



APPENDIX D: EXPERIENTIAL LEARNING

EXPERIENTIAL LEARNING

LEARNING EXPERIENCES DESIGNED TO PREPARE FUTURE GRADUATES TO CONTRIBUTE AND LEAD IN A COMPLEX WORLD

Virginia Tech has embarked on a bold vision for the future, a future in which graduates will be prepared for the complex world in which they will work and live. The Beyond Boundaries vision charges us to build on the foundation of educational excellence at Virginia Tech to prepare students to address 21st century challenges. As stated in the Beyond Boundaries: Thematic Area Group Report (2016, p. 3),

...we know that disciplinary depth alone is insufficient to prepare a student to become a productive contributor in society...we believe that Virginia Tech is uniquely positioned to offer a holistic and experiential education that engages the whole person...We envision a Virginia Tech education in 2047 will be grounded in work and learning that is purpose-driven, a manifestation of Ut Prosim and the land-grant mission that is no longer just co-curricular but embedded in and indeed integral to the curriculum.

Making this vision a reality challenges us to reflect on the ways in which our graduates are well-prepared, and the ways in which our graduates can be better prepared, for a purpose-driven career and life. Extending students' traditional classroom learning to tackle authentic problems and work in real-world contexts provides students motivation and passion to synthesize theory, concepts, and habits of mind thus maximizing their learning and development at Virginia Tech. If this is to become a hallmark of a Virginia Tech education, it is not sufficient for these learning experiences to be had by some of our students in particular programs with particular means of participation. Rather, such experiences must be for all of our students.

For all students to engage in authentic learning through experience, we will need a student-focused perspective to redesigning programs, courses, and learning activities. For the learning experiences to have a positive impact on student preparation, they must be accessible, high quality, and designed to deepen and enrich the disciplinary knowledge and skills of a program of study.

Implementing an educational model integrating disciplinary concepts and skills with interdisciplinary capacities through embedded experiential learning will take expertise in educational design and teaching in departments and programs. In the midst of research and teaching responsibilities, faculty will need to be students and scholars of a different type of education, an education readying our students to handle increasingly complex global issues. Faculty will need support, learning opportunities, and communities of practice to ensure valuable time is well spent in this pursuit.

Intentional design and implementation are required for quality, degree-embedded experiential learning. While we strive for life-long learning outcomes for our students, experiential learning efforts will be judged by the quality of the curriculum, learning opportunities, student products, and student competencies. High quality, degree-embedded experiential learning at Virginia Tech is characterized by an approach that builds skills and competencies through experience across the curriculum for all students in the discipline.

PRINCIPLES OF PRACTICE

To advance experiential learning for all students at Virginia Tech, the work will be guided by principles of practice. The principles of practice serve to keep the work focused with a spirit of improvement and recognition of the good work of those who laid the foundation for an enhanced educational model.

Principle 1: Evidence-Based

Program components and design will be informed by the educational research of experiential learning and what the research has demonstrated as the measured outcomes of student participation.

EXPERIENTIAL LEARNING IN CONTEXT: Developing degree-embedded experiential learning allows for the synthesis of the components of a VT-shaped education. At Virginia Tech, the experiential learning opportunities, which will be selected and customized to meet the professional and personal development needs of students in particular disciplines, are undergraduate research, internships, study abroad, service learning, or a hybrid of two or more types.

EXPERIENTIAL LEARNING TYPES: Different experiential learning opportunities will be appropriate to different disciplines. The important design considerations must include what faculty hope students will learn from the experience: What concepts will students need to apply? What types of problems will they be asked to address in context? What life-long learning skills will be most appropriate and useful for future success? What habits of mind will support persistence and resilience in the face of challenge? The potential student learning outcomes of experiential learning will differ by design.

- **Undergraduate Research** provides research experiences for students in all disciplines. With strong support from the National Science Foundation and the research community, courses and outside experiences are designed to connect key concepts and questions with students' active involvement in systematic investigation and research.
- **Internships** provide students with direct experience in a work setting—usually related to their career interests—to give them the benefit of supervision and coaching from professionals in the field.
- **Study Abroad** provides students educational opportunities abroad that result in progress toward an academic degree at Virginia Tech. It might include field research, internship programs, field schools, as well as study at an overseas branch campus.
- **Service Learning** experiences are designed to be beneficial for both student and community. Students perform a sustained task in the community and reflect on the service from multiple perspectives.

CUSTOMIZING COMPONENTS FOR TRANSFORMATIVE LEARNING: There are countless ways to customize experiential learning for integration and application of disciplinary knowledge, interdisciplinary capacities, and habits of mind. Some of the more common types of customized experiential learning in disciplines include (from Loretto, 2011 and Northern Illinois FDIDC, 2018):

- **Apprenticeship Experiences** allow students to take on a job role with an experienced professional in the field acting as a mentor. Apprenticeships may lead to a certificate or can be organized within a large organization or employer.
- **Clinical Experiences** are tied to practice in an area of study such as pre-med students participating in a hospital-based experience or teacher education students participating in classroom settings.
- **Cooperative Education Experiences (co-ops)** are more extensive than internships and are usually longer in duration. Co-ops are often more structured, integrated programs specific to students' career goals.
- **Field Work Experiences** require students to explore and apply classroom learning in an authentic context. Field work can serve to bridge educational experiences with the outside community and can range from public health education in the community to anthropological digs to work in a laboratory.
- **Competitions** challenge students to apply their skills to developing a product, solving a problem, as well as delivering an idea or talk. Often students work in teams throughout the competition.

Faculty will design customized learning experiences to meet the learning goals for students in their program. Faculty will work together to develop creative and innovative experiential learning opportunities to prepare students to address complex problems and issues. With support and resources, faculty can create experiential learning opportunities much more innovative than those described above.

Principle 2: Build from the Bright Spots

Recognize and respect the good work being done and find ways to build on successes to elevate best practices and make participation inclusive. Virginia Tech's existing commitment to experiential learning reflects the work of many across campus who engage students with transformative learning opportunities.

PARTNER OFFICES: To support faculty development and implementation of degree-embedded experiential learning in the program of study, existing offices will be key partners and support faculty initiatives: Office of Undergraduate Research, Career and Professional Development, VT Engage, Global Education Office, Office of Housing and Residence Life, College and Academic Departments

CO-CURRICULAR OFFERINGS: Virginia Tech's Division of Student Affairs provides leadership and coordination for a plethora of high-quality co-curricular opportunities.

EXEMPLARY DEPARTMENT AWARD WINNERS: In 2017, the Provost's Award for Exemplary Departments focused on "Hands-on, Minds-on" instructional environments. Twenty departments submitted review packets. All of the departments' practices exemplified student-focused, purpose-driven education with most highlighting experiential learning opportunities.

Principle 3: Integrated Operations

Practices will work within the culture and context of Virginia Tech using the communication and student decision-making structures that we know exist and will drive the work.

MAKING IT VISIBLE: One of the greatest challenges for engaging all Virginia Tech graduates in experiential education is the visibility of experiences. A focus on degree-embedded, customized experiential learning engages students within the program of study. Transformative experiences will be integrated in ways that reinforce disciplinary learning and bring relevance to concepts and skills.

MAKING IT MEANINGFUL: In academic departments and programs, faculty will work to integrate experiential learning in a way that brings meaning to disciplinary learning and that clearly communicates the meaning and relevance of experiential learning for students' success. Through the customization of experiential learning to the degree, learning opportunities will 'make sense' to students through real-world application and learning in authentic contexts.

MAKING IT POSSIBLE: Just as experiential learning opportunities will be diverse as they are customized to academic programs, the barriers to experiential learning will too be diverse. Some programs may want to scale undergraduate research opportunities, others may want to expand internship opportunities in the greater Washington, D.C., area requiring affordable housing and paid internships, while others may want to have all students study abroad to develop their language skills and cultural knowledge. Each opportunity will bring its unique challenges for student access and success. Faculty, staff, and administrators will need to engage in collaborative, creative problem solving, to identify potential barriers and seek solutions to enable equitable participation in transformative learning experiences.

Principle 4: Qualified Academy Professionals

Ensure those coordinating the design work are well-versed in the learning and program outcome literature and understand what is, and is not, working at other universities in the area of experiential learning.

A BEYOND BOUNDARIES EDUCATION

Students enter Virginia Tech from diverse backgrounds; with diverse skills, talents, and experiences; and, for diverse purposes. The concept of a VT-shaped education serves as a framework to plan and implement learning experiences with the flexibility and challenge for students to become agents of their personal and professional development. Each Virginia Tech student will have a unique learning journey through curricular, co-curricular, and personal learning opportunities. Through twists and turns on the journey, students will discover new ideas, new talents, and what motivates them. Faculty engaged in intentional planning, development, and implementation of degree-based experiential learning will facilitate a purpose-driven educational journey for all Virginia Tech students.