and solve visual communication needs on behalf of themselves or clients
- Use a wide range of design tools, both digital and analog, and apply new technologies to their practice as they arise
- Distinguish between scholarly and popular sources and understand their benefits and drawbacks
- Search the library's collections via keywords, thesauri, and subject headings
- Browse and find images using a variety of library sources, such as books, magazines, databases, and the Internet
- Cite their image and textual sources correctly and accurately

- Locate library materials by call number
- Find and incorporate information from other fields into their designs when necessary, such as psychology, communication theory, and human behavior
- Understand the relationships between text and image and how they function within a design
- Use photography, illustration, typography and/or screen-based approaches to effectively to communicate their ideas
- Develop basic digitization, scanning, and photography skills to document their designs
- Develop basic digital, technical, and software skills to collect and present work in a logical and understandable manner through professional portfolios, poster presentations, proposals, and websites
- Employ digital archiving and preservation to combat digital obsolescence
- Communicate their designs and design choices to other designers, clients, and others through speaking and writing clearly and efficiently
- Adapt their designs to a variety of objects depending on the project's goals
- Design across a wide range of media types including print, screen, and packaging
- Document the creative process taken to arrive at a final design and understand that this documentation is an integral component of the final design and the creative process itself
- Understand that the creative process is in and of itself a process and requires flexibility and ingenuity
- Identify the audience for their design, including aspects like culture, physical, and socio-economic conditions
- Use information sources to research their intended audience when creating their designs
- Communicate effectively through the use of formal elements of art and principles of design as the basis of their designs
- Apply critical thinking to their designs
- Present their work cohesively as a portfolio, in both hardcopy and digital format
- Define the environment in which the design will be used

***Learners are aware of:***

- The history of graphic design and print culture, including major developments and works
- The history of typography and how different fonts/types communicate different ideas
- How the intended audience for a design can influence visual communication
- Contemporary and historical design issues and how they relate to society
- Copyright law, fair use, and how they affect both their designs and the designs of others
- New design technologies on the horizon
- The importance of digital archiving and preservation to combat digital obsolescence as well as the importance of maintaining records of their design works
- Terminology used in the field of graphic design and typography
- Professional publications in the field of graphic design



- The formal elements of art, such as line, shape, and color, and how/what they communicate
- The principles of design, such as harmony, contrast, and balance, and how/what they communicate
- The differences between appropriation and copying

## **EXPERT**

### ***Learners are able to:***

- Use a wide range of design tools, both contemporary and historical, and understand how these choices communicate different visual ideas and/or solve different communication needs
- Develop the digital, technological, and software skills to maintain an online portfolio
- Discuss differences in graphic design across cultures, times, and nationalities
- Create new, innovative, and original ways to communicate visual ideas and solve visual design problems
- Use resource management strategies and tools, including bibliographic citation managers (e.g., Zotero, Endnote, Mendeley) to organize, manage, and safeguard assets
- Understand graphic design studio practices and entrepreneurship
- Constantly update their skills and adapt new design technologies
- Create their own visual identities and brand
- Understand how cultural and social trends, both current and historical, inform graphic design

### ***Learners are aware of:***

- How designs participate in and create consumer culture
- How designs communicate and, potentially, reinforce or change cultural messages
- Professional associations within the field and how to use them to their advantage for networking and exchanging information and ideas
- Visual communication, design theory, and how they apply to their work and the works of others
- The differences between modern and postmodern graphic design
- The interrelationships between the studio/fine arts and graphic design
- How their own work fits into graphic design's historical narrative
- How to start individual and collaborative studio practices
- The historical significance of the grid and the breaking of the grid as visual design principles
- The social, cultural, and economic environments in which their designs live and how their designs function within these environments

## Interior Design

### INTRODUCTION

Interior Design is a truly interdisciplinary industry in which professionals balance the art and science of the built environment as well as an understanding of human behavior. Designers in this field must be visually literate, apply a broad range of theories, communicate across teams and with clients, solve problems, consider environmental impact, and utilize laws, codes, and standards in their designs. Learners and designers alike rely on a variety of resources when conducting research and moving through the design process. Research in interior design often takes the form of a program or a portfolio of organized information about a specific problem they wish to solve, analysis of that information, and a plan or a design based on that analysis. Case studies and trend forecasting tools, as well as interdisciplinary research that supports the design solution and is centered around a specific message or concept, are at the core of the iterative research practice within interior design.

It is important for learners entering the field to be aware of the schools that are accredited through the Council for Interior Design Accreditation (CIDA)<sup>5</sup> as well as CIDA's professional standards<sup>6</sup>, by which all interior design programs are evaluated. The American Society of Interior Designers (ASID)<sup>7</sup> is the premier professional organization, producing research, awards, career resources, and the professional code of conduct<sup>8</sup> for the industry. The Council for Interior Designer Qualification (CIDQ)<sup>9</sup> provides certification and licensure to individuals who have completed an interior design program and passed a formal exam, showing expertise and knowledge of design principles. These organizations are only a few of those that can provide post-baccalaureate support in networking, trend-spotting, and continuing education within interior design.

### NOVICE

#### ***Learners are able to:***

- Seek out interior design-specific periodical indexes to understand historic and current trends (e.g. *Avery Index to Architectural Periodicals, Design and Applied Arts Index, Art Index*) or to locate articles on a topic they are interested in
- Identify interdisciplinary resources and authorities outside of interior design that address a problem or research question
- Identify and critically evaluate historical and contemporary design approaches in order to appropriately frame problem-based design questions

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<sup>5</sup> Council for Interior Design Accreditation, accessed May 6, 2019, <https://accredit-id.org/>

<sup>6</sup> Council for Interior Design Accreditation Professional Standards, accessed May 6, 2019, [https://accredit-id.org/wp-content/uploads/2018/01/Professional-Standards-2018\\_Final.pdf](https://accredit-id.org/wp-content/uploads/2018/01/Professional-Standards-2018_Final.pdf)

<sup>7</sup> "About the American Society of Interior Designers," American Society of Interior Designers, accessed May 6, 2019, <https://www.asid.org/about>

<sup>8</sup> "Code of Conduct," American Society of Interior Designers, accessed May 6, 2019, <https://www.asid.org/lib24watch/files/download/900>

<sup>9</sup> Council for Interior Design Qualification, accessed May 6, 2019, <https://www.cidq.org/>

- Seek multiple perspectives and design solutions
- Locate and use Library of Congress call numbers representing the major fields that are included in interior design studies: Decorative Arts (NK), retail stores (HF), lighting (TH and TK), decoration and decorative furnishings (TH 8001 – TH 9024) and architecture (NA) to browse
- Explore material, print and digital visual resources (e.g. ARTstor, Building Types Online, Bridgeman Art Library, Unsplash, *World Architecture Index: A Guide to Illustrations*) for alternative design ideas and to create meaningful image groups or collections
- Synthesize and distill data and research through visual communication techniques such as infographics, diagrams, charts, matrices, bubble diagrams/schematics, sketches/drawings and narrative
- Show their underlying design creation process and provide rationale developed in the design process through annotated ideation drawings and sketches
- Articulate the message behind their design choices and understand how a design's message shapes perceptions and experience within a space; may align with organizational goals, values, or mission; can help build a brand; is shaped by historical and cultural contexts
- Give credit for the ideas and intellectual property of others' and attribute design inspiration appropriately
- Develop basic digital, technical, and software skills to collect and present work in a logical and understandable manner through professional portfolios, poster presentations, proposals, and websites

***Learners are aware of:***

- The value of both formal and informal sources of information within interior design research
- Language and terminology used to describe aspects of interior design, such as furniture, decorative arts, and material culture
- Allied disciplines and the language and terminology used by those disciplines, such as decorative arts, architecture, engineering, construction, etc.
- Summarize the influences affecting historical changes in design of the built environment
- The privilege of practicing design and having tools and materials to explore and iterate multiple ideas
- Methods of idea generation and design thinking
- The broad range of problem identification and problem-solving methods
- The broad range of sources for information and research on the elements and principles of design, such as color, materials, lighting, space, etc.

**EXPERT**

***Learners are able to:***

- Take complex problems and research and break them down into smaller, simple ones, limiting the scope of a project and required research

- Create and design research and programming documents with detailed attention to how their choices impact the overall message and purpose
- Offer and accept critique of the logic and meaning of a message, underlying assumptions of the message, and value of the message within peer research and design documentation
- Recognize that there are specialized areas of expertise within interior design, such as commercial vs. residential specializations, and articulate their own specialization
- Integrate legal and regulatory standards of the profession into design solutions and articulate the purpose of those standards
- Express project solutions using a variety of visual communication techniques (sketches, material samples, etc.) and technologies appropriate to a range of purposes and audiences
- Seek out and evaluate the usefulness of qualitative and quantitative data, such as precedent studies, case studies, surveys, observations, peer-reviewed literature, and focus groups
- Question the canon of the making, history, preservation, and interpretation of objects and material culture
- Source a variety of building material and supplies dealers and construction companies and make informed, ethical decisions about the use of those materials in their work
- Demonstrate intellectual humility and mental flexibility throughout the design process and be open to design refinement
- Understand theories of human-centered design and identify, analyze, and apply information from a variety of stakeholders and sources to develop a successful response to user needs
- Use resource management strategies and tools, including bibliographic citation managers (e.g., Zotero, Endnote, Mendeley) to organize, manage, and safeguard assets

***Learners are aware of:***

- The social responsibility of designers and the social, political, and physical impact of design
- The value of simple questions as a means to address complex problems, within a system of interconnected issues, which lead to disruption and key research and development
- Interdisciplinary conversations and theories such as similarity, continuation, closure, proximity, figure/ground, symmetry, order, and/or hierarchy
- The origins and intent of laws, codes, and standards

## Photography

### INTRODUCTION

Rapid advances in technology have made photography an extremely accessible and popular form of artistic expression and communication. Because of this, it has a uniquely wide presence in popular culture. Although originally considered objective documentation when first invented, photography, like other art forms, is subjective; the artist's choices -- from equipment, to subject, to composition, to editing -- reveal the intention. While modern day photographic art practice requires mastery of both analog and digital technology, an understanding of historical processes, knowledge of the medium's place in art history as well as its contemporary directions, and the ability to create, interpret, and analyze meaning in images and visual media is essential.

Photography, like other studio arts, is highly interdisciplinary. Therefore, learners must be able to adapt research strategies to a variety of information resources and formats in order to acquire a broad range of knowledge across disciplines that may inspire and inform the work. Research helps the learner develop practices that contextualize and engage in constructive dialogues with others. Through an understanding of the legal, social, and economic issues related to the creation of and access to photographic art and related communication, learners promote critical awareness, encourage diverse perspectives, and employ ethical professional practices.

As an area of studio art, photography draws on many of the necessary information literacy skills and concepts present in other fine art disciplines. Therefore, the following list of competencies should be considered in conjunction with those competencies listed for studio art.

### NOVICE

#### ***Learners are able to:***

- Brainstorm and translate ideas and feedback into different types of searching language (e.g., controlled vocabulary, keywords, natural language)
- Use search strategies in a variety of print and digital resources to identify relevant text and visual sources
- Locate relevant materials using call numbers and library classification systems
- Give credit through proper citation to the ideas and work of others in both scholarly writings and visual presentations
- Interpret, analyze, and evaluate images for context, meaning, and quality
- Use resource management strategies and tools to organize, manage, and safeguard digital assets
- Understand how to use and manipulate images responsibly within the context of fair use

- Use photographic technologies to create images that communicate meaning
- Use research and experience to develop a vocabulary that contextualizes the photographic work within a larger framework
- Thoughtfully contribute photographic work to and participate in collaborative online environments
- Develop basic digital, technical, and software skills to collect and present work in a logical and understandable manner through professional portfolios, poster presentations, proposals, and websites

**Learners are aware of:**

- The value of multidisciplinary research as an essential part of the creative process
- Photography terms and vocabulary, relevant to Library of Congress subject headings, and call number ranges, particularly as it relates to art and photography
- Historical and contemporary photographers and the technologies that have shaped photographic practice
- Art and photography information sources, from more traditional publications (i.e. *Aperture*, *Exposure Magazine*, *Photographer's FORUM*, *Artforum*, *Art in America*, *Art News*) to current and emerging social media sites (i.e. Instagram, Flickr) and the process through which these sources are created and are influential
- The implications inherent in accessing and valuing one information source or format over another (for example, online versus print formats, social media versus traditional, peer-reviewed publications)

**EXPERT**

**Learners are able to:**

- Critically evaluate ideas, perspectives, and work from a variety of creative, scholarly, and popular sources
- Engage with theories and concepts from across disciplines as they relate to and inform photographic practice
- Consider and question authoritative sources and the structures that create them
- Use resource management strategies and tools, including bibliographic citation managers (e.g., Zotero, Endnote, Mendeley) to organize, manage, and safeguard assets
- Participate effectively in critiques by using vocabulary and concepts that articulate the context of the photographic work in larger frameworks of thought and artistic practice
- Decide where and how their work is presented (i.e. personal websites, social media sites, etc.) and understand the social, economic, legal, and ethical implications of these decisions

**Learners are aware of:**

- Established historical perspectives, the marginalized voices traditional interpretations ignore, and representational gaps in the photography canon
- The value of seeking out diverse ideas and worldviews

- Intellectual property rights and concepts as they relate to textual, visual, and digital information (i.e. open access, Creative Commons)
  - Their role as not just consumers, but also contributors to the larger artistic/creative conversation and marketplace
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## Urban and Regional Planning

### INTRODUCTION

Planning is an interdisciplinary field spanning the sciences, social sciences, humanities, design fields, and visual arts. Planners identify community needs through developing both short- and long-term plans to improve and revitalize communities, spanning from grassroots to governmental levels, taking into consideration current and future trends for particular regions (e.g., urban, metro, tribal, rural, suburban, exurban). They work with a variety of stakeholders to assess economic, social, and environmental impacts. As a field, Planning is heavily reliant on information gathering through fieldwork and research, data analysis and forecasting, and communication to a variety of audiences and stakeholders. It is a highly visual, media, and data literate field that requires the creation and synthesis of non-textual information created for particular purposes for specific audiences. Through qualitative and quantitative research, planners visualize information through graphs, charts, maps, plans, schematics, artistic renderings, 2D, 3D, and 4D models. With new media, virtual reality, augmented reality, and immersive video, a range of new tools are used to showcase proposals and demonstrate regional and environmental changes.

It is important for learners entering the field to be aware of the schools that are accredited through the Planning Accreditation Board (PAB)<sup>10</sup> and the PAB's accreditation standards<sup>11</sup>, by which planning programs are evaluated. The American Planning Association<sup>12</sup> represents the field in the United States, and offers numerous ways to get involved, including divisions, a knowledge center, policy and advocacy priorities, job postings, and professional certification. The Canadian Institute of Planners (CIP)<sup>13</sup> represents the field in Canada and works with the Professional Standards Board (PSB)<sup>14</sup> to provide Canadian accreditations. Additionally, the Association of Collegiate Schools of Planning<sup>15</sup> is a consortium of over 100 university departments and programs, both within and external to the United States and

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<sup>10</sup> Planning Accreditation Board, accessed May 6, 2019, <https://www.planningaccreditationboard.org/>

<sup>11</sup> "PAB Accreditation Standards and Criteria," Planning Accreditation Board, accessed May 6, 2019, [https://www.planningaccreditationboard.org/index.php?s=file\\_download&id=500](https://www.planningaccreditationboard.org/index.php?s=file_download&id=500)

<sup>12</sup> American Planning Association, accessed May 6, 2019, <https://www.planning.org>

<sup>13</sup> Canadian Institute of Planners, accessed May 6, 2019, <https://www.cip-icu.ca/>

<sup>14</sup> Professional Standards Board, accessed May 6, 2019, <http://www.psb-planningcanada.ca/NEWS/index.php>

<sup>15</sup> Association of Collegiate Schools of Planning, accessed May 6, 2019, <https://www.acsp.org/>

Canada. These organizations offer a source for career growth, networking, trend-spotting, and continuing education within the field of planning.

## NOVICE

### ***Learners are able to:***

- Research, evaluate, and analyze information through the context of the planning environment using a variety of tools for assembling and analyzing ideas and information from prior practice and scholarship, and from primary and secondary sources
- Compile a variety of planning resources (textual, visual, and data), utilizing both qualitative and quantitative methodologies, conducting research through fieldwork and their university library
- Seek out planning-specific information, through databases (e.g., Avery Index of Periodicals, Building Green, EconLit, GreenFILE, PAIS Index, Science Direct, NexisUni, Web of Science), government resources (e.g., Censuses, American FactFinder, U.S. Housing Market Conditions, Housing and Urban Development Department publications) and periodicals (e.g., *Urban Land Magazine*, *APA's Planning Advisory Service Reports*, *Review of Urban and Regional Development Studies*, *Journal of Urban Design*, *Planning Theory and Practice*, etc.) through building iterative search strategies
- Synthesize data, visual, and textual information to achieve a good background knowledge of an area of practice in order to present future planning possibilities to stakeholders
- Identify interdisciplinary resources and authorities outside of planning that address a problem or research question
- Identify and critically evaluate historical and contemporary approaches in order to appropriately frame problem-based planning questions
- Locate and use Library of Congress call numbers representing the major fields that are included in planning and affiliated studies (e.g., architecture, design, legal, economic, environmental, social sciences, historical, etc.)
- Explore print and digital resources (e.g. Artstor, RIBAPix, Building Types Online, Cyburbia, Hypercities, Unsplash, Pedestrian and Bicycle Information Center, *World Architecture Index*) for plans and design ideas and to create meaningful image groups or collections
- Locate local, national, and international codes and standards and use them to inform original plans and designs
- Monitor, update, and discuss planning processes with stakeholders
- Collaborate in and across teams on projects, plans, and processes
- Prepare clear, accurate and compelling text, graphics and maps for use in documents and presentations. Design and present proposals using a variety of tools (e.g., 2D, 3D, 4D models, renderings, sketches, schema, video, etc.) to a spectrum of stakeholders and audiences, tailoring materials and communications accordingly
- Articulate the message behind their design choices and understand how space and place shapes embodied perceptions and experiences; may align with organizational



goals, values, or mission; can help build a brand; is shaped by historical and cultural contexts

- Give credit for the ideas and intellectual property of others and attribute plans, designs, and inspirations appropriately
- Develop an organizational strategy as planning practitioners to document, archive, and manage a suite of assets (e.g., data, photographs, images, documents)
- Develop basic digitization, scanning, and photography skills to document and archive one's creative work
- Develop basic digital, technical, and software skills to collect and present work in a logical and understandable manner through professional portfolios, poster presentations, proposals, and websites
- Develop a strategy for ongoing documentation and observations through sketchbooks, photography, and digital creative tools to create 2D, 3D, and 4D representations of one's ideas

***Learners are aware of:***

- Why planning is undertaken by communities and the impact planning is expected to have; understand, represent, and use appropriate planning ideas and information, including appropriate perspectives from history, social science, design and other allied fields
- Language and terminology used to describe planning and affiliated design professions, such as within the built environment, sustainability, architecture, landscape architecture, engineering, construction, and urbanism
- The basic drawing, pictorial, and representational conventions, which include plans, sections, elevations, and details, and how they are used to represent architecture, planning, and design concepts
- Planning as an interdisciplinary field combining the humanities, social sciences, sciences, arts, and design fields, requiring spaces and places to be aesthetically pleasing, structurally sound, sustainable, and invigorating to communities
- Image, map and data repositories for both contemporary and historical city, regional, and urban planning resources
- Professional publications dealing with architecture, planning, and related fields and the type of content they contain
- Methods of idea generation and design thinking
- The broad range of problem identification and problem-solving methods
- The value of both formal and informal sources of information within Planning research
- The influences affecting historical changes in design of the built environment

**EXPERT**

***Learners are able to:***

- Take complex problems, research, and break them down into smaller, simpler ones, in order to achieve project outcomes and priorities
- Recognize that there are specialized areas of expertise within planning (e.g., urban, rural, tribal, transit planning) and articulate their own specialization

- Integrate legal and regulatory standards of the profession into planning solutions and articulate the purpose of those standards
- Present alternative theories, solutions, or lines of inquiry based on planning principles
- Innovate through alternative approaches, exhibiting vision and strategic planning; create their own interpretations and move into other disciplines or into a global context to achieve project goals
- Conduct original research and fieldwork, synthesize information with secondary research and prior/tacit knowledge
- Seek out and evaluate the usefulness of qualitative and quantitative data, such as precedent studies, case studies, surveys, observations, peer-reviewed literature, and focus groups
- Question the canon of planning, urbanism, suburbanism, geography, and the built environment in order to move in new directions
- Demonstrate intellectual humility, metacognition, and flexibility throughout the planning process
- Offer and accept critique of the logic and meaning of a message, underlying assumptions of the message, and value of the message within peer research and design documentation
- Exhibit a sophisticated understanding of ethics and intellectual property rights, including their own as creative practitioners
- Infer consequences of actions, and forecast future possibilities based on current information and data
- Understand theories of planning and design principles and identify, analyze, and apply information from a variety of stakeholders and sources to develop a successful response to user needs
- Use resource management strategies and tools, including bibliographic citation managers (e.g., Zotero, Endnote, Mendeley) to organize, manage, and safeguard assets
- Express project solutions using a variety of visual communication techniques and technologies appropriate to a range of purposes and audiences; develop unique and original ways of representing and communicating planning concepts and design ideas
- Create and design research and programming documents with detailed attention to how their choices impact the overall message and purpose

***Learners are aware of:***

- Planning theories, behaviors, legal and institutional contexts within which Planning occurs
- The global dimensions of planning, interactions, flows of people and materials, cultures, and differing approaches to planning across world regions; the effects of global politics, international markets, labor practices, and climate change on planning practice
- Quantitative and qualitative methods that inform the field, including data collection, analysis and modeling tools for forecasting, policy analysis, and design of projects and plans

- Plan creation and implementation, integrating tools for sound plan formulation, adoption, implementation and enforcement
- The benefits and usefulness of archives including academic library special collections, museum collections, and municipal/state archives to find architectural and planning documents and information
- Planning process methods, including tools for stakeholder involvement, community engagement, and collaboration with diverse communities
- Tools for project management, strategic planning, consensus-building, and organizational/community motivation, including the need to re-examine stakeholder claims or cases, if needed
- The social responsibility of planners and the social, political, and physical impact of the design of the built environment
- The origins and intent of laws, codes, and standards
- The need for professional Planners to embrace a lifelong learning mentality as well as intellectual humility and flexibility
- Current trends and technologies in planning and affiliated disciplines (e.g., architecture, landscape architecture, construction, and engineering)
- The requirements to become a planner in their respective city, county, state, and country
- That planners and planning students must work with architects, landscape architects, engineers, legal and city officials, and construction management professionals as equal partners engaged in a collaborative endeavor
- The need of planning and affiliated practices to continue to embrace and promote gender, socio-economic, and ethnic diversity within the profession and with communities of practice