

# National Institute for Learning Outcomes Assessment

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## DQP/Tuning Case Study: Utah State University

### Bringing It All Together to Foster Intentional Learners

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As the Utah State University (USU) [mission](#) states, USU is one of the “nation’s premier student-centered land-grant and space-grant universities.” USU fosters the “principle that academics come first”, and as an institution strives to “cultivate diversity of thought and culture, serving the public through learning, discovery, and engagement.”

In accordance with this mission, Utah State University’s degree profile ensures that students develop intellectually, personally, and culturally, so that they may serve the people of Utah, the nation, and the world. USU prepares citizen-scholars who participate and lead in local, regional, national, and global communities. University Studies (i.e. general education) is an integral part of every student’s experience—in both lower-division and upper-division courses. A solid University Studies foundation, combined with concentrated study in a major discipline and interdisciplinary studies, provides the breadth and depth of knowledge qualifying USU graduates as educated citizens.

Utah State University fulfills a unique role in the Utah System of Higher Education. Its land-grant designation makes Utah State responsible for programs in agriculture, business, education, engineering, natural resources, sciences, and the traditional core of liberal learning—humanities, arts, and social sciences—throughout the state, delivered by a variety of instructional methods. The university gives particular emphasis to programs involving the interaction of land, people, and the environment. USU is a “Doctoral Research University/high research activity” institution as designated by the Carnegie Foundation, providing doctoral and master’s level education and supporting significant research efforts by its faculty.

The institution has 850 faculty who provide education for more than 27,000 undergraduate and graduate students. The University has seven colleges, more than 200 majors, and 130 research-related classes. Students are distributed across the main campus in Logan, five branch campuses, distance learning sites, and extension offices in all of Utah’s 29 counties. Utah State is accredited by the Northwest Commission on Colleges and Universities.

Utah State University was selected as a DQP/Tuning case study due to faculty-led involvement in the state of [Utah Tuning](#) projects; integration of the DQP with various programs and colleges on campus; and bridging the work of national initiatives such as Utah’s status as a [LEAP state](#),

The Degree Qualifications Profile (DQP) presents outcomes for three levels of degrees (Associate, Baccalaureate, and Master’s), and five broad categories of proficiencies: Specialized Knowledge, Broad and Integrative Knowledge, Intellectual Skills, Applied and Collaborative Learning, and Civic and Global Learning.

To learn more about the DQP and institutions working with it see: [www.degreeprofile.org](http://www.degreeprofile.org)

participation in AAC&U's [Quality Collaboratives](#) project, involvement with the [Multi-State Collaborative](#) and [WICHE Passports Initiative](#), and its integration of [High-Impact Practices](#). Further, faculty, staff, and administration built upon the work with Tuning to integrate the major and general education for a focus upon the degree, as well as made connections across the entire institution to better serve students. Data collection for the case study took place during a two-day site visit where various faculty, staff, students, and administrators were interviewed. The site visit occurred in June of 2014, with additional verification and updates provided in 2016 by USU co-author, Norman Jones.

## [Institutional Context: Background with Tuning and DQP](#)

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Since 2009, with the help of a grant from Lumina Foundation, Utah's colleges and universities have been involved in the [tuning of degrees in history, physics, elementary education and math](#). In a [news article](#) on their involvement, a participant in the history Tuning process states, "When we tune a degree what we're asking is, 'No matter where you got it, or who got it, what is it that you [the degree holder] have in common?'" The Tuning process involved faculty coming together to work on their chosen discipline to decide what knowledge, skills, and abilities students acquire in a specific discipline when completing an associate, bachelor, and master's degree. The conversation focused on "what we have in common" and served as a counterpart to the state of Utah's efforts to align course requirements and course numbering throughout the state. A faculty participant in the Tuning process commented on the intersection of the efforts of the state of Utah with that of a national disciplinary association, the [American Historical Association](#).

We recognize that Tuning is a process, one that proceeds slowly and incrementally. We also realize that Tuning represents a profound change in informing the culture of academic life. It has been an enormous help to have a professional academic organization such as the American Historical Association support the Tuning effort and stand as an advocate for substantive changes in teaching, learning, and the identity of the discipline.

In the Institutional Activity Report forms gathered as part of the National Institute for Learning Outcomes Assessment (NILOA) DQP/Tuning tracking efforts, Utah State University respondents indicated that several purposes drove their engagement with DQP and Tuning. One involved integrating general education and the major—conversations that emerged naturally from the Tuning project, but another was possible cost savings involved with an integrated, intentional curriculum that built towards a coherent degree. By combining DQP with Tuning into a model for institutional change, USU brought the work from departments engaged with Tuning to the college level beginning with the College of Humanities and Social Sciences. Their efforts proved so successful that the work was subsequently taken university-wide.

The DQP served as the interface between the various parts of the curriculum as USU sought to achieve for all their students the USU degree profile, defining what they refer to as the USU [Citizen Scholar](#). Utah State University has had a degree profile since 1997, but it was through the intersection of DQP and Tuning that the profile became, in the words of an administrator, "a touchstone we continuously refer back to in our work." Exploring how the whole curriculum (i.e. general education, ancillary courses and majors) fit together changed the culture within the institution. Working with faculty, student services staff, librarians, and upper administrators, USU explored student learning from initial student entry through to completion. They began by redesigning the First-Year Program, known as "Connections," to ensure that all students were prepared to be intentional learners. Connections enrolls over 2,000 students each fall, two-thirds of all incoming freshmen.

In alignment with the DQP/Tuning conversations, a general education faculty-led committee developed [rubrics and criteria](#) to review courses [applying for identification](#) as a general education course. The rubrics assist faculty in identifying not only the essential content of the courses but also what competence and mastery might look like within the courses. The general education conversations helped to facilitate exploration within majors of the roll of upper division courses and what it means to "map preparation." Various colleges and departments found ways to express the pathways from General Education into the

major. Majors began mapping backwards from their particular degree outcomes, demonstrating what the major contributes to student achievement of the USU degree profile and what educational opportunities need to be provided by other units within the institution. Some rewrote their advising materials. Some majors created pre-majors that made explicit the optimal pathway that prepared students for success in the major. Recognizing that students are often unsure of their majors, tools were created such as the College of Humanities and Social Sciences' "[Pathways Through General Education: PREPARING FOR DEGREES, CAREERS, AND LIVES](#)," focused on student interests, guiding undeclared students efficiently toward their likely majors. Additionally, partnering with advising and the library allowed for the creation of "interactive mind maps" to help students navigate the curriculum, identifying knowledge and skills that feed into the Citizen Scholar profile from the majors, general education, and co-curricular parts of the institution.

Overall, Utah State University engaged various components and partners within their campus and beyond to explore questions of degree-level learning outcomes attainment and meaningful preparation for students to successfully attain a degree. The integration of their efforts with Tuning allowed for movement towards degree-level conversations utilizing the DQP, thus effectively shifting campus conversations towards collaboration, coherence, and intentional integration.

### [General Education and the Degree Qualifications Profile: Processes for Cultural Change](#)

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The institutional commitment to creating pathways to degrees rests on the willing enthusiasm of faculty, student services personnel, and librarians, but USU realized that to embed change, processes must be created to ensure permanent progress. As listed on the [university website](#), the University Studies program is intended to help students learn how to learn—not just for the present, but also for the future. The University Studies program site claims that

No individual can master all, or even a small portion, of society's knowledge, but students can learn the basic patterns used to obtain and organize information, enabling them to discover or recover knowledge. University Studies involves a series of interrelated educational experiences that stimulate and assist students in becoming self-reliant scholars and individuals. The ultimate objective is for general and discipline-specific education to complement each other in helping students to achieve the learning outcomes. University Studies courses emphasize how knowledge is achieved and applied in different domains.

To help facilitate integration, a key element of the DQP, the [general education approval process](#) was revised and rubrics were created on [course designation criteria](#). The materials are targeted towards faculty since as one faculty member commented, reflecting on how General Education classes prepare students for subsequent classes, "every professor is the consumer of general education so we need to be sure they are consuming quality stuff." While the degree profiles, explored later, help to demystify for students expectations and possible pathways to a degree, the general education approval process materials and related rubrics were created to demystify general education program expectations for faculty. To help clarify general education for students, explanations on the general education curriculum and purposes are provided in [video form](#).

Of note is the impact the faculty committee on general education has had on cross-campus conversations. The committee became a place "in which faculty talk about the whole curriculum with student services at the table, representatives from all colleges, and diverse faculty representation." The committee serves as a space for campus-wide conversation on topics crossing campus boundaries, such as issues of grade inflation. Further, the efforts of the committee had an impact on the way faculty think about and talk about what they are doing as described by one committee member by "offering guidelines for shaping a successful syllabus and offering suggestions about evaluating student performance in courses." The view of general education is now one elucidated by a committee member as, "the necessary building blocks needed to understand what

the core curriculum is delivering with definitions that allow the campus to have conversations at the next level about the degree.”<sup>1</sup>

## Connections across the Curriculum: Creating Intentional Pathways

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The work in general education connected meaningfully to advising, orientation, and the first-year **Connections course**, in part through the development of a degree profile tool. As one faculty member stated, “We need to explore how to make advising about helping students move through the curriculum in a more efficient way as well as help faculty understand how the student gets prepared to succeed in the major and in upper division work at the right time, at the right level.” Conversations on “levels” involved faculty discussing what upper division work and preparation for the major looks like and culminated in a beta version of a pathways advising tool designed by a former student, Justin Solum, in a USU design studio seminar.<sup>2</sup> Justin Solum **created tools** that help to graphically demonstrate the proficiencies and special knowledge developed in each major’s degree profile. He showed how each major produced a different kind of spider web while achieving the DQP proficiencies.

The pathways advising tools sought to address the issue of students viewing general education courses as a box to check off as opposed to building skills that are subsequently applied in the major. Building from the idea that general education serves as preparation for the major, the pathways advising tools were created to share a map of the degree with students. For instance, librarians, inspired by Tuning, took up the question of where information literacy resided in the curriculum. They created their own degree maps showing when and where instruction in information literacy occurred in each degree curriculum, allowing students to understand sequences and librarians to assess them.

Beginning with orientation in the summer, USU tries to help students and advisors select general education or elective classes they want to take in addition to the major – classes that support and build towards their interests. This shift towards an integrated role of general education with the major courses was important as students lacked an understanding of the connections between general education and their courses as a whole. One student stated, “I feel like 50% of the courses are meaningless and everyone has a degree, so I should spend time in college networking.” A survey of students further solidified this concern, with students reporting that they didn’t see general education as having an impact on them prior to graduation.

The pathways advising tools took the form of major-based degree profiles, with the intent, according to one designer to “integrate a purpose and flow to courses—not only for a particular major, but for the degree—by integrating general education.” The degree profile was built from the DQP five areas of learning and integrated each major’s **four-year plan** to show students where they are and the role of their classes in degree-level integration. Instead of focusing upon the language of the majors, such as identifying a student as a “business student,” the profiles identify students as citizen scholars within various fields. As a peer advisor stated, “Yes you are a civil engineer, but you are also a citizen scholar, and students need to see how those connections take place.” Thus, the degree profile allows students to see the focus of the program and areas where they want to “branch out or be more well-rounded” while also helping faculty see “what they want students to know and be able to do before they come into major courses, by seeing the degree as a whole.”

The integration of the DQP’s focus on the degree with the work of Tuning in the discipline, coupled with the knowledge gained from the student perspective of their experience of USU, helps reinforce the statement made by a degree profile creator that

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<sup>1</sup> Information on the Citizen Scholar, general education, and a video on how to navigate the college experience based on the structure of a degree are all located here: [http://www.usu.edu/epc/subcommittees/general\\_education/citizen\\_scholar/](http://www.usu.edu/epc/subcommittees/general_education/citizen_scholar/)

<sup>2</sup> Supported by the Lumina Foundation and the Business Innovation Factory, student design studios were created to tackle the question of how students understood the University. The student R&D teams quickly learned that curricular innovation had to be communicated to students, and that a new way of communicating was needed to help students navigate the system. They designed “MY USU,” a student interface that was put into effect in 2013. Those students taught USU new ways of thinking about how it communicates with and helps students find their way through the curricular maze.

Regrettably, as practices currently stand, students may leave USU with a degree but not with an education. However, if students leave with an education, they will also leave with a degree, and their education will make them more fulfilled individuals and better prepared for their future. The aim for the USU Degree Profile is to make clear to students this goal and how their courses build their education.

The profiles are viewed as a tool to help departments that have not been part of the Tuning or DQP conversations see connections by providing them with language to explore their degree profiles (which may have more than the [5 points of the DQP spiderweb](#)). While the beta version of the degree profiles—which integrated the DQP spiderweb as a visual—were created by one designer, the plan is to engage with departments in collaborative conversations around their specific profiles. The process is thought to help faculty and students “understand these courses have a purpose beyond the necessary skills I might have within my discipline as well as see where a degree may have more of an emphasis or focus on certain points of the web than another.”

By showcasing “purpose and a way to move through the curriculum for students” the profiles are useful for recruiting. A student indicated the importance of the work for recruitment by saying, “If people could show me the path from things I am interested in with a way to move forward, that would help greatly. I don’t know what I want to be for a major but I know what I am interested in.” Preliminary uses of the profiles as a recruitment tool have proved positive in terms of heightened understanding on the part of prospective students and families.

Finally, the degree profiles have implications for transfer students, facilitating understanding of where students come from and where they are headed, since the profile work presupposes integration of knowledge and skills from the prior year. Transfer conversations can focus on what knowledge and skills students have acquired that build towards their degree. A faculty member indicated that by “not focusing on a semester plan we allow more flexibility for when students can acquire the knowledge and skills, and the conversation is not on courses—it’s on knowledge and skills needed in a specific year.”

## Preparing Students as Intentional Learners

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Early on, additional connections were made with student recruitment efforts to help craft an incoming class prepared to succeed at USU. The degree profile work was presented to advisors and deans and served to start a larger conversation regarding what level to expect students to reach proficiency, how many courses students need to take beyond that level, and what is needed to get them there. Involved faculty stated, “It is a disservice to students to take a higher-level course too early or a lower-level course too late.” Thus, an element of USU’s DQP/Tuning efforts has been consistent communication with current and prospective students so they understand when they need to be engaging with different courses at different levels.

Prior to the DQP/Tuning integration, USU attempted learning communities by registering students in groups of classes based on their orientation dates. Yet, this approach did not allow USU to be responsive to students’ course needs or to alert departments of the need for additional course sections based on enrollment demand. USU shifted to a web-based approach that allows students to sign up for new student orientation, with the information gathered at registration feeding into a list of recommended classes. Classes offered to students include select general education options, and registration now occurs upon a students’ decision to attend USU. Of the students who utilized the website registration approach, 70% kept the courses for which they registered prior to attending on-campus orientation. Further, the early registration allowed the registrar’s office to alert departments of the need for additional course sections earlier and in response to student needs. It also led to modifications in policies and procedures that had previously hindered timely preparation and course access. Understanding the student population and how students move through the curriculum allowed administrators to forecast course demand.



After registering for an intentional collection of courses, integration and a degree-level focus is reinforced in two orientation programs offered to students. The first is a required Student Orientation and Registration, or **SOAR**, where students come to campus to meet with advisors. They are given a book on “Becoming a Learner” written by a USU faculty member.<sup>3</sup> The book outlines why students are coming to college in the first place by offering a broad philosophy of learning “that will enable you to make sense out of everything you do in college” (p. xiv). The text focuses upon the role of students and the integrated nature of the degree, with college presented as a time of preparation. Sanders (2012) writes,

If job skills are not the most important outcome of a college education, then what is the purpose of earning a degree?...I finally figured out my answer: *The primary purpose of college isn't learning a specific set of professional skills; the primary purpose of college is to become a learner...*It's not just *that* you completed a degree; it is *how* you earned your degree and the cumulative effects of your education that matter (p. 2, 9).

Prior to enrollment in the Fall, students read the book and then come to Connections—the first-year experience course for USU. Two-thirds of students enroll in Connections which is built around **three big questions** which serve to help students determine what being an intentional student entails. In the Connections course is also where students first hear about the USU degree profile and can engage with the degree finder website which helps with career awareness.<sup>4</sup>

## Connections with Various Initiatives: Bringing the External In

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In 1997, the state of Utah established a Regents' Task Force on General Education. The group has representatives from each of the nine public institutions in Utah; oversees issues of transfer, articulation, and assessment in the state; and has helped develop state policy on general education. These faculty discipline majors' meetings have been occurring for 19 years now, with representatives for each of 32 disciplines. These groups meet annually to review syllabi and texts to coordinate courses among and across the institutions. Further, the state-wide task force established the “What is an Educated Person?” **conference series**, now in its 19<sup>th</sup> year that involves academics and others from around the state. These mechanisms have kept USU informed of the national conversations, incentivized majors to pay attention to their curricula, and addressed issues of transfer and articulation in Utah. All of these efforts inform USU's work with the DQP and Tuning, since it was not done alone or in isolation. The entirety of the state system was in the conversation, each campus in its own way.

At USU the work of integrating DQP and Tuning had implications for the integration of various initiatives at USU. The degree profiles provided a mechanism to connect with the **Essential Learning Outcomes** promulgated by the Association of American Colleges and Universities (AAC&U) (used by Utah as a LEAP state), but also with the advancement of High-Impact Practices. In a **presentation by Norm Jones** from USU, he raises the following points: “Is it content, or the application of content” that faculty are interested in promoting? He links to High-Impact Practices as a mechanism to help students “develop their proficiencies more than their book learning” by “creating opportunities for practice; linking content to a need to know; and emphasizing acquisition, deployment, and communication of knowledge through experience.” He divides High-Impact Practices into pedagogical approaches and institutional approaches that reinforce proficiencies and connect the work to the design of the general education rubrics that “identify proficiencies we expect a course to deliver without precisely defining content.” The achievement of learning outcomes is thusly intentionally designed into a course with faculty interested in understanding student's engagement with the practice considering questions such as “Has he or she demonstrated proficiencies in the discipline through the use of the tools of the discipline?” Not only does the effort integrate the tuned major with High-Impact Practices, but it also means that, as Norm Jones stated in his presentation,

<sup>3</sup> Sanders, M. L. (2012). *Becoming a learner: Realizing the opportunity of education*. Institute for Communication and Leadership.

<sup>4</sup> A copy of the instructor manual for Connections with exploration assignments can be found here: [http://www.usu.edu/connections/pdf/2016\\_manual.pdf](http://www.usu.edu/connections/pdf/2016_manual.pdf)

As we refine our templates and enact them in course rubrics, we can begin to map the way student practice builds proficiency over the curriculum. That means we can envision appropriate pathways to degrees. Through assessing the degree outcomes, we are asking if the students have sufficient mastery to be granted a degree.

The integration with assessment involves the senior thesis or capstone project as a demonstration of degree-level learning. The use of capstones is an easy step forward since USU has, in the words of a faculty member, “a considerable amount of senior capstone project opportunities that allow space for integration of knowledge and skill.” A faculty member who participated in tuning Physics stated the importance of the role of the capstone experience for students and the department.

Getting a physics degree at USU is not just about taking courses and passing tests. A USU physics degree is about learning how “to do” physics and, most importantly, learning how to teach oneself the physics needed to solve problems and create knowledge. All physics majors finish their USU degree by doing just that.<sup>5</sup>

The work of Tuning involved questions of how faculty were preparing students for the capstone experience, which “forced us back into the curriculum to explore these questions at a course level.” The Office of Analysis, Assessment & Accreditation saw promise in mapping backwards from the degree to individual student learning artifacts identified within courses. Such a move was considered by the office to be a “shift beyond compliance to viewing learning from an individual student level.” The focus on individual student assignments in courses would allow for mapping a student learning educational journey to the capstone in relation to the degree outcomes—an approach that was in sync with other efforts of the office to have various systems across the campus interface with each other in data alignment as well as the involvement of USU in the [Multi-State Collaborative](#).

Using the technologies available through Canvas, a learning management system, the USU Center for Innovative Design and Instruction is helping faculty map proficiencies for individual students based on individual course performance using the course goals. Good for the individual student, these can be aggregated for program assessment and used to demonstrate the proficiencies achieved by a student over time. As a faculty participant of Tuning stated, “it is not just about making a stronger course, but figuring out how that course fits into a larger curriculum as part of a degree—from that kernel of an idea, all kinds of connections can be made.”

## Final Thoughts

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The DQP was viewed as a summary of what the curriculum looks like, a summary that points to an intentional curriculum with learning experiences that build for students towards shared end goals. Degree profiles provide the flexibility for every major to get there in a different way by also exploring which “bits the major delivers on and which bits students need to acquire from somewhere else, such as general education.” Such an integrative conversation necessarily involved broad groups of faculty and has led to diminished friction between majors and colleges, easily integrating faculty from various USU centers across the state. Even adjunct faculty were actively involved because, in the words of an administrator “they are a vital and necessary part of the faculty and need to understand what particular role the course they are teaching fills.”

With such heavy faculty involvement, it is not surprising that DQP and Tuning efforts are appearing in the faculty promotion and tenure review process. At USU, each faculty member has a tailored role statement based on what they actually do and what they bring to the department.

Thus, there is no expectation of a set time spent on research, teaching, and service for *all* faculty—tenure review is based on determining if faculty members have met their *specific* role statement expectations. Tuning

<sup>5</sup> To view past Physics capstone projects see: [http://digitalcommons.usu.edu/phys\\_capstoneproject/](http://digitalcommons.usu.edu/phys_capstoneproject/)

and DQP have allowed faculty members to “connect teaching to a larger national and disciplinary project, which we can concretely talk about in the teaching section of our review.”

Administrators reinforce the efforts of USU faculty and view the work of DQP and Tuning as faculty-driven and bottom-up in nature. The role of administration has been one of providing moral and financial support for faculty to enact the “vision of what the curriculum can be.” Administrative support of faculty is important because “the faculty work environment is the student learning environment.” Administrators viewed the work as a culture building effort, one that “opened our eyes to the kinds of conversations we need to have across faculty lines” and that it has “become the way we think and solve problems.” They stressed that the “number one piece of our mission is ensuring student access to quality programming through providing multiple options for learning for the highly variable kinds of students we have.”

Utah State University has used Tuning and DQP processes and concepts to change the way it thinks and talks about students and curriculum. Using rubrics, degree maps, the First Year program, General Education, majors, and whole colleges, it is enacting its institutional degree profile in ways not often found in large research universities.

### Takeaways for Practice

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1. Actively involve faculty and staff in national conversations about higher education and then use the talents of students, staff, faculty, and administrators to solve local, shared curricular issues.
2. A clear curricular purpose helps students, advisers, and faculty understand how and why a degree is acquired and where different elements come in and out of degree paths.
3. Begin with questions, dialogue, and space for conversations. Development of shared understanding, mutually reinforcing roles, and opportunities for collaboration can develop from such an approach.
4. Curricular improvement is an organic process: plant seeds of change, encourage exploration and translation, permit experimentation. And share the change widely.



## About NILOA

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- The National Institute for Learning Outcomes Assessment (NILOA) was established in December 2008.
- NILOA is co-located at the University of Illinois and Indiana University.
- The NILOA website contains free assessment resources and can be found at <http://www.learningoutcomesassessment.org/>.
- The NILOA research team has scanned institutional websites, surveyed chief academic officers, and commissioned a series of occasional papers.
- One of the co-principal NILOA investigators, George Kuh, founded the National Survey for Student Engagement (NSSE).
- The other co-principal investigator for NILOA, Stanley Ikenberry, was president of the University of Illinois from 1979 to 1995 and of the American Council of Education from 1996 to 2001.

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