

RESOURCE GUIDE

Campus Colleagues,

Beginning this 2016–17 academic year, we are officially launching the full implementation of our university's Quality Enhancement Plan (QEP), Experience Learning. As we move forward with laying the groundwork and strengthening our campus culture for this new and engaging opportunity, we want you to get involved.

The purpose of this resource guide is to provide the information you need as a faculty or staff member or academic advisor to be a part of Experience Learning, and to equip you to engage our students in the opportunities surrounding experiential education here at the University of Tennessee.

- **Faculty**—You'll find everything you need to get started with incorporating experiential learning pedagogy into your courses through the Guiding Principles and Best Practices section (p. 20) as well as information about our faculty development programs and Smart Communities Initiative (pp. 16–20).
- **Staff**—Research shows that experiential education can happen through curricular, co-curricular, and extracurricular activities. Inside this guide you'll find information to help you support our students' educational pursuits as they relate to experiential learning, as well as information on leading campus opportunities based on our four Student Learning Outcomes outlined in the Assessment section (p. 30).
- Academic Advisors—On page 12 you'll find a campus map, developed through the lens of Experience Learning, to help you connect students to campus resources designed to support them in exploring their passions as well as pursuing their educational goals.

We are in the midst of building something exciting here at UT, and we want you to be a part of it. Our goal is for everyone to be knowledgeable about all the opportunities supported by Experience Learning and to have the information needed to engage students, alumni, and members of the surrounding community in this initiative.

Thank you, and GO VOLS!

Christopher E. Lavan

Assistant Provost for Experiential Learning & Teaching Innovation
Teaching & Learning Innovation







Experience Learning Mission Statement

Experience Learning will enhance opportunities for students to learn through actual involvement with problems and needs in the larger community. The purpose is to help students apply the knowledge, skills, and values learned in the classroom to real-world challenges. Learning occurs during the process of dealing with these problems and through guided reflection on these experiences, developing new skills, creating new knowledge, and clarifying values.

The pursuit of excellence in teaching, research, outreach, and engagement at the University of Tennessee is strengthened by the Volunteer spirit that promotes value creation, the generation of new ideas, and the preparation of capable and ethical leaders. These values embrace principles such as diversity, community engagement, and intellectual curiosity.

UT's mission, vision, and values are implemented through our strategic plan, *Vol Vision 2020*, which provides the framework for UT to reach its goal of becoming a Top 25 public research university. *Vol Vision* informed every step in the development of our QEP. The selection of Experience Learning as our QEP is an exciting opportunity to make learning transformative for our students.

Experience Learning advances the university's abilities to engage students in new educational experiences, generates new research and creative opportunities for students and faculty, supports faculty and staff development of new teaching and student engagement methods, and builds the university's capacity to better serve the community and our diverse constituents. In short, Experience Learning not only focuses on the student learning experience but also simultaneously and seamlessly integrates with our goal of becoming a Top 25 public research university.



The notion of learning by experiencing is not a new

concept. Notable educational analysts such as John Dewey, Carl Rogers, and David Kolb provide the groundwork for learning theories that focus on "learning through experience" or "learning by doing." Theorists address the question "Why is experience central to the learning process?" Dewey (1938) contended that traditional education's authoritarian preordained-knowledge approach was focused too much on delivering knowledge and too little on students' receipt of knowledge and their actual experiences in the classroom. At the same time, students who are unconstrained by educators, he argued, are frequently unable to structure their own learning experiences for maximum benefit.

Dewey advocated an educational pedagogy that provided students with carefully structured experiences that were immediately valuable to them and better enabled them to become

informed, effective members of democratic society.

Other theorists adapted Dewey's ideas in their own work. Kurt Lewin, considered the founder of modern social psychology, studied theory, group dynamics, and experiential learning. From this he formed his premise that learning is more effective when it is an active rather than a passive process (1943).

Psychologist David Kolb's theory of learning is influenced by the work of Dewey, Lewin, and Piaget. Kolb defines experiential learning as "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combinations of grasping and transforming experience" (1984, p. 41). He distinguishes experiential learning theory from cognitive and behavioral theories. Cognitive theories emphasize mental processes, and behavioral theories ignore subjective experience in the learning process. Kolb's theory is more holistic, emphasizing how experiences, including

cognitions, environmental factors, and emotions, influence the learning process.

Kolb's experiential learning model is based on his identification of two ways of grasping experience (concrete experience and abstract conceptualization) and two ways of transforming experience (reflective observation and active experimentation). His model represents a four-stage learning cycle. Concrete experiences provide information that serves as the basis for observations and reflection. We assimilate the information from our reflections, distilling them in abstract concepts. We then use the concepts to develop new theories about the world, which we actively test. By testing our ideas, we again gather information through our concrete experience, cycling back to the beginning of the process.

Many educators use Kolb's fourstage learning cycle as the basis for the development of a contemporary experiential learning pedagogy.

Clinical experiences

are hands-on experiences of a predetermined duration directly tied to an area of study, such as nursing students participating in a hospital-based experience or child development and teacher education students participating in day care and classroom settings.

Fellowship experiences

provide tuition or aid to support the training of students for a period of time. They are usually made by educational institutions, corporations, or foundations to assist individuals pursuing a course of study or research.

Fieldwork experiences

allow students to explore and apply content learned in the classroom in a specific field experience away from the classroom. Fieldwork experiences bridge educational experiences with outside communities that can range from neighborhoods and schools to anthropological dig sites and laboratory settings.

5 Internship experiences

are job-related and provide students and job changers with an opportunity to test the waters in a career field and also gain some valuable work experience. Internships can be for credit or not for credit, paid or unpaid.

Apprenticeship experiences

provide students with an opportunity to try out a job, usually with an experienced professional in the field to act as a mentor.

12 Types of Experiential Learning at UT

Experiential learning courses, activities, and programs come in different forms. Each has particular features that distinguish experiential learning from other forms. Northern Illinois University's Faculty Development and Instructional Design Center (n.d.) provides an example of the wide variety of experiential learning forms that were used to guide our QEP development. All of these experiential learning opportunities are available to students based on their academic interest and personal passions, and are led by trained faculty and educators at UT.

6 Practicum experiences

are often a required component of a course of study and place students in a supervised and often paid situation. Students develop competencies and apply previously studied theory and content, such as school library media students working in a high school library or marketing majors working in a marketing

research firm.

Service-learning experiences

are distinguished by being mutually beneficial for both student and community. Service-learning is growing rapidly and is considered a part of experiential education by its very nature of learning, performing a job within the community, and serious reflection by the student. Service-learning involves tackling some of society's most complex issues such as homelessness, poverty, lack of quality education, pollution, etc. One of the goals of service-learning is to help students become aware of these issues and to develop good citizenship through learning how to help address these problems.

12 Volunteer experiences

allow students to serve in a community primarily because they choose to do so. Many serve through a nonprofit organization—sometimes referred to as formal volunteering—but a significant number serve less formally, either individually or as part of a group. Because these informal volunteers are much harder to identify, they may not be included in research and statistics on volunteering.

Undergraduate research opportunities

across all disciplines are increasingly common. With strong support from the National Science Foundation and the research community, scientists are reshaping their courses to connect key concepts and questions with students' early and active involvement in systematic investigation and research. The goal is to involve students with actively contested questions, empirical observation, cuttingedge technologies, and the sense of excitement that comes from working to answer important questions.

Study abroad experiences

offer students a unique opportunity to learn in another culture, within the security of a host family and a host institution carefully chosen to allow the transfer of credit to a student's degree program.

Simulations and gaming/role-playing

aim to imitate a system, entity, phenomenon, or process. They attempt to represent or predict aspects of the behavior of the problem or issue being studied. Simulation can allow experiments to be conducted within a field situation to show the real behaviors and outcomes of possible conditions. But simulations cannot simply be regarded as a homogeneous collection of approaches. While overlaps between activities exist (Yorke & Hollinshead, 1981), previous studies have identified three specific types of simulation-based learning: role play, gaming, and computer simulation (Feinstein et al., 2002: Hsu, 1989). Each type is different in its composition and utility (Lean et al., 2006).

Student teaching experiences

provide student candidates with an opportunity to put into practice the knowledge and skills they have been developing in the preparation program. Student teaching typically involves an on-site experience in a partner school with opportunities for formal and informal candidate reflection on their teaching experience.

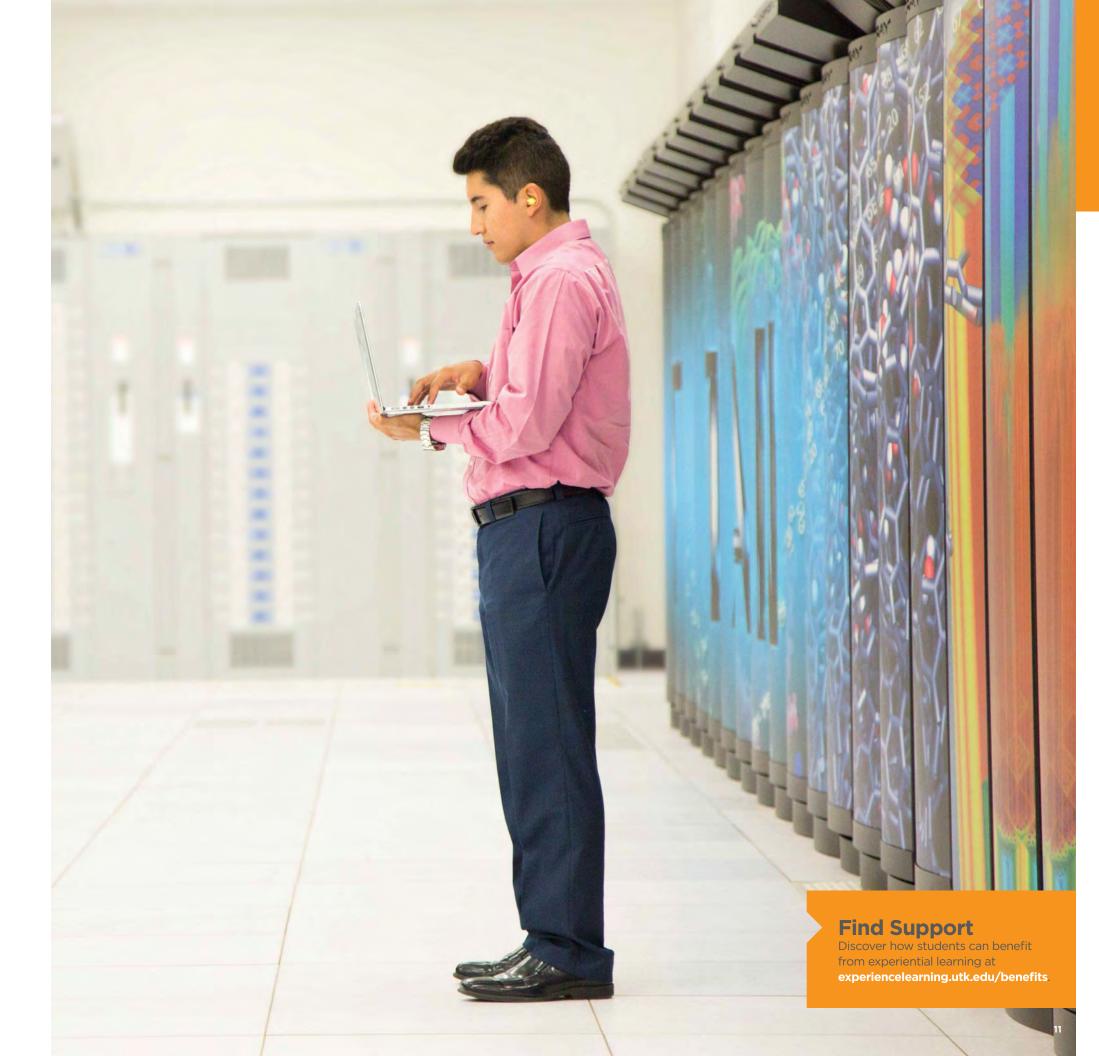
Benefits to Students

Students learn through active engagement with and reflection on actual real-world problems.

In experiential classrooms, "students can process real-life scenarios, experiment with new behaviors, and receive feedback in a safe environment. Experiential learning provides opportunities for students to relate theory to practice and to analyze real-life situations in light of course material" (Lewis & Williams, 1994, p. 8).

Another crucial element of experiential learning is its interdisciplinary nature. Subjects are not kept in discrete unconnected bundles because compartmentalization does not reflect the real world. The experiential classroom works to create an interdisciplinary learning experience that mimics real-world learning (Wurdinger, 2005). Keys to a successful experiential learning experience are the course design, implementation strategy, and recognition of the reciprocal nature of instructor and student roles.

Experiential learning is an immersive method of instruction, deeply engaging students to apply classroom knowledge to experience and then encouraging their reflection to develop new skills, attitudes, and ways of thinking (Lewis & Williams, 1994). Full immersion in the experience can result in the student's transformation as they explore and examine their own values.



KEY CAMPUS PARTNERS

The following units provide direct or indirect support for experiential learning opportunities at UT.



Office of Undergraduate Research ugresearch.utk.edu

Supports faculty who engage students in undergraduate research. Provides curriculum support, grant writing assistance, and funding for research assistants. Help us expand Explore—the research opportunities database—at **ugexplore.utk.edu**.



First-Year Studies fys.utk.edu

Provides interdisciplinary outlets for faculty to engage students in experiential learning pedagogies of their own design. Program outlets include FYS 129, Life of the Mind, and FYS 101.

Office of National Scholarships & Fellowships

Provides information and tailored advising to support students applying for nationally competitive funding opportunities.

Office of Information Technology oit.utk.edu/instructional

Offers technology solutions to help faculty keep in touch with students online and integrate technology into teaching and learning.

Student Success Center studentsuccess.utk.edu

Helps students find tutors, academic coaches, and other academic support programs. Referrals from faculty for supplemental instruction and other programs are encouraged.

Undergraduate Academic Advising advising.utk.edu

Faculty and professional advisors provide effective guidance so students can maximize their educational opportunities and make critical decisions regarding education, career, and life goals.



Center for Leadership & Service

leadershipandservice.utk.edu

Educates and engages students in curricular, co-curricular, and collaborative leadership and service experiences and houses a shared resource to track student volunteer hours across campus.



Center for Career Development career.utk.edu

Refer your students for help with choosing majors and careers or finding jobs and internships.



Programs Abroad Office studyabroad.utk.edu

Advises students on study abroad, internship, and service learning academic programs. Works with academic units and faculty to create new UT credit-bearing international experiences for students.



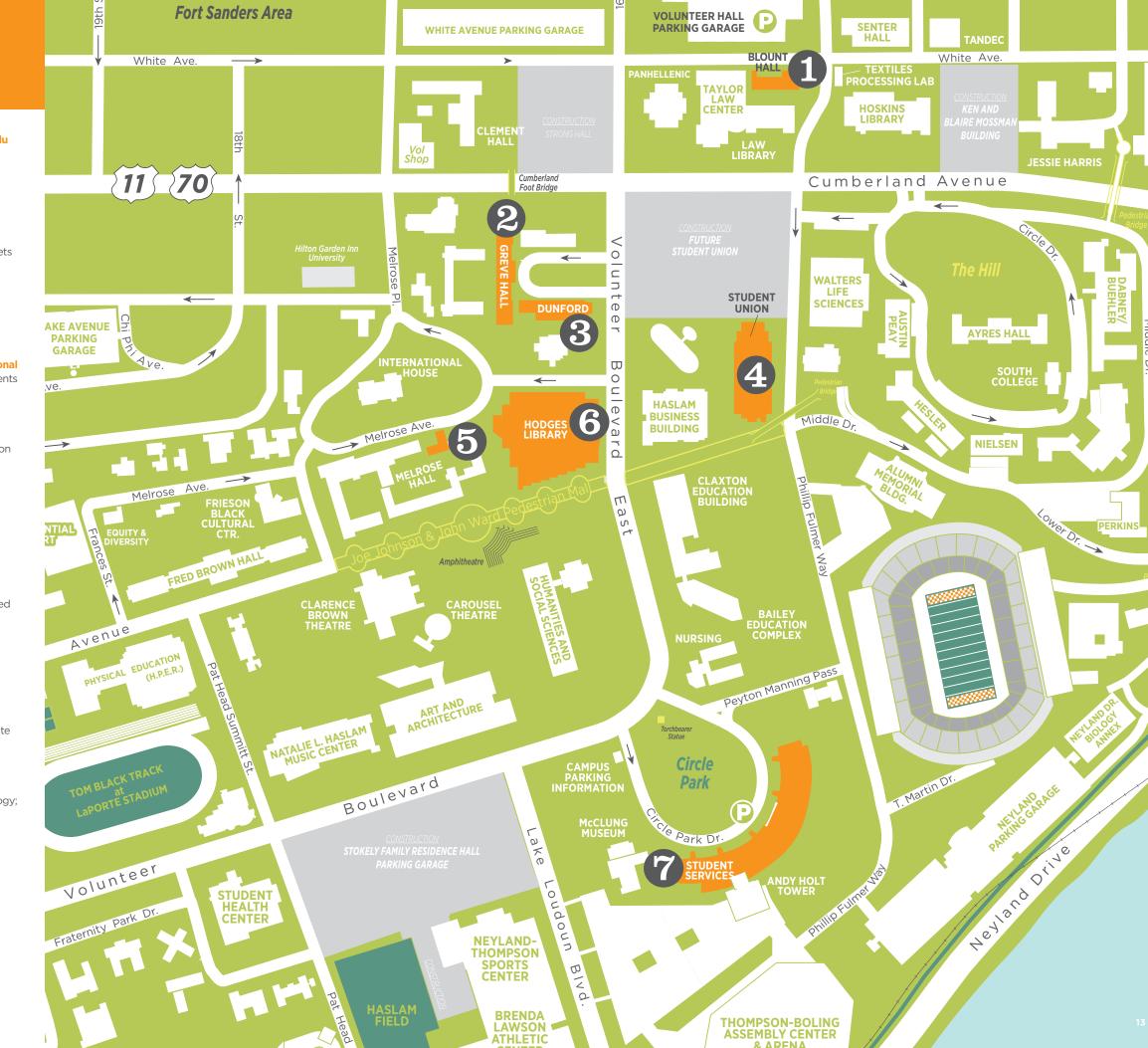
UT Libraries library.utk.edu

Advances learning, research, and engagement through instruction; subject-specific and interdisciplinary expertise; collections; technology; and classroom, study, and collaborative spaces.



Living & Learning Communities housing.utk.edu/LLC

Find and engage with driven and talented students who live in residential neighborhoods associated with your college or interdisciplinary interests.



I. NEED TO KNOW

- There are twelve types of experiential learning. Each provides opportunities for robust and valuable student learning.
- Experience Learning supports student learning in every college and every major at UT.
- Incorporating Experience Learning into your course or activity can be beneficial to our students, both now and after they graduate.
- There are trained faculty and staff educators who are ready to assist you in developing any type of experiential learning you see listed in this guide.
- Use the Key Campus Partners map (p. 12) to find offices or units that can help you develop or connect experiential learning opportunities.
- Contact us at *experiencelearning@utk.edu* or 865-974-3867 if you have questions that are not answered within this guide or if you want to talk about an Experience Learning topic.

Notes



Faculty Development Program

Faculty members will play a lead role in the success of Experience Learning since an undeniable relationship exists between the quality of faculty involvement and the level of student achievement. Yet experiential pedagogies require a different approach to teaching than is common in many college classes.

Instructors assume the role of facilitator

and must create a less teacher-centric environment where students feel safe to engage in a process of self-discovery and structured reflection. Given the demands and exciting opportunities associated with experiential learning, faculty development is critically important for instructors to

feel prepared and supported in these pursuits.

Experiential learning encourages faculty to consider other

innovative yet
potentially challenging
changes to their
teaching

such as new uses for technology, redesigning the use of physical classroom space, and restructuring how class time is spent.

Faculty development is also essential to fulfilling the university's mission to embody excellence in teaching (University of Tennessee, 2014).

The *Vol Vision* strategic plan similarly highlights the need to build an infrastructure for recognizing faculty achievements and to consider new pedagogies for enhancing undergraduate student engagement (University of Tennessee, 2011).

Workshops & Presentations

Workshops, presentations, and other events about experiential learning will be promoted to the campus community and open to all instructors. Workshops are designed around the guiding principles and best practices for experiential learning as well as emerging research on this topic.

These events will address the effective uses of technology, classroom spaces, classroom-based time, student activities outside formal classroom times, and service-learning activities to enhance student learning.

When appropriate, workshops and presentations may feature invited guests such as faculty who successfully use experiential learning pedagogies (e.g., brown-bag presentations) or other invited speakers.

Academic departments may request specialized presentations to learn more about discipline-specific experiential learning methods and how to infuse more experiential learning into their curricula.



Faculty Fellows Program

Instructors seeking more intensive training in experiential learning may apply to the new Faculty Fellows program. A cohort of faculty fellows will be selected each year.

Fellows will attend several workshops and presentations on experiential learning and receive regular individualized consultation and mentoring from the faculty development coordinator, Tennessee Teaching and Learning Center staff, faculty leaders, and others. They will agree to redesign at least one of their classes to incorporate more experiential learning and to conduct direct assessment of student learning in that class using Experience Learning assessment tools (see p. 30).

Faculty fellows will be connected to units such as the Office of Information Technology Instructional Support (OITIS) or the UT Libraries for assistance with redesigning their classes, depending on their unique needs and goals. UT Libraries is developing online modules and virtual learning environments for students and faculty at UT, while OITIS helps instructors with integrating and effectively using technology in their teaching.

Faculty participation is incentivized through course releases, stipends for classroom enhancements or supplies, funds to travel to professional development conferences and workshops, and campus-wide recognition. Faculty fellows will also receive consideration for the Faculty Leaders program.

Get Connected Teaching and Learning Innovation supports these and other programs. Visit teaching.utk.edu for information.

Faculty Leaders Program

This new program recognizes instructors who have employed effective experiential learning pedagogy. A limited number of faculty leaders are selected annually following a campus-wide solicitation of applications and nominations.

Faculty leaders serve as Experience Learning ambassadors by encouraging experiential learning. They act in an advisory role to instructors who are interested in integrating more experiential learning opportunities into their classes.

Leaders will be spotlighted on campus and provided with incentives such as course releases and honoraria in recognition of their achievements and engagement with the program.

Mentoring & Consultation

Faculty leaders serve as mentors to faculty fellows and are available to talk with other instructors with similar teaching interests. Once faculty fellows complete their program and successfully integrate experiential learning pedagogies into their courses, they will be encouraged to serve as faculty leaders and provide mentoring to subsequent cohorts of faculty fellows.

Faculty leaders and faculty fellows are expected to serve as peer facilitators within their home departments and colleges. In this role, they assist colleagues with integrating more experiential learning into classes and co-curricular activities.

Smart Communities Initiative

A part of the university's Teaching and Learning Innovation, the Smart Communities Initiative (SCI) extends rigorous community-based learning experiences to students in up to twenty courses each year. Under faculty guidance, students apply research and inquiry to a variety of problems identified by communities across the state. Examples have included public health students studying factors that facilitate aging in place, geology students conducting an environmental assessment for an upcoming "urban wilderness," and architecture students creating redevelopment concepts for a blighted industrial building.

This dramatic expansion of service-learning opportunities for students helps meet a specific priority area outlined in *Vol Vision* (visit **top25.utk.edu**). It also addresses specific needs identified in NSSE data and in a white paper authored by the Student Forum on Learning (2011). NSSE data show that our students frequently lag behind those at our peer institutions in measures of participation in community-based projects or community service. The white paper highlights the limited number of service-learning and community engagement opportunities available to students.

Finally, SCI clearly advances the mission of Experience Learning to enhance student learning opportunities through actual involvement with the problems and needs in the larger community.

SCI courses take one of the following formats:

A standard enrollment course specializing in a field of study related to the project.

These courses are composed of ten to thirty students and may be entirely or partially dedicated to the project. They are most suitable to projects that can benefit from a variety of different ideas and perspectives grounded in disciplinary or interdisciplinary theory, or large projects that need to be divided into subcomponents.

An internship course in a field of study related to the project.

These courses entail a faculty-recommended student working under the close supervision of a faculty member in a discipline relevant to the project. This format is most appropriate for small-scale projects or single components of a large project.

An interdisciplinary research team of two to four students.

These courses entail two to four faculty-recommended students working under the guidance of a faculty member in a discipline relevant to the project. This format is flexible and serves a range of project types.

Additional information about participation in SCI:

SCI faculty and their students work through a variety of research- and inquiry-based approaches to examine problems, research best practices, identify existing community needs and assets, engage citizens and stakeholders, pitch new ideas and creative approaches, and test possible solutions.

Throughout the SCI year, participating SCI faculty and students engage in multiple large-and small-group interdisciplinary dialogues about the work they are doing in the partner community. Each SCI year culminates in a final report, delivered to the community partner, which compiles the results of all the SCI course projects, including students' inquiry processes and recommendations for addressing the problem.

Project work is showcased throughout the year through university and community press releases. The year culminates in a wrap-up event featuring project final and next steps for the partner community.



Get Connected

For more information about teaching a course within the SCI, visit servicelearning.utk.edu.

Guiding Principles and Best Practices

Guiding principles and best practices based on empirical research provide a pragmatic grounding for the development of an expanded experiential learning program at UT.

Simple participation in a prescribed set of learning experiences does not make something experiential. The experiential methodology is not linear, cyclical, or even patterned. It is a series of working principles, all of which are equally important or must be present to varying degrees at some time during experiential learning. These principles are required no matter what activity the student is engaged in or where the learning takes place (Warren, Sakofs & Hunt, 1995, p. 243).

Chapman, McPhee, and Proudman (1992) provide a list of guiding principles garnered from the literature that should be present to define a method as experiential.

Mixture of content & process

There must be a balance between the experiential activities and the underlying content or theory.

Engagement in purposeful endeavors

In experiential learning, since the learner is the teacher, there must be meaning for students in the learning. Learning activities must be personally relevant to students.

Absence of excessive judgment

The instructor must create a safe space for students to work through their own processes of self-discovery.

Encouraging the big-picture perspective

Experiential activities must allow students to make connections between the learning they are doing and the world. Activities should help build in students the ability to see relationships in complex systems and the capability to work within them.

The role of reflection

Students should be able to reflect on their own learning, bringing theory to life and gaining insight into themselves and their interactions with the world.

Creating emotional investment

Students must be fully immersed in the experience, not merely doing what they feel is required of them. Ideally, students will be invested to the extent that the topic being learned and the experience combine to create a powerful reaction within the learner.

The reexamination of values

By working within a space that has been made safe for self-exploration, students can begin to analyze and even alter their own values. Learning outside one's perceived comfort zones

Students often learn more when they have opportunities to learn outside their individual comfort zones. This refers not only to the physical environment but also the social environment, and might include being held accountable for one's actions and their consequences.

8

The presence of meaningful relationships

One part of getting students to see their learning in the context of a world view is to start by showing the important relationships between the learner, the teacher, and the learning environment.



Intention

All parties, from the outset, must be clear about why experience is the chosen approach to the learning that is to take place and to the knowledge that will be demonstrated, be applied, or result from it. Intention represents the purposefulness that enables experience to become knowledge and, as such, is deeper than the goals, objectives, and activities that define the experience.

Preparedness and **Planning**

Participants must ensure that they enter the experience with a foundation of sufficient resources to support a successful experience. They must also focus from the earliest stages of the experience or program on the identification of intentions, adhering to them as goals, objectives, and activities that are clearly defined. The resulting plan should include those intentions and be referred to on a regular basis by all parties. At the same time, it should be flexible enough to allow for adaptations as the experience unfolds.

Authenticity The experience must

have a real-world
context or be useful and
meaningful in reference
to an applied setting or
situation. It should be
designed in concert with
those who will be affected
by or use it, or in response
to a real situation.

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Reflection

Reflection is the element that transforms simple experience to a learning experience. For knowledge to be discovered and internalized, the learner must test assumptions and hypotheses about the outcomes of decisions and actions taken, then weigh the outcomes against past learning and future implications. This reflection process is integral to all phases of experiential learning, from identifying intention and choosing the experience to considering preconceptions and observing how they change as the experience unfolds. Reflection is also an essential tool for adjusting the experience and measuring outcomes.

Orientation and Training

For the full value of the experience to be accessible to both the learner and the learning facilitator, and to any involved organizational partners, it is essential that they be prepared with important background information about each other and about the context and environment in which the experience will operate. Once that baseline of knowledge is addressed, ongoing structured development opportunities should be included to expand the learner's appreciation of the context and skill requirements of their work.

Monitoring & Continuous Improvement

Any learning activity will be dynamic and changing, and the parties involved all bear responsibility for ensuring that the experience, as it is in process, continues to provide the richest learning possible while affirming the learner. It is important that there be a feedback loop related to learning intentions and quality objectives, and that the structure of the experience be sufficiently flexible to permit change in response to that feedback. While reflection provides input for new hypotheses and knowledge based in documented experience, other strategies for observing progress against intentions and objectives should also be in place. Monitoring and continuous improvement represent the formative evaluation tools.

Assessment & Evaluation

Outcomes and processes should be systematically documented with regard to initial intentions and quality outcomes. Assessment is a means to develop and refine the specific learning goals and quality objectives identified during the planning stages of the experience. In contrast, evaluation provides comprehensive data about the experiential process as a whole and whether it has met the intentions that suggested it.

Acknowledgment

Recognition of learning and impact occur throughout the experience by way of the reflection and monitoring processes and through reporting, documentation, and sharing of accomplishments. All parties to the experience should be included in the recognition of progress and accomplishment. Culminating documentation and celebration of learning and impact help provide closure and sustainability to the experience.

Find Support

Teaching and Learning Innovation has helpful resources on teaching using experiential learning pedagogies and offers consulting services for curriculum development. Call 865-974-3807, visit teaching.utk.edu, or email tli@utk.edu.

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II. NEED TO KNOW

- The Faculty Development program seeks to equip faculty members and instructors with the information they need in order to successfully incorporate experiential learning strategies into their courses.
- The Faculty Fellows program seeks to prepare newer faculty members with the knowledge they need to effectively structure any course into an Experience Learning course.
- The Faculty Leaders program seeks to recognize and highlight faculty members who have successfully incorporated experiential learning pedagogy into their courses.
- Members of the Faculty Leaders program will serve as advisors to other faculty members interested in incorporating experiential learning in their courses.

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Experiential Learning and Communities

Research demonstrates positive outcomes of experiential learning related to civic and community outcomes. This includes a variety of well-organized experiences that have a positive effect on students' sense of social responsibility and citizenship skills (Astin & Sax, 1998; Eyler & Giles, 1999; Gray et al., 2000; Kahne & Sporte, 2008; Kahne & Westheimer, 2003; Levine, 2010; Moely, McFarland, et al., 2002).

Substantial, meaningful engagement in the community through service-learning and experiential community engagement activities enhances students' commitment to community service (Astin et al., 2000; Astin, Sax & Avalos, 1999; Eyler & Giles, 1999; Fenzel & Peyrot, 2005; Markus, Howard & King, 1993; Vogelgesang & Astin, 2005).

Experience Learning and Faculty/Staff/ Student Support Initiatives

Today's educators generally recognize that pedagogies other than traditional lecturing can promote deeper learning. A number of pedagogies designed to facilitate experiential learning have been implemented and improved over time. Common features of these pedagogies include addressing real-world questions, issues, and controversies; developing research and communication skills; problem solving; collaborating in and beyond the classroom; fostering deep understanding of content knowledge; and participating in the public creation and improvement of ideas and knowledge (Jones & Pfeiffer, 1998).

Fundamentally, experiential learning is learning through reflection on structured activities, in contrast to rote or didactic learning. Wurdinger and Carlson (2010) contend that most college faculty teach by lecturing exclusively because few learned other pedagogies in graduate school. The authors urge supplementing lectures by inviting students' active participation in the learning process "through discussion, group work, hands-on participation, and applying information outside the classroom" (p. 2). High-impact experiential learning programs enhance the classroom environment to support student learning.

We must recognize that experiential learning happens in curricular, cocurricular, and extracurricular activities.



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It is important
then to create
a structure that
seeks to identify,
support, sustain,
and recognize
the full breadth
of experiential
learning at the
University of
Tennessee.

3

This third initiative therefore uses a multifaceted approach to promote, enhance, and expand experiential learning activities and projects.

Visit experiencelearning.utk.edu/ staff-support for information on how staff and administrators can lead and develop Experience Learning opportunities at UT.

III. NEED TO KNOW

- Staff members are educators, too. Experience Learning can provide support for those staff members who teach and educate our students.
- Leading our students through structured reflection after they complete their planned experiential learning activity is key to long-term success.
- Review the Student Learning Outcomes (p. 38) to ensure the program, activity, or opportunity you coordinate is considered for Experience Learning support.

Notes		

2 3.





Direct Assessment

Direct assessment is critical for evaluating Experience Learning's impact on student learning at UT. This assessment will use a series of rubrics designed around each of the student learning outcomes and associated benchmarks. The rubrics are adapted from the Association of American Colleges and Universities' Valid Assessment of Learning in Undergraduate Education (VALUE) rubrics.

Each rubric is intended to evaluate students' level of competence across key domains such as critical and creative thinking, global learning, oral communication, teamwork, and quantitative reasoning. The rubrics have demonstrated good reliability and validity and are popular tools utilized by institutions throughout the United States. We have adopted these rubrics and adapted them for use as tools to evaluate our four student learning outcomes.

Student learning outcomes

Students will value the importance of engaged scholarship and lifelong learning.

Students will develop and apply knowledge, values, and skills in solving real-world problems.

Students will utilize structured reflection as a part of the inquiry process.

Students
will work
collaboratively
with others.

Assessment of progress on these learning outcomes will include direct and indirect measures.

Desired Student Learning Outcomes



Students will value the importance of engaged scholarship and lifelong learning.

BENCHMARKS (students will):

- 1. Show evidence of interest in the problems of society (needs of others).
- **2.** Value (i.e., offer a positive attitude toward) the use of engaged scholarship to address societal problems.
- **3.** Express a desire to utilize engaged scholarship.
- **4.** Demonstrate a commitment to lifelong learning.

For students to truly commit to engaged scholarship and lifelong learning, they must acknowledge and come to value the potential importance and benefit that can be derived from such a commitment. Students, as future graduates, would not be expected to invest the time and effort required to continually engage real-world problems unless they find such engagement to be of importance for members of the communities confronting the problem as well as something they personally value. Overall, the first student learning outcome focuses on and assesses the development and magnitude of the value students place on engaged scholarship and lifelong learning.



Students will develop and apply knowledge, values, and skills in solving realworld problems.

BENCHMARKS (students will be able to):

- 1. Clearly describe a real-world problem amenable to engaged scholarship.
- **2.** Analyze literature (content/research methods) related to the problem.
- **3.** Formulate an inquiry approach driven by questions relevant to the problem.
- **4.** Address potential ethical issues related to addressing the problem.
- **5.** Employ the selected inquiry approach to a. Collect and analyze data.
 - b. Draw conclusions/inferences (interpret).
- **6.** Apply findings toward addressing the problem.

Beyond acknowledging and valuing the importance of experiential and lifelong learning, the experiential learning process requires active student engagement through the development and application of knowledge, values, and skills in solving real-world problems. Students must encounter a problem, assess the needs of the community affected by the problem, and then enlarge and apply their knowledge, skills, and dispositions toward problem solutions. Overall, the second student learning outcome focuses on and assesses the extent to which students are engaging in real-world problems and developing and applying their knowledge, skills, and values toward understanding and solving the problem.



Students will work collaboratively with others.

4:

Students will utilize structured reflection as a part of the inquiry process.

BENCHMARKS (students will):

- 1. Participate in collaborative interactions.
- 2. Support group processes.
- 3. Be attentive to the ideas of others.
- **4.** Offer relevant questions and comments.
- **5.** Meet obligations for group assignments on a timely basis.

Real-world problems are often complicated, multifaceted, and deeply interrelated with other societal problems. Such problems are not amenable to quick fixes by single agents acting alone. Real-world problems often require the collaboration of experts from multiple fields working in concert with the broad constituencies of increasingly diverse communities. Students therefore must become adept at working in a collaborative manner with a range of peers, relevant experts, and a diverse set of community members. Overall, the third student learning outcome focuses on and assesses students' ability to work collaboratively on a real-world problem in concert with a broad range of individuals in a variety of relevant roles and contexts.

BENCHMARKS (students will be able to):

- 1. Use structured reflection in assessing an engaged inquiry experience.
- 2. Assess what they have learned about themselves as an individual (self-awareness) from experiences.
- **3.** Assess what they have learned about themselves as members of the broader community.
- **4.** Use reflection on the inquiry process to guide lifelong learning.

Experiential learning requires students to actively engage in reflection during and after the process of addressing a real-world problem. Students are expected to reflect in action—reflection that occurs when students are engaging a problem and thinking about the knowledge, skills, and dispositions that they constantly must interactively draw upon to address the problem. Students are also expected to reflect on action—reflection that occurs when students think about their overall experience, especially from the perspective of the lessons they have learned and can carry forward when addressing future problems. Overall, the fourth student learning outcome is focused on and assesses the extent to which students are engaged in reflection throughout and beyond their efforts to address a real-world problem.

Direct Assessment Rubric

SIC

Students will value the importance of engaged scholarship and lifelong learning.

BENCHMARK	4 ADVANCED	3 ACCOMPLISHED	2 DEVELOPING	1 BEGINNER
Show evidence of interest in the problems of society (needs of others)	Explores a real-world problem in depth, yielding a rich awareness indicating intense interest in the problem and helping those affected.	Explores a real-world problem in depth, yielding insight or information indicating interest in the problem.	Explores a real-world problem with some evidence of depth, providing occasional insight or information indicating mild interest in the problem.	Explores a real-world problem at a surface level, providing little insight or information beyond the basic facts indicating low interest in the problem.
Value (i.e., offer a positive attitude toward) the use of engaged scholarship to address societal problems	Completes required work; generates and pursues opportunities to expand knowledge, skills, and abilities beyond required work.	Completes required work; identifies and pursues opportunities to expand knowledge, skills, and abilities beyond required work.	Completes required work; identifies opportunities to expand knowledge, skills, and abilities beyond required work.	Completes required work.
Demonstrate a desire to utilize engaged scholarship	Articulates a deep recognition of the potential value of engaged scholarship to address the real-world problem as well as the potential benefits beyond the immediate project.	Recognizes the potential benefits of engaged scholarship to address the real-world problems and acknowledges potential benefits beyond the immediate project.	Recognizes the potential benefits of engaged scholarship to address the real-world problem.	Cannot articulate the potential benefits of engaged scholarship but is open to utilizing it to address the real-world problem.
Demonstrate a commitment to lifelong learning	Educational interests and pursuits exist and flourish outside classroom requirements. Knowledge and experiences are pursued independently that build on classroom requirements.	Beyond classroom requirements, pursues additional knowledge and actively pursues independent educational experiences.	Beyond classroom requirements, pursues additional knowledge and shows interest in pursuing independent educational experiences.	Begins to look beyond classroom requirements, showing interest in pursuing knowledge independently, but takes no action.

SLO 2.

Students will develop and apply knowledge, values, and skills in solving real-world problems.

BENCHMARK	4 ADVANCED	3 ACCOMPLISHED	2 DEVELOPING	1 BEGINNER
Clearly describe a real-world problem amenable to engaged scholarship	Real-world problem is stated clearly and described comprehensively, delivering all relevant information necessary for full understanding.	Real-world problem is stated, described, and clarified so that under- standing is not seriously impeded by omissions.	Real-world problem is stat- ed but description leaves some terms undefined, ambiguities unexplored, or context unknown.	Real-world problem is stated without clarification or description.
Analyze literature (content/research methods) related to the problem	Information is taken from sources with enough interpretation and evaluation to develop a comprehensive analysis or synthesis. Viewpoints of experts are questioned thoroughly.	Information is taken from sources with enough interpretation and evaluation to develop a coherent analysis or synthesis. Viewpoints of experts are sometimes questioned.	Information is taken from source(s) with some interpretation and evaluation, but not enough to develop a coherent analysis or synthesis. Viewpoints of experts are rarely questioned.	Information is taken from sources without any interpretation and evaluation. Viewpoints of experts are not questioned.
Formulate an inquiry approach driven by questions relevant to the problem	Develops a logical, consistent approach to address the real-world problem, recognizes consequences of this approach and can articulate reasons for choosing this approach.	Develops a logical, consistent approach to address the real- world problem.	Considers and rejects less appropriate approaches to address the real-world problem.	Considers only a single approach and uses it to address the real-world problem.
Recognize potential ethical issues related to addressing the problem	Recognizes ethical issues when presented in a complex, multilayered context AND can recognize relationships among the issues.	Recognizes ethical issues when presented in a complex, multilayered context OR can grasp relationships among the issues.	Recognizes basic and obvious ethical issues and grasp some of the complexities or interrelationships among the issues.	Recognizes basic and obvious ethical issues but fails to grasp complexity or interrelationships.
Employ the selected inquiry approach Collect and analyze data Draw conclusions/ inferences (interpret)	Organizes and synthesizes evidence to reveal insightful and meaningful information critical to addressing the real-world problem then states a specific conclusion that is a logical extrapolation from these findings.	Organizes evidence to reveal important information related to the real-world problem then states a conclusion based solely on these findings.	Organizes evidence, but the organization is not effective in revealing im- portant information related to the real-world problem then states a general con- clusion that is beyond the scope of the findings.	Lists evidence, but it is not organized or is un- related to the real-world problem then states an ambiguous or unsup- ported conclusion.
Apply findings toward addressing the problem	Applies knowledge and skills to implement sophisticated, appropriate, and workable solutions to address the real-world problem.	Plans and evaluates more complex solutions to address the real- world problem.	Formulates practical yet elementary solutions to address the realworld problem.	Formulates illogical or unsupported solutions to the real-world problem.

Direct Assessment Rubric

SLO

Students will work collaboratively with others.

BENCHMARK	4 ADVANCED	3 ACCOMPLISHED	2 DEVELOPING	1 BEGINNER
Participate in collaborative interactions	Supports a constructive team climate by doing all of the following: • Treats team members respectfully. • Conveys a positive attitude about the team and its work. • Expresses confidence about the importance of the project and the team's ability to accomplish it. • Provides assistance and encouragement to team members.	Supports a constructive team climate by doing any three of the following: • Treats team members respectfully. • Conveys a positive attitude about the team and its work. • Expresses confidence about the importance of the project and the team's ability to accomplish it. • Provides assistance and encouragement to team members.	Supports a constructive team climate by doing any two of the following: Treats team members respectfully. Conveys a positive attitude about the team and its work. Expresses confidence about the importance of the project and the team's ability to accomplish it. Provides assistance and encouragement to team members.	Supports a constructive team climate by doing any one of the following: Treats team members respectfully. Conveys a positive attitude about the team and its work. Expresses confidence about the importance of the project and the team's ability to accomplish it. Provides assistance and encouragement to team members.
Support group processes	Engages team members in ways that facilitate their contributions to the project by both constructively building upon or synthesizing the contributions of others as well as noticing when someone is not participating and inviting them to engage.	Engages team members in ways that facilitate their contributions to the project by constructively building upon or synthesizing the contributions of others.	Engages team members in ways that facilitate their contributions to the project by restating the views of other team members and/or asking questions for clarification.	Engages team members by taking turns and listening to others without interrupting.
Be attentive to the ideas of others	Helps the team move forward by articulating the merits of team members' ideas or proposals.	Offers alternative solutions or courses of action that build on the ideas of others.	Offers new suggestions to advance the work of the team.	Shares ideas but does not advance the work of the team.
Offer relevant questions and comments	Tailors communication strategies to effectively listen and respond to the diverse perspectives of others.	Frequently shows the ability to listen and respond effectively to the diverse perspectives of others.	Occasionally shows the ability to listen and respond effectively to the diverse perspectives of others.	Rarely shows the ability to listen and respond to the diverse perspectives of others.
Meet obligations for group assignments on a timely basis	Completes all assigned tasks by deadline; work is thorough, comprehensive, and advances the project. Proactively helps team members complete their assigned tasks to a similar level of excellence.	Completes all assigned tasks by deadline; work is thorough, comprehensive, and advances the project.	Completes all assigned tasks by deadline; work advances the project.	Completes all assigned tasks by deadline.

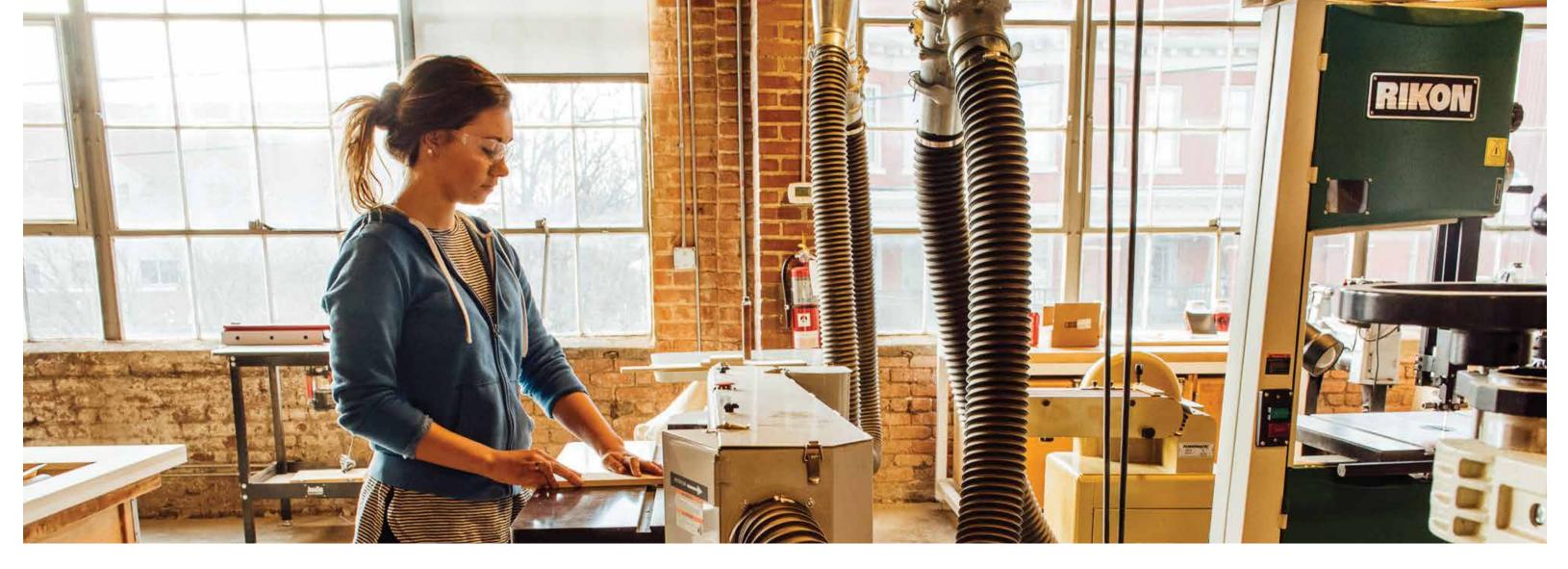
SIO

4:

Students will utilize structured reflection as a part of

the inquiry process.

BENCHMARK	4 ADVANCED	3 ACCOMPLISHED	2 DEVELOPING	1 BEGINNER
Use structured reflection in assessing an engaged inquiry experience	Meaningfully synthesizes connections among experiences to deepen understanding of the inquiry process.	Identifies several specific examples of experiences that contributed to deeper understanding of the inquiry process.	Identifies limited number of specific examples of experiences that contributed to deeper understanding of the inquiry process.	Recognizes connections among experiences but cannot articulate specific impact on own learning.
Assess what they have learned about themselves as an individual (self-awareness) from experiences	Demonstrates a developing sense of self as a learner to build upon experiences to respond to new and challenging realworld problems.	Thoroughly evaluates changes in own learning over time and recognizes the complex factors that impacted learning in prior experiences.	Describes strengths and areas for improvement within prior experiences to increase effectiveness.	Describes own performance with general descriptors of success and failure.
Assess what they have learned about themselves as members of the broader community	Thoroughly describes what they have learned about self because of involvement with broader community and demonstrates a clear community to ongoing community engagement.	Some reflection on what they have learned about self because of involvement with broader community and demonstrates a commitment to ongoing community engagement.	Awareness of learning about self because of involvement with broader community but cannot articulate specific examples. No articulation of a commitment to ongoing community engagement.	No awareness of learning about self because of involvement with broader community and no commitment to ongoing community engagement.
Use reflection on the inquiry process to guide lifelong learning	Reviews prior learning in depth to reveal significantly changed perspectives about educational and life experiences, which provide foundation for expanded knowledge, growth, and maturity over time	Reviews prior learning in depth, revealing fully clarified meanings or indicating broader perspectives about educational or life events.	Reviews prior learning with some depth, revealing slightly clarified meanings or indicating somewhat broader perspectives about educational or life events.	Reviews prior learning at a surface level, without revealing clarified meaning or indicating a broader perspective about educational or life events.



Indirect Assessment

Indirect assessments complement direct assessments by measuring changes in attitudes, beliefs, and behaviors resulting from experiential learning. Whereas the previously described rubrics assess student learning in QEP-related classes, a series of indirect assessment tools will be used to evaluate Experience Learning's influence on the campus community and the environment for student learning.

Indirect assessment is critical for assessing changes in cultural norms, which are best reflected in the attitudes and dispositions of faculty, staff, and students.



1 Student Surveys

The first method for indirect assessment is a survey to measure students' perceptions of their own learning and attainment of the SLOs and benchmarks. This method builds upon the rubrics used for direct assessment by providing another opportunity for students to engage in structured reflection as part of their learning process.



2 Faculty Surveys

There will also be a survey administered to faculty members who are involved in the SCI and faculty development program. The survey will gauge their perceptions and level of satisfaction with the structure and organization of the activities, content of the trainings and related programming, and knowledge gained from participating in these programs.



3 Focus Groups

The Experience Learning director and assessment coordinator will organize regular focus groups of faculty and staff who have been involved with Experience Learning. These focus groups will aim to collect qualitative data about their experiences with Experience Learning activities, strengths of the activities, and areas for improvement.



4 NSSE

The National Survey of Student Engagement (NSSE) will also be an important indirect assessment tool. NSSE is administered to first-year students and seniors at UT twice in a five-year cycle as required by the Tennessee Higher Education Commission. NSSE data from undergraduate students at UT strongly support the need for more experiential learning activities. These data from the NSSE survey over the past few years provide a baseline for measuring changes in future semesters as Experience Learning is implemented.

IV. NEED TO KNOW

- Experience Learning has four Student Learning Outcomes (SLOs).
- Each SLO has benchmarks students must be exposed to at some point during the experiential learning opportunity. The faculty or staff leader must choose at least one benchmark from each SLO to include in their Experience Learning course or opportunity.
- Both direct and indirect assessment measures will be used to evaluate the effectiveness of the Experience Learning initiative over time.
- There are four indirect assessment measures for the initiative, and all require the Experience Learning team to listen to participating faculty, staff, and students in order to improve the initiative over time for the benefit of everyone involved.
- Faculty members participating in either the Smart Communities Initiative or the Faculty Fellows program must agree to align their class's final capstone assignment with the Experience Learning SLO rubrics. Instructors will be permitted to select one benchmark from each SLO to create a rubric that best fits with the topic and content of their particular course and assignments.

Notes



The QEP **Development Team**

The QEP was developed by a team of faculty, staff, and students that represented different parts of the university community. We would like to express our gratitude to Provost Emeritus Susan Martin, under whose leadership this initiative was pioneered.

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The Experience **Learning Team**

Experience Learning was selected as the QEP for UT in spring 2015. Meet the rest of our team at experiencelearning.utk.edu/staff as we add new members and continue to grow.

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Works Cited

- Association of American Colleges and Universities. (2007–2009). Valid Assessment of Learning in Undergraduate Education (VALUE) rubrics. Retrieved from http://www.aacu.org/value/index.cfm.
- Astin, A. W., Sax, L. J. (1998). How undergraduates are affected by service-participation. Journal of College Student Development. 39 (3), 251-63.
- Astin, A. W., Sax, L. J., Avalos, J. (1999). The long-term effects of volunteerism during the undergraduate years. The Review of Higher Education. 21 (2), 187–202.
- Astin, A. W., Vogelgesang, L. J., Ikeda, E. K., Yee, J. A. (2000). How service learning affects students. Los Angeles: University of California, Higher Education Research Institute.
- Chapman, S., McPhee, P., Proudman, B. (1992). What is experiential education? Journal of Experiential Education. 15 (2), 16-23.
- Dewey, J. (1938). Experience and education. New York, NY: Macmillan.
- Eyler, J., Giles, D. E. (1999). Where's the learning in service-learning? San Francisco, CA: Jossey-Bass.
- Feinstein, A. H., Mann, S., Corsun, D. L. (2002). Charting the experiential territory: Clarifying definitions and uses of computer simulation, games, and role play. *Journal of Management Development*. 21 (10), 732-44.
- Fenzel, L. M., Peyrot, M. (2005). Comparing college community participation and future service behaviors and attitudes. *Michigan Journal of Community Service Learning*. 12 (1), 23–31.
- Gray, M. J., Ondaatje, E. H., Fricker, R. D., Geschwind, S. A. (2000). Assessing service-learning: Results from a survey of Learn and Serve America, Higher Education. *Change.* 32 (2), 30–39.
- Hsu, E. (1989). Role event gaming simulation in management education: A conceptual framework and review. *Simulation & Gaming*. 20 (4), 409–438.
- Jones, J. E., Pfeiffer, W. J. (1998). The Pfeiffer library. San Diego, CA: Jossey-Bass.
- Kahne, J., Sporte, S. (2008). Developing citizens: The impact of civic learning opportunities on students' commitment to civic participation. American Educational Research Journal. 45 (3), 738-66.
- Kahne, J., Westheimer, J. (2003). Teaching democracy: What schools need to do. Phi Delta Kappan. 85 (1), 34-40, 57-66.
- Lean, J., Moizer, J., Towler, M., Abbey, C. (2006). Simulations and games: Use and barriers in higher education. *Active Learning in Higher Education*. 7, 227–42.

- Levine, M. (2010). Developing principles for clinically based teacher education. Prepared for the National Council for the Accreditation of Teacher Education (NCATE).
- Lewis, L. H., Williams, C. J., (1994). Experiential learning: Past and present. *New Directions for Adult and Continuing Education*. 1994 (62), 5–16. Retrieved from http://dx.doi.org/10.1002/ace.36719946203.
- Markus, G. B., Howard, J. P. F., King, D. C. (1993). Integrating community service and classroom instruction enhances learning: Results from an experiment. *Educational Evaluation and Policy Analysis*. 15, 410–19.
- Moely, B. E., McFarland, M., Miron, D., Mercer, S. H., Ilustre, V. (2002). Changes in college students' attitudes and intentions for civic involvement as a function of service-learning experiences. *Michigan Journal of Community Service Learning*. 9, 18–26.
- Northern Illinois University, Faculty Development and Instructional Design Center. (n.d.). Experiential learning. Accessed at http://www.niu.edu/facdev/resources/guide/strategies/experiential-learning.pdf.
- Student Forum on Learning. (2011). Student ownership and the college experience. Knoxville, TN: Tennessee Teaching and Learning Center. Retrieved from http://tenntlc-utk-edu.wpengine.netdna-cdn.com/files/2011/03/SFL-White-Paper_Student-Ownership-and-the-College-Experience.pdf.
- University of Tennessee. (2011). Vol Vision: The pursuit of top 25. Retrieved from http://top25.utdev2.wpengine.com/wp-content/uploads/sites/11/2014/03/vol-vision-overview-framework-final.pdf.
- University of Tennessee. (2011). Vol Vision: The pursuit of top 25. Retrieved from http://top25.utk.edu/2011/vol-vision-2015-the-pursuit-of-top-25/
- Vogelgesang, L. J., Astin. A. W. (2005). Post-college civic engagement among graduates. *HERI Research Report No. 2.* Los Angeles: Higher Education Research Institute, UCLA.
- Warren, K., Sakofs, M., Hunt, J. S. (1995). The theory of experiential education. Dubuque, IA: Kendall Hunt.
- Wurdinger, S. D. (2005). Using experiential learning in the classroom: practical ideas for all educators. Lanham, MD: Scarecrow Education, 63.
- Wurdinger, S. D., Carlson, J. A. (2010). Teaching for EL: Five approaches that work. Lanham, MD: Rowman & Littlefield Education.
- Yorke, M., Hollinshead, B. (Eds.) (1981). Simulation and games: the real and the ideal: the proceedings of the 1980 conference of SAGSET. Perspectives on academic gaming & simulation Vol. 6. London: Kogan Page.





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