#### VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY





# **Pathways to Success Quality Enhancement Plan**

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## **Executive Summary**

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY (Virginia Tech), a Research I land-grant institution founded in 1872, has developed as part of its Southern Association of Colleges and Schools-Commission on Colleges (SACS-COC) Reaffirmation of Accreditation submission, a Quality Enhancement Plan (QEP) called Pathways to Success, which will increase undergraduate student engagement by means of comprehensive first-year experiences (FYEs). At Virginia Tech, engagement implies reciprocity between the university and its students. The university is responsible for initiating this process by welcoming students, recognizing them as valuable citizens who have much to offer to the institution, and creating environments in which the students can flourish. Through its diverse and talented human capital and cutting-edge technological resources, the university will facilitate students' ability to make appropriate connections between

The FYEs will draw upon Virginia Tech's strengths in discovery and creativity to prepare students for success in the technologically rich and multiculturally diverse environment of the 21st century. and among the wealth of potential pathways available at Virginia Tech and in the professional world. Students will assume ownership of their roles and responsibilities as active and engaged learners by seeking out and utilizing information about the university and its programs.

As a result of participating in FYE activities, students will build foundations and skills for lifelong learning through a series of curricular and co-curricular learning opportunities designed to foster their abilities to (1) solve problems, (2) explore and use information appropriately and effectively, and (3) integrate ideas and experiences and apply them to new learning situations within and beyond campus. The FYE activities will draw upon Virginia Tech's strengths in discovery and creativity to prepare students for success in the technologically rich and multiculturally diverse environment of the 21st century.



These goals, learning outcomes, and themes are central to Virginia Tech's undergraduate mission and strategic plan (see Appendix I), and are closely aligned with "Essential Learning Outcomes" for undergraduate education as articulated and further refined for assessment purposes by the Association of American Colleges and Universities' (AAC&U) Liberal Education and America's Promise (LEAP) and Valid Assessment of Learning in Undergraduate Education (VALUE) projects (AAC&U, 2007; 2009).

*Pathways to Success* is innovative and transformational to the campus by providing first-year students with access to multiple high-impact practices empirically demonstrated to support student engagement with their undergraduate education.

The program will be phased in over a five-year period, with an estimated cumulative cost of \$3.1 million. An internal competitive grant process will be implemented as the mechanism through which academic units will secure initial funding for their programs. An Office of First-Year Experiences will provide leadership for the effort and program, which will be supported by an organizational structure that involves faculty, staff, and students. Virginia Tech is committed to institutionalizing this initiative. The university's monetary and human capital investment will build the foundation for enduring and vigorous FYE activities that are designed to motivate and empower students throughout their academic and professional careers.





# **Pathways to Success:** Adding Meaning to Metaphor

OVER THE COURSE OF THE PAST FIVE years, the concept of the undergraduate experience at Virginia Tech as an opportunity for students to purposefully pursue their own path emerged and began to resonate with key groups of faculty, administrators, and staff. The multiple-paths metaphor gained momentum during institution-wide discussions of the purpose and efficacy of Virginia Tech's general education program, the Curriculum for Liberal Education (CLE), in 2005.

"Pathways" was officially articulated as a metaphor for the Virginia Tech undergraduate experience in the 2006 update to the university's strategic plan:

*Education of the whole person* is achieved through the rigor of the university's undergraduate curriculum and the delivery of curricular choices provided by VT Pathways for Learning and the educational benefits of a The program represents an opportunity to set first-year students on their own paths, equipped with appropriate tools for exploration and discovery, and with the curricular and co-curricular opportunities necessary to engage fully as learners and ultimately as citizens. culturally diverse student body. VT Pathways for Learning reflects Virginia Tech's renewed commitment to liberal education through strong advising, multiple majors, integrated course sequences, and purposeful selection of liberal education courses across different disciplines. Virginia Tech graduates will be prepared for interdisciplinary and creative problem solving and lifelong learning in a variety of contexts, including emerging global communities.

This inspired focus on undergraduate education called upon the institution to strengthen all aspects of the undergraduate experience by implementing VT Pathways for Learning to integrate learning across the entire curriculum.

Notwithstanding the inclusion of the Pathways metaphor within the university strategic plan (see Appendix I) as a programmatic initiative, it had not progressed beyond the conceptual stage when formative work began on Virginia Tech's QEP.



However, the language of "Pathways" had been infused into several elements of undergraduate education, for example in the hard-copy Pathways Planner used by many but not all academic departments.

When campus deliberations around the selection of the QEP topic, learning outcomes, and format indicated a prevailing sense that the university community — and most importantly, its students — strongly desired the integrated experience for undergraduates initially articulated in the strategic plan in 2006, the language for such an initiative was already in place and in use to a limited degree.

Virginia Tech's QEP provides an opportunity to the university to more fully develop and instantiate the Pathways metaphor in a completely fresh format through the creation of academically grounded first-year experiences organized around common intellectual experiences and shared learning outcomes. The program represents an opportunity to set first-year students on their own paths, equipped with appropriate tools for exploration and discovery, and with the curricular and co-curricular opportunities necessary to engage fully as learners and ultimately as citizens.

Accordingly, the proposed QEP First-Year Initiative will be called Pathways to Success. This title was selected in consultation with students, faculty, administrators, and staff, and will capitalize upon a degree of extant name recognition within the university community. By giving programmatic substance and intentional planning to the earlier metaphor, Virginia Tech aims to collectively assuage any skepticism that an institution steeped in tradition can and will make significant and transformational change to its undergraduate programs. Beginning at the beginning — with students' first year — this initiative will begin the process for making a previously intuitive metaphor for undergraduate education — Pathways — tangible, functional, and meaningful at Virginia Tech.







# **Process Used to Develop the QEP**

institution named Virginia Agricultural and Mechanical College, Virginia Tech is now a comprehensive, innovative research university with the largest number of degree offerings in the Commonwealth of Virginia, more than 125 campus buildings, a 2,600-acre main campus, a 1,700-acre agriculture research farm near the main campus, and off-campus educational facilities in six regions of the state and several international sites. The main campus is located in the Town of Blacksburg in Montgomery County and is 38 miles southwest of Roanoke, in the New River Valley. Through its tripartite mission of teaching and learning, research and discovery, and outreach and engagement, Virginia Tech continually strives to accomplish the charge of its motto: Ut Prosim (That I May Serve). The university currently serves 30,000+ full-time students in a total of 65 bachelor's degree programs and 145 master's and doctoral degree programs.

FOUNDED IN 1872 AS A LAND-GRANT

Virginia Tech's QEP has been developed over the three-year period with the extensive involvement of all constituencies represented on campus.

#### Quality Enhancement Plan: Virginia Tech

At the heart of Virginia Tech's mission is the commitment to provide a rich teaching and learning environment for undergraduate students. The mission statement articulates it well: "Through its focus on teaching and learning, research and discovery, and outreach and engagement, the university creates, conveys, and applies knowledge to expand personal growth and opportunity, advance social and community development, foster economic competitiveness, and improve the quality of life." Collectively, all academic and administrative units at the university support the mission of Virginia Tech through the development of campus environments, programs, and services that complement the university's learning, discovery, and engagement foci and its mission to expand personal growth and opportunity, advance social and community development, foster economic competitiveness, and improve the quality of life.

In spite of its size and diversity, the institution as a whole is committed to current and future initiatives that address three university core values:

• *Ut Prosim* (That I May Serve) – The motto of Virginia Tech represents an attribute that distinguishes it from all but a few of the nation's institutions. As a community



of scholars and reflective of our land-grant mission, Virginia Tech is committed to service to individuals and society in all its forms.

- Freedom of Inquiry Fundamental to the creation and transmission of knowledge is a commitment to nurture and protect freedom of inquiry. Intellectual freedom is the foundation of academic excellence and it is vital for sustaining environments in which sound and rigorous learning, discovery, and engagement occur.
- Lifelong Learning A commitment to lifelong learning and inquiry within and outside the university community guarantees continued growth and secures for society the benefits of continually advancing knowledge for society.

To this end, Virginia Tech seeks to develop and implement a comprehensive FYE for undergraduate students. In doing so, the university seeks to create environments that are welcoming, accessible, comfortable, and representative of a diverse and inclusive campus community, and that address the needs of students from a wide variety of backgrounds to reflect and stimulate diversity of thought and encourage meaningful participation and dialog in all aspects of learning.

Concurrent with the development of the university's strategic plan and strategies, and in accordance with Southern Association of Colleges and Schools–Commission on Colleges' (SACS-COC) protocols and policies, the university began to organize the QEP component of the Reaffirmation of Accreditation process in 2006. Charles W. Steger, president, is responsible for Virginia Tech's SACS reaffirmation of accreditation process. Mark G. McNamee, senior vice president and provost, charged with leading the development of the QEP, appointed two successive QEP committees over the course of three years and provided the resources and structure for the plan to be completed. Early in the development of the QEP, David Ford, the former vice provost for academic affairs, served as Virginia Tech's SACS accreditation liaison until he retired in December 2008. Landrum L. Cross, the university's VT-SACS coordinator at the time, facilitated communication between and among the various QEP and compliance teams, President Steger, the board of visitors, and other university administrators, as well as SACS-COC officials. In spring 2009, the newly hired vice president and dean for undergraduate education, Daniel A. Wubah, was charged with direct oversight of the QEP development process and was named Virginia Tech's SACS accreditation liaison. Robin Panneton was subsequently named Virginia Tech's SACS coordinator, succeeding Cross upon his retirement in June 2009.

Virginia Tech's QEP has been developed over the three-year period with the extensive involvement of all constituencies represented on campus. Beginning in 2006, the broad-based Scoping Committee focused on a deep analysis of institutional data and on extensive communication across campus. Subsequently, an Implementation Committee worked throughout the 2008-2009 academic year to narrow and focus the QEP concepts. In Summer 2009, Mary Ann Lewis was named director of first-year experiences and was charged with completing the QEP report and initiating critical activities in preparation for implementation of the QEP.

Over the previous two-year period, a committee of 28 faculty, administrators, staff, and students appointed by McNamee and chaired by Michael Ellerbrock, professor of agricultural and applied economics, examined institutional data and met with all Virginia Tech educational constituencies. The Scoping Committee's goal was to identify opportunities where targeted investments to advance the university's strategic plan could provide measurable gains in learning. Details of the committee's work, including membership, documentation of process, a set of recommendations, written input from the community, mini-proposals, and white papers are documented in two interim reports dated Fall 2007 and April 2008, and are available on the FYE/QEP website (*www.fye.vt.edu*).

The committee met monthly, typically with invited guests from various academic and support programs representing the full spectrum of students, staff, faculty, and administrators involved in teaching and learning. The following documents and data categories were reviewed:

- University strategic plans; Ad Hoc Core Curriculum Committee Report; and reports from the university task forces on Advising, and on Race, Student Engagement, and Learning Communities
- Institutional data, including entering freshman surveys, senior surveys, alumni surveys, and data from national survey tools used at Virginia Tech, including the National Survey of Student Engagement, the Cooperative Institutional Research Program (CIRP Freshman Survey), the College Student Experience Questionnaire, and the National Study of Living-Learning Programs
- QEP documents of selected peer institutions

In January 2007, the QEP Scoping Committee held a town hall meeting attended by students, staff, faculty, and administrators to discuss student engagement and to explore possible QEP topics and strategies. The 10 most prominently expressed issues were:

- Service Learning/Internships
- First-Year Experiences
- Student Engagement
- Faculty Advising
- Ways of Learning

- Promotion and Tenure of Faculty
- Assessment of Learning Outcomes
- Research/Problem-based Learning
- Technology/Instructional Technology
- Curriculum for Liberal Education/ Holistic Education

A complete report of the town hall meeting can be found on the FYE/QEP website (*www.fye.vt.edu*).

Following the tragedy at Virginia Tech on April 16, 2007, SACS-COC added a one-year extension to the university's reaffirmation deadline, which, in effect, provided additional time in the 2007-2008 year to continue the university-wide dialogue about the purposes of the QEP. During the summer of 2007, several QEP Scoping Committee members met multiple times with 18 students enrolled in the Summer Leadership Experience Program, an academic course designed and taught by staff in the Division of Student Affairs. These officers and leaders of major campus organizations were seriously invested in participating in the development of Virginia Tech's QEP. After researching and summarizing the QEPs of other universities and colleges, these student leaders advocated a dual focus on enhanced resources for advising and an intensive first-year experience.

The Scoping Committee continued its work in fall 2007, and in spring 2008, committee members wrote a series of informal white papers and miniproposals. Armed with a comprehensive analysis of institutional data and reports, informed by numerous conversations with all of Virginia Tech's major constituencies, and confirmed in their purpose by having produced the informal white papers, the committee made a number of recommendations in April 2008:

 Focus on undergraduate education through a grounding in AAC&U's Essential Learning Outcomes and Principles of Excellence.

- Foster greater student engagement with their education, to be accomplished by shifting away from an "instructional paradigm" dominated by teacher-centered methods of learning, to a more studentcentered paradigm in which students take greater charge of their learning.
- Advance the university's legacy of technological innovation in support of teaching and learning by continual development and implementation of cutting-edge pedagogical tools and practices.
- Use an assessment plan that is multi-faceted, including qualitative and quantitative measures of learning outcomes.
- Emphasize one or a combination of five specific topics/approaches:
  - Enhanced Undergraduate Academic Advising
  - The Freshman Experience
  - Multicultural Learning
  - Student Engagement
  - Undergraduate Research

In April 2008, Provost McNamee reviewed the Scoping Committee's report and concurred with its major recommendations. The provost specifically endorsed the concept of implementing vigorous first-year experiences that will serve to strengthen the advising process and that are guided by AAC&U's Essential Learning Outcomes. To move forward, McNamee appointed a QEP Implementation Committee of 13 faculty, administrators, staff, and students with a mandate to narrow and focus the QEP topic and to make recommendations regarding structure and organization.





# **Identification of the Topic**

AS NOTED IN THE PREVIOUS SECTION,

McNamee appointed a QEP Implementation Committee in spring 2008 of 13 faculty, administrators, staff, and students charged to move forward with the design of Virginia Tech's QEP. Robert Jones, head of the biological sciences department, was appointed chair of the committee. Jones attended the SACS Summer Institute in July 2008 and joined other Virginia Tech attendees at the SACS annual meeting in December 2008. From September 2008 to April 2009, the Implementation Committee met weekly. Notes from those meetings can be found on the FYE website (*www.fye.vt.edu*), and a summary of the evolution of QEP recommendations is presented on the following page.

...the Implementation Committee was empowered to frame the goal of the QEP as student engagement and tie it to just one Essential Learning Outcome — Foundations and Skills for Lifelong Learning.



#### **Evolution of QEP Recommendations**



In a separate project that ultimately became a key element of planning for the QEP, a study group consisting of six faculty members and administrators, funded by the then-named Center for Excellence in Undergraduate Education (CEUT), now known as the Center for Instructional Development and Educational Research (CIDER), conducted a survey and analysis of FYEs at Virginia Tech during the 2007-2008 academic year (*www.fye.vt.edu*). The study group's analysis of literature and current practices at Virginia Tech pointed to the criticality of first-year students' ability to exercise seven foundational behaviors (Cuseo, 2008):

- Connect to the university
- Build self-awareness and self-efficacy
- Identify a sense of purpose
- Participate in cross-cultural experiences
- Engage in learning
- Strengthen social integration
- Enhance critical and reflective thinking

These seven critical behaviors align with both the university's undergraduate mission and the Principles of Excellence delineated by the AAC&U LEAP report. When it became clear that the QEP would focus on FYEs, the faculty study group presented its report to the Implementation Committee in fall 2008, and two representatives of the study group became Implementation Committee members.

In December 2008, the Implementation Committee concluded that Virginia Tech had reached a strong consensus regarding its QEP. That conclusion embraced the evidence that improved academic advising, new learning programs in the first year, and expanded intentional use of new learning technologies help students develop more thoughtful academic plans, take advantage of the strengths and diverse learning opportunities at our institution, and build competencies critical to academic and professional success in the 21st century. The committee then formulated three major learning goals outlined below and mapped them to the Essential Learning Outcomes from the AAC&U LEAP report (AAC&U, 2007):

- GOAL #1: Thoughtful Academic Planning: By the end of the first year, students will demonstrate knowledge of the value and availability of curricular and co-curricular services and programs at Virginia Tech (AAC&U"Foundation and Skills for Lifelong Learning").
- GOAL #2: Enhancing Research Skills: By the end of the first year, students will demonstrate knowledge of and ability to engage in the research process(es) practiced by the members of Virginia Tech's scholarly community (AAC&U"Inquiry and Analysis").
- GOAL #3: Building Intercultural Knowledge & Understanding: By the end of the first year, students will demonstrate knowledge of and the ability to engage with the many dimensions of diversity represented by Virginia Tech's community (AAC&U "Intercultural Knowledge and Competence").

The Implementation Committee presented these three goals, Essential Learning Outcomes, and corresponding AAC&U VALUE rubrics to various campus constituencies in 14 meetings during spring 2009. At each presentation, participants were asked to examine the goals and learning outcomes, and to recommend priorities to strengthen the focus of the QEP. In each of the first seven meetings, the overwhelming majority of people favored Goal #1, thoughtful academic planning, so that beginning in their first year, students would fully engage with their education. There were similar outcomes in the remaining six meetings. A culminating activity was a town hall meeting on April 28, 2009, attended by 60 people



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from across the university representing a variety of constituencies. The PowerPoint presentation from that meeting is located on the FYE website (*www.fye.vt.edu*). In response to the feedback, the Implementation Committee was empowered to frame the goal of the QEP as student engagement and to tie it to just one Essential Learning Outcome — Foundations and Skills for Lifelong Learning.

During July 2009, two members of the Implementation Committee, Mary Ann Lewis and Kathryne Drezek McConnell (university academic assessment coordinator), and Robin Panneton (coordinator of the VT-SACS Reaffirmation activities), attended the SACS Summer Institute in Houston, Texas. One important conclusion these participants reached as a result of the intense examination of the plan for Virginia Tech's QEP, when compared to other institutions with successful QEPs, was that Virginia Tech's plan should more intentionally describe its academic focus. Consequently, at the outset of fall 2009, Lewis established a small group of QEP advisors, including two members of the Implementation Committee, to further refine the learning outcomes. Lewis then began a series of information/feedback meetings with campus groups. The schedule of those meetings can be found in Appendix II. These deliberations led to a more fully defined purpose for Virginia Tech's QEP within the context of developing the lifelong learning skills of its first-year students.







# **Desired Learning Outcomes**

TO DEVELOP AND IMPLEMENT FYE activities under the auspices of its QEP, Virginia Tech will draw upon and customize current best practices in higher education. *Pathways to Success* activities will be designed with explicit reference to essential learning outcomes articulated and further refined for assessment purposes by AAC&U's Liberal Education and America's Promise (LEAP) and Valid Assessment of Learning in Undergraduate Education (VALUE) projects.

Lifelong learning is "all purposeful learning activity, undertaken on an ongoing basis, with the aim of improving knowledge, skills, and competence" (Commission of the European Communities, 2000). Lifelong learners demonstrate high levels of curiosity, initiative, and independence in their learning process. These learners possess the ability to transfer learning from one context to another; At the onset of the 21st century, which will require individuals to redirect their lives and careers repeatedly, a key goal of every college and university must be to produce lifelong learners.

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in addition, they reflect upon prior learning to reveal significantly changed perspectives about educational and life experiences, which provide a foundation for expanded knowledge, growth, and maturity over time (AAC&U, 2009). At the onset of the 21st century, which will require individuals to redirect their lives and careers repeatedly, a key goal of every college and university must be to produce lifelong learners. Through FYE initiatives, Virginia Tech aspires to inculcate three antecedent skills in its students to prepare them for lifelong learning:

- Problem-Solving Skills the ability to design, evaluate, and implement a strategy or strategies to answer an open-ended question or achieve a desired goal.
- Inquiry Skills the ability to explore issues or topics through the ethical and responsible collection, analysis, and use of information as evidence that results in informed conclusions/judgments.
- Integration of Learning Skills the ability and disposition to make connections between ideas and experiences, and to apply them to new learning situations within and beyond campus.

For each essential learning outcome — problem solving, inquiry, and integration — Virginia Tech has identified three measurable indicators of learning.

Derived from relevant AAC&U VALUE rubrics, and adapted to fit the culture and context of undergraduate education at Virginia Tech, these desired outcomes and indicators are specific, welldefined, and appropriately tailored to the first year. Moreover, they will serve as "common ground" for observable and measurable student learning among a wide array of FYE activities.









#### **Problem-Solving Learning Indicators Students will be able to:**

- Define a problem.
- Identify problem-solving strategies.
- Propose solutions/hypotheses.

#### **Inquiry Learning Indicators** Students will be able to:

- Select a topic of inquiry.
- Access and evaluate existing knowledge, research, and/or views.
- Use information effectively, ethically, and legally to accomplish a specific purpose.



#### **Integration Learning Indicators** Students will be able to:

- Connect relevant experience and academic knowledge.
- Make connections across disciplines.
- Reflect upon and assess themselves as learners.





6

# **Literature Review of Best Practices**

FIRST-YEAR EXPERIENCES (FYEs) entered the higher education lexicon in 1972 with the implementation of "University 101," the inaugural FYE, at the University of South Carolina (Pascarella & Terenzini, 2005). According to the National Survey on First-Year Seminars (2006), 85 percent of the respondents indicated they offer first-year seminars. From student retention and academic performance to social integration, decades of research confirm the positive impact of first-year initiatives:

- FYE participants achieve higher mean grade point averages than peers of similar academic potential who do not participate in FYE programs (Hotchkiss, Moore & Pitts, 2006; Lang, 2007).
- FYE participants persist to the second, third, and fourth semesters at greater rates

Through the use of common learning outcomes, ePortfolios, and other shared activities across its FYEs, *Pathways to Success* will ensure the delivery of an additional highimpact educational practice — the common intellectual experience... than their nonparticipating peers (Lang, 2007; Miller, Janz, & Chunju, 2007).

- FYE participants report feelings of personal success at establishing a network of peers, forging meaningful connections with faculty and staff, and using campus services (Keup & Barefoot, 2005).
- FYE course completers graduate at higher rates than their nonparticipating peers (Lang, 2007).

Most college and university personnel recognize the importance of providing entering students with the tools to function successfully within the institution. Thousands of programmatic interventions targeting first-year students have been implemented over the past 20 years (Barefoot, 2000). Programs that address first-year student academic and personal issues and new student transition to college are varied. Most common practices in FYE include first-year seminars, learning communities (both residential and nonresidential), and intentional first-year advising. Large research universities are likely to use these methods to connect the student to the institution, thus contributing to a "smaller feel" (Barefoot, 2000).

In his seminal piece, High Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter, Kuh (2008) identifies 10 teaching and learning practices that "educational research suggests increases rates of retention and student engagement" (p. 9). Leading the list is "first-year seminars and experiences," the very best of which "place a strong emphasis on critical inquiry, frequent writing, information literacy, collaborative learning, and other skills that develop students' intellectual and practical competencies. FYEs can also involve students with cutting-edge questions in scholarship and with faculty members' own research" (Kuh, 2008, p. 9).

# High-Impact Educational Practices<br/>(Kuh, 2008)First-Year Seminars and ExperiencesCommon Intellectual ExperiencesLearning CommunitiesWriting-Intensive CoursesCollaborative Assignments and ProjectsUndergraduate ResearchDiversity/Global LearningService Learning, Community-Based LearningInternshipsCapstone Courses and Projects



Unfortunately, this same research indicates that implementation of these practices on most campuses is haphazard at best. To ensure that colleges and universities are able to help students achieve the essential learning outcomes, not only must institutions change curricular and co-curricular practices, colleges and universities must also "take action to ensure that all students participate in at least two of these practices" (Kuh, 2008, p. 8).

Programs dedicated to students' successful transition to and completion of the first year have existed, in various forms, for decades at Virginia Tech, and represent the impressive diversity of thought and creativity that can be found at a large Research I institution. However, the majority of these programs have functioned with goals and objectives that may or may not connect explicitly to larger learning outcomes deemed essential for all first-year students. *Pathways to Success* will build upon the best practices — and more



importantly, the *best thinking* — related to undergraduate education in the 21st century.

First, all FYE activities initiated as part of the *Pathways to Success* will be grounded in the three essential learning outcomes articulated by AAC&U. Furthermore, students will participate in common assessments based upon AAC&U's VALUE rubrics, an outgrowth of the organization's LEAP project initiated to facilitate the authentic assessment of learning across the curriculum and co-curriculum (see chapters 5 and 11 for detail regarding the desired student learning outcomes and the assessment plan, respectively).

Second, all *Pathways to Success* activities will incorporate the use of ePortfolios for pedagogical and assessment purposes. Importantly, within the *Pathways to Success*, portfolios will serve as tools for facilitation and assessment of students' reflections on learning, and will be used to engender "folio thinking" (Chen & Mazlow, 2002). This type of thinking values reflection and its role throughout the process of learning, and it views students as collaborators who are actively engaged in constructing and taking ownership of their educations (Cambridge, 2009; Garis, 2007; Roberts et al., 2005).

Through the use of common learning outcomes, ePortfolios, and other shared activities across its FYEs, *Pathways to Success* will ensure the delivery of an additional high-impact educational practice — the common intellectual experience (Kuh, 2008). By allowing for diversity of structure and design within its FYEs, *Pathways to Success* will encourage the incorporation of other high-impact educational practices — from an FYE activity structured as a learning community, to one centered on collaborative projects, to FYE activities that expose students to undergraduate research opportunities or to the diversity of experience inherent to a Research I university and the world beyond.





# **Actions to be Implemented**

THE ULTIMATE GOAL OF VIRGINIA

TECH'S QEP, *Pathways to Success*, is to increase undergraduate students' engagement with their education by means of comprehensive first-year experiences (FYEs). Throughout the process of developing the QEP, the university community — faculty, students, staff, and administrators — participated in multiple conversations about the direction of the QEP. Scholarship on first-year experiences was examined; an administrative office was established; and organizational structures are being put in place. These discussions, investigations, and actions, coupled with an analysis and understanding of Virginia Tech's institutional context, have guided the university in the design of its QEP.

To accomplish this institutional goal, academic units (colleges and/or academic departments) across campus will design and implement FYEs to The Community of Practice will provide a venue for discussion and collaboration across university units to promote the use of existing and new best practices.



provide curricular and co-curricular activities that incorporate all of the following learning outcomes:

- Problem-solving Skills: the ability to define a problem, identify problemsolving strategies, and propose solutions/ hypotheses
- Inquiry Skills: the ability to select a topic of inquiry; access and evaluate existing knowledge, research, and/or views; and use information effectively, ethically, and legally to accomplish a specific purpose
- Integration Skills: the ability and disposition to make connections between ideas and experiences; apply these skills across disciplines and to new learning situations within and beyond campus; and reflect upon and assess themselves as learners

An important distinguishing feature of the Virginia Tech QEP FYEs is that each experience will be consistent with the mission, strategic directions, and culture of the proposing academic unit, and will include student experiences that are particularly important to and/or appropriate for that unit. Additionally, a comprehensive assessment plan, described in Chapter 11, will incorporate assessment strategies for each FYE activity as well as for institution-wide assessment.

The Virginia Tech QEP calls for phasing in the *Pathways to Success* programs over a five-year period using a competitive grant process (see Appendix III for RFP). This strategy eventually will accommodate the approximately 5,000 freshmen and 1,500 transfer students who matriculate at Virginia Tech in a given academic year. In Year 1,

two to five grants to academic units will be awarded to a maximum of \$30,000 each, depending on their quality. A comprehensive monitoring and assessment process will be in place during the first year to inform the award process for subsequent years. Virginia Tech intends that by the end of the fifth year of the QEP, all first-year freshmen and transfer students will participate in an approved *Pathways to Success* activity.

The plan allows for the possibility that academic units may wish to revise an existing program or course to include the requisite common intellectual experiences. In other situations, new experiences or courses may be developed. Some examples of either approach are seminar and/or introductory courses, learning communities, co-curricular activities, or workshops. To acknowledge the importance of the "whole" student, each funded *Pathways to Success* program will establish an explicit, well-defined partnership with one or more units of the Division of Student Affairs. Moreover, each proposal must include:

- A description of how required common assessment protocols will be incorporated, as well as descriptions of any additional assessment protocols
- A description of how the program will utilize the university's new electronic academic planner
- A description of how the program will enhance the advising process
- A description of how ePortfolios will be incorporated and used as part of the assessment

Year 1	Year 2	Year 3	Year 4	Year 5
2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
1,500 students	2,500 students	3,500 students	5,000 students	6,500 students

- A description of the existing resources to be leveraged, and/or needs for new support beyond the initial year of funding
- A description of how Virginia Tech's Common Book selection will be incorporated
- A description of the necessary faculty development support required from other units on campus, such as CIDER, Faculty Development Institute (FDI), and/or Academic Assessment

Proposals that are interdisciplinary and/or inter-college or that address the unique needs of first-year transfer students will be encouraged. Preference will be given to proposals that include one or more of the following: meaningful collaboration or partnership with other units of the university, such as the Center for Student Engagement, the Center for Academic Excellence and Enrichment, or the Center for Peace Studies and Violence Prevention; a plan for long-term continuation; a description of the potential for external funding support; and evidence of how this project will contribute to the professional scholarly literature about first-year programs.

Initiatives in the planning year (2009-2010) to support the development of proposals for QEP funding include the establishment of three Faculty Innovation Teams (FITs) directed to the topics of problem solving, inquiry, and integration of learning (see Appendix IV). Faculty members on the FITS were nominated by their academic deans (including University Libraries) and student affairs professionals were nominated by the vice president for Student Affairs. These 12 faculty members and three student affairs professionals were charged with researching, preparing, and presenting a minimum of three learning indicators and commensurate activities. These deliverables will constitute the first deposits in the Bank of Best Practices and associated activities made available to those units developing QEP FYE

proposals (*www.fye.vt.edu*). When *Pathways to Success* is initiated upon reaffirmation, the FITs concept will evolve into the establishment of a Community of Practice, comprised of faculty and administrators responsible for FYE activities. The Community of Practice will provide a venue for discussion and collaboration across university units to promote the use of existing and new best practices. Additionally, the Community of Practice can serve as an incubator for research opportunities to enhance Virginia Tech's contribution to the scholarship of teaching and learning in the first year.

Further evidence of the institution-wide commitment to the success of Virginia Tech's QEP is the series of faculty development sessions designed for presentation throughout spring semester 2010 in collaboration with and co-branded with FDI, CIDER, and Academic Assessment on critical topics related to the development of *Pathways to Success* programs. The complete list with names of presenters and dates is in Appendix V. Sessions included are:

- Recommendations for Those Preparing a QEP Proposal
- Creating and Managing Civic Engagement Partnerships with Community
- ePortfolio: Virginia Tech's ePortfolio System within Scholar
- Building on Common Ground: Common Book/Common Experience
- ePortfolios and eFolio Thinking
- Technology and the 21st Century Student
- An Introduction to the Electronic Course of Study Planner
- Co-Curricular Engagement: A Panel on Working with Student Affairs
- Assessing Essential Learning Outcomes with VALUE rubrics

- Advising First-Year Students
- Service Learning as a Strategy for Engaged Teaching and Scholarship
- From the Other Side of the Podium: A Student Panel and Discussion

Proposals to seek funding for Year 1 are due March 29, 2010. A Grant Review Panel consisting of a faculty member from each college and University Studies, chaired by Robert Jones, who is also head of the biological sciences department and chair of the QEP Implementation Committee, will review the proposals during the month of April. Recommendations for funding will go forward to the director of the Office of First-Year Experiences, who in consultation with the vice-president and dean for undergraduate education, will announce funding for 2010-2011 (no later than May 10, 2010). Professional development activities designed specifically for the funded proposals will be conducted during the summer of 2010.

Throughout Year 1 of implementation, the director of first-year experiences and participants on

the Implementation/Advisory Committee (see description of organizational structure in Chapter 9) will review the funded projects using institutional assessment activities (see Chapter 11). In conjunction with information from the projects, specific assessment will inform and shape requirements that will establish Year 2 funding.

FYE program leaders will be required to submit a mid-term report in which they provide information about continuation plans for the subsequent year (by February 1 of each year). Additionally, they will participate in a debriefing seminar at the end of the funded academic year, will contribute to the Bank of Best Practices that will be accessible to the campus community as the project goes forward, and will submit an end-of-year project report. The report must define the FYE within that particular academic context, describe the assessment of student learning outcomes, explain how the assessment data will be used (including any changes made as a result from assessment findings) and describe how the FYE project will impact students' entire university experience.









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number of key activities to ensure the appropriate environment for successful implementation of its QEP. For example, discovery and planning committees have been in operation since 2006, and the 2009-2010 academic year is dedicated to planning for implementation of the QEP. Consistent with recommendations from the QEP Implementation Committee, an organizational structure was initiated. Specifically, in July 2009, the vice president and dean for undergraduate education established an Office of First-Year Experiences staffed with a director, an administrative assistant, and a graduate assistant. This office is charged with developing the QEP implementation plan and creating the QEP document.

By Year 5, all first-year students, both freshman and transfer, will participate in an approved FYE program. Quality Enhancement Plan: Virginia Tech

The QEP implementation plan requires coordination of and collaboration among the following Virginia Tech entities: all colleges with undergraduate programs, the University Academic Advising Center, the Division of Student Affairs, and a number of other academically related units across campus. During the 2009-2010 year, advisory groups are participating in the process, and three groups of faculty are developing activities and/or assignments and assessments of learning outcomes linked to problem solving, inquiry learning, and integration of learning. Year 1 FYE programs will be selected in late spring 2010 for implementation in the 2010-2011 academic year. The implementation goal is to have approximately 1,500 first-year students participating in an approved FYE in Year 1; 2,500 in Year 2; 3,500 in Year 3; and 5,000 in Year 4. By Year 5, all first-year students, both freshman and transfer, will participate in an approved FYE program. Outcomes will be disseminated to the university community through the Web (*www.fye.vt.edu*). In addition, two university-wide conferences will be held, one at the end of Year 2 and the second at the end of Year 4. These will represent an opportunity to highlight the scholarship on FYE teaching and learning generated in the first year at Virginia Tech.

	Planning Year 2009-2010
Summer 2009	QEP Implementation Committee report submitted to the vice-president and dean for undergraduate education
	<ul> <li>Director of first-year experiences appointed and Office of First-Year Experiences established</li> </ul>
Fall 2009	<ul> <li>Some advisory groups established (Associate Dean Advisory Council and the Student Advisory Council)</li> </ul>
	Implementation planning process initiated
	Faculty Innovation Teams established and begin developing Bank of Best Practices
	<ul> <li>FYE organizational structure and QEP budget approved by the provost and the vice- president for undergraduate education</li> </ul>
	Public awareness campaign initiated through campus-wide seminars
	Request for proposals for 2010-2011 (Year 1) disseminated
	QEP document finalized
Spring 2010	<ul> <li>Grant Review Panel, Stakeholder Committee, and QEP Implementation/Advisory Council are established</li> </ul>
	QEP document submitted to SACS and released to university community
	Faculty Innovation Teams complete development of Bank of Best Practices
	Bank of Best Practices made available to university community
	Faculty development sessions held for those interested in submitting a proposal
	SACS Onsite Reaffirmation Team visit occurs
	Implementation plan finalized following site visit
	Proposals for funding for 2010-2011 (Year 1) selected
Summer 2010	<ul> <li>Faculty development sessions held for faculty, student affairs staff, and others participating in 2010-2011 (Year 1) FYEs</li> </ul>

	Implementation Year 1 2010-2011
Fall 2010	Implementation of selected FYEs
	Ongoing program and institutional assessment of selected FYEs
	Review and adjustment of process
	Community of Practice established
	Request for proposals for 2011-2012 (Year 2) disseminated
	Faculty development sessions held
Spring	Ongoing program and university-wide assessment of FYEs in progress
2011	Review and adjustment of process
	<ul> <li>Community of Practice contributes to Bank of Best Practices and identifies program support activities needed</li> </ul>
	<ul> <li>Support activities held for existing FYEs</li> </ul>
	Proposals for funding for 2011-2012 (Year 2) selected
	FYEs submit end-of-year project report
	University-wide assessment activities completed
Summer 2011	<ul> <li>Faculty development sessions held for faculty and student affairs staff participating in 2011-2012 (Year 2) FYEs</li> </ul>

	Implementation Year 2 2011-2012
Fall 2011	University-wide assessment of FYEs reported to university community
	<ul> <li>Implementation of new and continuing FYEs</li> </ul>
	Ongoing program and university-wide assessment of new and continuing FYEs
	Review and adjustment of process
	<ul> <li>Community of Practice contributes to Bank of Best Practices and identifies program support activities needed</li> </ul>
	Request for proposals for 2012-2013 (Year 3) disseminated
	<ul> <li>Faculty development and program support sessions held</li> </ul>
Spring	Ongoing program and university-wide assessment of FYEs in progress
2012	Review and adjustment of process
	<ul> <li>Community of Practice contributes to Bank of Best Practices and identifies program support activities needed</li> </ul>
	<ul> <li>Faculty development and program support activities held</li> </ul>
	<ul> <li>Proposals for funding for 2012-2013 (Year 3) selected</li> </ul>
	FYEs submit end-of-year project report
	University-wide assessment activities completed
	FYE coordinator and support staff hired
	<ul> <li>University FYE conference on the scholarship of teaching and learning in the first year will be held</li> </ul>
	Recognition activities for participating FYE faculty and staff
Summer 2012	Faculty development sessions held for faculty and student affairs staff participating in 2012-2013 (Year 3) FYEs



	Implementation Year 3 2012-2013
Fall 2012	University-wide assessment of FYEs reported to university community
	Implementation of new and continuing FYEs
	Ongoing program and university-wide assessment of new and continuing FYEs
	Review and adjustment of process
	<ul> <li>Community of Practice contributes to Bank of Best Practices and identifies program support activities needed</li> </ul>
	Request for proposals for 2013-2014 (Year 4) disseminated
	Faculty development and program support activities held
Spring	<ul> <li>Ongoing program and university-wide assessment of FYEs in progress</li> </ul>
2013	Review and adjustment of process
	<ul> <li>Community of Practice contributes to Bank of Best Practices and identifies program support activities needed</li> </ul>
	<ul> <li>Faculty development and program support activities held</li> </ul>
	<ul> <li>Proposals for funding for 2013-2014 (Year 4) selected</li> </ul>
	FYEs submit end-of-year project report
	University-wide assessment activities completed
Summer 2013	<ul> <li>Faculty development sessions held for faculty and student affairs staff participating in 2013-2014 (Year 4) FYEs</li> </ul>

	Implementation Year 4 2013-2014
Fall 2013	Ongoing program and university-wide assessment of FYEs in progress
	Review and adjustment of process
	<ul> <li>Community of Practice contributes to Bank of Best Practices and identifies program support activities needed</li> </ul>
	<ul> <li>Request for proposals for 2014-2015 (Year 5) disseminated</li> </ul>
	<ul> <li>Faculty development and program support activities held</li> </ul>
Spring	<ul> <li>Ongoing program and university-wide assessment of FYEs in progress</li> </ul>
2014	Review and adjustment of process
	<ul> <li>Community of Practice contributes to Bank of Best Practices and identifies program support activities needed</li> </ul>
	<ul> <li>University FYE conference on the scholarship of teaching and learning in the first year will be held</li> </ul>
	<ul> <li>Recognition activities for participating FYE faculty and staff</li> </ul>
	<ul> <li>Faculty development and program support activities held</li> </ul>
	<ul> <li>Proposals for funding for 2014-2015 (Year 5) selected</li> </ul>
	FYEs submit end-of-year project report
	University-wide assessment activities completed
Summer 2014	<ul> <li>Faculty development sessions held for faculty and student affairs staff participating in 2014-2015 (Year 5) FYEs</li> </ul>



	Implementation Year 5 2014-2015
Fall 2014	University-wide assessment of FYEs reported to university community
	<ul> <li>Ongoing program and university-wide assessment of selected FYEs</li> </ul>
	Review and adjustment of process
	<ul> <li>Community of Practice contributes to Bank of Best Practices and identifies program support activities needed</li> </ul>
	Faculty development sessions held
	SACS QEP Impact Report developed
Spring	Ongoing assessment of FYEs in progress
2015	<ul> <li>Community of Practice contributes to Bank of Best Practices and identifies program support activities needed</li> </ul>
	Support activities held for existing FYEs
	FYEs submit end-of-year project report
	University-wide assessment activities completed
	SACS QEP Impact Report submitted





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# **Organizational Structure**

ULTIMATE RESPONSIBILITY FOR ALL SACS-related activities, obligations, and relationships, including the QEP, rests with the president, who is in turn supported in this duty by the senior vice president and provost. The provost has assigned direct oversight of accreditation responsibilities to the vice president and dean of undergraduate education. The director of the Office of First-Year Experiences, who reports to the vice president and dean for undergraduate education, is responsible for the day-to-day operations of the QEP.

Virginia Tech's QEP — *Pathways to Success* — will function as a collaborative effort among central administration, the seven Virginia Tech colleges with undergraduate programs, the University Academic Advising Center (UAAC), the Division of Student Affairs, and many other units, including, but not limited to, the University Libraries, In addition to these supporting bodies, groups of faculty from the broader academic community will collaborate to research, develop, and participate in the dissemination of exemplar learning activities and assessment strategies. the Center for Instructional Development and Educational Research, Learning Technologies, Faculty Development Institute, the Center for Academic Excellence and Enrichment, the University Honors Program, the Center for Student Engagement, the VT-SACS Office, and the Office of Academic Assessment. The membership and roles of the director of the Office of First-Year Experiences and others directly involved are illustrated below, followed by role descriptions.

The director of FYE activities holds administrative responsibility for managing the processes of selection, implementation, and assessment of the first-year programs at Virginia Tech. This responsibility includes long-range planning, implementation, day-to-day management, budgetary responsibility and accountability, and ensuring the integrity of relevant programs across the university. Mary Ann Lewis was appointed to this position in July 2009 to oversee continuation of the planning process and to initiate the five-year implementation process. An administrative assistant and a doctoral-level graduate assistant with experience in teaching first-year students support the office in the planning year (2009-2010). Additional support for implementing the QEP is represented in the staffing plan for a management team, reflected in the five-year budget projections, and includes the hiring of an additional graduate assistant.

In fall 2009, an Associate Deans' Advisory Council, comprised of the undergraduate academic dean from each college and the director of the UAAC, was formed to provide advice and counsel to the Office of First-Year Experiences. The council meets no less than once a semester, and serves as the locus of communication between the Office of First-Year Experiences, the colleges, and the UAAC. Each college and the UAAC is required to establish an internal process to review candidate first-year programs, a process for determining those programs to be advanced to the Grant Review Panel as requests for funding, and a process to oversee the fiscal, educational, and personnel management of the funded projects.

Also in fall 2009, a Student Advisory Council of 12 to 15 undergraduate students was formed.



Council membership includes representatives named by the Student Government Association and at least one student representative from UAAC and one from each college with undergraduate programs. The Student Advisory Council meets at least twice a semester with the management team, and will identify at least one student member to serve on the Stakeholders Committee.

Moreover, to promote widespread ownership of Pathways to Success across the university landscape, a Stakeholders Committee (Spring 2010) and a QEP Implementation/Advisory Council (Spring 2010) will be formed. The Stakeholders Committee will be composed of representatives from academic and administrative units that have substantial material or fiscal interests in first-year programs and will meet twice a year to review and comment on goals and accomplishments. The Stakeholders Committee will be chaired by the vice president and dean for undergraduate education and will include a dean of one of the colleges with undergraduate programs, a faculty representative from the Faculty Senate, the vice-president for Student Affairs, the dean of the libraries, the associate vice-president for learning technologies, the VT-SACS coordinator, and an undergraduate student. The director of first-year experiences will serve as an ex-officio member.

The QEP Implementation/Advisory Council will include faculty, student, and staff representation.



The director of first-year experiences will work closely with the QEP Implementation/Advisory Council to monitor the progress of the QEP initiative and to recommend changes when needed. The QEP Implementation/Advisory Council will meet at least twice each semester.

In addition to these supporting bodies, groups of faculty from the broader academic community will collaborate to research, develop, and participate in the dissemination of exemplar learning activities and assessment strategies. Conceptualized and operating during the planning year (2009-2010) as Faculty Innovation Teams (FITs), their work will be deposited into the Bank of Best Practices, which will be available to members of the university community as a resource to develop proposals for funding first-year programs. As the FYE initiative continues into subsequent years of implementation, the faculty and staff involved in first-year programs will become a Community of Practice that will be supported by continuing professional development activities. Both the FITs and the Community of Practice have budgetary implications reflected in the budget plan.

In spring 2010, a Grant Review Panel will be established to review the applications for fiscal support for FYE programs and make recommendations to the director of first-year experiences for programs to be funded. The Grant Review Panel also will evaluate the efficacy of the funded projects by reviewing mid-year reports and making recommendations for continued funding. Chaired by a faculty member, the Grant Review Panel will include a faculty representative from each college, the UAAC, and representatives from Student Affairs, the libraries, and Center for Academic Enrichment and Excellence. The panel also will include students. This panel will meet approximately four times during the academic year and will receive staff support from the Office of First-Year Experiences.



## Resources

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leaders at the highest level are fully aware of and committed to providing adequate funding for the implementation of Virginia Tech's QEP *Pathways to Success*. Existing funds are being utilized to support current positions associated with the planning year, specifically the director of first-year experiences and the FYE administrative assistant. A graduate assistant position currently is supporting the planning year but must be returned to other core university activities beginning in 2010-2011. The table on the following page includes the new resources required to carry out full implementation of the QEP.

	<b>Year 1</b> 2010- 2011	<b>Year 2</b> 2011- 2012	<b>Year 3</b> 2012- 2013	<b>Year 4</b> 2013- 2014	<b>Year 5</b> 2014- 2015
OPERATING	·				
Competitive Grants to Pathways to Success Programs <sup>1</sup>	\$150,000	\$250,000	\$350,000	\$500,000	\$650,000
Faculty Development and Recognition Activities <sup>2</sup>	\$15,000	\$20,000	\$15,000	\$20,000	\$15,000
Office expenses, travel, publications, etc.	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Assessment Protocols <sup>3</sup>	\$10,000	\$15,000	\$15,000	\$15,000	\$15,000
PERSONNEL					
Graduate Assistant <sup>4</sup>	\$25,000	\$26,000	\$27,000	\$28,000	\$29,000
Assessment, ePortfolio, and Faculty Development Support <sup>5</sup>	\$163,000	\$163,000	\$163,000	\$163,000	\$163,000
TOTAL PER YEAR	\$393,000	\$504,000	\$600,000	\$756,000	\$902,000
TOTAL NEW FUNDING NEEDED: \$3,155,000					

#### New Resources for Pathways to Success

<sup>1</sup> Centrally budgeted at \$100/student. Actual awards will vary in amount up to a maximum of \$30,000 each.

<sup>2</sup> Remuneration to faculty for participation in Community of Practice activities and for faculty and program recognition activities. Years 2 and 4 include year-end university-wide dissemination conferences.

 $^{\rm 3}$  Purchase and/or administration costs of assessments to be used institution-wide.

<sup>4</sup> Graduate assistant position dedicated to FYE. The graduation assistant position being used in 2009-2010 is borrowed from supporting other core university commitments of Curriculum for Liberal Education and Honor System and needs to be assigned back to those responsibilities.

<sup>5</sup> Partial support needed for approved, but not yet funded, positions in Academic Assessment, Learning Technologies, and CIDER to provide ongoing consultative activities and reporting. Included here because if the positions are not funded, then these offices will not be able to provide the ongoing support needed for the five-year implementation plan.



## **Assessment Plan**

VIRGINIA TECH'S PLAN FOR ASSESS-ING THE EFFECTIVENESS of the Pathways to Success initiative is grounded in the "Assessment for Improvement Paradigm" (Ewell, 2009). Accordingly, the predominant ethos behind assessment activities related to this QEP is engagement in the improvement of teaching and learning for the betterment of Virginia Tech's undergraduate experience. This formative approach to assessment will rely on the triangulation of data derived from multiple assessment instruments — quantitative and qualitative — at both the individual course/experience level, as well as in the aggregate, to develop an understanding of the efficacy of the Pathways to Success overall. As the Pathways to Success initiative grows, opportunities will emerge for comparative, longitudinal analyses across experiences; this ongoing process will allow for the identification of best practices in the delivery of academically grounded FYEs and will

The penultimate goal of *Pathways* to *Success* is to enable Virginia Tech students to become lifelong learners.



further the broader research agenda in the scholarship of teaching and learning in the first year.

#### Direct Assessment of Student Learning Outcomes

The penultimate goal of *Pathways to Success* is to enable Virginia Tech students to become lifelong learners. To further this goal, Virginia Tech has identified three antecedent learning outcomes — problem solving, inquiry, and integration — developmentally appropriate to the first year of college that will provide a solid foundation for students' path to lifelong learning. In operationalizing each learning outcome, *Pathways*  to Success has been purposefully aligned with the AAC&U VALUE rubrics, a nationally recognized effort to develop common definitions of and, most significantly, *measurable criteria for*, each of the Essential Learning Outcomes (AAC&U, 2009). Using VALUE rubrics designed to assess lifelong learning, problem solving, inquiry and analysis, information literacy, and integration of learning, Virginia Tech has developed three measurable indicators of learning for each of its learning outcomes that can be assessed through direct means. A matrix of direct assessment of these studentlearning outcomes is provided below:

Learning Outcome	Measurable Indicator of Learning	Instrumentation	Nature of Evidence	Administration
Problem- solving	Define a Problem	Common Reflection Prompt in ePortfolio	Qualitative	Embedded in the individual Pathways to Success courses/ programs
	Identify problem- solving strategies	rated using customized VALUE rubric for problem-		
	Propose solutions/ hypotheses	solving		
Inquiry	Select a topic of inquiry	Common Reflection Prompt in ePortfolio	Qualitative	Embedded in the individual Pathways to Success courses/ programs
	Access and evaluate existing knowledge, research, and/or views	customized VALUE rubric for inquiry		
	Use information effectively, ethically, and legally to accomplish a specific purpose	Information Literacy Test, developed by the Center for Assessment and Research Studies, James Madison University	Quantitative	Conducted under auspices of Office of Academic Assessment
Integration	Connect relevant experience and academic knowledge	Common Reflection Prompt in ePortfolio rated using customized VALUE	Qualitative	Embedded in the individual <i>Pathways</i> to Success courses/ programs
	Make connections across disciplines	rubric for integration		
	Reflect upon and assess themselves as learners	Measure of ePortfolio Skills and Integration, developed by Virginia Tech ePortfolio Initiative	Quantitative	Conducted under the auspices of the Office of Academic Assessment

Each FYE grant funded by the Pathways to Success program will administer a common reflection to its students for each of the three learning outcomes. The reflections are explicitly designed to elicit evidence of student learning against each measurable indicator using the VALUE rubrics customized for the Virginia Tech campus. The reflections will be administered through Virginia Tech's ePortfolio platform, Scholar. The use of ePortfolios by students participating in Pathways to Success is intricately linked to the teaching, learning, and assessment process, not only as a means by which the university can collect and collate assessment data, but also as a significant means by which students will begin to develop the ability to integrate information and make connections across their learning experiences. Data from each FYE activity will be shared with the Office of Academic Assessment for institutional assessment purposes. Additionally, a sample of reflection prompt responses will be taken each summer and evaluated by a team of faculty and administrators involved in Pathways to Success to establish inter-rater reliability across first-year courses/ experiences.

In addition to the qualitative evidence of student learning derived from the Common Reflection Prompts, two objective measures are included in the direct assessment of student learning. The first is the Information Literacy Test (ILT), which is commercially available from the Center for Assessment and Research Studies at James Madison University. This reliable and valid instrument measures students' ability to: (a) determine the nature and extent of information needed, (b) access needed information effectively and efficiently, (c) evaluate information and its sources critically and incorporate selected information into their knowledge base system, and (d) understand many of the economic, legal, and social issues surrounding the use of information and access, and use information ethically and legally (ILT Test Manual). The ILT aligns with the identified measurable indicators of student learning for inquiry for *Pathways to Success*. The second objective measure included in the direct assessment of student learning is the Measure of ePortfolio Skills and Integration. Developed by the Virginia Tech ePortfolio staff, this instrument will assess students' technical skills using the ePortfolio system as well as levels of "folio thinking." The psychometric properties of the instrument will be evaluated as a part of the assessment of the *Pathways to Success*.

#### Indirect Assessment of Student Learning

As part of the assessment of Pathways to Success, Virginia Tech will also consider indirect evidence of student learning by comparing students who participated with a sample of those who did not participate. Indicators of student success will be analyzed, such as retention and graduation rates, GPA, number of major changes, select data from national surveys (e.g., NSSE), and participation in high-impact practices (e.g., study abroad, undergraduate research, etc.). All students enrolled in an FYE will also complete a common Pathways to Success evaluation at the end of each semester, in which they will self-report on gains against specific learning outcomes as well as perceived efficacy of the course overall. (This evaluation is separate from and in addition to the university's standard evaluation of teaching form, distributed at the end of each course, and will be administered by the Office of First-Year Experiences). Additionally, all students participating in a Pathways to Success FYE will take the Motivational Strategies for Learning Questionnaire (MSLQ) (Duncan & McKeachie, 2005; Pintrich, McKeachie, & Lin, 1987). This 81-item, self-report instrument measures students' motivation along six subscales and students' use of learning strategies along nine subscales. Several subscales for both motivation as well as learning strategies can be mapped onto the essential learning outcomes of problem solving, inquiry, or integration. Others may serve to influence students' progress against these indicators

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of learning. See below for a detailed description of the motivational and student learning strategy subscales of the MSLQ.

#### **Other Measures of Program Effectiveness**

Beyond the direct and indirect assessment of student learning outcomes delineated above, the Office of First-Year Experiences will engage all *Pathways to Success* programs in additional evaluative activities designed to provide evidence of individual course/program effectiveness. Other measures of program effectiveness employed by the Office of First-Year Experiences will include interviews with participating students, faculty, administrators, and staff; focus groups; and regular course observations.

The Office of Academic Assessment and the ePortfolio literature will provide leadership, analytical, and technical support for course-level

The Motivated Strategies for Learning Questionnaire (MSLQ)			
Motivation Subscales	Learning Strategies Subscales		
Intrinsic Goal Orientation	Rehearsal		
Extrinsic Goal Orientation	Elaboration		
Task Value	Organization		
Control of Learning Beliefs	Critical Thinking		
Self-Efficacy for Learning and Performance	Metacognitive Self-Regulation		
Test Anxiety	Time and Study Environment Management Effort Regulation Peer Learning Help Seeking		

Assessment Timeframes				
Beginning of Pathways to Success FYE	Midpoint of Pathways to Success FYE	Conclusion of Pathways to Success FYE		
<ul> <li>Pre-Test ILT</li> <li>Pre-Test MSLQ</li> <li>Pre-Test Measure of ePortfolio Skills &amp; Integration</li> </ul>	<ul> <li>Common Reflection Prompts for Problem- Solving, Inquiry, &amp; Integration in ePortfolio</li> <li>Course observations, interviews, focus groups</li> <li>Student data (GPA, participation rates, etc.)</li> </ul>	<ul> <li>Post-Test ILT</li> <li>Post-Test MSLQ</li> <li>Post-Test Measure of ePortfolio Skills &amp; Integration</li> <li>Common Pathways evaluation</li> <li>Interviews, focus groups</li> <li>Student data (GPA, portioination rates ato)</li> </ul>		



assessment of student learning. The Office of Academic Assessment will be responsible for coordinating institutional-level assessment of stu dent learning. The Office of First-Year Experiences will be ultimately responsible for coordinating the evaluation of overall program effectiveness.







# Supporting Literature

- Association of American Colleges and Universities. (2007). College Learning for the New Global Century. Washington, DC: Author.
- Association of American Colleges and Universities. (2009). The VALUE project overview. *Peer Review*, 11(1), 4-7.
- Association of American Colleges and Universities. (2009). VALUE rubrics. Retrieved October 1, 2009, from *https://www.aacu.org/value/rubrics/index. cfm*.
- Astin, A.W. (1975). *Preventing students from dropping out*. San Francisco: Jossey-Bass.
- Astin, A. (1993). What matters in college? San Francisco: Jossey-Bass.
- Barefoot, B.O. (2000). The first-year experience: Are we making it any better? *About Campus*, 4, 12-18.
- Cambridge, D. (2009). Layering networked and symphonic selves: A critical role for e-portfolios in employability through integrative learning. *Campus-Wide Information Systems*, 25(4), 244-262.
- Challis, M. (1999). AMEE medical education guide no. 11 (revised): Portfoliobased learning and assessment in medical education. *Medical Teacher*, 21(4), 370-386.
- Chen, H.L., & Mazlow, C. (2002). Electronic learning portfolios and student affairs. Net Results. Retrieved April 6, 2009, from www.naspa.org/netresults/ PrinterFriendly.cfm?ID=825
- Chickering, A. & Gamson, Z. (1987). Seven principles of good practice in undergraduate education. *AAHE Bulletin*, 39, 3-7.
- Commission of the European Communities (2000). A memorandum on lifelong learning. Retrieved December 1, 2009, from www.see-educoop.net/education\_ in/pdf/lifelong-oth-enl-t02.pdf
- Cuseo, J. (2008). Seven properties of effective first-year program delivery. E-source for College Transitions, (5)3. Retrieved from www.sc.edu/fye/esource/ index/html
- Cuseo, J. (2008). First-year program delivery: Effective Principles and Exemplary Practices. *E-Source for College Transitions*, (5)4. Retrieved from *www.sc.edu/fye/esource/index/html*.
- Diez, M. (1994). *The portfolio: sonnet, mirror, and map.* Paper presented at the conference on Linking Liberal Arts and Teacher Education: Encouraging Reflection through Portfolios. San Diego, CA.



Duncan, T.G., & McKeachie, W.J. (2005). The making of the motivated strategies for learning questionnaire. *Educational Psychologist*, 40:2, 117-128.

Duran, R.K., Colarulli, G.C., Barrett, K.A., & Stephenson, C.B. (2005). An assessment of the effectiveness of the University of Hartford first-year interest group model. *Journal of The First-Year Experience & Students in Transition*, 17(1), 79-99.

- Education Commission of the States (1995). *Making quality count in undergraduate education*. Denver, CO: Author.
- Elbow, P., & Belanoff, P. (1986). Portfolios as a substitute for proficiency examinations. *College Composition and Communication*, 37(3), 336-340.
- Ewell, P.T. (2009). Assessment, accountability, and improvement: Revisiting the tension. National Institute of Learning Outcomes Assessment Occasional Paper, No. 1, retrieved December 10, 2009, from www.learningoutcomeassessment. org/documents/PeterEwell.pdf
- Gamson, Z. (1991). A brief history of the seven principles for good practice in undergraduate education. In R.J. Menges (Series Ed.) & A. Chickering & Z.
  Gamson (Vol. Ed.), New directions for teaching and learning, No. 47. Applying the seven principles for good practice in undergraduate education (pp. 5-12). San Francisco, CA: Jossey-Bass.
- Garis, J.W. (2007). e-Portfolios: Concepts, designs, and integration with student affairs. *New Directions for Student Services*, 119(Fall), 3-15.
- Grayson, P., & Grayson, K. (2003). Research on retention and attrition. Montreal: Canadian Millennium Scholarship Foundation.
- Harley, B. (2001). Freshmen, information literacy, critical thinking, and values. *Reference Services Review*, 29(4), 301-305.

Hotchkiss, J.L., Moore, R.E., & Pitts, M. (2006). Freshman learning communities, college performance, and retention. *Education Economics*, Volume 14(2), 197-210.

- Johnson, N.J., & Rose, L.M. (1997). Portfolios: clarifying, constructing, and enhancing. Lancaster, PA: Technomic Publishing Company.
- Johnson, R.S., Mims-Cox, J.S., & Doyle-Nichols, A. (2006). Developing portfolios in education: A guide to reflection, inquiry, and assessment. Thousand Oaks, CA: SAGE Publications.
- Keup, J.R., & Barefoot, B.O. (2005). Learning how to be a successful student: Exploring the impact of first-year seminars on student outcomes. *Journal of The First-Year Experience & Students in Transition*, 17(1), 1-37.



- Knefelkamp, L. (1991). The seamless curriculum. CIC Deans Institute: Is this good for our students? Washington, DC: Council for Independent Colleges.
- Knight, M.E., & Gallaro, D. (Eds.). (1994). Portfolio assessment: Applications of portfolio analysis. Lanham, MD: University Press of America.
- Kuh, G. (2001). Assessing what really matters to student learning: Inside the national survey of student engagement. *Change*, May/June, 10-18.
- Kuh, G. (2003). How are we doing at engaging our students? *About Campus*, 8(1), 9-16.
- Kuh, G.D. (2008). High-impact educational practices: What they are, who has access to them, and why they matter. Washington, DC: Association of American Colleges and Universities.
- Lang, D.J. (2007). The impact of a first-year experience course on the academic performance, persistence, and graduation rates of first-semester college students at a public research university. *Journal of the First-Year Experience & Students in Transition*, 19(1), 9-25.
- Levitz, R. (1993). Retention is dollar-wise. *Recruitment and Retention Newsletter*, 7(1), p. 4.
- Love, P.G., & Love, A.G. (1995). Enhancing student learning: Intellectual, social, and emotional integration (ASHE-ERIC Higher Education Report No. 4). Washington, DC: ASHE-ERIC.
- Miller, Janz, & Chunju (2007). The retention impact of a first-year seminar on students with varying pre-college academic performance. *Journal of The First-Year Experience & Students in Transition*, 19(1).
- McKeachie, W.J., Pintrich, P.R., & Lin, Y.G. (1985). Teaching learning strategies. *Educational Psychologist*, 20, 153-160.
- National Survey on First-Year Seminars (2006). National Resource Center for The First-Year Experience and Students in Transition. Retrieved September 8, 2008 from www.sc.edu/fye/research/surveyfindings/index.html
- Noel, L., Levitz, R., Saluri, D., & Associates. (1985). *Increasing student retention*. San Francisco: Jossey-Bass Publishers.
- Orbitz, A.M., & Rhoades, R.A. (2000). Deconstructing whiteness as part of a multicultural education framework: From theory to practice. *Journal of College Student Development*, 41(1), 81-93.
- Pascarella, E.T. (2001). Identifying excellence in undergraduate education: Are we even close? *Change*, May/June, 19-23.



- Pascarella, E.T., & Terenzini, P.T. (2005). *How college affects students: A third decade of research*. San Francisco: Jossey-Bass.
- Paulson, F.L., Paulson, P.R., & Meyer, C.A. (1991). What makes a portfolio a portfolio? *Educational Leadership*, 60-63.
- Pintrich, P.R., McKeachie, J.W., & Lin, Y.G. (1987). Teaching a course in Learning to Learn. *Teaching of Psychology*, 14, 81-86.
- Pitkethly, A. & Prosser, M. (2001). The First-year Experience Project: A model for university-wide change. *Higher Education Research & Development*, 20(2), 185-198.
- Roberts, G., Aalderink, W., Cook, J., Feigen, M., Harvey, J., Lee, S., et al. (2005). Reflective learning, future thinking: digital repositories, e-portfolios, informal learning and ubiquitous computing. Paper presented at the ALT/SURF/ ILTA1 Spring Conference Research Seminar. Trinity College, Dublin.
- Sagaria, M.D. & Johnsrud, L.K. (1989). Providing administrative, faculty, and staff leadership. In M.L. Upcraft, Gardner, J.N., & Associates (Eds.), The Freshman Year Experience. San Francisco: Jossey-Bass.
- Schneider, C.G. (2009). The proof is in the portfolio. *Liberal Education*, 95(1), 1-2.
- Schuh, J.H. (2005). Finances and retention: Trends and implications. In A. Seidman (Ed.), College student retention: Formula for success. Westport, CT: ACE/Praeger.
- Shaklee, B.D., Barbour, N.E., Ambrose, R., & Hansford, S.J. (1997). Designing and using portfolios. Boston, MA: Allyn and Bacon.
- Swing, R. (2002). Series of essays on the first-year initiative benchmarking study. Retrieved June 5, 2008, from www.sc.edu/fye/resources/assessment/essays/ Swing-8.28.02.html
- Taylor, I., Thomas, J., & Sage, H. (1999). Portfolios for learning and assessment: Laying the foundations for continuing professional development. Social Work Education, 18(2), 147-160.
- Tobolowsky, B.F., Mamrick, M. & Cox, B.E. (2005). Monograph #41: The 2003 national survey of first-year seminars: Continuing innovations in the collegiate curriculum. National Resource Center for the First-Year Experience and Students in Transition. Columbia, SC.
- Yancey, K. B. (2001). Digitized student portfolios. In B. Cambridge (Ed.), Electronic portfolios: Emerging practices in student, faculty, and institutional learning (pp. 15-30). Sterling, VA: Stylus.

# Appendices

# **Appendix I: Strategic Plan Summary**

## **Mission**

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Virginia Polytechnic Institute and State University (Virginia Tech) is a public land-grant university serving the Commonwealth of Virginia, the nation, and the world community. The discovery and dissemination of new knowledge are central to its mission. Through its focus on teaching and learning, research and discovery, and outreach and engagement, the university creates, conveys, and applies knowledge to expand personal growth and opportunity, advance social and community development, foster economic competitiveness, and improve the quality of life.

## **Scholarship Domains**

Areas of immediate strategic focus within the broad array of programs consistent with the university's comprehensive missions

#### Learning

#### 2012 Profile

- 29,000 total enrollments
- 2,600 Ph.D.s
- 3,900 master's
- 22,500 undergraduate enrollments, including 3,000 who enter as transfer students

#### **Undergraduate Education**

- Create quality research experiences, capstone courses, education abroad, and service learning opportunities
- + Increase and support a diverse student body
- Provide transitional support for transfer students
- Integrate liberal education into the curriculum through VT Pathways for Learning
- Expand international and foreign language study
- + Strengthen academic and career advising

#### e-Learning and Information Systems

- Strengthen role of distance and distributed learning
- Integrate advanced learning technologies across the curriculum

#### **Core Values**

- Freedom of inquiry
- Mutual respect
- A commitment to diverse and inclusive communities
- Ut Prosim (That I May Serve)
- Lifelong learning
- A culture of continuous improvement
- Personal and institutional integrity
- Strengthen library systems appropriate for the 21st century

#### **Graduate and Professional Education**

- Align with National Research Council quality benchmarks
- + Achieve transformative graduate education
- Enhance graduate and professional degree value through national partnerships and joint degrees

#### **Educating the Whole Student**

- Expand and support the holistic and transformative educational experiences of students
- Develop diverse and inclusive living and learning communities
- Develop opportunities to strengthen crosscultural and international competencies
- Design ethical leadership opportunities within and outside the classroom
- Promote quality of student life, health, and well-being

#### **Discovery**

#### 2012 Profile

- \$540M in research expenditures
- Increased stature in strategic research areas

#### **Energy, Materials, and Environment**

- Energy: Establish a resource consortium focused on energy supply, distribution, and utilization: research foci include clean coal, fuel cell, bio-renewable, solar, wind, and nuclear energies, and transportation
- Materials: Establish research initiatives in polymeric, ceramic, metallic, composite, electronic, optical, computational, and biological materials
- Environment: Strengthen research partnerships in water quality, atmospheric sciences, and environmental health sciences

#### Health, Food, and Nutrition

- Establish research collaborations in infectious disease: host-pathogen-environment interaction (HPEI)
- Leverage research partnerships in health, food, and nutrition with a focus on the prevention, treatment, and management of obesity

#### **Social and Individual Transformation**

- Explore the establishment of an institute aimed at researching global issues in science, policy, and society
- Strengthen current multidisciplinary efforts that explore social, political, ethical, and cultural thought
- Establish collaborations in the National Capital Region that explore issues related to urban development
- Promote artistic and creative expression through collaborations with the future center for performing and visual arts

#### Innovative Technologies and Complex Systems

 Secure research opportunities in innovative technologies and complex systems: nanotechnology, bioinformatics, biotechnology, high-performance computing, power electronics and robotics, wireless, and geographic information systems (GIS)

#### Engagement

#### 2012 Profile

- Significant number of patents filed, spin-off companies established, and regional economic development initiatives launched
- Five international regional centers established

#### PK-12 Enhancements in Science, Technology, Engineering, Mathematics (STEM)

- + Expand PK-12 teacher preparation
- Expand PK-12 school and university partnerships
- Provide professional development for PK-12 STEM teachers and other educators
- Develop a continuum of recruitment from PK-12 to STEM undergraduate and graduate programs

#### Student Engagement

- Integrate service learning in courses across the curriculum
- Increase experiential and service-learning opportunities for all students, faculty, and staff with community and business partners

#### **Economic Vitality**

- Strengthen public and private commercialization partnerships, including patents, spin-off companies, and licensing income, with domestic and international businesses that have commercial interests in Virginia
- Lead economic, research, and community development efforts in targeted regions in the commonwealth and National Capital Region
- Develop the workforce through training and continuing education

#### International Education and Research

- Implement the Virginia Tech International Strategic Plan
- Expand education abroad
- Strengthen faculty international research, education, and outreach
- Enhance international and cross-cultural content across the curriculum

## **Foundation Strategies**

#### **Development of the Organization**

#### A High-Quality, Diverse, and Inclusive Academic Environment

- Achieve competitive compensation for instructional faculty at 60 percent of SCHEV peers
- Promote competitive compensation for A/P and research faculty and for staff based on market data and available benchmarks
- Foster a diverse, inclusive, and welcoming university community
- Recruit, retain, and develop the best staff and faculty
- + Reward achievement and excellence
- Nurture management and leadership development
- Develop new HR system supporting Higher Education Restructuring Act
- + Implement succession planning programs
- Enhance cultural programming and awareness
- Continue management of competitive benefits
- · Promote the health and welfare of the university community
- Partner with alumni, emeriti faculty, and business and government partners

#### Investment in the Campus Infrastructure

- Promote effective management of the university's space and land resources for learning, living, and work
- + Enhance health, safety, and security operations
- · Promote robust and integrated information technology strategies
- + Promote and reward innovative administrative processes
- + Enhance customer-service orientation in all business services operations
- · Maximize the university's branding effort

# Effective Resource Development, Allocation, and Management

- Work with governor, legislators, General Assembly staff, and SCHEV to increase state funding
- + Increase funding from private and other sources
- Maintain competitive tuition and fee package
- + Practice effective debt management
- + Utilize strategies to aggressively grow the endowment
- · Continue effective management of university-related corporations
- Utilize alternative fund sources
- Further develop existing partnerships and create opportunities for new partnerships with business, industry, and corporations



## Appendix II: Schedule of FYE/QEP Information and Feedback Meetings

#### Conducted by Mary Ann Lewis | Fall 2009

August 5, 2009: Core of Cadets Staff Member QEP Information Meeting

August 27, 2009: Residential Life Administrators QEP Information Meeting

August 31, 2009: Academic Affairs Sub-Committee of the Board of Visitors QEP Presentation

September 3, 2009: Student Advisory Council QEP Presentation

September 25, 2009: Associate Deans Advisory Council QEP Question & Answer Session

October 8, 2009: Engineering Education Faculty of the College of Engineering QEP Question & Answer Session

October 16, 2009: Coordinating Counselors of the College of Agriculture and Life Sciences QEP Question & Answer Session

October 23, 2009: Faculty Innovation Teams QEP Presentation October 28, 2009: University Advising Afternoon Chat QEP Presentation

November 5, 2009: Career Services Director and Staff QEP Question & Answer Session

November 16, 2009: Student Affairs Leadership Team QEP Presentation

November 18, 2009: Academic Enrichment and Excellence Staff Member QEP Information Meeting

November 19, 2009: Faculty Development Institute QEP Request for Proposal Presentation

December 3, 2009: Dean's Council QEP Presentation

December 11, 2009: 2008-2009 Implementation Committee QEP Update Presentation

# Appendix III: Pathways to Success

## VIRGINIA TECH'S QEP FIRST-YEAR EXPERIENCES Request for Proposals for 2010-2011 Grants | January 2010

#### **Program Description**

The Quality Enhancement Plan (QEP) is a Southern Association of Colleges and Schools (SACS) accreditation requirement adopted in 2001. The QEP exemplifies SACS' commitment to student learning being at the heart of the institution's mission. The QEP looks to the future and is intended to launch a process that moves an institution forward. In addition, SACS requires that there is evidence of institutional commitment, a robust assessment plan, and potential for sustainability.

The purpose of Virginia Tech's QEP is to increase undergraduate students' engagement with their education through comprehensive first-year experiences (FYEs). These experiences will provide curricular and co-curricular learning opportunities designed to foster students' abilities to (1) solve problems, (2) explore and use information appropriately and effectively, and (3) integrate ideas and experiences to apply to new learning experiences within and beyond the campus.

The Virginia Tech QEP Office of First-Year Experiences invites participation in the inaugural program for funding for *Pathways to Success*. We anticipate that the initial funding cycle for the 2010-2011 academic year will support 2-5 awards to colleges or the University Academic Advising Center (UAAC), up to a maximum of \$30,000 each depending on the quality. The intention is that by the end of five years, first-year experience programs will have become a critical part of the culture at Virginia Tech, and all freshman and transfer students will be participating in an approved FYE that draws from a set of common learning outcomes and assessment protocols.

#### **Funding Guidelines**

Proposals shall incorporate all of the following learning outcomes and map them to activities required of students.

- Problem-solving Skills: the ability to define a problem; identify problem-solving strategies; and propose solutions/hypotheses. Student learning outcomes associated with problem-solving are derived from the AAC&U VALUE rubrics *www.aacu.org/value/rubrics/index.cfm* on problem solving as well as elements of motivation and learning strategies captured by the Motivated Strategies for Learning Questionnaire (MSLQ).<sup>1</sup>
- Inquiry Skills: the ability to select a topic of inquiry; access and evaluate existing knowledge, research, and/or views; and use information effectively, ethically, and legally to accomplish a specific purpose. Student learning outcomes associated with inquiry are derived from the AAC&U VALUE rubrics *www.aacu.org/value/rubrics/index.cfm* on information literacy and inquiry and analysis, as well as standardized measures of information literacy skills.
- Integration Skills: the ability and disposition to make connections between ideas and experiences; apply them across disciplines and to new learning situations within and beyond campus; and reflect upon and assess themselves as learners. Student learning outcomes associated with

<sup>&</sup>lt;sup>1</sup> Duncan, T.G., & McKeachie, W.J. (2005). The making of the motivated strategies for learning questionnaire. *Educational Psychologist*, 40(2), 117-128. Available electronically through the Virginia Tech library ejournals.

integrative learning are derived from the AAC&U VALUE rubrics *www.aacu.org/value/ru-brics/index.cfm* on integrative learning as well as elements of learning strategies captured by the Motivated Strategies for Learning Questionnaire (MSLQ).

A Bank of Best Practices on student learning outcomes and associated activities will be available as a resource to those developing proposals. Also, a series of faculty development sessions will be offered throughout spring semester 2010 in collaboration with and co-branded with FDI, CIDER, and Academic Assessment on topics related to FYE programs, such as assessing essential learning outcomes using VALUE rubrics, advising first-year students, incorporating the common book in FYEs, an introduction to the electronic course of study planner, ePortfolios, and ePortfolio thinking among others. See *www.fye.vt.edu* or *www.fdi.vt.edu* or *www.cider.vt.edu* for a complete list.

Proposals should be consistent with the mission, strategic directions, and culture of the proposing academic unit and may reflect student experiences that are particularly important to and/or appropriate for that unit. Some examples are a commitment to diversity, the introduction of freshmen to undergraduate research, or the enhancement of student engagement. These are but a few examples and are not intended to include all possibilities. Regardless of the theme or direction of the proposal, all proposals must include the following:

- a description of the assessment protocols that will be used
- an explanation of how at least one meaningful partnership with a unit of the Division of Student Affairs will be incorporated
- a description of how the program will utilize the new electronic academic planner
- a description of how the program will enhance the advising process
- a description of how ePortfolios will be incorporated and used as part of the assessment
- a description of plans for sustaining the program beyond the initial year of funding
- a description of how the Virginia Tech Common Book will be incorporated
- a description of the support needed for professional development for participating faculty from other units on campus, such as CIDER, FDI, or Academic Assessment. (Professional development sessions will be designed by these units in support of the particular needs of the funded projects.)

Proposals that are interdisciplinary and/or inter-college or that address the unique needs of first-year transfer students are encouraged. Preference will be given to proposals that include one or more of the following: meaningful collaboration or partnership with other units of the university, such as (but not limited to) the Center for Student Engagement, the Center for Academic Excellence and Enrichment, or the Center for Peace Studies and Violence Prevention; a plan for long-term continuation; a description of the potential for external funding support; and evidence of how this project will contribute to the professional scholarly literature on first-year programs.

Examples of appropriate uses of funds include, but are not limited to, personnel (e.g., GTA), instructional and/or assessment support (e.g., technology, books, software), release time from teaching, faculty summer stipends, or consultant expenses.

Notification of awards for the 2010-2011 year will be made in early May 2010.



#### **Applicant Qualifications**

Colleges or UAAC are eligible to apply. Academic departments that apply must do so through and with the full support of its college administration. Each college and UAAC will need to create its own mechanism for encouraging and selecting proposals to put forward. The principal investigator must be a faculty member or be in an administrative professional (AP) position. Funding for approved projects will go to the colleges or UAAC for fiscal and administrative oversight.

#### **Expectations and Outcomes**

Each funded proposal will be required to:

- Participate in both FYE project-related and university-wide assessment activities
- Submit a mid-year report (guidelines will be provided)
- Participate in a debriefing seminar at the end of the funded academic year
- Contribute to the FYE bank of resources that will be accessible to the campus community as the project goes forward
- Submit an end-of-year project report that defines FYE within that particular academic context, describes the assessment of student learning outcomes, explains how the assessment data will be used, and describes how the FYE project will impact students' entire university experience (guidelines will be provided)

#### **Criteria for Review**

Proposals will be reviewed by the Grant Panel for:

- Congruency with the FYE learning outcomes of the QEP
- Feasibility
- Strength of assessment plans
- Meaningful partnership with at least one unit of the Division of Student Affairs
- Plans for continuation of the program beyond the first year of operation
- Plans for addressing issues of duplication if students are involved in more than one FYE
- Meaningful collaboration with academic support units, such as CIDER, Academic Assessment, Learning Technologies
- Integration of electronic academic planner, the Common Book, and ePortfolio
- Articulation of anticipated transformative nature of program
- Potential contributions to the scholarship on the teaching and learning of first-year students

#### Submission Requirements/Deadline

Proposals are to be prepared using 1" margins and Arial 11 font. Submit one paper copy and one electronic copy of the completed application, including the cover sheet (see attached guidelines) to the Office of First-Year Experiences, 103 Hillcrest Hall (0193) *malewis@vt.edu* by 5:00 p.m., Monday, March 29, 2010. Please address questions to Mary Ann Lewis, Director of First-Year Experiences, 103 Hillcrest Hall, 231-3341. Awards will be announced in early May 2010.



## **QEP First Year Experiences**

## 2010-2011 FYE FUNDING PROPOSALS

## **COVER SHEET**

**Proposal Title:** 

Academic Unit (college, UAAC, or department(s):

Delivery Mode(s): (check all that apply)

 \_\_\_New course
 \_\_\_Revised course

 \_\_\_Theme housing/living learning
 \_\_\_Nonresidential learning community

 \_\_\_Seminars/workshops, etc.
 \_\_Other (please explain)

#### Signatures of Principal Investigator (PI) and Collaborators:

If we, the undersigned, receive a first-year experiences grant we understand and agree to the following: (a) expend the award according to the university's fiscal policies and end-of-year deadlines: (b) submit interim and final reports to the Office of First-Year Experiences as requested; (3) participate in university-wide assessment activities related to first-year experiences; and (4) participate in follow-up seminars or workshops as requested.

Printed Name and Signature of PI	Department or College	Date
Printed Name and Signature	Department, Division, or College	Date
Printed Name and Signature	Department, Division, or College	Date

#### Signatures of College(s) with Fiscal Responsibility:

I (we) support the attached application for a first-year experiences grant. I (we) understand that the award will be transferred to the operating account(s) of the participating college(s) or departments (if appropriate) and must be expended according to the university's fiscal policies and endof-year deadlines.

Dean's Signature	College	Date
Dean's Signature	College	Date

## **QEP First-Year Experiences**

2010-2011 FYE FUNDING PROPOSALS

## **APPLICATION GUIDELINES**

Proposals should not exceed five pages (excluding cover sheet, personnel information requested in #8, and appendices) and should be organized as follows.

- 1. Title of Project
- **2. Purpose** Describe the overall purpose of the project, including the difference this project will make to the participating students (transformative potential).
- **3. Overview** Provide a brief overview of the project, including delivery mode, the role of the partner and collaborating units, the number of students to be involved in the 2010-2011 academic year, and how the electronic planner, the Common Book, and he ePortfolio will be incorporated.
- **4. Learning Outcomes and Assessment** Complete the Learning Outcomes Matrix. (Appendix A) For assistance in developing the matrix, please refer to the Bank of Learning Outcome Resources at the Request for Proposals link at *www.fye.vt.edu*.
- **5. Professional Development** Explain the anticipated professional development needs (if any) and describe the role of appropriate units on campus, such as CIDER, FDI, Academic Assessment, etc.
- **6. Sustainability** Describe how you plan to use assessment data to revise for subsequent years, develop plans for continuation beyond the funded year(s), seek external support, and contribute to the professional scholarship of teaching and learning literature.
- 7. Budget Provide an itemized budget and narrative budget justification.
- 8. **Personnel** (do not submit curriculum vitae) Describe the role and expertise of the principal investigator (director of the project), the collaborating professionals, and any other key personnel. Include their names, titles, department/division/college affiliation, phone numbers, and e-mail addresses.
- **9. Appendix** Append any additional information, such as assessment data on existing firstyear experiences in your unit. (Appendix is limited to a maximum of five pages)

Learning	Outcome	<b>Matrix</b>
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Learning Outcome	Learning Indicators	Activities*	Assessment Strategy	
Problem- solving	1.1 Define a problem		Required: Common Problem-Solving Reflection Prompt in ePortfolio; Motivated Strategies for Learn-	
	1.2 Identify problem- solving strategies			
	1.3 Propose solu- tions/hypotheses		ing Questionnaire (MSLQ pre-/post-)	
			Others as developed per indicator specific to individual first-year experiences	
Inquiry	2.1 Select a topic of inquiry		Required: Common Inquiry Reflection Prompt in ePortfolio Others as developed per indicator specific to individual first-year experiences	
	2.2 Access and evalu- ate existing knowl- edge, research, and/ or views			
	2.3 Use information effectively, ethi- cally, and legally to accomplish a specific purpose			
Integration	3.1 Connect relevant experience and aca- demic knowledge		Required: Common Inquiry Reflection Prompt, Pre- and Post- Reflection Prompts	
	3.2 Make connections across disciplines		regarding identity as student, including use of ePortfolio; ePortfo- lio survey instrument (pre-/post-)	
	3.3 Reflect upon and assess self as learner			
			Others as developed per indicator specific to individual first-year experiences	

\* Proposals should incorporate required QEP activities (e.g., course of study planner, development of resume, Common Book experience), and may include suggested activities developed by Faculty Innovation Teams (FITs) and available in the Bank of Best Practices, and/or develop own set of activities designed to foster the development of each specific learning indicator for problem-solving, inquiry, and integration.

# Appendix IV: Faculty Innovation Teams (FITs): Charge, Background, Deliverables, Considerations

### FIRST-YEAR EXPERIENCES @ VIRGINIA TECH

**Charge:** In support of the development of proposals for funding, Faculty Innovation Teams will create a bank of resources designed to foster students' abilities (1) to solve problems, (2) to explore and use information appropriately and effectively, and (3) to integrate ideas and experiences and apply them to new learning situations in and beyond campus. These are three intellectual and practical skills that are foundational to students' development into lifelong learners.

This bank of resources will be made available to those developing proposals for funding first-year experiences through Virginia Tech's Quality Enhancement Plan.

**Background:** For purposes of the development and implementation of first-year experiences under the auspices of its QEP, Virginia Tech will draw upon and customize extant best practices in higher education, with explicit reference to essential learning outcomes articulated and further refined for assessment purposes by AAC&U's Liberal Education and America's Promise (LEAP) and Valid Assessment of Learning in Undergraduate Education (VALUE) projects.



Lifelong learning is "all purposeful learning activity, undertaken on an ongoing basis, with the aim of improving knowledge, skills, and competence" (Commission of the

European Communities, 2000). Lifelong learners demonstrate high levels of curiosity, initiative, and independence in their learning process. They possess the ability to not only transfer learning from one context to another, they reflect upon prior learning to reveal significantly changed perspectives about educational and life experiences, which provide foundation for expanded knowledge, growth, and maturity over time. It is the ultimate goal of every college and university to produce lifelong learners. Through first-year experiences, Virginia Tech aspires to inculcate three antecedent skills in its students to enable them to become lifelong learners:

- Problem-solving Skills: the ability to design, evaluate, and implement a strategy or strategies to answer an open-ended question or achieve a desired goal. Student learning outcomes associated with problem solving are derived from the AAC&U VALUE rubric on problem solving as well as elements of motivation and learning strategies captured by the Motivated Strategies for Learning Questionnaire (MSLQ).
- Inquiry Skills: the ability to explore issues or topics through the ethical and responsible collection, analysis, and use of information as evidence that results in informed conclusions/ judgments. Student learning outcomes associated with inquiry are derived from the AAC&U VALUE rubrics on information literacy and inquiry and analysis, as well as standardized measures of information literacy skills.

 Integration Skills: the ability and disposition to make connections between ideas and experiences and apply them to new learning situations within and beyond campus. Student learning outcomes associated with integrative learning are derived from the AAC&U VALUE rubric on integrative learning as well as elements of learning strategies captured by the Motivated Strategies for Learning Questionnaire (MSLQ).

For each essential learning outcome — problem solving, inquiry, and integration — Virginia Tech has identified three measurable indicators of learning.

Deliverables: Each FIT will produce:

- Three to five activities/assignments designed to foster students' skills and abilities associated with their specific learning outcome.
- Documentation as to how each activity/assignment promotes one or more of the specific, measurable learning indicators associated with their specific learning outcome.
- A corresponding writing prompt that requires students to reflect upon their own learning process in relation to the specific learning outcome and its indicators. This reflection prompt will serve as both a classroom-level tool for the assessment of individual student learning and as a tool for conducting program-level assessment of funded first-year experiences.

**Considerations:** When developing an activity/assignment and corresponding reflection prompt for inclusion in the bank of resources, the following questions should be taken into consideration and appropriately addressed:

 Does this activity/assignment help students make meaningful connections to co-curricular opportunities/student affairs?

#### Problem-Solving Learning Indicators Students will be able to:

- Define a problem.
- Identify problem-solving strategies.
- Propose solutions/ hypotheses.

#### Inquiry Learning Indicators Students will be able to:

- Select a topic of inquiry.
- Access and evaluate existing knowledge, research, and/ or views.
- Use information effectively, ethically, and legally to accomplish a specific purpose.

## Integration Learning Indicators Students will be able to:

- Connect relevant experience and academic knowledge.
- Make connections across disciplines.
- Reflect upon and assess themselves as learners.
- Can this activity/assignment be incorporated within first-year experiences across several disciplines, with minor tweaking?
- Is this activity/assignment appropriate for transfer students participating in a first-year experience, or is it appropriate only to traditional first-year students?
- Can this activity/assignment be connected in a meaningful way to other QEP required activities (e.g., the completion of the plan of study, the development of a résumé, the inclusion of the Common Book experience)?



# Appendix V: Spring 2010 QEP/FYE Related Workshops

Co-sponsored by CIDER, FDI, FYE, OAA <sup>1</sup>				
Date	Instructor/Facilitator	Title	Time	Location
1/26/10	Marc Zaldivar, Britta Long	Recommendations for Those Preparing a QEP Proposal	10-noon	3060 TORG
2/01/10	Michele James-Deramo	Creating & Managing Civic Engagement Partnerships with Community	10-noon	3060 TORG
2/02/10	Marc Zaldivar, Teggin Summers	ePortfolio: Virginia Tech's ePortfolio System within Scholar	3-5	1120 TORG
2/03/10	Joan Monahan Watson	Building on Common Ground: Common Book/Common Experience	10-noon	3080 TORG
2/04/10	Marc Zaldivar, Teggin Summers	ePortfolios and eFolio Thinking	3-5	3080 TORG
2/09/10	Eddie Watson	Technology and the 21st Century Student	9-11:30	1120 TORG
2/11/10	Kimberly Brown	An Introduction to the Electronic Course of Study Planner	10-noon	3080 TORG
2/12/10	Mary Ann Lewis	Recommendations for Those Preparing a QEP Proposal	10-noon	3080 TORG
2/15/10	Frank Shushok, Marc Zaldivar	Co-Curricular Engagement: A Panel on Working with Student Affairs	1-3	3080 TORG
2/15/10	Kate Drezek McConnell	Assessing Essential Learning Outcomes with VALUE Rubrics	3-5	3060 TORG
2/15/10	Marc Zaldivar, Teggin Summers	ePortfolio: Virginia Tech's ePortfolio System within Scholar	10-noon	3080 TORG
2/17/10	Marc Zaldivar, Teggin Summers	ePortfolios and eFolio-Thinking	10-noon	3080 TORG
2/23/10	Kimberly Brown	Introduction to the Electronic Course of Study Planner	10-noon	3080 TORG
2/24/10	Joan Monahan Watson	Building on Common Ground: Common Book/Common Experiences	1-3	3080 TORG
2/25/10	Kimberly Brown	Advising First-Year Students	10-noon	1120 TORG
3/01/09	Kate Drezek McConnell	Assessing Essential Learning Outcomes with VALUE Rubrics	10-noon	3060 TORG
3/01/10	Marc Zaldivar, Teggin Summers	ePortfolio: Virginia Tech's ePortfolio System within Scholar	1-3	1120 TORG
3/02/10	Kimberly Brown	Advising First-Year Students	10-noon	1120 TORG
3/03/10	Marc Zaldivar, Teggin Summers	ePortfolio and eFolio-Thinking	1-3	1120 TORG
3/03/10	Eddie Watson	Technology and the 21st Century Student	12:30-3	3060 TORG
3/15/10	Michele James-Deramo	Service Learning as a Strategy for Engaged Teaching and Scholarship	1-3	3060 TORG
3/17/10	Craig Brians, Eddie Watson	From the Other Side of the Podium: A Student Panel and Discussion	3-5	1100 TORG
2/01/10 -3/15/10	Mary Ann Lewis, Marc Zaldivar	QEP Proposal Consulting Sessions by Appointment on Mondays	9-5	TBD

<sup>1</sup> Center for Instructional Development and Educational Research, Faculty Development Institute, First-Year Experiences, and Office of Academic Assessment







Quality Enhancement Plan: Virginia Tech



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