

Organization of the DQP

Early in the 20th century, educators decided that the college degree should be organized in terms of depth and breadth, or “concentration” and “distribution.” Depth and breadth, terms applicable to the way students approach their studies in specific knowledge areas, became over time organizing principles for the college degree throughout the United States.

Yet, as educators have worked on hundreds of campuses and in every part of the U.S. to articulate the learning outcomes students need to succeed in 21st century contexts, they have moved well beyond the twin pillars of breadth and depth. In particular, they have specified essential intellectual skills in seeking to ensure that students are well prepared to apply their learning beyond the classroom and to contribute to the life and vitality of the U.S. as a globally engaged democracy. Educators also have expanded the contexts for learning so that students now have many opportunities to develop and apply their learning in field-based settings.

The DQP builds from and further develops insights about higher learning articulated through these deliberations. While “depth” and “breadth” remain component elements of all postsecondary study, the DQP defines the following five essential areas of learning, each of which should be included in the associate degree, the bachelor’s degree and the master’s degree:

Specialized Knowledge

Independent of the vocabularies, theories and skills of particular fields of study, the DQP outlines what students in any specialization should demonstrate with respect to the specialization, often called a major field. While the DQP frames specialized knowledge outcomes for *any* field of study, proficiencies in *each* field will be determined and defined by the specialties themselves. Tuning — or some other field-specific effort to map learning outcomes — is necessary to describe the concepts, knowledge areas, methods and accomplishments that are basic to particular fields of study (Appendix B, Page 33).

Broad and Integrative Knowledge

This category asks students at all degree levels covered in the DQP to develop and consolidate broad knowledge across multiple areas of learning and to discover and explore concepts and questions that bridge multiple fields of study.

The DQP recommends that broad and integrative learning should involve students across all degree levels in the inquiry practices of core fields ranging from the sciences and social sciences to the humanities and arts. By exploring global, intercultural, scientific and economic topics, students pursue questions that both prepare them for civic participation and create a larger context for their specialized interests.

Intellectual Skills

The DQP describes a set of proficiencies basic to evidence-based reasoning across fields of study, including: analytic inquiry and operations, use of information resources, engaging diverse perspectives, ethical reasoning, quantitative fluency and communicative fluency. There is an emphasis throughout on the capacity to engage, make and interpret ideas and arguments from different points of reference (e.g., cultural, technological, political).

Applied and Collaborative Learning

This area focuses on what students can do with what they know, demonstrated by innovation and fluency in addressing both conventional and unscripted problems in the classroom, beyond the classroom and at work. This category includes both undergraduate research and creative activities involving individual and group effort — and may include specific practical skills crucial to the application of expertise.

Civic and Global Learning

This area of learning fosters students’ integration of knowledge and skills through applications and experiences that prepare them for citizenship. Students engage with, respond to, and reflect on political, social, environmental and economic challenges at local, national and global levels.

Guidelines for interpreting the DQP proficiencies

Proficiencies are organized in the DQP within the five broad areas of learning outlined above. For the sake of clarity, the DQP describes the proficiencies for each area independently. Yet, as will become clear, specific proficiencies typically integrate knowledge, one or more intellectual skills, and some form of demonstration. The same point applies to students’ development of the expected proficiencies. Students will learn what they practice as they encounter assignments that charge them to integrate knowledge, specific skills and applications.



Guidelines for interpreting the proficiencies are as follows:

- The proficiencies are intended to be cumulative for each degree level. Thus, the proficiencies identified “at the associate level,” which are also descriptive of work assigned during the first two years of a four-year curriculum, are assumed for the baccalaureate level. In turn, outcomes stated specifically for the master’s degree include those for the associate and bachelor’s degrees. Each section of the DQP demonstrates the principle of incremental challenge and cumulative accomplishment from one degree level to the next.
- Students can attain these proficiencies through many paths and at any point in the course of their academic pathway. Just as learning is cumulative but rarely follows a rigid sequence, evidence for learning is also cumulative and reflects programmatic and individual differences.
- The ways of demonstrating the proficiencies frequently included in these statements are offered as illustrations. When they indicate a range of performance, the implied forms of demonstration (e.g., an essay, oral presentation or project) are suggestive rather than exhaustive.
- The proficiencies are presented through active verbs that declare what students should do to demonstrate proficiency. These active verbs are deliberately cast at different levels of sophistication as the DQP moves up the degree ladder. The DQP avoids nouns such as “appreciation,” “awareness” and “ability” because these cannot be demonstrated through specific assignments.
- The proficiency statements do not prescribe *how well* a student must demonstrate proficiency; they are intended to invite demonstration that learning outcomes have been achieved. Though faculty members should find the DQP useful in evaluating student performance, the standards of quality remain judgments based on criteria that faculty have made explicit to students.
- Illustrations from specific disciplines, occupational fields, institutions or associations are emerging through use of the DQP by faculty in different fields of study and through work associated with the “Tuning USA” project described in Appendix B.
- The five broad areas of learning included in the DQP will be approached in different ways and with differing degrees of emphasis by the many providers of U.S. higher education. However, the inclusion and integration of these five component areas of learning should represent a widely *shared* curricular goal.
- The descriptions of proficiencies often include references to unknowns, inquiries, partial conclusions and unresolved challenges. Such inquiries and contingencies are common to all fields of study, and they apply not only to research but also to creative works, technical designs, interpretations and projects.

The Degree Qualifications Profile

This section outlines the five categories of learning for each degree level, defines proficiencies basic to each area of learning, and describes their relationship to one another. These proficiencies appear also in a summary chart or grid on Pages 26-31.

The DQP offers a significant modification of the traditional distinction between the broad knowledge acquired through the entire course of one's education and that gleaned through pursuit of a specialized field of study. It emphasizes the integration of ideas, methods, practice and theory across both broad and specialized realms.

Specialized Knowledge

Most who receive degrees pursue specialized areas of study and are expected to meet knowledge and skill requirements of those areas. Specialized accrediting associations and licensure bodies have developed standards for many such fields of study. But all fields call more or less explicitly for proficiencies involving terminology, theory, methods, tools, literature, complex problems or applications and cognizance of limits. These reference points for student achievement of specialized knowledge are addressed in the proficiencies presented below.

At the associate level, the student pursuing a specialized degree such as an Associate of Applied Science

- Describes the scope of the field of study, its core theories and practices, using field-related terminology, and offers a similar description of at least one related field.
- Applies tools, technologies and methods common to the field of study to selected questions or problems.
- Generates substantially error-free products, reconstructions, data, juried exhibits or performances appropriate to the field of study.

At the bachelor's level, the student

- Defines and explains the structure, styles and practices of the field of study using its tools, technologies, methods and specialized terms.
- Investigates a familiar but complex problem in the field of study by assembling, arranging and reformulating ideas, concepts, designs and techniques.
- Frames, clarifies and evaluates a complex challenge that bridges the field of study and one other field, using theories, tools, methods and scholarship from those fields to produce independently or collaboratively an investigative,

creative or practical work illuminating that challenge.

- Constructs a summative project, paper, performance or application that draws on current research, scholarship and techniques in the field of study.

At the master's level, the student

- Elucidates the major theories, research methods and approaches to inquiry and schools of practice in the field of study, articulates their sources and illustrates both their applications and their relationships to allied fields of study.
- Assesses the contributions of major figures and organizations in the field of study, describes its major methodologies and practices and illustrates them through projects, papers, exhibits or performances.
- Articulates significant challenges involved in practicing the field of study, elucidates its leading edges and explores the current limits of theory, knowledge and practice through a project that lies outside conventional boundaries.

Broad and Integrative Knowledge

U.S. higher education is distinctive in its emphasis on students' broad learning across the humanities, arts, sciences and social sciences, and the DQP builds on that commitment to liberal and general education in postsecondary learning. However, the DQP further invites students to integrate their broad learning by exploring, connecting and applying concepts and methods across multiple fields of study to complex questions — in the student's areas of specialization, in work or other field-based settings and in the wider society. While many institutions of higher education and most state requirements relegate general knowledge to the first two years of undergraduate work and present it in isolated blocks, the DQP takes the position that broad and integrative knowledge, at all degree levels, should build larger, cumulative contexts for students' specialized and applied learning and for their engagement with civic, intercultural, global and scientific issues throughout their academic careers and beyond.

At the associate level, the student

- Describes how existing knowledge or practice is advanced, tested and revised in each core field studied — e.g., disciplinary and interdisciplinary courses in the sciences, social sciences, humanities and arts.
- Describes a key debate or problem relevant to each core field studied, explains the significance of the debate or problem to the wider society and shows how concepts



from the core field can be used to address the selected debates or problems.

- Uses recognized methods of each core field studied, including the gathering and evaluation of evidence, in the execution of analytical, practical or creative tasks.
- Describes and evaluates the ways in which at least two fields of study define, address and interpret the importance for society of a problem in science, the arts, society, human services, economic life or technology.

At the bachelor’s level, the student

- Describes and evaluates the ways in which at least two fields of study define, address, and interpret the importance for society of a problem in science, the arts, society, human services, economic life or technology. Explains how the methods of inquiry in these fields can address the challenge and proposes an approach to the problem that draws on these fields.
- Produces an investigative, creative or practical work that

draws on specific theories, tools and methods from at least two core fields of study.

- Defines and frames a problem important to the major field of study, justifies the significance of the challenge or problem in a wider societal context, explains how methods from the primary field of study and one or more core fields of study can be used to address the problem, and develops an approach that draws on both the major and core fields.

At the master’s level, the student

- Articulates how the field of study has developed in relation to other major domains of inquiry and practice.
- Designs and executes an applied, investigative or creative work that draws on the perspectives and methods of other fields of study and assesses the resulting advantages and challenges of including these perspectives and methods.
- Articulates and defends the significance and implications of the work in the primary field of study in terms of challenges and trends in a social or global context.

Intellectual Skills

The six crosscutting Intellectual Skills presented below define proficiencies that transcend the boundaries of particular fields of study. They overlap, interact with and enable the other major areas of learning described in the DQP.

Analytic inquiry

The synthesizing cognitive operations of assembling, combining, formulating, evaluating and reconstructing information, foundational to all learning, are addressed throughout the DQP. But analytic inquiry, though it is involved in such synthesis, requires separate treatment as the core intellectual skill that enables a student to examine, probe and grasp the assumptions and conventions of different areas of study, as well as to address complex questions, problems, materials and texts of all types.

At the associate level, the student

- Identifies and frames a problem or question in selected areas of study and distinguishes among elements of ideas, concepts, theories or practical approaches to the problem or question.

At the bachelor's level, the student

- Differentiates and evaluates theories and approaches to selected complex problems within the chosen field of study and at least one other field.

At the master's level, the student

- Disaggregates, reformulates and adapts principal ideas,

techniques or methods at the forefront of the field of study in carrying out an essay or project.

Use of information resources

There is no learning without information, and students must learn how to find, organize and evaluate information in order to work with it and perhaps contribute to it. At each degree level, these tasks become more complicated — by language, by media, by ambiguity and contradictions — and the proficiencies offered below reflect that ladder of challenge.

At the associate level, the student

- Identifies, categorizes, evaluates and cites multiple information resources so as to create projects, papers or performances in either a specialized field of study or with respect to a general theme within the arts and sciences.

At the bachelor's level, the student

- Locates, evaluates, incorporates, and properly cites multiple information resources in different media or different languages in projects, papers or performances.
- Generates information through independent or collaborative inquiry and uses that information in a project, paper or performance.

At the master's level, the student

- Provides evidence (through papers, projects, notebooks, computer files or catalogues) of contributing to, expanding, evaluating or refining the information base within the field of study.



Engaging diverse perspectives

Every student should develop the intellectual flexibility and broad knowledge that enables perception of the world through the eyes of others, i.e., from the perspectives of diverse cultures, personalities, places, times and technologies. This proficiency is essential to intellectual development and to both Applied and Collaborative Learning and Civic and Global Learning.

At the associate level, the student

- Describes how knowledge from different cultural perspectives might affect interpretations of prominent problems in politics, society, the arts and global relations.
- Describes, explains and evaluates the sources of his/her own perspective on selected issues in culture, society, politics, the arts or global relations and compares that perspective with other views.

At the bachelor's level, the student

- Constructs a written project, laboratory report, exhibit, performance or community service design expressing an alternate cultural, political or technological vision and explains how this vision differs from current realities.
- Frames a controversy or problem within the field of study in terms of at least two political, cultural, historical or technological forces, explores and evaluates competing perspectives on the controversy or problem, and presents a reasoned analysis of the issue, either orally or in writing, that demonstrates consideration of the competing views.

At the master's level, the student

- Investigates through a project, paper or performance a core issue in the field of study from the perspective of a different point in time or a different culture, language, political order or technological context and explains how this perspective yields results that depart from current norms, dominant cultural assumptions or technologies.

Ethical reasoning

Analytic reasoning, the use of information resources, communication, and diverse perspectives should be brought to bear on situations, both clear and indeterminate, where tensions and conflicts, disparities and harms emerge, and where a particular set of intellectual skills is necessary to identify, elaborate and, if possible, resolve these cases. Ethical reasoning thus refers to the judicious and self-reflective application of ethical principles and codes of conduct resident in cultures, professions, occupations, economic behavior and social relationships to making decisions and taking action.

At the associate level, the student

- Describes the ethical issues present in prominent problems in politics, economics, health care, technology or the arts and shows how ethical principles or frameworks help to inform decision making with respect to such problems.

At the bachelor's level, the student

- Analyzes competing claims from a recent discovery,

scientific contention or technical practice with respect to benefits and harms to those affected, articulates the ethical dilemmas inherent in the tension of benefits and harms, and either (a) arrives at a clearly expressed reconciliation of that tension that is informed by ethical principles or (b) explains why such a reconciliation cannot be accomplished.

- Identifies and elaborates key ethical issues present in at least one prominent social or cultural problem, articulates the ways in which at least two differing ethical perspectives influence decision making concerning those problems, and develops and defends an approach to address the ethical issue productively.

At the master's level, the student

- Articulates and challenges a tradition, assumption or prevailing practice within the field of study by raising and examining relevant ethical perspectives through a project, paper or performance.
- Distinguishes human activities and judgments particularly subject to ethical reasoning from those less subject to ethical reasoning.

Quantitative fluency

Quantitative expressions and the issues they raise inform many tasks. In addition to essential arithmetic skills, the use of visualization, symbolic translation and algorithms has become critically important.

At the associate level, the student

- Presents accurate interpretations of quantitative information on political, economic, health-related or technological topics and explains how both calculations and symbolic operations are used in those offerings.
- Creates and explains graphs or other visual depictions of trends, relationships or changes in status.

At the bachelor's level, the student

- Translates verbal problems into mathematical algorithms so as to construct valid arguments using the accepted symbolic system of mathematical reasoning and presents the resulting calculations, estimates, risk analyses or quantitative evaluations of public information in papers, projects or multimedia presentations.
- Constructs mathematical expressions where appropriate for issues initially described in non-quantitative terms.

At the master's level, the student

- Uses logical, mathematical or statistical methods appropriate to addressing a topic or issue in a primary field that is not for the most part quantitatively based.
— or —
- Articulates and undertakes multiple appropriate applications of quantitative methods, concepts and theories in a field of study that is quantitatively based.
- Identifies, chooses and defends the choice of a mathematical model appropriate to a problem in the social sciences or applied sciences.

Communicative fluency

The use of messages to achieve shared understanding of meaning depends on effective use of language, intentional engagement of audience, cogent and coherent iteration and negotiation with others, and skillful translation across multiple expressive modes and formulations, including digital strategies and platforms.

At the associate level, the student

- Develops and presents cogent, coherent and substantially error-free writing for communication to general and specialized audiences.
- Demonstrates effective interactive communication through discussion, i.e., by listening actively and responding constructively and through structured oral presentations to general and specialized audiences.
- Negotiates with peers an action plan for a practical task and communicates the results of the negotiation either orally or in writing.

At the bachelor's level, the student

- Constructs sustained, coherent arguments, narratives or explications of issues, problems or technical issues and processes, in writing and at least one other medium, to general and specific audiences.
- Conducts an inquiry concerning information, conditions, technologies or practices in the field of study that makes substantive use of non-English-language sources.
- Negotiates with one or more collaborators to advance an oral argument or articulate an approach to resolving a social, personal or ethical dilemma.

At the master's level, the student

- Creates sustained, coherent arguments or explanations summarizing his/her work or that of collaborators in two or more media or languages for both general and specialized audiences.

Applied and Collaborative Learning

An emphasis on applied learning suggests that what graduates can *do* with what they know is the most critical outcome of higher education. The proficiencies described in this section focus on the interaction of academic and non-academic settings and the corresponding integration of theory and practice, along with the ideal of learning with others in the course of application projects. Research of different kinds and intensities, on and off campus, on and off the Internet, and formal field-based experiences (internships, practicums, community and other service-learning) all are cases of applied learning.

At the associate level, the student

- Describes in writing at least one case in which knowledge and skills acquired in academic settings may be applied to a field-based challenge, and evaluates the learning gained from the application.
- Analyzes at least one significant concept or method in the field of study in light of learning outside the classroom.

- Locates, gathers and organizes evidence regarding a question in a field-based venue beyond formal academic study and offers alternate approaches to answering it.
- Demonstrates the exercise of any practical skills crucial to the application of expertise.

At the bachelor's level, the student

- Prepares and presents a project, paper, exhibit, performance or other appropriate demonstration linking knowledge or skills acquired in work, community or research activities with knowledge acquired in one or more fields of study, explains how those elements are structured, and employs appropriate citations to demonstrate the relationship of the product to literature in the field.
- Negotiates a strategy for group research or performance, documents the strategy so that others may understand it, implements the strategy, and communicates the results.
- Writes a design, review or illustrative application for an analysis or case study in a scientific, technical, economic, business, health, education or communications context.
- Completes a substantial project that evaluates a significant question in the student's field of study, including an analytic narrative of the effects of learning outside the classroom on the research or practical skills employed in executing the project.

At the master's level, the student

- Creates a project, paper, exhibit, performance or other appropriate demonstration reflecting the integration of knowledge acquired in practicum, work, community or research activities with knowledge and skills gleaned from at least two fields of study in different segments of the curriculum. Articulates the ways in which the two sources of knowledge influenced the result.
- Designs and implements a project or performance in an out-of-class setting that requires the application of advanced knowledge gained in the field of study to a practical challenge, articulates in writing or another medium the insights gained from this experience, and assesses (with appropriate citations) approaches, scholarly debates or standards for professional performance applicable to the challenge.

Civic and Global Learning

U.S. higher education acknowledges an obligation to prepare graduates for knowledgeable and responsible participation in a democratic society. The DQP reaffirms and upgrades that commitment. But the DQP further recognizes that graduates face a social, economic and information world that knows no borders, that is buffeted by environmental changes, and that requires both the knowledge and the experiences that will enable them to become genuinely interactive and productive. The DQP therefore envisions both global and domestic settings for civic engagement and outlines proficiencies needed for both civic and global inquiry and interaction.

Civic and Global Learning proficiencies rely principally on the types of cognitive activities (describing, examining,



elucidating, justifying) that are within the direct purview of institutions of higher education, but they also include evidence of civic activities and learning beyond collegiate settings. Such activities may of course take the form of service learning, in which community engagement prompts reflection and explication. These proficiencies also reflect the need for analytic inquiry and engagement with diverse perspectives. Together, they underscore the interplay of proficiencies from the major components of higher learning presented previously in the DQP.

At the associate level, the student

- Describes his/her own civic and cultural background, including its origins and development, assumptions and predispositions.
- Describes diverse positions, historical and contemporary, on selected democratic values or practices, and presents his or her own position on a specific problem where one or more of these values or practices are involved.
- Provides evidence of participation in a community project through either a spoken or written narrative that identifies the civic issues encountered and personal insights gained from this experience.
- Identifies an economic, environmental or public health challenge spanning countries, continents or cultures, presents evidence for the challenge, and takes a position on it.

At the bachelor's level, the student

- Explains diverse positions, including those representing

different cultural, economic and geographic interests, on a contested public issue, and evaluates the issue in light of both those interests and evidence drawn from journalism and scholarship.

- Develops and justifies a position on a public issue and relates this position to alternate views held by the public or within the policy environment.
- Collaborates with others in developing and implementing an approach to a civic issue, evaluates the strengths and weaknesses of the process, and, where applicable, describes the result.
- Identifies a significant issue affecting countries, continents or cultures, presents quantitative evidence of that challenge through tables and graphs, and evaluates the activities of either non-governmental organizations or cooperative inter-governmental initiatives in addressing that issue.

At the master's level, the student

- Assesses and develops a position on a public policy question with significance in the field of study, taking into account both scholarship and published or electronically posted positions and narratives of relevant interest groups.
- Develops a formal proposal, real or hypothetical, to a non-governmental organization addressing a global challenge in the field of study that the student believes has not been adequately addressed.
- Proposes a path to resolution of a problem in the field of study that is complicated by competing national interests or by rival interests within a nation other than the U.S.