# THE DEGREE QUALIFICATIONS PROFILE

A learning-centered framework
for what college graduates should know
and be able to do to earn the
associate, bachelor's or master's degree

Lumina FOUNDATION



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FOREWORD

# IT'S TIME TO DEFINE QUALITY – FOR STUDENTS' SAKE

As an organization whose sole mission is to increase college attainment, Lumina Foundation has always emphasized educational quality. True, Goal 2025, the goal that drives all of our work, is quantifiable: It calls for 60 percent of Americans to hold high-quality degrees, certificates or other postsecondary credentials by 2025. But it isn't all about numbers. By calling specifically for "high-quality" credentials, Goal 2025 makes clear that they must reflect rigorous and relevant learning.

You see, students don't need just credentials. What they need — and what our global economy and democratic society increasingly demand — is the learning those credentials signify, the highly developed knowledge and skills that postsecondary education provides.

That's why, in the drive to increase college attainment, it's not enough to simply count credentials; the credentials *themselves* must count. This document, the Degree Qualifications Profile, is designed to ensure that they do.

The DQP isn't exactly a secret. Authored by four eminent scholars and honed by input from experts from all over the globe, the DQP is gaining traction on campuses throughout the nation. In fact, after nearly four years of "beta testing" at more than 400 colleges and universities in 45 states, the DQP has already proven its value as a tool for fostering and ensuring high-quality learning at the college level.

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Its specific, well-articulated learning outcomes have made educational pathways more clear and concrete for students at all types of institutions. Paired with the complementary, discipline-specific process of Tuning, the DQP has engaged faculty members in the vital work of improving courses and shaping programs of study at scores of institutions. At others, it has helped focus and streamline the accreditation process.

Even in its formative stages, the DQP showed great promise as a practical tool for meaningful change on America's campuses. And now, bolstered by the lessons learned in its years-long "beta" phase, this new version is poised to fully realize that promise. In fact, we at Lumina see the DQP as a lever that can aid a vital and inevitable shift in American higher education: the shift from a time-based, institution-centric system to one that is based on learning and designed with students' needs at the center.

This momentous shift shouldn't be news to any of us. It's been underway for years, propelled by several interrelated forces.

First of all, the nation's need for talent — for individuals who are well equipped to succeed in the modern, global workforce — is huge and growing. Employers continually lament the lack not just of specialized technical expertise, but also vital "soft skills" such as critical thinking, communication and teamwork. In today's world, everyone needs both, and higher education must be the major resource for developing these talented citizens.



Second, as higher education's role becomes more critical to society and the economy, policymakers and the public call ever louder for the academy to be more accountable, more productive and more responsible. Today, as never before, institutions must be able to clearly and persuasively articulate the value — in terms of specific learning outcomes — that their programs add to students' lives.

Third, as our economy and society demand more talent, the need to link all forms of postsecondary learning in a common system of credentials has become acute. All learning should count, wherever and however it is obtained, and credentials should clearly and transparently represent underlying skills and knowledge. In a knowledge-based world, everyone should have a path forward to further levels of education, whether it's from an associate degree to a bachelor's, from a workforce-relevant certificate to a degree, or from a degree to a career. By defining the learning outcomes that degrees represent, the DQP will help build bridges between all systems of postsecondary learning.

Finally, students themselves need this change to happen. College-level learning has become vital to success, but more students than ever before are "nontraditional" in some way — working adults, low-income students, first-generation students, students of color, second-career professionals, you name it. All of them — and traditional students, too — need a clear path to success.

We believe these demands are clear, and that quality in higher education *will* be better defined. The only real questions are "How?" and "By whom?"

By using the DQP and its allied Tuning process, institutions can answer those questions in the best possible way. Specifically, the DQP empowers faculty to lead the process to clearly define degrees and credentials according to what really matters: the specific learning outcomes those credentials signify. In short, the DQP shifts the discussion from "What are we going to teach?" to "What should our students learn? What knowledge and skills do they need to thrive?"

That discussion has already shifted on hundreds of campuses. Now it's time to change the *national* discussion — to scale up use of the DQP and Tuning and apply them broadly as tools to help build a learning-based, student-centered system. Now it's time to go big; millions of students are counting on it.

We at Lumina are committed to that course — and to the success of those students. We urge you to join us.



Jamie P. Merisotis, *President and CEO, Lumina Foundation*

PREFACE

# TESTED AND READY: DQP HONED BY FACULTY IN THE FIELD

Since its publication in January 2011 as the beta Degree Qualifications Profile, the DQP has proved its usefulness to higher education institutions and associations from coast to coast. More than 400 colleges and universities[1] have used the DQP. Its applications have been as diverse as the variety of missions of higher education. The following examples will indicate the range:

- Many institutions have used the DQP to review and strengthen their general education curricula and enhance connections between general education and the major.
- Two- and four-year institutions in nine states have collaborated on ways to assess DQP proficiencies in the context of student transfer.
- Some institutions working to develop discipline-specific learning outcomes (often through "Tuning" projects) have specified links to DQP proficiencies.
- Some institutions have implemented a reorientation of their mission and curriculum in light of the DQP.
- Some institutions with existing statements of learning outcomes have used the DQP in a "gap analysis" to determine the inclusiveness, sufficiency and distinctive strengths of their statements.
- Some institutions have used the DQP as a platform for discussions with employers and other stakeholders about needs and expectations.
- Some institutions have created model assignments for their students in the light of DQP proficiencies.

Though this formal release of the DQP reflects much that has been learned through experience with the earlier beta version, this document is more an enhancement than a revision. The fundamental strength of the DQP — succinct, active definitions of what degree recipients should know and be able to do at each degree level — remains unchanged. Those engaged in implementation or adaptation of the DQP may be confident that its structure and contents have not been substantially altered.

What has changed since the beta version of the DQP was issued in 2011? Informed by significant feedback from the field,[2] this edition includes new proficiencies addressing ethical reasoning and global learning, strengthened statements on quantitative reasoning, and more explicit attention to research. It now highlights analytical and cooperative approaches to learning that transcend specific fields of study. It provides guidance on integrating the development of students' intellectual skills with their broad, specialized, applied and civic learning. And, in response to explicit requests from the field, it points to resources that support the assessment of DQP proficiencies.

This edition of the DQP thus builds on the success of its beta edition — to offer an even more useful, flexible and practical guide for what college graduates should know and be able to do when awarded the associate, bachelor's or master's degree. Future editions of the DQP will be published on a regular basis, as revisions are called for by the field, but the goal of the DQP throughout future editions will continue unchanged — to be a useful, flexible and practical tool to define postsecondary degrees in the U.S. through the demonstration and documentation of student learning, regardless of the student's field of study.

Users are asked to relay suggestions for improving the DQP to: **www.DegreeProfile.org.**



[1] References to "colleges and universities" include community colleges, junior colleges and nontraditional providers.

[2] The DQP has been used and tested by more than 400 colleges and universities, four of the seven regional accrediting associations and several constituency organizations including the Council of Independent Colleges, the American Association of State Colleges and Universities, and the Association of American Colleges and Universities.

# EXECUTIVE SUMMARY

With the assistance of the original authors, many expert reviewers and faculty colleagues throughout the U.S., Lumina Foundation now releases its Degree Qualifications Profile. Reflecting years of wide-scale and diverse applications of a beta version, the DQP provides a baseline set of reference points for what students should know and be able to do for the award of associate, bachelor's and master's degrees, regardless of their fields of study.

Though the DQP draws on many earlier statements in its effort to describe what postsecondary degrees should mean in terms of learning outcomes, it seeks to set a new direction for U.S. higher education in the following ways:

- The student, not the institution, is its primary reference point. The DQP describes what students should know and be able to do as they progress through progressively higher levels of postsecondary study.
- The DQP presents outcomes for three levels of degrees by articulating increasing levels of challenge for student performance for each of the learning outcomes it frames. (A future edition of the DQP will include doctoral degrees.)[3]
- The DQP emphasizes the degree, not the field of study. And yet it implicitly asks faculty to provide field-specific learning outcomes and expectations in their areas of specialized knowledge. Accrediting associations in some fields of study have established such expectations. And the DQP invites and supports an allied process, Tuning, which encourages the development of disciplinary-level outcomes (see Appendix B, Page 33).
- DQP proficiencies are intended not as statements of aspiration for some students, but as descriptions of what every graduate at a given level ought to know and be able to do.
- DQP learning outcomes employ active verbs (e.g., "identifies," "categorizes," "prioritizes," "evaluates") because such verbs describe what students actually do to demonstrate proficiency through their assignments (e.g., papers, performances, projects, examinations, exhibits). The DQP avoids nouns such as "ability," "awareness" and "appreciation" because they do not lead to assessments of proficiency.
- The DQP provides a qualitative set of important learning outcomes, not quantitative measures such as numbers of credits and grade-point averages, as the basis for awarding degrees.
- The DQP has developed organically, with many stakeholders testing potential applications over several years. This unique, nongovernmental process has been undertaken voluntarily by faculty and staff of more than 400 institutions engaged in sponsored and independent projects to strengthen student learning.

The DQP differs in important ways from other approaches to accountability in U.S. higher education. For example:

- Current accountability markers focus primarily on degree-completion data based on numbers of courses or credit hours. While these measures are useful for purposes of record-keeping and transfer, they fail to describe what degrees mean in terms of demonstrated student learning.
- Many state or system-level accountability strategies rely heavily on measurements derived from standardized test



scores, including licensing exams in some fields or retrospective opinions captured through surveys. While standardized tests and surveys may offer indicators useful for some purposes, the DQP offers qualitative guidance both to students and to a society that asks, "So, you hold this degree. What does this mean you know and can do?"

- Current assessment practice often relies on learning goals developed by each institution individually. The attainment of these goals may then be investigated on average through examination of "samples" of students using various methods — summative examinations (standardized or developed by the institution's faculty), portfolios, capstone exercises, etc. The DQP proposes a more integrated approach, one focused on the expected and performed accomplishments of all students — not just samples — in the course of multiple teaching and learning experiences.

The DQP recognizes that U.S. higher education is in the midst of significant change, challenged to deliver a 21st century higher education system that effectively balances the learning needs of students with the rapidly changing economic needs of the U.S. — and indeed the global — community. The DQP's inherent flexibility should make it useful in dealing with a broad array of emerging issues.

- In response to questions about higher education's current and future effectiveness, academic administrators and faculty have been able to offer few persuasive answers. The DQP invites — and prepares pathways for — the documentation of student learning in easily understood terms.
- Faced with the complexity of contemporary curricula in higher education and the many locations and technologies through which curricula are delivered, few students receive adequate guidance on the structure and cumulative force of their learning. The DQP can help them make strategic choices informed by a shared awareness of degree-level outcomes.
- Recognizing that many faculty members are more likely to work within their departments or fields of study than to work collaboratively with peers in other fields, the DQP calls for wider collaboration among faculty in different disciplines. Working collegially to strengthen teaching strategies and communicate the affinities among disciplines, they will better support students in their efforts to achieve expected proficiencies in all of their studies.
- Recognizing and accommodating an increasing variety of higher education providers and modes of delivery, the DQP offers a perspective on proficiencies that transcends providers and learning contexts. The DQP is as applicable to learning assessed outside the framework of courses as it is to traditional, course-based degree programs.

## The DQP's five learning categories

The DQP organizes the learning outcomes (proficiencies) of degrees according to five broad interrelated categories:

1 **Specialized Knowledge.** This category addresses what students in *any* specialization should demonstrate with respect to the specialization beyond the vocabularies, theories and skills of particular fields of study. (Tuning, on the other hand, focuses on what students in a *particular* specialization should know and be able to do to earn the degree. See Appendix B, Page 33.)

2 **Broad and Integrative Knowledge.** This category asks students at all three degree levels to consolidate learning from different broad fields of study (e.g., the humanities, arts, sciences and social sciences) and to discover and explore concepts and questions that bridge these essential areas of learning.

3 **Intellectual Skills.** This category includes both traditional and nontraditional cognitive skills: analytic inquiry, use of information resources, engagement with diverse perspectives, ethical reasoning, quantitative fluency and communicative fluency. Throughout, the DQP emphasizes the importance of students making, confronting and interpreting ideas and arguments from different points of reference (e.g., cultural, technological, political).

4 **Applied and Collaborative Learning.** This category emphasizes what students can do with what they know. Students are asked to demonstrate their learning by addressing unscripted problems in scholarly inquiry, at work and in other settings outside the classroom. This category includes research and creative activities involving both individual and group effort and may include practical skills crucial to the application of expertise.

5 **Civic and Global Learning.** This category recognizes higher education's responsibilities both to democracy and the global community. Students must demonstrate integration of their knowledge and skills by engaging with and responding to civic, social, environmental and economic challenges at local, national and global levels.

[3] Neither professional practice doctorates (e.g., MD, DDS, JD) nor academic doctorates (Ph.D.) are included at this time because of their close focus on specific disciplines. Qualifications for these degrees will be developed for a later edition of the DQP in response to requests from the field. Lumina is also supporting work to develop learning-centered qualifications for sub-associate and other non-degree credentials. This work is part of an effort to explore an overarching credentials framework for the nation.

# The DQP: value, uses, contexts and reinforcement

The Degree Qualifications Profile describes what degree recipients should know and be able to do. As a profile that invites institutions to fill in the details, the DQP proposes proficiencies that benchmark the associate, bachelor's and master's degrees — which constitute the great majority of postsecondary degrees awarded by U.S. colleges and universities — regardless of a student's field of specialization.

The proficiencies specified in the DQP are not without precedent. In fact, the DQP draws on more than a decade of widespread debate and effort across all levels of U.S. higher education and in countries throughout the world to define learning outcomes that graduates are expected to fulfill in preparation for work, citizenship, global participation and life. But the DQP represents a significant advance beyond such efforts by describing in concrete terms how students demonstrate expected proficiencies across different degree levels and across the different elements of any degree.

Informed by its application in more than 400 institutions and by more than 100 substantive recommendations from authoritative reviewers, the DQP represents a continuing resource for higher education. Of course, further experience with the DQP and reflection on its many applications should improve subsequent editions.

The intermediate goal of the DQP process is consensus on a public definition of quality in U.S. higher education. In reaching toward this goal, the DQP has a strong ally in Tuning. Tuning convenes faculty *within a discipline* who, with input from employers, establish discipline-specific curricular reference points and learning outcomes that can be linked to DQP proficiencies. In the longer term, the DQP and allied efforts seek to increase the capacity of postsecondary education to ensure that students achieve the levels of learning they require and deserve.

## The need for the DQP

Higher learning is becoming ever more critical in the 21st century. To succeed in the workplace, students must prepare for jobs that are rapidly changing, use technologies and knowledge in areas that still are emerging and work with colleagues from (and often in) all parts of the world. The complex challenges that graduates must address as citizens are increasingly global.

Recognizing the economic and societal importance of higher levels of learning, national leaders, policymakers, analysts and major philanthropies have called for a dramatic increase in the number and quality of degrees awarded in the U.S. But the press toward increased degree production has not been grounded in consistent public understanding of what these degrees ought to demand and mean. While some colleges and universities have defined their own expected student learning outcomes, what they have done has been largely invisible to policy leaders, the public and even many students. Similarly, while higher education institutions have been under increasing pressure to "be accountable" for the quality of their degrees, colleges and universities have frequently responded by assessing samples of students in ways that say too little about learning — and even less about what all students should know and be able to do.

The DQP responds to these concerns by describing concretely what is meant by each of the degrees addressed. Focusing on broad areas of conceptual knowledge and essential proficiencies and their applications, the DQP illustrates how students should be expected to perform at progressively more challenging levels. Demonstrated performance at these ascending levels becomes the basis on which students are then awarded degrees.

While clarity and consensus are goals of the DQP process, the DQP does not attempt to "standardize" U.S. degrees. The DQP recognizes the role and responsibility of faculty to determine both the content appropriate to different areas of study and the best ways to teach that content. Instead, the DQP describes generic forms of student performance appropriate for each degree level through clear reference points that indicate the incremental, integrative and cumulative nature of learning.

While the DQP offers reference points in five broad categories of learning for all associate, bachelor's and master's degrees, no outcomes framework can or should attempt to address every element of a college education. In particular, the emphasis of the DQP on assessable learning is not meant to imply that cognitive standards are sufficient to measure all desirable forms of student development. The DQP chooses not to define "affective" goals of learning that many colleges properly affirm — e.g., integrity, personal initiative, professionalism — because they rarely are specified as



criteria for awarding degrees. But the DQP recognizes the value of such goals and encourages institutions to articulate and foster them.

Acknowledging and seeking to protect the rich diversity of postsecondary institutions in the U.S., the DQP thus invites adaptation within the context of varied institutional missions. For example, it can be adapted to serve an institution that emphasizes spiritual exploration, or fosters proficiency in the performing arts, or seeks to expand access to the educationally dispossessed. In short, any institution may expand the DQP by adding outcomes and objectives specific to its mission and by documenting student attainment of such outcomes.

Sustained use of the DQP over time should continue to yield several positive results, including:

- An emerging common vocabulary for sharing good practice in degree granting by U.S. higher education institutions.
- A foundation for better public understanding of what institutions of higher education actually do in their instructional and learning assessment roles.
- Reference points for accountability that at least complement — and ideally, replace — less revealing measures of improvements in student learning such as test scores or tallies of graduates, research dollars, student satisfaction ratings, or job placements and average salaries.
- Benchmarks for improving the quality of learning in terms of integration and *application* — because the DQP defines proficiencies in ways that emphasize both the cumulative integration of learning from many sources and the application of learning in a variety of settings.
- Enhanced institutional assessment practices and resources — because every learning outcome should lead to and support a provider's capacity to gather evidence that stated proficiencies are achieved.

## Uses of the DQP

Although it is difficult to anticipate all of the purposes that the DQP can serve, there are several obvious and important applications that deserve mention. The more than 400 colleges and universities that have experimented with the DQP have already taken action on many of these applications.

- At the institutional level, the DQP provides reference points that allow faculty members to articulate and better align institutional student learning outcomes with departmental objectives. Instructors and students can then refer to the DQP as a common source of understanding and point of departure for agreement on more detailed and specific expectations about programs, courses, assignments and assessments. For those engaged in educational innovations and experiments, the DQP provides a framework for describing the multiple kinds of learning that students need to accomplish and demonstrate.
- In guiding students, advisers can use the DQP as a framework to explain the structure and coherence of the curriculum with a particular emphasis on the interdependence of general education and the major. In such a context, students will be able to make better-informed choices as to which courses to take and better understand how the parts of their education add up to a whole. Advisers will also be able to better inform and guide all types of students, including those working toward a degree, those who intend to transfer from one institution to another, and those returning to higher education after a period of absence.
- Recognizing that many students attend a community college intending to transfer to a four-year institution and that others may attend several institutions before completing their degrees, the DQP provides a framework useful for aligning degree requirements across institutions. This gives prospective students a clear statement of the proficiencies they will be expected to achieve wherever they enroll while also providing a platform for transfers that are both vertical (two-year to four-year institution) and horizontal (among similar institutions).
- The DQP provides resources for strengthening accreditation. Regional accreditors should find that the DQP prompts them to reach the consensus on specific, concrete learning outcomes being sought by many leaders and opinion makers. And specialized accreditors can use the DQP to relate disciplinary expectations to broad institutional goals for student learning outcomes.
- The DQP's focus on student learning and demarcation of increasing levels of challenge as a student progresses from one degree level to the next should enable a continuing and sustainable emphasis on learning as the proper determinant for the quality and value of degrees. This will help correct the tendency to view the credential as an end in itself, independent of the learning it is meant to represent.
- The DQP will inform refinement and further elaboration of points of alignment between and among secondary schools and postsecondary institutions regarding achievement levels in specific knowledge, skill and application areas.
- The DQP can inform the expansion and elaboration of connections between school-based learning and out-of-school learning, including prior learning (e.g., from employment, military service and volunteer activity).

## Contexts for the DQP

The DQP focuses on issues, strengths and opportunities for improvement that are of particular importance to higher education in the U.S. These include a commitment to access, to diversity, to academic freedom and its responsibilities, to broad liberal education as well as specialized learning, to civic education for a democracy, and to innovative, integrative, inquiry-focused and collaborative pedagogies. For

## Key terms in the DQP

**Proficiency:** Proficiency designates the knowledge, understanding and skill that satisfy the levels of mastery sufficient to justify the award of an academic degree. The DQP uses the term "proficiency" rather than "competency" because the DQP focuses on the degree as a whole and the continuum of learning across increasingly higher degree levels. The term "competence" describes formative attainment goals within specific learning experiences (e.g., in courses) along the path to degree-qualifying proficiencies.

**Field-based:** Study pursued beyond traditional academic locations, whether on or off campus. Field-based study is characterized by work in "real time" (rather than that measured by the classroom clock), in "real space" (rather than in designated academic facilities), and in "real urgency" (arising from immersion in issues and an environment).

**Field of study:** Sometimes used as a synonym for discipline but used also to describe applied programs such as culinary arts, graphic design or medical records administration.

**Tuning:** Faculty-led, discipline-by-discipline projects to determine what students should know and be able to do (mapping and alignment of learning outcomes) stage by stage through the curriculum. Originally a European initiative associated with the Bologna Process, Tuning projects are moving forward in several states of the U.S. as well as in Latin America, Africa and Central Asia.



instance, because U.S. higher education emphasizes the application of knowledge, the DQP draws attention to the importance of field-based projects, performances, investigative research, demonstrations, collaborations and other settings where knowledge is actually used.

The DQP also considers the varied ways in which students demonstrate their proficiencies. While conventional testing may still be useful, the DQP holds that students provide more persuasive evidence of their learning through completion of assigned tasks and major projects within and beyond the classroom. The DQP proficiency statements are written accordingly, with such modes of demonstration as reference points.

Fortunately, the U.S. is not starting from scratch in crafting a transformational, proficiency-based DQP. Many institutions throughout American higher education are engaged in defining and addressing learning outcomes. Faculty members, administrators and researchers are working to improve the understanding of such outcomes and of the experiences and practices that move students toward them. Several fields of study have shown leadership in clarifying objectives for learning and engaging multiple stakeholders to establish benchmarks for these objectives (e.g., "Tuning USA" efforts in history, communications, civil engineering, marketing, chemistry and graphic arts). But these laudable efforts are largely separate from one another and largely unknown to the public. One aim of the DQP is to create a platform where such undertakings can come together.

While the DQP focuses on higher education and defers to others regarding pre-collegiate learning standards, it recognizes the importance of sound preparedness for college, career and life. Students with inadequate preparation often must remedy shortcomings and thus face a greater challenge in attaining the college-level DQP proficiencies. Hence the DQP acknowledges recent efforts to reach a deeper understanding of K-12 educational outcomes. In particular, initiatives such as that represented by the Common Core State Standards offer a promising opportunity for dialogue between the K-12 and higher education sectors.[4]

[4] Another Lumina Foundation publication analyzes the potential for greater alignment between these initiatives. See Paul L. Gaston and David T. Conley, *A path to alignment: Connecting K-12 and higher education via the Common Core and the Degree Qualifications Profile*, Indianapolis: Lumina Foundation, 2013. http://www.luminafoundation.org/publications/DQP/A_path_to_alignment.pdf

# The value of the DQP

## ... for students

American college students choose from among hundreds of fields of study, often with scant information to guide them on the learning implications of their choices. Because the DQP clearly defines the learning that each degree should reflect, regardless of major field of study, it can help students develop and pursue a thoughtful, coherent and meaningful education plan. It can serve as a roadmap for navigating the often-fragmented landscape of higher education.

While students must master the content and methods in the fields they study in depth, the DQP can contribute to that goal by providing general reference points for acquiring field-specific knowledge and skills, i.e., essential dimensions of higher learning that specific fields will elaborate in greater detail.

**Because the DQP clearly defines the learning that each degree should reflect, it can help students pursue a coherent and meaningful education plan.**

Moreover, because most students will change jobs many times during their lives, the DQP strongly emphasizes the kinds of broad, integrative studies and crosscutting proficiencies that graduates need for continuous learning in complex and changing environments.

A fundamental assumption behind the DQP is that study in breadth (traditionally associated with general education) and study in depth (traditionally associated with the major) are both vital. The DQP also assumes that general education and the major must work together. Degree recipients benefit from a curriculum in which general education and the major are clearly aligned in the pursuit of a shared commitment to assuring accomplishment of degree-level proficiencies.

There are pedagogical and practical benefits in such clarity. Students who understand the purposes of the courses they take and the congruence between course-level and degree-level objectives learn more effectively. The DQP offers a resource to guide that understanding. Moreover, working adults and students returning to higher education after an extended absence may find the DQP useful because it enables them to "ladder" their applied learning experiences.

Use of the DQP also should help students commit themselves to prepare fully for citizenship, for contributing to the economy and for the accomplishment of personal goals. As colleges and universities make clear their resolve to support students pursuing such preparation, they might invite students to formalize a shared resolve at the beginning of their college career, perhaps through a statement that says, "I have read and understand the proficiencies for the degree I seek and commit myself to investing the time, energy and creativity to qualify for that degree." An overarching learning agreement for each degree — an agreement that also affirms an institution's commitment to give each student the support needed to pursue a degree — should be an important outgrowth of the framework envisioned here.

## ... for faculty members

There are five principal values of the DQP for faculty.

- It draws faculty into active clarification of how and what they teach in relation to what their students learn.
- It encourages them to examine more fully the content and methods of their fields of study in relation to priorities that span departmental and school boundaries. (The DQP can prompt a shift of perspective from "my courses" to "our curriculum.")
- It can help foster purposeful, sustained interactions with colleagues concerning the purposes of colleges and universities, i.e., to generate, preserve, evaluate and disseminate knowledge.
- The DQP enables faculty to examine the assignments they give to students so as to ensure that these assignments foster and properly assess the desired proficiencies.
- Faculty members' collaborative engagement with the DQP reinforces and demonstrates the value of their intentionality in strengthening the quality of both learning and teaching.

## ... for the public

Although the public values higher education, too few people understand how it is organized, how it operates, and what it accomplishes. Higher education is in part responsible for this problem because colleges and universities have never expressed a clear consensus as to what degrees should mean in terms of actual student learning.

The DQP offers an important step toward such a consensus by proposing in direct, simple language what a degree recipient should know and be able to do, regardless of the field of study. When such a consensus can be expressed broadly for the great majority of colleges and universities, the public will be able to make better-informed decisions about higher education. In short, the DQP can provide practical help in answering any number of important, real-world questions. For example:

- To which colleges and universities should a prospective student apply?
- Will this program help a student obtain the learning and skills needed to succeed in this chosen field?
- Does a community college bond issue deserve support?
- Should media reports on higher education be taken at face value?
- What, after all, do academic degrees mean?



# 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

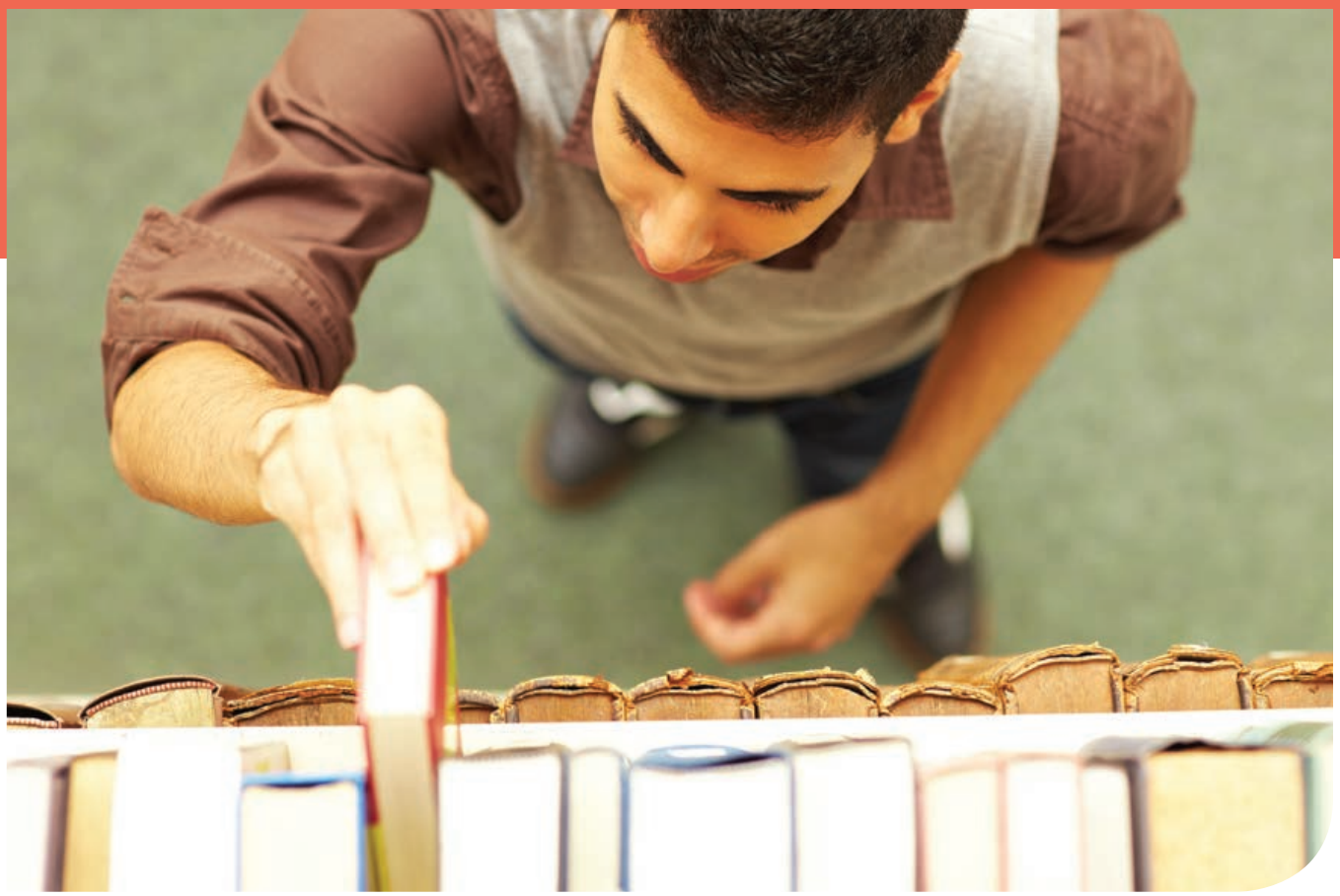
This area focuses on what students can do with what they know, demonstrated by innovation and fluency in addressing both conventional and unscripted problems in the classroom, beyond the classroom and at work. This category includes both undergraduate research and creative activities involving individual 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 beginning on Page 26.

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. (SK1.1)
- Applies tools, technologies and methods common to the field of study to selected questions or problems. (SK1.2)
- Generates substantially error-free products, reconstructions, data, juried exhibits or performances appropriate to the field of study. (SK1.3)

**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. (SK2.1)
- Investigates a familiar but complex problem in the field of study by assembling, arranging and reformulating ideas, concepts, designs and techniques. (SK2.2)
- 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. (SK2.3)
- Constructs a summative project, paper, performance or application that draws on current research, scholarship and techniques in the field of study. (SK2.4)

**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. (SK3.1)
- 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. (SK3.2)
- 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. (SK3.3)

## 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. (BI1.1)
- 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. (BI1.2)
- Uses recognized methods of each core field studied, including the gathering and evaluation of evidence, in the execution of analytical, practical or creative tasks. (BI1.3)
- 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. (BI1.4)

**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. (BI2.1)
- Produces an investigative, creative or practical work that draws on specific theories, tools and methods from at least two core fields of study. (BI2.2)
- 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. (BI2.3)

**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. (BI3.1)
- 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. (BI3.2)
- 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. (BI3.3)

## 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. (IS1.1)

**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. (IS2.1)

**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. (IS3.1)

### 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. (IS1.2)

**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. (IS2.2)
- Generates information through independent or collaborative inquiry and uses that information in a project, paper or performance. (IS2.3)

**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. (IS3.2)



## 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. (IS1.3)
- 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. (IS1.4)

**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. (IS2.3)
- 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. (IS2.4)

**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. (IS3.3)

## 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. (IS1.5)

**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. (IS2.6)
- 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. (IS2.7)

**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. (IS3.4)
- Distinguishes human activities and judgments particularly subject to ethical reasoning from those less subject to ethical reasoning. (IS3.5)

## 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. (IS1.6)
- Creates and explains graphs or other visual depictions of trends, relationships or changes in status. (IS1.7)

**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. (IS2.8)
- Constructs mathematical expressions where appropriate for issues initially described in non-quantitative terms. (IS2.9)

**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. (IS3.6)

  — or —
- Articulates and undertakes multiple appropriate applications of quantitative methods, concepts and theories in a field of study that is quantitatively based. (IS3.7)
- Identifies, chooses and defends the choice of a mathematical model appropriate to a problem in the social sciences or applied sciences. (IS3.8)

### 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. (IS1.8)
- Demonstrates effective interactive communication through discussion, i.e., by listening actively and responding constructively and through structured oral presentations to general and specialized audiences. (IS1.9)
- Negotiates with peers an action plan for a practical task and communicates the results of the negotiation either orally or in writing. (IS1.10)

**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. (IS2.10)
- Conducts an inquiry concerning information, conditions, technologies or practices in the field of study that makes substantive use of non-English-language sources.(IS2.11)
- Negotiates with one or more collaborators to advance an oral argument or articulate an approach to resolving a social, personal or ethical dilemma. (IS2.12)

**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. (IS3.9)

## 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. (AC1.1)
- Analyzes at least one significant concept or method in the field of study in light of learning outside the classroom. (AC1.2)
- Locates, gathers and organizes evidence regarding a question in a field-based venue beyond formal academic study and offers alternate approaches to answering it. (AC1.3)
- Demonstrates the exercise of any practical skills crucial to the application of expertise. (AC1.4)

**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. (AC2.1)
- Negotiates a strategy for group research or performance, documents the strategy so that others may understand it, implements the strategy, and communicates the results. (AC2.2)
- Writes a design, review or illustrative application for an analysis or case study in a scientific, technical, economic, business, health, education or communications context. (AC2.3)
- 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. (AC2.4)

**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. (AC3.1)
- 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. (AC3.2)

## 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. (CG1.1)
- 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. (CG1.2)
- 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. (CG1.3)
- Identifies an economic, environmental or public health challenge spanning countries, continents or cultures, presents evidence for the challenge, and takes a position on it. (CG1.4)

**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. (CG2.1)
- 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. (CG2.2)
- 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. (CG2.3)
- 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. (CG2.4)

**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. (CG3.1)
- 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. (CG3.2)
- 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. (CG3.3)

# Tools for using the DQP

## The DQP is presented in four ways:

- The preceding narrative (Pages 14-19) sets forth degree-qualifying proficiencies in detail.
- The matrix that follows (Pages 22-23) provides a perspective on ways in which the proficiencies of the DQP relate to one another and to the student's entire learning experience at any degree level. In so doing, the matrix also offers a platform for curricular evaluation, planning, assignment development and assessment. The implications of this matrix for assignments discussed here are elaborated and illustrated in Appendix C (Pages 34-35).
- A spider web diagram (Pages 24-25) illustrates the flexibility of the DQP as used by different institutions in light of their distinctive areas of strength and mission. While all of the DQP's overarching proficiencies should be represented in every spider web, the proficiencies may be weighted and shaped differently according to institutional missions and priorities.
- The proficiencies appear on a grid beginning on Page 26; it offers an alternate view in a compact format.

### Using the DQP to develop assignments and assessments

Rather than ask faculty to relinquish the certification of student mastery to some external authority, the DQP invites evidence about student proficiency in a way that keeps faculty judgment firmly in control. The DQP — as well as discipline-specific Tuning processes (learning outcomes alignment/mapping at the programmatic level) — affirm that assignments developed by faculty are the key both to students' development of expected proficiencies and to the gathering of necessary evidence regarding meeting the proficiency standards of the degree. Both work focused on cumulative learning within a field of study and the DQP, with its emphasis on degree-level outcomes, enable a closer alignment between assessment strategies and overall academic priorities.

From the earliest discussions leading to the DQP, a clear standard has prevailed: Will these statements of proficiency encourage faculty to craft appropriate assignments, and will the DQP prompt and assist with assessment? Now that many campuses have used the DQP as a framework for assessing student learning, this edition of the DQP provides guidance on both assignments and assessments. (See Appendix C, Pages 34-35.)

For students enrolled in degree-granting institutions, the primary mechanism for determining whether or not students have mastered a given DQP proficiency at a given level is an assignment within a course. Such assignments should unavoidably elicit student responses that allow faculty to judge proficiency. While constructing assignments and assessments is already a core part of what faculty members do at the course and program levels, the DQP affirms that its proficiencies, complemented with a range of examples, will support faculty in further prompting students to demonstrate what they know and can do. As Appendix C indicates, resources for assessing DQP proficiencies will continue to expand.

DQP proficiencies are described at each degree level with "action verbs" that portray what a student at each level can actually do. Those descriptions should guide faculty in constructing assignments and laying the foundation for assessment. DQP proficiency statements also propose concrete demonstrations meant to elicit student performance at each degree level — an examination question, research paper, class project or artistic performance. Hence faculty members building an assignment to address a given DQP proficiency might begin with the verb or verbs that describe the proficiency and the task that illustrates it. A second step should be to determine how particular proficiencies are expected, enhanced or tested across courses and field-based learning in a curriculum. This step will help faculty properly place the assignments that they want to use to determine student attainment within the curriculum.

## Additional tools and resources

A number of tools and resources have been developed to assist the growing number of institutions, organizations and individuals interested in using the DQP and related Tuning processes. For access to that material and more information about its use, visit the DQP website: **www.DegreeProfile.org.**



### The spider web

From its inception, the DQP has promoted the articulation and celebration of the distinctiveness of colleges and universities and the importance of their diversity within American higher education. In addition to defining proficiencies in terms meant to be broadly applicable, the DQP explicitly invites the articulation of institution-specific proficiencies in its blank "sixth column" in both the matrix and the grid. For instance, a faith-based institution may wish to highlight opportunities for spiritual development, while a technical college may wish to detail an emphasis on practical experience.

While committed to expressing a developing consensus regarding *standards*, the DQP opposes and in no way contributes to *standardization*. To the contrary, the DQP expresses the conviction that broad agreement on educational goals, areas of expected learning, and standards may be the best defense against standardization. The diagram that follows (Pages 24-25) shows how different educational institutions can sustain their distinct identity within the broad DQP framework.

### The grid

The grid on the following pages arrays an ascending sequence of credentials (associate, bachelor's, master's) on one axis, and specific areas of knowledge or performance on the other axis. Cells in the table thus contain specific descriptions of the proficiency expected at that level and in that area. When read on one axis, the framework describes ascending proficiencies in a given area at increasingly higher award levels. When read on the other axis, the framework describes all of the proficiencies across areas required for a given degree.

Please note:

- The proficiency statements contained in this grid are the full statements presented on Pages 14-19.
- Each degree level assumes expectations articulated for prior degrees (expectations at the bachelor's degree level include those listed for the associate degree).
- Specific tasks or assignments are cited in the proficiency statements only as illustrative examples. (See Appendix C, Pages 34-35.)
- On the section headed "Intellectual Skills," expectations are further categorized according to six specific skills, arrayed in the far-left column.

# Putting it together: The

## *The DQP as a prompt for integrative*

| Intellectual Skills | Degree-level proficiencies: Specialized Knowledge | Degree-level proficiencies: Broad and Integrative Knowledge |
|---|---|---|
| Analytic inquiry | | |
| Use of information resources | | |
| Engaging diverse perspectives | | |
| Ethical reasoning | | |
| Quantitative fluency | | |
| Communicative fluency | | |
| Program-specific intellectual and practical skills | | |

** E.g., religious, artistic, technological, scientific, etc.*

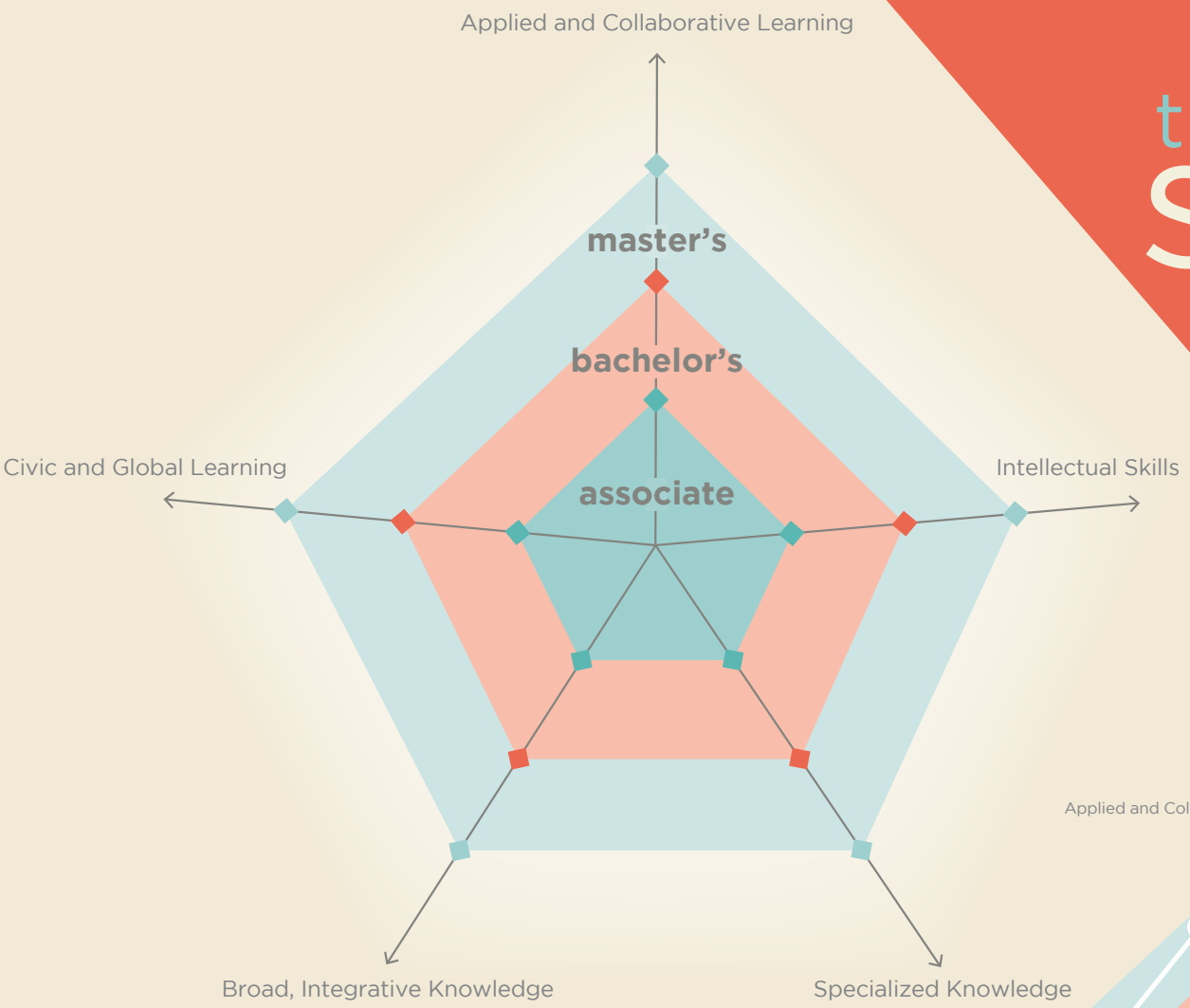
# matrix

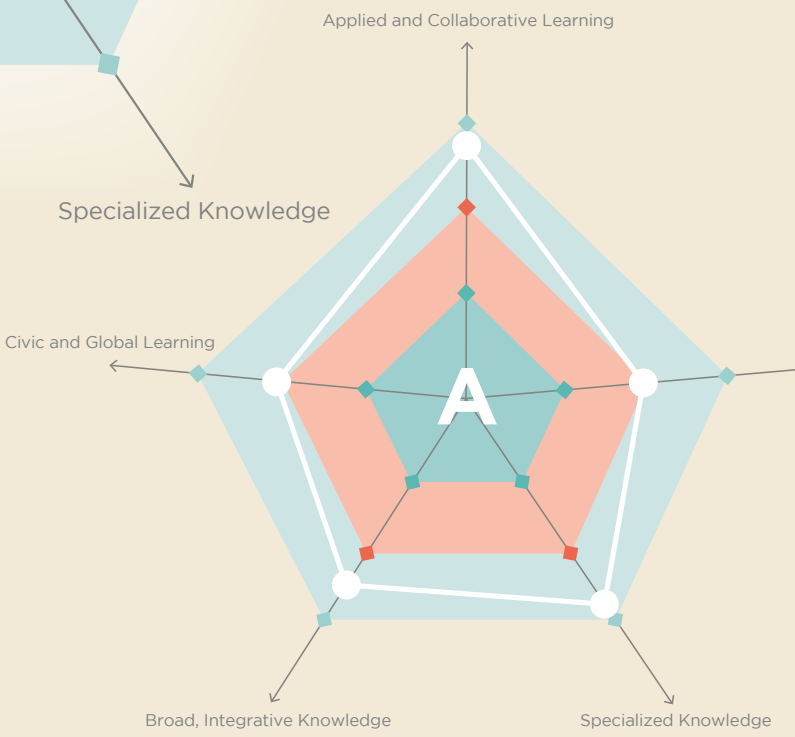
## *learning*

Intellectual skills should be practiced *across* the educational experience and demonstrated in the context of both broad and specialized studies, in civic and global learning, in applied and collaborative learning, and in areas that represent institution-specific emphases. Although its simplicity understates the complexity of most curricula, the matrix suggests how the DQP can be used for assignment planning and for assessment of students' achievement of degree-level proficiencies. Many may wish to fine-tune the matrix so that it aligns more closely with the pursuit of degrees at their institutions. Then, to complete the matrix, faculty should identify where and how students will practice key intellectual skills and take part in applied learning tasks and assignments — an exercise supporting curriculum development and improvement.

| Applied and Collaborative Learning | Civic and Global Learning | Institution-Specific Emphases* |
|---|---|---|
| | | |
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| | | |
| | | |

# the DQP spid




**3 degrees**
**5 areas of learning**
**3 types of institutions**

To illustrate the DQP's ability to accommodate institutional and program flexibility, three types of institutions are plotted on the spider web. Though the bachelor's degree requirements for all three institutions fully encompass the five core areas of DQP learning, it is clear that each institution also has discrete areas of emphasis and focus for its students.

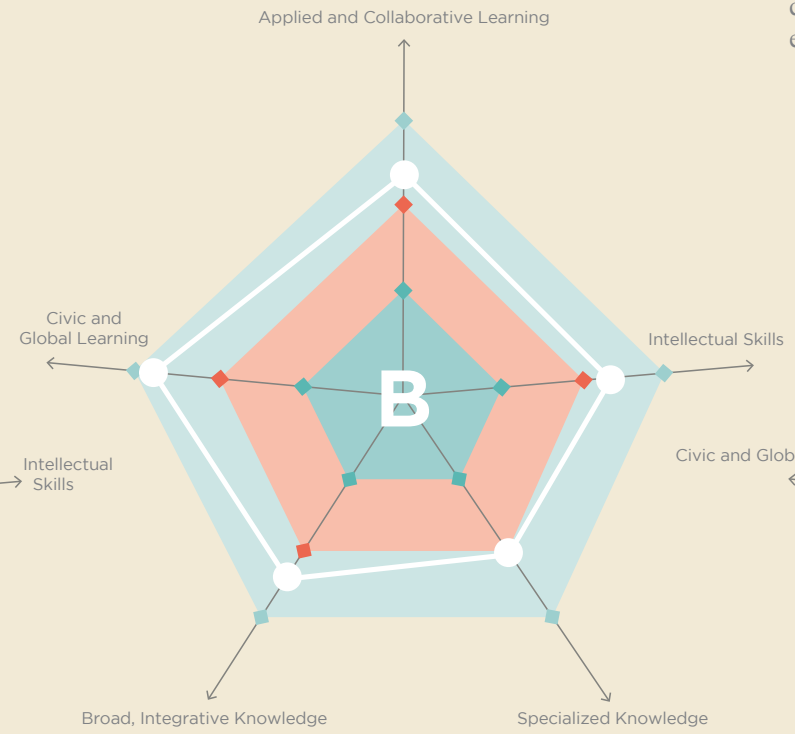
**Institution A** is a mid-sized, private institution that emphasizes cooperative placements for its students as part of most bachelor's degree programs. As a former technology institute, it is focused on producing engineers, though it has a newly developed holistic approach to education.

# er web

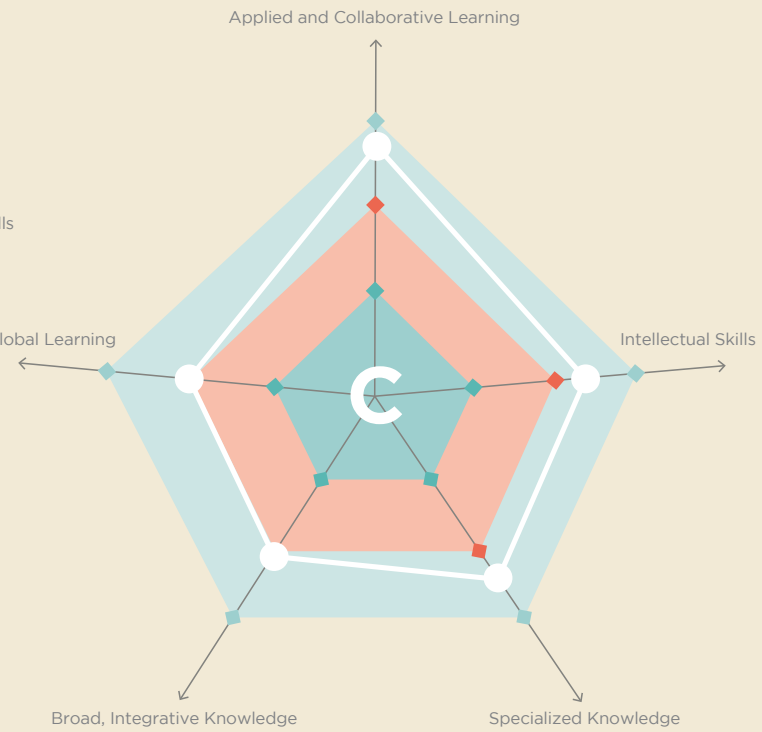
It can be helpful to visualize the DQP in terms of a spider web: a structured, interconnected series of levels (or capture spirals) that simultaneously build on and support one another. The web is strung among five anchor lines, each line representing one of the basic areas of learning. Along each line, three points are fixed to indicate the extent of learning required to reach each level: the associate degree, the bachelor's degree and the master's.

The shape of the spider web — its boundaries, slopes and distances between learning points — is determined, in practice, as the institution adopts and articulates its version of the DQP. That is what is meant by flexibility as opposed to standardization.

Once the points are fixed, a "core" of learning appears — the combination of proficiencies from each of the five areas of learning that collectively define the requirements for a specific degree at a specific institution. These cores of learning expand progressively outward as students extend their knowledge — a growth predictable and transparent to all concerned, and yet the antithesis of standardization. In fact, though certain core proficiencies are expected in all programs, the range of course content can vary widely — by institution, by field of study, even by individual class section.




**Institution B** is a large, public, land-grant state institution that has served as the economic driver for its region for more than a century. In the past, its focus has been on agriculture and applied research, but it has recently focused on citizenship and preparation for life after higher education.




**Institution C** is a large, for-profit institution with a geographically diverse student body and significant online course delivery. This institution has only been in operation for 15 years and focuses on competence-based courses and preparation for the workforce, with courses taught by faculty who have substantial workforce experience in their fields of study.

# The DQP

The following pages present a grid that lays out all of the learning outcomes, grouping them within the five categories of learning and by type of degree. Institutions are encouraged to use this grid as they adopt the DQP to their particular needs.

1. **Specialized Knowledge**
2. **Broad and Integrative Knowledge**
3. **Intellectual Skills**
4. **Applied and Collaborative Learning**
5. **Civic and Global Learning**

# 1 Specialized Knowledge

This category addresses what students in *any* specialization or major field of study should demonstrate with respect to that specialization. Tuning, a field-specific effort to map learning outcomes, is necessary to describe the concepts, knowledge areas and accomplishments that students in a *particular* specialization should demonstrate to earn the degree.

| **At the associate level,** the student | **At the bachelor's level,** the student | **At the master's level,** the student |
|---|---|---|
| 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.<br><br>Applies tools, technologies and methods common to the field of study to selected questions or problems.<br><br>Generates substantially error-free products, reconstructions, data, juried exhibits or performances appropriate to the field of study. | Defines and explains the structure, styles and practices of the field of study using its tools, technologies, methods and specialized terms.<br><br>Investigates a familiar but complex problem in the field of study by assembling, arranging and reformulating ideas, concepts, designs and techniques.<br><br>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.<br><br>Constructs a summative project, paper, performance or application that draws on current research, scholarship and techniques in the field of study. | 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.<br><br>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.<br><br>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. |

# 2 Broad and Integrative Knowledge

This category asks students at all three degree levels to consolidate learning from different broad fields of study (e.g., the humanities, arts, sciences and social sciences) and to discover and explore concepts and questions that bridge these essential areas of learning.

| **At the associate level,** the student | **At the bachelor's level,** the student | **At the master's 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.<br><br>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.<br><br>Uses recognized methods of each core field studied, including the gathering and evaluation of evidence, in the execution of analytical, practical or creative tasks.<br><br>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. | 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.<br><br>Produces an investigative, creative or practical work that draws on specific theories, tools and methods from at least two core fields of study.<br><br>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. | Articulates how the field of study has developed in relation to other major domains of inquiry and practice.<br><br>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.<br><br>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. |

# 3 Intellectual Skills

This category includes both traditional and nontraditional cognitive skills: analytic inquiry, use of information resources, engaging diverse perspectives, ethical reasoning, quantitative fluency and communicative fluency. Throughout, the DQP emphasizes that students should confront and interpret ideas and arguments from different points of reference (e.g., cultural, technological, political).

| | **At the associate level,** the student | **At the bachelor's level,** the student | **At the master's level,** the student |
|---|---|---|---|
| **Analytic inquiry** | 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. | Differentiates and evaluates theories and approaches to selected complex problems within the chosen field of study and at least one other field. | 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** | 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. | Locates, evaluates, incorporates and properly cites multiple information resources in different media or different languages in projects, papers or performances.<br><br>Generates information through independent or collaborative inquiry and uses that information in a project, paper or performance. | 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** | Describes how knowledge from different cultural perspectives might affect interpretations of prominent problems in politics, society, the arts and global relations.<br><br>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. | 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.<br><br>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. | 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** | 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. | 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.<br><br>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. | 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.<br><br>Distinguishes human activities and judgments particularly subject to ethical reasoning from those less subject to ethical reasoning. |
| **Quantitative fluency** | 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.<br><br>Creates and explains graphs or other visual depictions of trends, relationships or changes in status. | 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.<br><br>Constructs mathematical expressions where appropriate for issues initially described in non-quantitative terms. | 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.<br>***or***<br>Articulates and undertakes multiple appropriate applications of quantitative methods, concepts and theories in a field of study that is quantitatively based.<br><br>Identifies, chooses and defends the choice of a mathematical model appropriate to a problem in the social sciences or applied sciences. |
| **Communicative fluency** | Develops and presents cogent, coherent and substantially error-free writing for communication to general and specialized audiences.<br><br>Demonstrates effective interactive communication through discussion, i.e., by listening actively and responding constructively and through structured oral presentations to general and specialized audiences.<br><br>Negotiates with peers an action plan for a practical task and communicates the results of the negotiation either orally or in writing. | 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.<br><br>Conducts an inquiry concerning information, conditions, technologies or practices in the field of study that makes substantive use of non-English-language sources.<br><br>Negotiates with one or more collaborators to advance an oral argument or articulate an approach to resolving a social, personal or ethical dilemma. | 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. |

# 4 Applied and Collaborative Learning

This category emphasizes what students can *do* with what they know. Students are asked to demonstrate their learning by addressing unscripted problems in scholarly inquiry, at work and in other settings outside the classroom. This category includes research and creative activities involving both individual and group effort and may include practical skills crucial to the application of expertise.

| **At the associate level,** the student | **At the bachelor's level,** the student | **At the master's 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.<br><br>Analyzes at least one significant concept or method in the field of study in light of learning outside the classroom.<br><br>Locates, gathers and organizes evidence regarding a question in a field-based venue beyond formal academic study and offers alternate approaches to answering it.<br><br>Demonstrates the exercise of any practical skills crucial to the application of expertise. | 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.<br><br>Negotiates a strategy for group research or performance, documents the strategy so that others may understand it, implements the strategy, and communicates the results.<br><br>Writes a design, review or illustrative application for an analysis or case study in a scientific, technical, economic, business, health, education or communications context.<br><br>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. | 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.<br><br>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. |

# 5 Civic and Global Learning

This category recognizes higher education's responsibilities both to democracy and the global community. Students must demonstrate integration of their knowledge and skills by engaging with and responding to civic, social, environmental and economic challenges at local, national and global levels.

| **At the associate level,** the student | **At the bachelor's level,** the student | **At the master's level,** the student |
|---|---|---|
| Describes his/her own civic and cultural background, including its origins and development, assumptions and predispositions.<br><br>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.<br><br>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.<br><br>Identifies an economic, environmental or public health challenge spanning countries, continents or cultures, presents evidence for the challenge, and takes a position on it. | 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.<br><br>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.<br><br>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.<br><br>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. | 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.<br><br>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.<br><br>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. |

# Institution-specific areas

(Users of the DQP grid should use this panel to list and define other areas of learning they wish to include.)

# Appendices

## Appendix A

### Why 'proficiency'?

Most critical to the DQP is an understanding of a continuum of knowledge and skills, leading from acquaintance with a field of study to summative mastery and expertise appropriate to the degree awarded. Although "competence" has become a widely acknowledged descriptor for demonstrated educational attainment, this version of the Degree Qualifications Profile is organized in terms of student "proficiency." As noted in the box on Page 8, this term reflects the DQP's emphasis on summative learning for the degree as a whole, while the term "competence" usefully points to formative objectives within a specific course or learning experience. This distinction aligns well with the advancement of "competency-based education" and the direct assessment of competencies irrespective of how students have attained them. Unlike "competencies," none of the proficiencies addressed in the DQP can be developed in a single learning experience. Rather, the DQP describes broad, crosscutting areas of college-level accomplishment and the interrelationships among them recognized by the award of the degree.

Moreover, while the DQP anticipates that students will generally demonstrate proficiency through completing course or other program requirements such as a practicum, the DQP also emphasizes the importance of students' frequent and progressively more challenging work on assignments and projects across many courses or learning experiences in order to develop the expected proficiencies. For example, a student who demonstrates a qualifying level of proficiency on a specific assignment related to "analytical inquiry" or "applied learning" is deploying knowledge and skills that have been practiced and developed across multiple learning experiences.

"Competency" remains a useful term for defining course-level or course-equivalent learning outcomes, and institutions using the term to define degree-level outcomes may wish to continue doing so. However, in addition to its emphasis on the degree, the DQP seeks to set a high bar of attainment for degree recipients who present not only "a certain standard of skill" but also a demonstrated commitment to further learning, i.e., "progress or advancement." In sum, the DQP affirms that degree recipients should be *proficient* in their fields of study and, more generally, as students, not simply *competent.*

## Appendix B

### The DQP and Tuning

The DQP provides an architectural profile for three higher education degrees by spelling out five areas of learning and the proficiencies associated with them regardless of field of study. However, learning takes place most often through courses within fields of study, and faculty members typically evaluate student learning outcomes according to the standards of their fields. Hence, the DQP assumes that proficiencies will be demonstrated in relation to fields of study, whether the learning was developed within or outside a formal academic program.

This comprehensive perspective finds support in an allied initiative, a field-based process called Tuning USA. Inspired by the work of the Tuning Educational Structures in Europe Association, Tuning USA has supported faculty groups organized by state higher education systems and consortia in their development of field-specific reference points that describe a pathway to the student's credential in the field of study while meeting the markers of the DQP. Tuning reaches such consensus on field-based learning outcomes through consultations with employers, faculty outside the field, and students and former students.[5]

The DQP encourages individual institutions to define learning outcomes appropriate to the degrees it offers irrespective of discipline. Tuning encourages faculty members in multiple institutions to collaborate with one another within their respective disciplines — and with employers — to define outcomes appropriate to different stages of progress toward degrees in those disciplines. Thus, in a larger sense, Tuning and the DQP are part of the same effort to clarify and benchmark what

[5] Tuning started in Europe in 2000, was taken up across Latin America in 2005, came to the U.S. in 2009, and expanded into Russia in 2010. The Australians ran a Tuning trial in 2010-2011, the Chinese tested the model in 2012-2013, and Tuning projects have now begun in Central Asia and Africa. To date, Tuning USA has involved projects in Indiana, Kentucky, Minnesota, Texas, Utah, the Midwest Higher Education Consortium and the American Historical Association. It is a global phenomenon.

students should know and do in order to qualify both for degrees in general and for degrees in specific fields of study. Field-specific content provides an important context for the broader proficiencies set forth by the DQP. By clarifying intended learning outcomes and proficiencies within and across particular fields of study, and by encouraging pedagogies that promote active learning, both Tuning and the DQP invite faculty development of assignments that enable students to demonstrate competencies (Tuning) and proficiencies (the DQP).

Tuning brings together the academic communities necessary for finer articulations and acceptance of the DQP. The DQP, in turn, provides orientation points for the fields of study. Just as it is hard to imagine a chemistry, music or nursing program without applied learning, we should not be willing to sanction a business or history or civil engineering program inattentive to civic learning. The emphases and weights of these connections may differ, but they should all be present.

# Appendix C

## More on assignments and assessment

This appendix elaborates the discussion of assignments presented on Page 20 and is based on a NILOA Occasional Paper on developing assignments within the context of the DQP written by Peter Ewell. (See http://www.learningoutcomeassessment.org/documents/PeterEwell_008.pdf.) Assignment prompts should give a student maximum information about what a good response ought to look like. This means that faculty members need to think carefully about the specific properties of an appropriate answer and write the assignment prompts so the student has adequate information about what is being asked. Consequently, a good assignment should identify: a) the central task or tasks to be undertaken, b) how the student should broadly undertake the task(s) and communicate its results and, c) how extensive or evidential the response should be.

Combining all three elements yields something like the following: "Compare the substance of [argument X] with [argument Y] by means of a written essay [of Z length] that cites at least three examples of important ways in which the arguments differ." This basic approach can be used to construct assignments in virtually any field of study that combines one or more DQP proficiencies with explicit content knowledge. Examples of assignments consistent with these principles are provided below.

**Bachelor's level, Applied Learning, Global Learning**
Suppose a new form of absolutely clean energy were developed that would have the side effect of slowing the rotation of the Earth from 24 to 26 hours per day. Before the switch can be flipped, an environmental impact statement must be filed and widely reviewed. Outline the chapters and subchapters of such a statement.

**Associate level, Specialized Knowledge**
*The student is given a diagram of a cell not at division stage with various structures labeled.* Describe the cell in terms of a) its current stage, b) its morphological signs of activity, and c) the structure that addresses the formation of its nuclear envelope.

**Associate level, Broad and Integrative Knowledge**
Prepare an exhibit of not more than five discrete two-dimensional pieces illustrating the range of chaos in color, drawing on at least two of the major color theory sources; e.g., Goethe, Kandinsky, Chevruel, in a 3-5 page catalogue of your exhibit. You are not required to present in the same two-dimensional medium across all five pieces. The class exhibits will be displayed from April 1–30. It is now January 15. (At the bachelor's level, this assignment would ask also that the catalogue contain a section discussing the ways chemical and digital technologies have changed both the palette and range of color chaos.)

**Master's level, Specialized Knowledge, Applied Learning**
Choose one of the following mature companies for both PEST and SWOT analyses: Starbucks, IBM, Toys-R-Us. In each case, a discrete challenge is presented as a prod for both types of analyses. Fill in the classic matrices for both analyses, and accompany those documents with a 10-15 page paper that defends your selection of the best corporate opportunity under each challenge scenario. Your products are due in 10 days.
Starbucks: Spreading business risk.
IBM: Rectifying thin supply chain.
Toys-R-Us: Overcoming niche demography.

The creation of assignments consistent with DQP proficiencies, which assumes the faculty's collective ownership of the teaching and learning process, thrives on collaboration as it invites faculty to be much more systematic and intentional than is often the case. Considerable planning and attention are required to ensure that the appropriate proficiencies at the proper levels are developed or demanded across course sequences. Meanwhile, assignments should be carefully scripted to elicit the proper kinds of student responses and to enable evaluation of their adequacy.

Implementation of this approach at scale will require institutions to make two strategic investments:
- In opportunities for faculty members to examine the entire instructional process from the inside out — starting with a priority on students and what they learn.
- In a reliable and accessible record-keeping system for posting, housing and manipulating data about learning. An appropriate electronic record-keeping system of this kind resembles a conventional student registration system but is structured so that *proficiencies* are the unit of analysis, not courses.

### Curricular mapping

To develop appropriate assignments to assess DQP proficiencies, faculty must determine where and how particular proficiencies are expected, enhanced or tested across courses in



a curriculum — a process known as curricular mapping. At its most straightforward, a "curriculum map" is a two-dimensional matrix which arrays individual courses on one dimension and DQP proficiencies on the other. Entries within each cell can be constructed to communicate many things, including: a) whether the proficiency is taught in the course; b) the level of proficiency that is required to effectively engage course material; c) whether or not the proficiency is directly tested or evaluated as part of the course (and by what means); and d) the level of proficiency at which the student exits the course if it is passed.

The resulting map aids in identifying gaps in curricular coverage with respect to DQP proficiencies and points to where particular assignments might most profitably be located. Curricular mapping also enables a program to readily discern whether students have met program expectations through out-of-school learning experiences such as work-related training and accomplishment.

Mapping is usually done for all general education courses and selected courses in each major field of study, beginning with those most commonly taken. Curricular mapping is only a first step, however. Too many institutions stop short of the collaborative work of developing the assignments, examinations and projects that enable meaningful evidence of student proficiency to be collected across a program of study.

## Rubrics

Even the most thoughtfully designed assignments can fail to support assessment of DQP proficiencies if there is significant inconsistency in faculty judgments about the quality of a student response. Faculty members can address this issue by developing "rubrics," i.e., detailed scoring guides that track detailed descriptions of student work according to several dimensions. A rubric should represent a mirror image of the assignment design.

For example, if the design prescribes a response with "at least three examples," the associated rubric will reflect this prescription by awarding a full score for a response that indeed has three examples and partial scores for responses that have fewer. An additional dimension of the rubric might enable the scorer to evaluate any comparison of two arguments within the answer in terms of their respective clarity and supporting evidence. A third might provide a metric to evaluate components of the written essay. Is it of the required length? Is its analysis sophisticated and relevant? Is the language used consistent with standards of academic discourse? Examples of effective faculty-developed rubrics at the baccalaureate level may be found on the web page maintained by AAC&U for VALUE (Valid Assessment of Learning in Undergraduate Education). See http://www.aacu.org/VALUE/rubrics/

# Appendix D

## Examples of DQP use

Many institutions have used the Degree Qualifications Profile in some manner since its introduction in 2011, including large and small public and independent colleges and universities in urban, suburban and rural locations. This appendix contains a sampling of illustrations of how institutions have been experimenting with the DQP. These examples cover a range of approaches and are therefore presented in several discrete categories:

- Discussion and vetting of the DQP
- Clarification and review of learning outcomes
- Curriculum mapping
- Review of degree proficiencies
- Transfer and articulation
- Assessment of student learning
- Accreditation and strategic planning

Additional examples of DQP work at other colleges are available at **www.DegreeProfile.org.**

### Discussion and vetting of the DQP

**North Dakota State University** (NDSU) focused its DQP work at the department level, where each unit was charged with comparing its student learning outcomes and undergraduate capstone experiences in each major with DQP benchmarks for applied learning. NDSU created an electronic survey asking departments to evaluate to what extent their required capstone experience met the elements of applied learning from the DQP.

The survey questionnaire divided the applied learning benchmarks of the DQP into 14 separate items. For example, departments were asked if their capstone met the DQP's benchmark of "formulates a question on a topic that addresses more than one academic discipline or practical setting." If it did, then they were asked to describe what student activities in the capstone provide evidence for their conclusion. The intention was that evaluating the existing capstones would prompt departments to systematically reflect on how well the culminating experience induced their students to synthesize and apply the knowledge and skills they gain.

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The **North Dakota State College of Science** is an associate degree-granting institution founded in 1903. Its primary mission is to support the workforce needs of the state and to provide liberal arts education. NDSCS awards the AA, AS, ASN and 37 AAS degrees, as well as certificates and diplomas. NDSCS was invited to join the Higher Learning Commission's Pathway Degree Qualifications Profile Demonstration Project as an AQIP (Academic Quality Improvement Program) institution and represent the two-year college perspective.

The NDSCS project focused on the AAS degree and used the DQP to determine how well the AAS degree aligned with employer expectations, stated goals for student learning, and the results of student learning outcomes assessment. Alexandria Technical and Community College (ATCC), an associate degree-granting AQIP institution in Minnesota, is also participating in the HLC Pathway DQP Demonstration Project and developed a similar project. Therefore, the first phase of this project, soliciting employer input, was conducted in collaboration with ATCC.

Major employers of students were invited to a one-day focus group to review the DQP and provide feedback. Representatives from 18 employers representing thousands of employees participated in the summit. Overall, employers felt the DQP was an instructive approach to developing consistent guidelines for degrees.

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**Northeastern University** (MA) used the DQP in a pilot initiative to determine whether the online, hybrid and blended delivery models for programs in its College of Professional Studies met the proficiency standards for master's degree programs. Faculty and assessment specialists developed graduate-level core competency statements which all graduate programs then used to craft statements of student learning outcomes.

Graduate faculty found the "spider web" to be particularly helpful as it allowed different programs to visualize how each in its own way matched the parameters of the DQP's proficiencies. In addition, the DQP was presented to both bachelor's and graduate degree programs, focusing on defining action verbs that are appropriate for the degree-level student learning outcomes, which led to consistency across programs. Thus, the majority of the degree programs within the College of Professional Studies have designated learning outcomes that correspond to the categories listed in the DQP, and are distinctive to the specific program.

### Clarification and review of learning outcomes

**California State University, East Bay** is a comprehensive public university enrolling more than 13,000 students in the San Francisco Bay area. The two campuses of Cal State East Bay offer 52 baccalaureate degrees, 35 master's degrees, and a doctorate in educational leadership. In 2011, the institution's Academic Senate embarked on an ambitious project to develop Institutional Learning Outcomes (ILOs) and, as a second phase, to develop a plan for assessing them as part of the academic review process.

The DQP was used to help frame discussions regarding the meaning, quality and integrity of a Cal State East Bay degree and to examine linkages between general education, academic majors and ILOs. In addition, undergraduate and graduate academic program learning outcomes are being examined to be sure they are consistent with the ILOs. Faculty members





are using a DQP-like spider web to inform program development and improvement efforts.

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At **Marshall University** (WV) every degree program collects evidence of student learning on an annual basis. In 2010, a year before the beta version of the DQP appeared, the university began to implement a new core curriculum featuring seven domains of critical thinking. However, the intended outcomes for all Marshall students at each degree level, regardless of the student's major field, had not been clearly articulated. Marshall joined the Higher Learning Commission's DQP consortium and used the DQP as a framework to review and document the extent to which the institution's core curriculum, instructional and assessment practices were consistent with the DQP's proficiencies. This allowed Marshall to create its own degree profile at the baccalaureate level.

First, a task force was formed to consider a campus policy that all syllabi explicitly link outcomes, learning activities and assessments. Second, a workgroup studied the current domains of critical thinking, recommended revisions, articulated outcomes, and developed rubrics to measure the core domain outcomes. The revised domains of critical thinking aligned with the DQP include: Communication Fluency, Creative Thinking, Ethical and Civic Thinking, Information Literacy, Inquiry-Based Thinking, Integrative Thinking, Intercultural Thinking, Metacognitive Thinking and Quantitative Thinking.

Finally, all programs at each degree level have been asked to examine the alignment between various levels of learning outcomes and to map those outcomes to the DQP. The DQP helped Marshall underscore the importance of connecting students' actual learning experience to the learning goals explicated in the Marshall University Degree Profile.

## Curriculum mapping

**Kansas City Kansas Community College** is an urban community college in Kansas City, Kan., serving a diverse student body of approximately 7,000 students. In June 2011, KCKCC was invited by the Higher Learning Commission to join the DQP pilot project. KCKCC began by mapping existing 21st Century Learning Outcomes with DQP outcomes, combining both in one institution-wide document. Faculty then aligned their course competencies with the DQP proficiencies.

Subsequently, KCKCC personnel created an extensive curriculum-mapping database that revealed how and where each of the course competencies aligned with DQP items. The mapping generated a series of reports that revealed strengths and weaknesses at the course and program levels, as well as transcript analysis of graduates. Simultaneously, faculty reported assessment data on individual student learning outcomes, which informed reports documenting student performance in several different ways, as follows:

- On a course-by-course basis.
- As a compilation of all sections of the same course.
- On courses within the same field of study, in a program and/or by academic division.
- College-wide.

As they become available, these reports are disseminated to faculty, academic deans and the Vice President for Academic Affairs. Faculty close the loop on assessment by reviewing the reports on their courses, setting goals, devising action plans to improve student learning outcomes based on the data provided, and documenting the activity in a course assessment form.

KCKCC officials say participation in the DQP pilot has helped establish a culture of assessment at the institution with increased faculty engagement. For more information, visit KCKCC DQP PROJECT (http://www.kckcc.edu/kckcc%20DQP%20project/).

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**Utah State University** melded the DQP and Tuning processes into a model for institutional change. The work originally began in the College of Humanities and Social Sciences but soon was taken university-wide. The DQP was used to examine the alignment of the various components of the curriculum and the outcomes specified in the Utah State University degree profile, referred to as the USU Citizen Scholar.

Working with faculty focus groups, student services and library staff, and campus-level administrators, Utah State integrated its First Year Program, General Education (GE) and majors to delineate clear degree pathways by mapping backward from specific degree proficiencies and outlining the areas addressed by major field coursework and the potential contributions of other university units.

The First Year Program emphasizes the skills students need to become lifelong learners and provides information that students can use to navigate the curriculum and attain the degree profile proficiencies. Further, GE faculty have developed rubrics for GE courses that identify the essential content of courses, along with what competence and mastery look like in each of the courses.

The knowledge of GE "deliverables" is used to help majors determine the necessary preparation for upper-division coursework. Advisers have helped to build interactive "mind maps" to help students understand the skills and outcomes that feed into the Citizen Scholar profile from the majors, GE and the co-curricular aspects of the institution.

## Review of degree proficiencies

**Brandman University** (CA) serves adult learners at 26 campuses in California and Washington, offering undergraduate and graduate degree programs through blended and fully online delivery formats. In 2011, the university adopted five competencies for all baccalaureate students based on the DQP and informed by AAC&U's LEAP Essential Learning Outcomes. The General Education Task Force, comprising faculty across all schools, developed learning outcomes and built curriculum maps to measure mastery of each competency in each undergraduate degree program.

Brandman also revised its Associate of Arts in General Education (AA) degree using the DQP framework. Three of the AA degree's seven competencies are consistent with the baccalaureate degrees: Applied Learning, Innovation and Creativity, and Global Cultures/Engaging Diverse Perspectives.

The remaining four competencies fall in the DQP area of Intellectual Skills (Written Fluency, Oral Fluency, Quantitative Fluency and Information Fluency). To meet these competencies, faculty revised written and oral communication courses and created three new courses in applied math, student success and academic foundations.

Faculty created rubrics for the competencies based on AAC&U VALUE Rubrics and designed signature assignments within mastery-level courses. Brandman has adopted a course-embedded assessment approach for all program and institutional learning outcomes that greatly facilitates data capture. Competency data collection commenced in fall 2012.

For more information, see *Brandman University Adopts the DQP* at (https://www.wascsenior.org/files/Brandman%20University%20Adopts%20the%20Degree%20Qualification%20Profile_January%2031%202012_final.pdf).

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The **Texas A&M University System** Colleges of Business engaged in system-wide conversations to strengthen degree outcomes. Under the auspices of the American Association of State Colleges and Universities (AASCU) consortium, the DQP work provided a common vocabulary for institutions

to talk across the system, leading to validation of the DQP in relation to the core Bachelor's in Business Administration requirements.

Key system stakeholders participated, including faculty members and administrators. Faculty work groups mapped the DQP to Association to Advance Collegiate Schools of Business (AACSB) outcomes, Texas Coordinating Board outcomes and University Learning outcomes to discover overlapping goals and begin to align them with the DQP.

Portfolio rubrics are being developed collectively to assess student outcomes across the system. The system-wide collaborative efforts found that the approaches in assessing the business program aligned well with DQP proficiencies, although some adjustments were needed for the assessments to be more effective. In addition, the initiative strengthened the capacity for other system-wide work.

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The **University of Hawaii System** worked with the DQP in 2011 to develop a system-wide Associate in Arts in Hawaiian Studies degree. To ensure that the AA degree was coherent and consistent across the seven campuses (each with its own general education outcomes), each campus mapped its general education outcomes to the DQP.

As part of the Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges (ACCJC) consortium, **Kapi-oliani Community College** formed a cross-disciplinary general education task force to continue its curricular mapping efforts aligned with the DQP and the AA in Hawaiian Studies degree. Groups of faculty focused on particular general education outcomes to fine-tune the curricular maps and to draft revisions to the general education courses to better align with the DQP.

Courses contributing to the Hawaiian Studies AA degree mapped their respective proficiencies to the DQP, with the goal of revising their courses to better align the course outcomes with the DQP. The college is now moving into aligning assignments and assessment with an eye toward expanding the application of the DQP to other degree programs.

## Transfer and articulation

**California State University, Northridge** and **Pierce College,** through their participation in the Association of American Colleges and Universities (AAC&U) Quality Collaboratives project, used the DQP to enhance transferability by aligning the outcomes expected of lower-division general education courses that mapped to three thematic pathways: Social Justice, the Global Village and Sustainability.

These courses satisfy the broad general education requirements and make it possible for transfer students to contextualize their learning as well as to accumulate credits for a minor that is consistent with one of these three themes. Campus events organized around the thematic pathways bring together faculty and students from both campuses.

As a result, the CSU-Northridge-Pierce initiative helped align student learning outcomes for each of these pathways, ensuring that all students — whether "native" or transfer — attain the same general education goals.

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**Georgia State University** and **Georgia Perimeter College** are using the DQP to create a more robust approach to transfer in specific degree programs than focusing solely on grades. The animating question posed to faculty teams was: "How can we leverage the distinctive characteristics of the DQP as a way of predicting and aiding student success in the transition from AA to BA?"

Georgia State worked closely with its two-year partner institution to integrate the DQP and prior learning assessment in an effort to improve student learning in the complementary disciplines of criminal justice, psychology and biology.

As part of the American Association of State Colleges and Universities consortium, teams of faculty from different disciplines discussed DQP plans, strategies and protocols. With the assistance of a senior-level project adviser, common student learning outcomes were established, and faculty reviewed textbooks that would best address the common topics and themes that each department deemed important.

Working with the DQP helped faculty think more deeply about skills rather than focusing simply on content knowledge. The DQP framework also helped them clarify what students at each degree level should know and be able to do. In this manner, the DQP served as an impetus for faculty members to collaborate with colleagues from other institutions. By all accounts, the conversations between the two institutions were substantive and helpful in building consensus about the proficiencies that are expected from transfer students in these three programs.

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**IUPUI** (Indiana University Purdue University Indianapolis) and the Indianapolis campus of **Ivy Tech Community College** are working together under the aegis of the AAC&U Quality Collaboratives project (www.aacu.org/qc/index.cfm). The collaboration is investigating methods and forms of identifying the transfer of competencies between institutions. Specifically, it seeks to learn how institutions can partner to identify readiness for the movement from the first 60 hours of credit to the second, including the move into specific academic programs. IUPUI and Ivy Tech are focused on a general education competency, written communication, and program-specific competencies related to readiness for upper-level engineering and technology courses.



The work began with a focus on written communication competence. In July 2012, an inter-institutional workshop was conducted during which a Dynamic Criteria Mapping (DCM) process was used with student writing artifacts to foster dialogue among writing instructors on the characteristics of student work that they most valued. The workshop introduced the DQP to faculty, and it also provided a forum for them to share their experiences in teaching beginning students.

The DCM process revealed that the characteristics of writing competence extend across different outcomes explicated by the DQP. So, while faculty members understand their responsibility for teaching writing, they also insisted that, by fostering writing competence, they are always addressing other qualifications outlined in the DQP.

Interpreting the DQP as a set of descriptive outcomes, IUPUI and Ivy Tech are learning more about how and where their students demonstrate competence, how the institutions demonstrate it, and how those create points of investigation for developing curricula, courses and assignments.

## Assessment of student learning

**McKendree University** (IL) is engaged in a seven-year assessment revision initiative entitled "Assessment 2.0." Its purpose is to build a comprehensive and sustainable system to assess undergraduate student learning outcomes, and to link that system to faculty-development activities.

The first step was to adopt a revised set of seven student learning outcomes for undergraduate students (e.g., engagement, effective communication, inquiry and problem solving, etc.). The faculty derived the new outcomes directly from the university mission statement. Each year since then, one of the seven outcomes is targeted annually, with a volunteer committee of faculty and staff charged with determining performance indicators and identifying assessment tools to be used.

In 2011-12, a committee created a crosswalk among the DQP, the McKendree University student learning outcomes, the Association of American Colleges and Universities LEAP Essential Learning Outcomes, and the NCAA key attributes. Completing this crosswalk helped to provide construct

validity for its student learning outcomes and to create a common language for some outcomes. Notably, the DQP category of "broad, integrative knowledge" has helped lead the university to identify a capstone experience in all fields of study. The university is now working to create faculty-development programs related to capstone experiences.

**Faculty members at Middlesex Community College** and the **University of Massachusetts-Lowell** have a history of collaborative vertical curriculum alignment work. As with colleagues at other two- and four-year institutions, they have grappled with questions related to students' achievement of stated institutional learning outcomes. A continuing concern is demonstrating how the outcomes at the associate degree level differ from those at the bachelor's level.

Under the auspices of the AAC&U Quality Collaboratives project, the DQP was used as a framework for developing a scaffolded set of expectations for student achievement of specific learning outcomes associated with the associate degree and bachelor's degree.



These two campuses focused their collaborative work on assessing the quality of student writing from the first year of college through the senior year. The intent is to apply and extend this model to assess student proficiency in Quantitative Fluency over time and across the curriculum, drawing on faculty expertise from both institutions in the biology, business, criminal justice and psychology programs. This focus on assessment helped spark important work on assignment design as well.

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The **University of Charleston** (WV) is a private institution offering associate, baccalaureate and graduate programs. Rather than completing a traditional general education program, baccalaureate students at the University of Charleston are required to demonstrate achievement of six Liberal Learning Outcomes (LLOs): Citizenship, Communication, Creativity, Critical Thinking, Ethical Practice and Science. Demonstration of achievement occurs through learning activities embedded in selected courses, within and outside the student's chosen field of study.

The DQP framework is being used as the model for developing specific descriptors for demonstration of LLOs at all degree levels. The framework has helped sharpen thinking about differentiation in levels of skills and knowledge, and more clearly articulate what graduates should know and be able to do with degrees.

Opportunities for demonstrating outcomes achievement at Foundational, Mid-level or Advanced proficiencies vary in academic programs. This presents a challenge for transfer students who may have missed opportunities that occur early in a specific program, and for students moving into six-year graduate professional programs (e.g., pharmacy and physician assistant) who aspired to earn a bachelor's degree. Articulating expectations for achievement at levels above and below the baccalaureate through the framework of the DQP is expected to resolve many of these issues.

Assessment is embedded into courses with student work being posted to e-portfolios and assessed using university-developed rubrics. While the DQP project has been valuable in articulating proficiencies for outcomes at all degree levels, it has prompted a closer examination of whether the existing rubrics were yielding actionable information about student performance. Conversations on this topic are ongoing in Liberal Learning Roundtables this year and will likely result in revisions of most rubrics.

## Accreditation and strategic planning

**Point Loma Nazarene University** (CA) has a liberal arts-focused mission combining traditional residential undergraduate student population (2,400 students) with professional graduate programs (1,000 students) located at three regional centers. PLNU began discussions about the DQP early in the fall 2011 semester when both WASC (PLNU's regional accreditation association) and the Council of Independent Colleges invited universities to participate in pilot projects. PLNU participated in both pilot projects.

The discussions prompted by its DQP pilot have primarily focused on undergraduate programs. At the same time, graduate program deans and chairs have been asked to think about the challenges and benefits of implementing the DQP framework at the master's degree level.

Initial discussions centered on the fact that the DQP reflects skills and knowledge developed both in the student's major program of study and in general education courses. At that time the academic major programs were pursuing their well-crafted assessment activities and it was unclear how DQP could inform or add value to that work. However, the General Education Committee was re-evaluating how to assess general education learning outcomes and how to use that data to assist with general education curricular redesign.

In November of 2011 WASC announced the new requirement for more in-depth assessment of graduating seniors in five basic proficiencies: oral communication, information literacy, written communication, critical thinking and quantitative literacy. These skills explicitly connect with the DQP's Intellectual Skills proficiencies.

Rather than approach each important assessment of student learning as a separate activity, the DQP Task Force believed it important to think more strategically and move toward using the individual majors' culminating or capstone experience as a place to assess these five proficiencies, additional components from the DQP, and student learning in the major.

The DQP Task Force's first challenge was to identify the culminating experience for each academic major. The Task Force surveyed the undergraduate majors and found significant structural variation among the culminating experiences. The data from the survey also indicated variation in what skills and knowledge were being assessed in these culminating experiences.

While many discrete activities combine to build an assessment foundation for the DQP, the Task Force decided to invite academic units that already have significant capstone courses to pilot the DQP in spring semester 2013. The faculty and courses selected represent both colleges, the College of Arts and Sciences and the College of Social Sciences and Professional Studies, as well as the School of Education.

In fall 2012 the Task Force identified the guidelines and essential learning outcomes to be assessed. The faculty are now designing assessment assignments and reviewing and adapting the AAC&U Essential Learning Outcome Rubrics for the assessment activities.

# Appendix E

## Definitions of key DQP terms

The meanings provided here are not meant to challenge standard dictionary definitions. Rather, they seek to describe how words frequently used in academe are employed in the DQP and closely related discipline-specific Tuning processes.

**Analytic inquiry:** A set of proficiencies included under Intellectual Skills. The ability to recognize, describe and solve problems through differentiation, categorization and other relevant tools of inquiry and reasoning.

**Applied and Collaborative Learning:** The proficiency (one of five) that enables students to demonstrate what they can do with what they know by addressing existing problems.

**Assessment:** A process for the collection and analysis of evidence about the achievement of student *learning outcomes* used to determine student proficiency and improve or to demonstrate the effectiveness of an educational program or institution.

**Assignment:** A problem, task or creative undertaking designed by faculty that students within a course or program of study must complete in order to develop, advance and document their proficiency. Assignments are the principal vehicle for certifying DQP proficiencies.

**Broad and Integrative Knowledge:** The proficiency (one of five) that reflects student attainment in bringing together learning from different fields of study. Broad, integrative knowledge represents a priority for the entire curriculum.

**Civic and Global Learning:** The proficiency (one of five) that reflects student attainment in articulating and responding to political, social, environmental and economic challenges at local, national and global levels.

**Communicative fluency:** Demonstrated skills, oral and written, in effectively creating and expressing a sustained argument, narrative or explication to multiple types of audiences and in more than one medium or language.

**Competence/competency:** A term often used to describe the accomplishment of objectives within a specific course or learning experience.

**Competency-based degree:** An academic credential awarded for demonstrated competency rather than for the accumulation of credit hours through taking courses. However, for purposes of record keeping or transfer, demonstrated competencies may be assigned credit as one measure of the time committed or volume of effort required.

**Core fields:** Students' required studies — both disciplinary and interdisciplinary — across the humanities, arts, sciences and social sciences. The DQP calls for students to connect their broad learning across their core fields and to their majors.

**Credit:** A unit of measurement for completion of a traditional college course traditionally based on time spent in its pursuit, it is also applied as a proxy for time or volume of effort in the demonstration of competencies through assessments and portfolios.

**Degree:** A particular type of credential conferred by an accredited academic institution in recognition of demonstrated academic proficiencies. The DQP addresses three degree levels — associate, bachelor's and master's.

**Diploma:** A document issued by an educational provider that purports to document a student's successful completion of a curriculum. Customary use speaks of high school *diplomas*, college *degrees.*

**Discipline:** A *field* of study, whether academic (e.g., history, accounting, geology) or professional (e.g., medicine, law, engineering). For undergraduates, *discipline* is often synonymous with *major* and *field of study.*

**Ethical reasoning:** Analysis and resolution of issues involving conflicts in cultural, professional, occupational and economic codes of conduct.

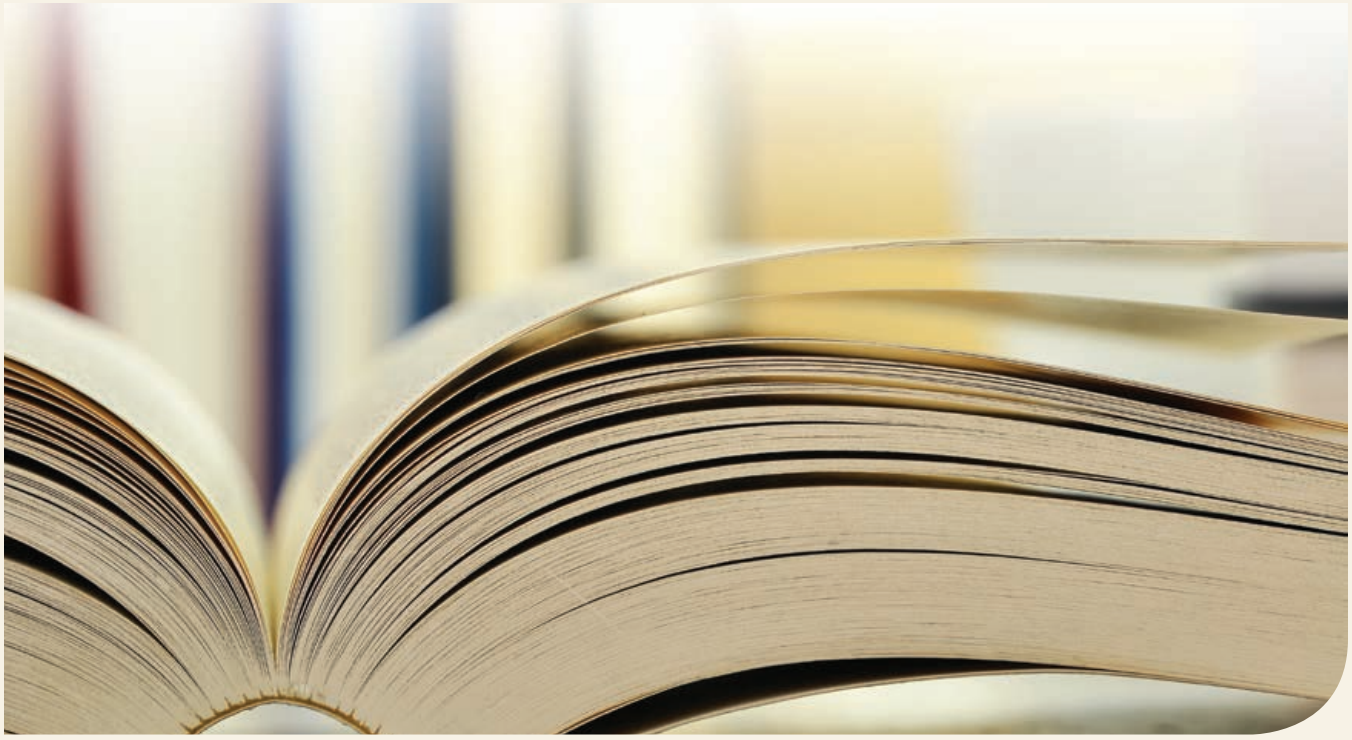
**Field of study:** Sometimes used synonymously with *discipline* but also used to describe applied, occupationally oriented programs such as culinary arts, automotive technology, graphic design or medical records administration.

**Field-based study:** Refers to learning pursued outside a traditional classroom setting (whether physical or online) that offers opportunity for independent work on projects.

**Fluency:** Speed, accuracy, flexibility and in-depth understanding as applied to quantitative, verbal or psychomotor skills. So far as second language acquisition is concerned, *fluency* ordinarily denotes a level of idiomatic facility corresponding to native speaking.

**Formative:** A descriptor for intermediate stages of growth in knowledge and skills. A formative stage in student development enables diagnostics, adjustments and refinements.

**Global literacy:** Demonstrated global learning that includes both factual prerequisites for describing differences among nations and regions (demography, geography, economics, culture, migration, etc.), and the principles and dynamics of problems, tensions and interactions among nation states and peoples.



**Institution:** An accredited college, community college or university, whether public, private not-for-profit, or private for-profit.

**Intellectual Skills:** One of five broad categories in the DQP, proficiencies that transcend the boundaries of particular fields of study and overlap, interact with, and enable the other major areas of learning described in the DQP. Includes analytic inquiry, use of information resources, engaging diverse perspectives, ethical reasoning, quantitative fluency, and communicative fluency.

**Learning outcome:** A clear statement that describes the demonstrated learning expected of students at the completion of an assignment, a course, a major or a degree program. (See also *proficiency* and *competency.*)

**Major:** A field of study chosen by a student as a principal area of focus, usually (but not exclusively) at the baccalaureate level. For undergraduates, *major* is often synonymous with *discipline* and *field of study.* However, some undergraduates may study more than one discipline (e.g., biology, philosophy) or draw on two or more fields in pursuit of another (e.g., coastal ecology).

**Normative:** A form of assessment directed principally to documentation of performance in comparison with others in a group of participants in a given assessment.

**Proficiency:** A label for a set of demonstrations of knowledge, understanding and skill that satisfy the levels of mastery sufficient to justify the award of an academic degree.

**Qualification:** For the purposes of the DQP, the set of proficiencies evident in demonstration of knowledge and skills that justify the award of a degree. In the DQP lexicon, "qualification" does not mean a credential.

**Quantitative fluency:** The adept use of calculations and symbolic operations, including essential arithmetical skills, visualization, symbolic translation and algorithms.

**Specialized Knowledge:** The proficiency (one of five) that demonstrates command of the vocabularies, theories and skills of the *field of study* on which a student has focused.

**Standards:** Expectations of proficiencies shared broadly enough to constitute a collegial consensus.

**Standardization:** The process of seeking conformity with a declared set of expectations.

**Summative:** A descriptor for the level of mastery of a proficiency that an institution indicates is required for the award of a degree.

**Tuning:** A faculty-led, discipline-by-discipline attempt to determine what students should learn and be able to do (often referred to as learning outcomes mapping or alignment) at applicable stages of the disciplinary curriculum. Originally a European initiative associated with the Bologna Process, Tuning projects are moving forward in several states of the U.S. and in Latin America, Africa and Central Asia. They also have been explored in both China and Australia.

# Appendix F

## Questions and concerns

The following issues and concerns about the DQP, raised by faculty, academic administrators and commentators, are summarized here in **boldface**, with brief responses following. Some items refer to issues that are addressed in the text of the DQP but may be imperfectly understood. Others are not covered in the text.

**Q: Some skepticism has been expressed as to why the U.S. should follow what Europeans have done in their various qualification frameworks.**
Both Tuning and the DQP were informed by efforts of other nations, but did not copy them. In the absence of a ministry of education, too, our efforts — both in the initial construction and execution of the DQP — in the U.S. are entirely voluntary. What one finds in Europe are (a) European Union qualifications framework (EQF) from pre-school to doctoral levels in eight steps, (b) national degree qualifications frameworks from pre-school to doctoral levels in 10-14 steps in countries such as Ireland, Scotland, England/Wales/Northern Ireland, and Denmark, (c) a higher education qualifications framework (Qualifications Framework for the European Higher Education Area, or QFEHEA) endorsed by 47 Bologna Process participants, and (d) individual higher education qualifications frameworks in such countries as the Netherlands and Germany. This is obviously a far more complex — and fixed — map than the single, continually evolving DQP with all its potential variations.

**The iterative process of DQP development was purposefully designed to include an ever-expanding universe of contributors.**

**Q: Some skepticism also has been expressed as to the authorship and sponsorship of the DQP, namely questioning the authority of a small group of writers and the purposes of sponsorship by Lumina Foundation.**
One has to initiate any project such as this with a manageable group of people who have studied and led in the world of U.S. higher education for a long time. The iterative process of DQP development was purposefully designed to include an ever-expanding universe of contributors — and has done just that. Lumina Foundation has no hidden agenda. Both Tuning USA and the DQP are part of its sponsorship of efforts to clarify and improve the quality of U.S. higher education. Lumina did not provide any specific instructions to its core group of DQP writers.

**Q: The DQP, we are told by some, is a document designed for legislators to impose standards on institutions of higher education.**
The design and development of the DQP has been led from within higher education, principally by faculty and their leaders. Neither state nor federal legislators have been consulted at all, and their principal concerns (e.g., with college costs and degree completion) are not those of the DQP.

**Q: Institutions of higher education are increasingly being asked by their regional and specialized accreditors to include student learning outcome indicators. How does the DQP differ from this, and is the DQP a duplication of effort?**
The iterative process of DQP development has already included three of the six regional accreditors (WASC, HLC of North Central and SACS) and the Association of Specialized and Professional Accreditors in exploring ways in which DQP structure and language of proficiencies might be used by institutions and programs within those regions.

**Q: Why is the DQP not just another name for General Education, and since we have Gen Ed at our school, with requirements that must be completed in the first two years, why do we need something else?**
First, the DQP applies to the entire degree, not just to a portion of the degree. Second, it has nothing to do with specific course requirements (course equivalents are not proxies for proficiency); it consists of summative — not formative — judgments of proficiencies. Third, the proficiencies it articulates can be demonstrated at any time — on entry to college and at any time in a student's academic career at the degree level indicated. In relation to general education, demonstrations of proficiency are not confined to "the first two years." The "broad and integrative learning" proficiencies are further developed and integrated both at the bachelor's and master's levels.

**Q: Would individual faculty members be responsible for addressing in their courses all (or even a majority) of the DQP proficiency statements selected and/or modified by their institutions?**
No. Many of the proficiency statements simply do not apply or would be nearly impossible to execute in some fields. Individual faculty members may feel comfortable addressing only three or four proficiencies in the courses they teach. The reason for teams and collaboration in the design and implementation of a local version of the DQP is to ensure that all of the proficiencies will be covered by more than one faculty member and in more than one place in the curriculum at each degree level.

**Q: Most students in our school concentrate in fields that require brain-hand competencies even more than the cognitive proficiencies articulated by the DQP; for example, culinary arts, studio art, music and physical therapy. Where does one find acknowledgment of brain-hand learning in the DQP?**
The DQP as written does not devote any particular section or sub-section to brain-hand proficiencies. However, that does not mean that individual institutions with programs that rely



heavily on this mode of learning cannot add an appropriate section under Applied Learning — which is where the cited fields of study are located.

**Q: How much time (person-hours) and how many faculty in a typical institution of, let us say, 8,000 students (at any of the degree levels indicated here) will it take to review, discuss, modify and adapt the DQP in such a way that a critical mass of academic staff endorses it and comes to live with it? The question is asked because faculty and administrators are stressed out with other assignments, and it's unclear how many people can be spared to work on this project.**

There is no way to estimate labor in any one environment. The institution has to be clear about what it wants to happen, and the necessary reading, reflecting and meeting cannot be left to a small cadre of enthusiasts. One can employ an entire faculty senate to take a first look at what will be required, and ask that senate to determine whether to move to a second phase. Assuming some form of adoption, the reworking of assignments that flow from a final set of proficiency statements affect all faculty in an activity in which they already engage, and, yes, that takes time. How much depends on the individual faculty member, but if tweaking or creating new assignments is the major "hoop," it is something that faculty

do all the time in the course of their responsibilities and would want to do better in any case.

**Q: Given that the DQP has followed a "beta" version and that future editions may reflect further experience and advice, why shouldn't an institution wait until the DQP is "final" before becoming engaged?**
The DQP is "final" — to the extent that any useful and influential resource may be deemed so. From its inception, the DQP has been offered not as a prescriptive statement, but as an effort to capture and clarify an emerging consensus about what degrees mean in terms of student learning. Because that consensus continues to develop, the DQP may continue to evolve as well in response to the experiences of those who find it useful. First-generation adopters enjoy at once the benefits that accrue from use of the DQP and from participation in an important national conversation.

**Q: The expectations of the DQP's proficiency statements are too low [too high]. Our students already fulfill them easily [would require at least twice the time to degree in order to fulfill them].**
The DQP process enables institutions to shape the proficiency statements to match their student populations. They could even develop differential challenge level statements for each proficiency. Think a particular proficiency is set too low?



Rewrite it to ratchet up the level of challenge! Serve a student population of varying degrees of preparation and varying degrees of commitment to learning? Take targeted proficiency statements, and write three levels of challenge for each (e.g., threshold, exceed, master). Nothing in the DQP is set in stone.

**Q: If our institution adopts some version of the DQP, are we endorsing a "wish list," a set of goals for student learning, or a set of required attainments without which the degree at issue would not be awarded?**
Any of these — or some intermediary construction — is possible. That is an institution's choice. The latter would be truly transformational.

**Q: This is a "business model" of higher education under which faculty would, in effect, be "teaching to the test."**
The DQP proficiencies prepare students through and for work on non-routinized problems, judgments, application and creative work. With this goal in view, the DQP emphasizes assignments, not tests, and it is the faculty that creates these assignments, not an external third party. Faculty expertise and judgment stand at the center of the DQP. But the DQP asks that assignments elicit student behaviors that allow faculty to judge whether degree-qualifying proficiencies have been attained. Moreover, the DQP encourages faculty to collaborate in determining where in a course of study specific proficiencies are achieved, practiced and assessed.

**Q: We're in an era of declining resources for higher education and increased student consumer behavior. We cannot take on a reconstructive DQP in the face of these trends.**
The DQP views students as learners, not consumers. In an era of constrained resources, it provides guidance as to which forms of learning should be included in a degree program to ensure students' readiness for work, citizenship and life, and therefore on the best places to invest resources.

**Q: Faculty enthusiasm varies by department, so there is no way an institution can achieve a broad consensus on the use of the DQP.**
Try the departments that demonstrate true and critical mass enthusiasm for the notion of degree qualifications and encourage them to engage in a discipline-based version following the Tuning methodology, and making sure to include all relevant DQP elements in the generic section of a Tuning report. Following this procedure would, in time, lead to more of a broad consensus on the use of the DQP than one initially imagined.

**Q: The DQP comes off as a checklist for graduation, almost like a degree audit. A parallel record-keeping system would appear the same way. Faculty are not in the business of checking off proficiencies, registrars have not historically been in the business of building prose transcripts, and those who judge a student's eligibility for a degree award have been traditionally guided by the proxies of specific coursework, grades, credits, residency requirements, etc. What the DQP asks for is a radical change of behavior by all of these parties, and even if everyone endorses the collection of proficiencies as markers of qualifying for graduation, the behaviors will not change, so the whole proposal winds up as an unenforceable wish list.**
This is a perceptive critique that should give everyone pause. The DQP process was envisioned as something that would take at least a decade to implement, with much of that time spent in rendering a vision operational, piece by piece. Faculty, staff, administrators and students have to recognize that the set of degree-qualifying proficiency statements an institution adopts is the strongest and clearest statement of public accountability available. Having said that, a mechanical checklist is not the inevitable consequence here. There are creative ways available to any institution to validate degree eligibility by means other than credits, grades and course proxies. Degree audits can ask questions other than the traditional basics.

**Q: If faculty are central to the design and execution of a DQP, with particular attention to the logical harmony between the assignments they give and the student proficiencies they seek to validate, then any move forward with DQP adoption must involve adjuncts, who teach a significant proportion of course offerings. So far, this has not happened, and there is nothing in DQP or discipline-based Tuning designs to involve this major portion of the academic workforce.**
Agreed. There is no easy answer, particularly for adjuncts who are not teaching every term, and who may have commitments to multiple institutions, let alone to non-academic work. But adjuncts are usually teaching in large, multi-section courses; they have much to gain in contributing to and using common assignments to assess DQP proficiencies. Moreover, once faculty have clarified their expectations for proficiency development in relation to their programs and courses, they can more readily help adjuncts understand what is expected for their own work, and why.

**The DQP views students as learners, not consumers. In an era of constrained resources, it provides guidance as to which forms of learning should be included in a degree program.**

**Q: Students come out of college or community college with debts, a degree, and no job — or a job that is hardly congruent with what they studied. The DQP doesn't do anything for them on these counts.**
True, and the DQP does not address financing, labor market conditions or job placement. These problematic phenomena would exist no matter how an institution of higher education

determined that a student earned a degree. However, the DQP does respond directly to employers' concerns that graduates need better preparation for applying their learning to a wide array of problems and settings.

**Q: Institutions of higher education are very different from each other in mission and curricular emphases. You can't get them to adopt a "one size fits all" statement of learning outcomes such as the DQP. And not all DQP proficiencies are of equal value — or value at all — to one institution or another.**
The only common "size" of a DQP is in the language of its proficiency statements — i.e., beginning with active verbs describing concretely what students actually do so that matching assignments logically follow. In terms of which proficiencies an institution will select or modify, which proficiencies an institution will add to fit its mission, which to ignore completely, there are many potential versions of a DQP.

**Integration is a key concept throughout the DQP, and perhaps its best translation in the language of cognitive actions is the verb "synthesize."**

**Q: The DQP, as written, explicitly avoids using dead-end nouns such as "ability," "capacity," "awareness" and "appreciation" in its proficiency statements on the grounds that these highly generalized concepts do not describe student behaviors and do not lead to the kind of assignments that faculty give to elicit those behaviors so that a student's proficiency can be judged. But it also includes its own collection of highly generalized nouns such as "integration" that are just as elusive and detached from cognitive action. What can be done about this?**
Granted, integration is a key concept throughout the DQP, and perhaps its best translation in the language of cognitive actions is the verb "synthesize." "Blend" and "combine" would also work provided that the statement also includes nouns indicating precisely what is to be blended or combined. "Integration" does not mean merely relying on two or more different fields of study or methods; it is an act of constructive intertwining, and that's what "synthesizing" conveys.

**Q: An increasing proportion of coursework in higher education is being delivered online, in fragmented pieces, in massive, open-enrollment courses with thousands of students from many educational backgrounds and countries, and based in servers from single sources, with inconsistent opportunity for feedback, and with limited opportunity for some of the proficiency-qualifying demonstrations mentioned in the DQP (such as field work, exhibits, performances), let alone collaborative learning activity. How does the DQP apply in this digital world?**
First — and the text indicates as much — any version of the DQP is institution-based. So the configuration and phrasing of proficiencies in one institution will not be those of another. Second — and the text also indicates as much — where a student learns X is secondary to the place that validates and/or recognizes the learning. In fact, the delivery source, system and environment are almost irrelevant. It is the institution at which the student is a degree candidate that determines whether proficiencies have been demonstrated. All the more reason to have a DQP as a stable reference point, along with its guidelines for assignments. If an external digital delivery point does not produce acceptable assignments according to the particular DQP an institution has adopted, it can always add other assignments that do the job.

**Q: What is the history of the LEAP Essential Learning Outcomes (ELOs)? Did the DQP develop hand-in-hand with these, or did one predate the other?**
The Association of American Colleges and Universities developed the LEAP framework for learning in 2005 after a multi-year dialogue that involved faculty and leaders at hundreds of higher education institutions, regional and specialized accreditors, and many employers. In 2009, when Lumina commissioned work on the DQP in response to calls for better clarification of what a degree means in terms of learning outcomes and levels (associate, bachelor's and master's), AAC&U joined the author group to help create the DQP, which was published in beta version in January 2011.

**Q: Our institution already uses the LEAP ELOs. Isn't the DQP a duplication of effort?**
On the contrary, engaging your faculty, staff and students with the DQP is an ideal next step for institutions to help students successfully achieve the forms of learning — broad knowledge about science, culture and society; strong intellectual and practical skills; personal and social responsibility; and integrative and applied learning — that the LEAP ELOs describe. Unlike the LEAP ELOs, the DQP provides a more detailed framework or roadmap for helping students, faculty and institutions achieve and demonstrate the expected proficiencies. Where LEAP outlines goals for student learning and recommends "high-impact," high student-effort practices to help students achieve the learning outcomes, the DQP shows an institution how to build those expectations into the design of degree programs at three levels — associate, bachelor's and master's. The DQP also provides guidance on building the component parts of the degree in more intentional ways (e.g., general education, major programs, the crosswalks between them). The DQP provides guidelines or reference points describing what students should actually be required to do to develop and demonstrate the proficiencies or learning outcomes that LEAP recommends. Where LEAP describes "essential" student learning, the DQP shows an institution — and transfer partners as well — how to translate those learning goals into program requirements, course assignments and assessments.

**Q: The DQP describes itself as a framework for assessing student learning. But we're already using the AAC&U's VALUE rubrics to assess student learning. Why should faculty and assessment professionals use the DQP as well?** VALUE (Valid Assessment of Learning in Undergraduate Education) and the DQP share a common view that the best evidence about student learning outcomes or proficiencies will be found in authentic student work, the work students do in completing assignments and projects, across college courses and degree programs and in field-based contexts such as practicums or service learning. The VALUE rubrics complement the DQP by providing faculty-developed qualitative judgments about students' level of achievement, from initial or "benchmark" to "capstone" or bachelor's level, for specific intellectual skills such as ethical reasoning, communication or integrative learning. The DQP, in sum, outlines the kind of tasks students should do to develop expected proficiencies, while the VALUE rubrics address the question of "how well" the student demonstrates key intellectual proficiencies. It's important to note that the DQP describes many proficiencies, such as core concepts and knowledge required in different fields, that the VALUE rubrics do not address. Institutions will want to use multiple assessments, including their own faculty members' qualitative judgments, to determine whether students have met all proficiency requirements for the degree.



# Appendix G

## Sources consulted


ABET (Accreditation Board for Engineering and Technology) (2008). *Criteria for accrediting engineering programs*. Baltimore, MD: Author.

ACGME (Accreditation Council for Graduate Medical Education) (2007). *Common program requirements: General competencies*. Chicago, IL: Author.

Adam, S. (2004). *Using learning outcomes: A consideration of the nature, role, application, and implications for European education of employing "learning outcomes" at the local, national, and international levels*. Retrieved from http://www.scotland.gov.uk/library5/lifelong/tehea-00.asp

Adam, S. (2007a). *New challenges in recognition: The recognition of prior learning.* Paper for the Official Bologna Process Seminar, Riga, Latvia, January 24-26, 2007.

Adam, S. (2007b). *Report based on the analysis of individual country 2007 stocktaking submissions on the implementation of national qualifications frameworks.* Strasbourg: Council of Europe. Retrieved from http://www.coe.int/t/dg4/highereducation/qf/DG-IVEDUHE_2007_37_EN.pdf.

Adelman, C. (ed. 1989). *Signs and traces: Model indicators of undergraduate learning in the disciplines.* Washington, D.C.: U.S. Department of Education.

Adelman, C. (2008). *Learning accountability from Bologna: A higher education policy primer.* Washington, D.C.: Institute for Higher Education Policy.

Adelman, C. (2009). *The Bologna Process for U.S. eyes: Relearning higher education in the age of convergence.* Washington, D.C.: Institute for Higher Education Policy.

Admodt, P. & Hovdhaugen, E. (2008). *Assessing higher education learning outcomes as a result of institutional and individual characteristics.* Paper for the General Conference of the Programme on Institutional Management in Higher Education. Paris: OECD.

Albertine, S. & Henry, R. J. (2004). Quality in undergraduate education: A collaborative project. *Liberal Education, 90*(3), 46-53.

Allais, S., Raffe, D., & Young, M. (2009). *Researching NQFs: Some conceptual issues*. Employment Working Paper No. 44. International Labour Office, Employment Sector, Skills and Employability Department.

American Association of State Colleges and Universities. (1984). *In pursuit of degrees with integrity: A value added approach to undergraduate assessment*. Washington, D.C.: Author.

American Council on Education (2004, April). *Public accountability for student learning in higher education: Issues and options.* A position paper from the Business-Higher Education Forum. Retrieved from http://www.bhef.com/publications/documents/public_accountability_04.pdf

Association Européene des Conservatoires, Académies de Musique et Musikhochschulen (AEC). (2007). *Summary of "Tuning" findings: Higher music education.* Utrecht, NL: Author.

Association of American Colleges. (1982). *A search for quality and coherence in baccalaureate education.* Project on Redefining the Meaning and Purpose of Baccalaureate Degrees. Washington, D.C.: Author.

Association of American Colleges and Universities. (2002). *Greater expectations: A new vision for learning as a nation goes to college.* Washington, D.C.: Author.

Association of American Colleges and Universities. (2004). *Taking responsibility for the quality of U.S. degrees: A report from the Greater Expectations Project on Accreditation and Assessment.* Washington, D.C.: Author.

Association of American Colleges and Universities. (2007). *College learning for the new global century: A report from the National Leadership Council for Liberal Education and America's Promise.* Washington, D.C.: Author.

Association of American Colleges and Universities. (2010). *The quality imperative: Match ambitious goals for college attainment with an ambitious vision for learning*. Washington, D.C.: Author.

Association of American Colleges and Universities and Council for Higher Education Accreditation. (2010). *New leadership for student learning and accountability*. Washington, D.C.: Author.

Astin, A.W. (1978). *Four Critical Years.* San Francisco: Jossey-Bass.

Australian Qualifications Authority. (2007). *AQF Implementation Handbook* (4th ed.). Retrieved from http://www.aqf.edu.au/implem.htm

Australian Qualifications Framework Council. (2009, September). *Strengthening the AQF: An architecture for Australia's qualifications. A consultation paper.* Retrieved from www.aqf.edu.au

Australian Qualifications Framework Council. (2010, July). *Strengthening the AQF: A framework for Australia's qualifications.* Retrieved from www.aqf.edu.au

Barkley, E. F. *Student engagement techniques: A handbook for college faculty.* San Francisco: Jossey-Bass, 2010.

Barr, R. B. & Tagg, J. (1995). From teaching to learning: A new paradigm for undergraduate education. *Change,* 27(6), 13-25.

Bartosch, U. (2008). Bringing transparency to the faculties? The Qualifications Frameworks in action. In HRK (German Rectors Conference) *Educating for a global world: Reforming German universities toward the European higher education area.* Bonn, 18-19.

Baume, D. (2009). *Writing and using good learning outcomes*. Leeds, UK: Leeds Metropolitan University.

Bergan, S. & Damian, R. (eds.). (2010). *Higher education for modern societies — competences and values.* Strasbourg: Council of Europe.

Bjornavold, J. & Coles, M. (2010). *Added value of national qualifications frameworks in implementing the EQF [European Qualifications Framework]*. Luxembourg: Publications Office of the European Union.

Blaich, C., & Wise, K. (2009). *Overview of findings from the first year of the Wabash National Study of Liberal Arts Education.* Crawfordsville, Indiana: Center of Inquiry in the Liberal Arts at Wabash College. Retrieved from http://www.liberalarts.wabash.edu/storage/Overview_of_Findings_from_the_First_Year_web_07.17.09.pdf

Bloch, R. & Bürqi, H (2008). *2008 Swiss catalogue of learning objectives for undergraduate medical training* (2nd ed.). Bern, CH: Institute for Medical Education.

Bloom, B.S. (1956). *A taxonomy of educational objectives.* Chicago: University of Chicago Press.

BMBF (German Federal Ministry of Education and Research) and KMK (Standing Conference of the Ministers of Education and Cultural Affairs of the Länder of the Federal Republic of Germany). (2008). *Report on the compatibility of the "Qualifications Framework for German Higher Education Qualifications" with the "Qualifications Framework for the European Higher Education Area."* Bonn, DE: Authors.

Bologna Process Coordination Group for Qualifications Frameworks. (2009). *Synthesis of the replies received from national QF correspondents.* Strasbourg: Author.

Bologna Process Working Group on Qualifications Frameworks. (2007). *National qualifications frameworks development and certification.* Retrieved from http://www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/WGR2007/WGQF-report-final2.pdf

Bologna Working Group on Qualifications Frameworks. (2005). *A framework of qualifications of the European higher education area*. Copenhagen: Ministry of Science, Technology and Innovation. Retrieved from http://www.bologna-bergen2005.no/Docs/00-Main_doc/050218_QF_EHEA.pdf

Bowen, H.R. (1983). *Investment in Learning*. San Francisco: Jossey-Bass.

Bundesministerium für Bildung, Wissenschaft und Kultur. (2004). *Terminologiewörterbuch Hochschulwesen.* Band I: Deutsch. Wein (AT): Author.

California State University. (1999). *Learning outcomes for mathematical reasoning for the baccalaureate degree*. Learning Outcomes Project Final Report, January 15, 1999. Los Angeles: Author.

Chickering, A.W. & Gamson, Z. S. (1987, March). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, 39 (7), 3–7.

Coles, M. (2006). *A review of international and national developments in the use of qualification frameworks.* Turin, Italy: European Training Foundation. Retrieved from http://www.etf.europa.eu/pubmgmt.

Committee on Information Technology Literacy. (1999). *Being fluent with information technology.* National Research Council. Washington, D.C.: National Academy Press.

Council for Higher Education Accreditation (CHEA). (2003, September). *Statement of mutual responsibilities for student learning outcomes: Accreditation, institutions, and programs*. Retrieved from http://www.chea.org/pdf/StmntStudent LearningOutcomes9-03.pdf

Council for Higher Education Accreditation (CHEA). (2006, December). *Accreditation and accountability: A CHEA special report*. Retrieved from http://www.chea.org/pdf/Accreditation_and_Accountability.pdf

Council of Ministers of Education, Canada. (2007). *Ministerial statement on quality assurance of degree education in Canada.* Retrieved from www.cmec.ca

Council of the European Union. (2007). Bologna Seminar: Higher Education Forum on Qualifications Frameworks: Recommendations. Strasbourg: Author. Retrieved from http://www.coe.int/t/dg4/highereducation/QF/Recommendations_QF_Stras1007_EN.pdf

Danish Bologna Follow Up Group. (2003). *Towards a Danish "Qualifications Framework" for higher education.* Copenhagen, DK: Author.

de Bruin *et al.* (2007). *Competences in education and cross-border recognition: Evaluation of the usefulness of learning outcomes and competences for international recognition.* The Hague, Netherlands: NUFFIC.

Dillon, S. (2010, June 3). States receive a reading list: New standards for education. *The New York Times,* p. A14.

Driscoll, A., & Wood, S. (2007). *Outcomes-based assessment for learner-centered education*. Sterling, VA: Stylus.

Erwin, T. D. (1991). *Assessing student learning and development*. San Francisco: Jossey-Bass.

European Centre for the Development of Vocational Training (Cedefop). (2008a). *Terminology of European education and training policy: A selection of 100 key terms* [in six languages]. Luxembourg: Office for Official Publications of the European Communities.

European Centre for the Development of Vocational Training (Cedefop). (2008b). *The shift to learning outcomes: Conceptual, political and practical developments in Europe.* Luxembourg: Office for Official Publications of the European Communities. Retrieved from http://www.cedefop.europa.eu/EN/publications/12952.aspx

European Students Union (ESU). (2004). *Policy paper: Qualification frameworks.* Tallinn, Estonia: Author.

European University Association (2004). Shared "Dublin" descriptors for Short Cycle, First Cycle, Second Cycle and Third Cycle Awards, October 18, 2004. Retrieved from http://www.eua.be/fileadmin/user_upload/files/EUA1_documents/dublin_descriptors.pdf

Ewell, P.T. (1983). *Information on student outcomes: How to get it and how to use it.* Boulder, CO: National Center for Higher Education Management Systems (NCHEMS).

Ewell, P.T. (1984). *The self-regarding institution*. Boulder, CO: National Center for Higher Education Management Systems (NCHEMS).

Ewell, P.T. (2009, November). *Assessment, accountability and improvement: Revisiting the tension.* National Institute for Learning Outcomes Assessment (NILOA). Retrieved from http://www.learningoutcomeassessment.org/documents/PeterEwell_006.pdf

Ewell, P. (2013, January). *The Lumina Degree Qualifications Profile (DQP): Implications for assessment*. National Institute for Learning Outcomes Assessment (NILOA). Retrieved from http://www.learningoutcomeassessment.org/documents/Ewell*DQP*op1.pdf.

Farmer, D.W. (1988). *Enhancing student learning: Emphasizing essential competencies in academic programs*. Wilkes-Barre, PA: King's College.

Gallacher, J., Toman, N., Caldwell, J., Edwards, R., & Raffe, D. (2005). *Evaluation of the impact of the Scottish Credit and Qualifications Framework (SCQF).* Edinburgh: Scottish Executive**.** Retrieved from http://www.scotland.gov.uk/Publications/2005/11/30173432/34323

Gaston, P. L. (2008). Bologna: A challenge for liberal education and an exceptional opportunity. *Liberal Education, 94*(4), 14-19.

Gaston, P. L. (2010b). *The challenge of Bologna: What U.S. higher education has to learn from Europe and why it matters that we learn it*. Sterling, VA: Stylus Publishers.

Gaston, P. L. (2010a). *General education & liberal learning: Principles of effective practice.* Washington, D.C.: American Association of Colleges and Universities.

Gaston, P. L. (2014). *Higher education accreditation: How it's changing, why it must.* Sterling, VA: Stylus Publishers.

Gaston, P. L. (2004). Reading reauthorization: Lessons for tomorrow in yesterday's debate. *Metropolitan Universities*, *15*(4), 38-50.

Gaston, P. L. & Gaff, J. G. (2009). *Revising general education — and avoiding the potholes.* Washington, D.C.: Association of American Colleges and Universities.

Gehmlich, V. (2008). *Die Einführung eines Nationalen Qualifikationsrahmens in Deutschland: Untersuchung der Möglichkeiten für den Bereich des formalen Lernens.* Bonn, DE: Bundesministerium für Bildung und Forschung.

González, J. & Wagenaar, R. (2005). *"Tuning" educational structures in Europe II*. Bilbao, Spain: University of Deusto.

Grant G., Elbow, P., Ewens, T., Gamson, Z., Kohli, W., Neumann, W., Olesen, V., & Riesman, D. (1979). *On competence: A critical analysis of competence-based reforms in higher education.* San Francisco: Jossey-Bass.

Hart Research Associates. (2007). *How should colleges prepare students to succeed in today's global economy?* Washington, D.C.: Author. Retrieved from http://www.aacu.org/leap/documents/Re8097abcombined.pdf

Hart Research Associates. (2008). *How should colleges assess and improve student learning? Employers' views on the accountability challenge*. Washington, D.C.: Author. Retrieved from https://www.aacu.org/leap/documents/2008_Business_Leader_Poll.pdf

Hart Research Associates. (2009). *Trends and emerging practices in general education*. Washington, D.C.: Author. Retrieved from www.aacu.org/membership/documents/2009MemberSurvey_Part2.pdf

Hart Research Associates. (2010). *Raising the bar: Employers' views on college learning in the wake of the economic downturn*. Washington, D.C.: Author. Retrieved from http://www.aacu.org/leap/documents/2009_EmployerSurvey.pdf

Hersh, R. H. (2004). *Assessment and accountability: Unveiling the student learning factor in higher education.* A presentation to the AAHE National Assessment Conference, June 2004. Retrieved from http://www.teaglefoundation.org/learning/pdf/200406_hersh.pdf

Hersh, R. H., Bundick, M., Keeling, R., Keyes, C., Kurpius, A., Shavelson,R., Silverma, D., & Swaner, L. (2008). *A well-rounded education for a flat world: A paper prepared by the College Outcomes Project.* Washington, D.C.: S. Engelhard Center. Retrieved from http://www.aacu.org/bringing_theory/documents/AWELLROUNDED-finalmasterFOOTNOTESINSERTEDnarrativecitationsA_Well-rounded-sept_25_Kurpiu_000.doc

Higher Education and Training Awards Council, Ireland (HETAC). (2004). *Policy and criteria for the making of higher education and training awards.* Dublin, Ireland: Author.

Internet Resources for Higher Education Assessment: DQP 2 WorkDocInProg 090913.docx http://www2.acs.ncsu.edu/UPA/assmt/resource.htm.

[Irish] University Sector Framework Implementation Network. *University awards and the National Framework of Qualifications (NFQ): Issues around the design of programmes and the use and assessment of learning outcomes.* Dublin, IE: Author.

James, R. & Meek, L. (2008). *Proposal for an Australian Higher Education Graduation Statement: Final report to the Department of Education, Employment and Workplace Relations*. Melbourne: Centre for the Study of Higher Education.

Johnstone, S.M., Ewell, P., & Paulson, K. (2002). *Student learning as academic currency*. Washington, D.C.: American Council for Higher Education (ACE).

Jones, E.A. (1995). *National assessment of college student learning: Identifying college graduates' essential skills in writing, speech and listening, and critical thinking.* Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.

Khayat, J., Dif, M., Alsace, B.C., Kelly, C., Kadlec, M., Stalker, M., & Tūtlys, V. (2009). *Guidelines for the application of national qualifications frameworks and the European Qualifications Framework in the inter-county comparison of sectoral qualifications.* Kaunas, Lithuania: Vytautas Magnus University. Retrieved from http://www.nqai.ie/documents/SECCOMPATGUIDELINES_Final_Report_Jan2010.pdf

Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Washington, D.C.: Association of American Colleges and Universities.

Kuh, G. & Ikenberry, S. (2009). *More than you think, less than we need.* Champaign, IL: National Institute for Learning Outcomes Assessment.

Leskes, A. & Miller, R. (2006). *Purposeful pathways: Helping students achieve key learning outcomes.* Washington, D.C.: Association of American Colleges and Universities.

Loboda, Z. & Krémó, A. (2008). *Linking European and national qualification frameworks — processes in Hungary.* Budapest: Ministry of Education and Culture.

Malta Qualifications Council. (2009). *Referencing of the Malta Qualifications Framework (MQF) to the European Qualifications Framework (EQF) and the Qualifications Framework of the European Higher Education Area (QF/EHEA).* Malta: Author.

Massachusetts Board of Regents of Higher Education. *Student learning outcomes statements.* Retrieved from http://www.mass.edu/documents/BHE10-02AcceptanceoftheFinalReportfr

McKiernan, H.H. & Birtwistle, T. (2010). Making the implicit explicit: Demonstrating the value added of higher education by a qualifications framework. *Journal of College and University Law*, *36*(2), 511-564.

Meijers, A.W.M., van Overveld, C.W.A.M., & Perrenet, J.C. (2005). *Criteria for academic bachelor's and master's curricula.* Eindhoven, Netherlands: Technische Universiteit Eindhoven.

Miami Dade College. *Student learning outcomes statements*. Retrieved from http://www.mdc.edu/learningoutcomes/outcomes.aspx

Miller, M. A. (2008). The Voluntary System of Accountability — origins and purposes: An interview with George Mehaffy and David Shulenberger. *Change,* 40(4), 8-13.

Ministére de l'Enseignement Supérieur et de la Recherche [MEN]. (2005). *Programme Pédagogique de National du DUT: "Information - communication": Présentation de la formation.* Paris: Author.

Ministére de l'Enseignement Supérieur et de la Recherche [MEN]. (2006). *Programme Pédagogique de National du DUT*: *"Carrières juridiques": Présentation de la formation*.

Paris: Author.
Ministry of Education, Culture and Science [OCW]. (2008). *[Draft] Self-certification of the Higher Education Qualifications Framework in the Netherlands*.The Hague: Author.
Moon, J. (2002). *The module and programme development handbook*. London: Kogan Page.
National Governors Association. (2010). *Compete to complete.* Washington, D.C.: Author. Retrieved from http://www.subnet.nga.org/ci/1011/
National Governors Association and the Council of Chief State School Officers (2010). *The Common Core State Standards*. Washington, D.C.: Authors. Retrieved from http://corestandards.org/
National Governors Association Center for Best Practices (2007, February 23). *Issue brief: Higher education accountability for student learning.* Washington, D.C.: Author. Retrieved from http://www.nga.org/Files/pdf/0702HIGHERED.PDF
National Governors Association Center for Best Practices. (2009, November 9). *Measuring student achievement at postsecondary institutions.* Washington, D.C.: Author. Retrieved from http://www.nga.org/Files/pdf/0911MEASURINGACHIEVEMENT.PDF
National Qualifications Authority of Ireland. (2009). *Referencing of the Irish National Framework of Qualifications (NFQ) to the European Qualifications Framework for lifelong learning.* Dublin: Author.
National Qualifications Authority of Ireland. (2010). *National Qualifications Frameworks and the European Overarching Frameworks: Supporting lifelong learning in European education and training*. Dublin: Author.
Ontario Qualifications Framework. (2009). Retrieved from www.edu.gov.on.ca/eng/general/postsec/oqf.pdf
Palomba, C. A. & Banta, T. W. (1999). *Assessment essentials: Planning, implementing, and improving assessment in higher education*. San Francisco: Jossey-Bass.
Pulley, J. (2010). The data drive. *Lumina Foundation Focus,* Spring 2010, 3-13.
Quality Assurance Agency for Higher Education. (2007a). *Benchmark statements: Accounting*. Retrieved from www.qaa.ac.uk/academicinfrastructure/benchmark/statements/Accounting.pdf
Quality Assurance Agency for Higher Education. (2007b). *Benchmark statements: History*. Retrieved from www.qaa.ac.uk/academicinfrastructure/benchmark/statements/history07.pdf
Quality Assurance Agency for Higher Education. (2008). *The framework for higher education qualifications in England, Wales and Northern Ireland.* Gloucester: Author.
Rhodes, T. (ed.). (2010). *Assessing outcomes and improving achievement: Tips and tools for using rubrics.* Washington, D.C.: Association of American Colleges and Universities.
Rychen, D.S. & Salganik, L.H. (ed.). (2003). *Key competencies for a successful life and a well-functioning society.* Report of the OECD DeSeCo (definition of competences) project, OECD, Paris. Retrieved from http://www.oecd.org/dataoecd/47/61/35070367.pdf
Schermutski, M. and Peters-Burns. (2004), A. *Empfehlungen zur Anwendung des ECTS-System als Transfer- und Akkumulierungssystem im Rahmen der Umstellung auf Bachelor- und Masterabschlüsse an der FH Aachen.* Aachen, DE, *Fachhochschule Aachen.*
Stark, J.S. & Lowther, M.A. (1988). *Strengthening the ties that bind: Integrating undergraduate liberal and professional study.* Report of the Professional Preparation Network. University of Michigan, Ann Arbor, MI.
State Council of Higher Education for Virginia: *Core competencies*. Retrieved from http://research.schev.edu/
State Higher Education Executive Officers (SHEEO). (2005). *Accountability for better results: A national imperative for higher education*. A National Commission on Accountability in Higher Education, March 10, 2005. Retrieved from http://www.sheeo.org/account/accountability.pdf
Steen, L.A. (2001). *Mathematics and democracy: The case for quantitative literacy*. Princeton, NJ: National Committee on Education and the Disciplines.
Study Group on the Conditions of Excellence in American Higher Education (1984). *Involvement in learning: Realizing the potential of American higher education*. Washington, D.C.: U.S. Department of Education.
The Danish Evaluation Institute. (2009): *Self-certification: Verification of compatibility of the Danish National Qualifications Framework for Higher Education with the Framework for Qualifications of the European Higher Education Area*. Copenhagen: Author. Retrieved from http://www.ond.vlaanderen.be/hogeronderwijs/bologna/qf/documents/DK-QF-report-EN.pdf
The Secretary's Commission on Achieving Necessary Skills (1991). *What work requires of schools. A SCANS report for America 2000.* U.S. Department of Labor, Washington, D.C. Retrieved from http://wdr.doleta.gov/SCANS/whatwork/whatwork.pdf
Tuck, R. (2007). *An introductory guide to national qualification frameworks: Conceptual and practical issues for policy makers.* Skills and Employability Department, International Labour Office (ILO). Geneva: Retrieved from http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/instructionalmaterial/wcms_103623.pdf
"Tuning USA" Indiana Committee. (2010). *"Tuning USA" Indiana final report*. Indianapolis, IN: Author.
"Tuning USA" Minnesota Committee. (2010). *"Tuning USA" Minnesota final report*. St. Paul, MN: Author.
"Tuning USA" Utah Committee. (2010). *"Tuning USA" Utah final report*. Salt Lake City, UT: Author.
Université Jean Monnet. (2007). *Renouvellement d'un diplôme de LICENSE généraliste: Géosciences et Environnement*. Saint-Etienne, France: Author.
University of Wisconsin. *Student learning outcomes statements*. Retrieved from http://www.provost.wisc.edu/content/WI_Exp_ELOs.pdf
Wabash National Study of Liberal Arts Education. (2009). *High-Impact practices and experiences from the Wabash National Study*. Crawfordsville, IN: Center of Inquiry in the Liberal Arts at Wabash College.
Warren, J.R. (1978). *The Measurement of Academic Competence*. Final report to the Fund for the Improvement of Postsecondary Education. Washington, D.C.: U.S. Department of Education. ERIC number ED 174649.
Whitaker, U. (1989). *Assessing learning: Standards, principles, and procedures*. Philadelphia, PA: Council for Adult and Experiential Learning (CAEL).




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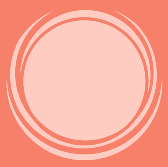
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## About Lumina Foundation

Lumina Foundation is an independent, private foundation committed to increasing the proportion of Americans with high-quality degrees, certificates and other credentials to 60 percent by 2025. Lumina's outcomes-based approach focuses on helping to design and build an accessible, responsive and accountable higher education system while fostering a national sense of urgency for action to achieve Goal 2025.



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