Futures Group Report to the Provost

On August 27, 2014, Provost Minner presented the concept of a Futures Group to the Board of Visitors during the Academic Affairs and Business Affairs Joint Committee Meeting. After consultation with President Kyle, the Futures Group membership was created via nomination by leaders from each college and academic support unit across campus.

The Futures Group members were asked to: *...examine the near term and more distant challenges and opportunities before RU and to recommend one or more courses of action to more powerfully achieve RU's mission to teach students, make new knowledge, and apply knowledge to make the world a better place.*

Working collaboratively with the campus community through constituent meetings and an interactive website, the Futures Group generated 165 ideas to help guide the future of Radford University. Through three rounds of internal voting and debate, the Futures Group identified the top eight recommendations, which are detailed in this report.

This report aligns recommendations with the framework of the State Council for Higher Education of Virginia's (SCHEV) Statewide Strategic Plan for Higher Education,[1] which was endorsed by the General Assembly in February 2015. If adopted, these recommendations will eventually be aligned with the recently approved Marketing and Branding Campaign to ensure an integrated and seamless approach.

The RU Futures Group was in part established to respond to the growing realization that higher education in the U.S. is in the process of creative destruction,[2] which will eventually lead to a fundamental transformation in the manner in which higher education is delivered to the millions seeking a path to a more successful life.[3] In our earlier report to the RU Board of Visitors, we identified a number of opportunities and challenges that characterize the environment in which RU operates and to which it must decisively respond in order to thrive into the future.

In this final report, we offer a series of ambitious and forward-looking recommendations designed to empower RU to leverage its strengths to more efficiently and effectively serve the essential needs of our changing student demographic. By adopting these recommendations, RU will ensure its students graduate with the vital skill sets they need to achieve more aspirational goals in their personal and professional lives, as well as to more readily serve the evolving needs of the Commonwealth.

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[1] http://www.schev.edu/StrategicPlan/VirginiaFinalReport20141024c.pdf

[2] http://www.economist.com/news/leaders/21605906-cost-crisis-changing-labour-markets-and-new-technology-will-turn-old-institution-its

[3] http://www.forbes.com/sites/susanadams/2013/01/10/it-still-pays-to-get-a-college-degree/

Futures Group Recommendation	SCHEV Strategic Plan Alignment	Opportunities and Challenges Addressed
Embed the Learning Sciences into Radford University's Mission, Practice and Ethos	Optimize Student Success for Work and Life	• Growth in new technologies. • Increasing competition from online providers.
Deploy a Student Support and Career Readiness Academic Program	Optimize Student Success for Work and Life	• Need for enhanced student services. • Growth in diversity of faculty, staff and students. • Decreasing state support resulting in higher tuition and increased student debt.
Create a Cross-Disciplinary Radford Innovation Lab to Promote Creativity, Innovation, and Entrepreneurship	Drive Change and Improvement through Innovation and Investment	• Potential for public/private partnerships. • Retaining the best of Radford University.
Expand Online Programs with a Strategic and Entrepreneurial Approach	Drive Change and Improvement through Innovation and Investment	• Increasing competition from online providers. • Growth in enrollment of students from outside Virginia.
Leverage Radford University's Geographical and Cultural Distinctiveness for Learning and Scholarship	Advance the Economic & Cultural Prosperity of the Commonwealth & its Regions	• Increasing competition from online providers. • Retaining the best of Radford University. • Growth in minority students and a continuing high percentage of first generation students. Radford University has a strong tradition of student-centered learning and high-impact practices that effectively engage these students.
Increase and Accelerate Degree Completion	Provide Affordable Access for All	• Growth in enrollment in community colleges. • Commonwealth's strategic plan for economic development stresses the importance of a more highly educated workforce. • Growing openness from accrediting bodies, the federal government and employers to alternative forms of credentialing, including outcome-based education and competency testing, as well as alternative forms of determining student credit hours. • Rising cost of instructional resources.
Welcome visitors to Radford University with attractive and inspiring facilities and services	Provide Affordable Access for All	• Need for enhanced student services.
Be the "Place to Go" for Educators	Provide Affordable Access for All	• Retaining the best of Radford University.

Recommendation #1: Embed the Learning Sciences into Radford University's Mission, Practice and Ethos

Summary

Research over the last two decades has provided profound insights into how people learn, which have practical applications for classroom teaching and potentially increasing the effectiveness of instruction at every level. Despite the emergence of the Learning Sciences, few universities have adopted this approach as a fundamental aspect of their instructional, programmatic, or environmental design. Integrating learning sciences across RU will better align our teaching methods with the research on how people learn to better meet the needs of today's RU student.

Learning sciences is an interdisciplinary field drawing upon research in cognitive science, educational psychology, computer science, education, sociology, neuroscience, anthropology, information sciences, design studies and other fields.[4] "The goal of the learning sciences is to better understand the cognitive and social processes that result in the most effective learning, and to use this knowledge to redesign classrooms and other learning environments so that people learn more deeply and effectively."[5]

We recommend the design of every class, program and learning environment at Radford University be based on the basic sciences of learning. Doing so will profoundly impact instructional design of class both online and face-to-face; choice of instructional technology tools including mobile, learning analytics, and adaptive learning systems or Intelligent Tutoring Systems (ITS); the development of programs in the areas of learning sciences with accompanying learning lab classrooms; and sequencing of courses within programs. There is also the potential to establish partnerships with national and international learning science labs (e.g., http://lsi.asu.edu/home).

Value Added

Adopting a learning sciences approach will give Radford University a competitive advantage over our peers in the region and across the country. In addition, this research-based and personalized approach to learning will increase teaching efficacy and student retention.

Fiscal Implications

Faculty professional development, design/redesign of curriculum and academic support services to align with the learning sciences will require a significant investment of time and financial resources.

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[4] Bransford, J.D., Brown, A.L., & Cocking, R.R. (Eds.). (2000). How people learn: Brain, mind, experience, and school. Washington, DC: National Academy Press.

[5] Sawyer, R. K. (Ed.). (2006). *The Cambridge handbook of the learning sciences* (Vol. 2, No. 5). New York: Cambridge University Press, p. xi.

Recommendation #2: **Deploy a Student Support and Career Readiness Academic Program**

Summary

We recommend expanding the concept of RU's successful University 100[6] course across all four years of the RU student experience to improve student retention and academic success while also preparing them for future careers. This University 100 expansion would create a comprehensive student support system, which would also provide our graduates with key skills to competitively enter the job market or graduate school.

According to a recently delivered RU Career Services Taskforce Report to the Provost,[7] the following developmental stages are essential to personal and career readiness and should therefore be among the learning outcomes for the visionary University 100, 200, 300 and 400 sequence:

1. Catalyst: Developing **career perspective**
2. Clarity: Developing **career identity**
3. Competence: Developing **career maturity**
4. Confidence: Developing **career professionalism**

In addition to these career skills, the curriculum would also include life skills such as time management, prioritizing, living off campus, budgets and life finances, making good decisions about relationships and managing one's social media presence.

Value Added

Potential advantages include increased retention and enhanced personal and professional growth during students' time at RU and facilitation of their transition to the world of work. In addition, the potential exists for corporate and alumni engagement in and sponsorship of different elements of the personal and career readiness program.

Fiscal Implications

A significant expansion of RU Career Services would require substantial additional financial resources. Faculty and staff professional development would be required to create and staff multiple sections of University 100, 200, 300 and 400 or their discipline-based equivalents in curricular and/or co-curricular activities. In addition, increased one-on-one personal support services outside normal business hours would be required to accommodate students' Career Services needs in the evenings and weekends.

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[6]http://www.radford.edu/content/new-student-programs/home/univ100.html

[7]http://www.radford.edu/content/dam/departments/administrative/faculty-senate/Resources/TaskForceReports/Career-Services-2013-12-19.pdf

Recommendation #3: Create a Cross-Disciplinary Radford Innovation Lab to Promote Creativity, Innovation, and Entrepreneurship

Summary

The Radford University Innovation Lab would provide opportunities for students and faculty across campus and member companies/organizations to engage in interdisciplinary collaboration, peer-to-peer teaching/learning, experiential learning, and complex problem solving skill development. By incorporating elements of "makerspaces" and "lean startup"[8] approaches, collaborative teams could be engaged in rapid development of prototypes and exploring the commercial viability of any resulting intellectual property.

The RU Lab would provide a dedicated space and facilities (e.g., 3D printers, laser cutters, interactive smartboards and break out rooms, etc.) for emerging technology (e.g., mechanical, electronic, biological, and mobile) research and development, and support collaborative partnerships with public and private organizations. This would enable start-ups and corporate product/service developers to explore development on different platforms without heavy investment in hardware and also potentially benefit from training and advice from participating vendors. The Lab will also provide an informal social space for unstructured discovery and creation.

This approach could also find synergies within RU (e.g., the ARTIS Lab) as well as establish multi-institutional collaborations with existing labs such as the ICE Venture Accelerator at JMU and international organizations such as the Fab Lab Association.

Value Added

Potential advantages include enhanced creativity and innovation among participants, increased skill development in entrepreneurship, potential for corporate sponsorships of programs, products, ideas, and solutions with the possibility for additional revenue streams for RU. The Lab will also foster collaborative problem solving and critical thinking skills for our graduates who will enter an ever-evolving marketplace.

Fiscal Implications

Establishing and maintaining the RU Lab could require a significant investment in infrastructure and personnel to oversee the facility, and facilitate commercialization of any resulting proprietary IP. A certain amount of this investment could come from interested alumni and businesses.

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[8]Ries, Eric. *The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses*. Random House LLC, 2011.

Recommendation #4: **Expand Online Programs with a Strategic and Entrepreneurial Approach**

Summary

While RU has experienced significant growth in both the number of online classes and students enrolled in these classes, our approach has not been organized or strategic. For example, over the last five years approximately 300 courses have been delivered online with significant growth in enrollment (see table and graph below), but we only have 5 online programs (i.e., DNP, RN-BSN, MBA, MFA in Design Thinking, Mathematics Education).
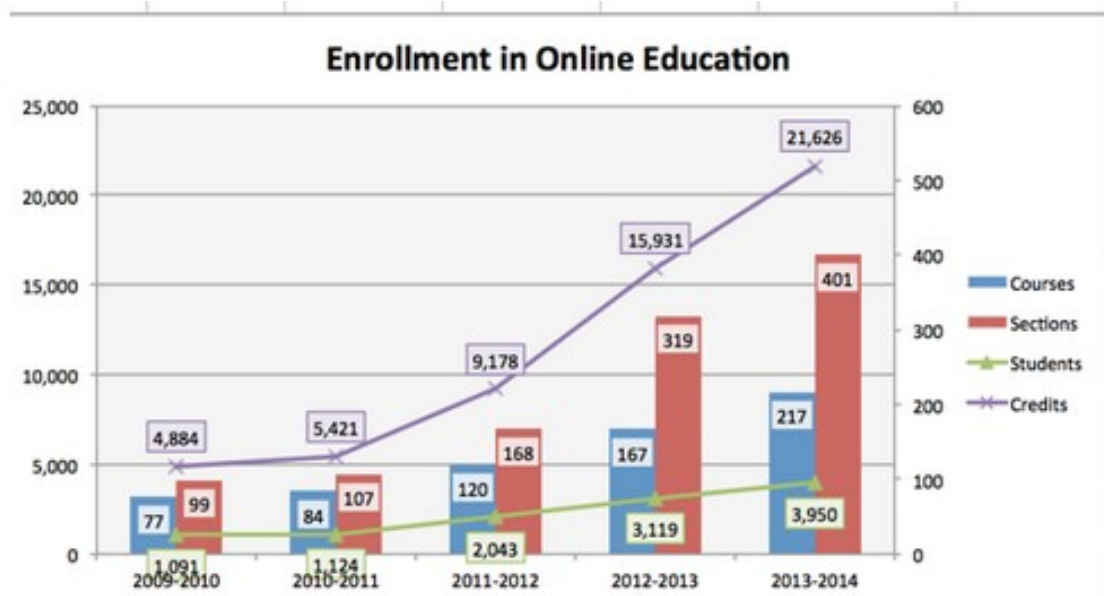
The Commonwealth, region, and nation are witnessing the emergence of multi-state agreements, which present additional student enrollment opportunities while simultaneously introducing competition for these students (e.g., State Authorization Reciprocity Agreement [SARA-NC], SECRAA [regional reciprocity agreement] and the Academic Common Market [ACM]).   Our recommendation is to identify, develop and market online classes and programs that offer a competitive advantage in states in which RU is authorized to offer instruction.

Value Added

Adopting this recommendation offers the potential to grow RU's share of the expanding online education marketplace, increasing enrollments, revenue and brand recognition.

Fiscal Implications

Significant investments in IT infrastructure and faculty and staff professional development could be required to support such an initiative.

Recommendation #5: Leverage Radford University's Geographical and Cultural Distinctiveness for Learning and Scholarship[9]

Summary

RU is located in the [Appalachian region](), one of the most geographically rich, naturally beautiful, and culturally diverse parts of the Commonwealth.[10] This provides many opportunities for enhanced teaching, research and scholarship, as well as service to the greater community.

Our recommendation is to construct an academic ecosystem focused on Appalachia that brings together students, scholars and citizens, while leveraging distinct local resources such as RU's [Selu Conservancy](), the [New River Valley](), and [Mountain Lake]().

Our recommendation focuses on three areas to support this academic ecosystem: (a) utilize Selu Conservancy as an incubator for learning, scholarship and entrepreneurship, (b) leverage unique geographic resources to enhance teaching and learning, and (c) initiate RU Appalachian as a program to recruit and support students from Appalachia.

Academic ecosystems support discovery, learning, and engagement in the context of innovation, sustainability and the existing environment, as well as build on existing frameworks for service learning, scholarly engagement, professional education, and current industry practice.

Value Added

Advantages could include realizing a competitive advantage over our peers with unique and innovative programmatic and academic offerings, as well as utilizing high-impact practices (e.g., service learning, client-based projects) to increase student retention and enhance student development of transdisciplinary competencies for personal and professional success after graduation.

Fiscal Implications

Investments in faculty and staff professional development could be necessary. In addition, investments in off-campus infrastructure might be required, as well as support for student, faculty and staff travel to off-campus locations such as the Selu Conservancy, Mountain Lake and other similar venues.

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[9] Boyer, E. L. (1990). Scholarship reconsidered: Priorities of the professoriate. Princeton, N.J: Carnegie Foundation for the Advancement of Teaching.

[10] Satterwhite, E. (2011). *Dear Appalachia: Readers, Identity, and Popular Fiction Since 1878*. University Press of Kentucky.
Higgs, R.J., Manning, A.N. & Miller, J.W., eds. (1995). *Appalachia Inside Out*. University of Tennessee Press.

Recommendation #6: Increase and Accelerate Degree Completion

Strategy #1: Deliver a Bachelor's Degree Completion Program for Nontraditional Students

Summary

According to recent research, the majority of all college students are *not* the "traditional" 17-22 year old, full-time residential student. National Center for Education Statistics (NCES) projections suggest significant growth in the population of students aged 25 years and older. Rather than relying solely on high school juniors and seniors, RU could target nontraditional students, a relatively untapped market. In addition, there are approximately 1.8 million persons living in Virginia who have some post-secondary education but who lack a baccalaureate degree.

RU's Bachelor of Interdisciplinary Studies in Liberal Arts (or comparable program) could offer a broader menu of online/hybrid courses as well as alternative paths to graduation such as competency-based testing. This would enable adults who never attained a degree to complete their education in a manner that allows them to balance the busy school, work and home lives of nontraditional students.

Value Added

Potential benefits include expanding our market for potential students and growing tuition revenues. Benefits to the Commonwealth include increasing the number of adults in Virginia who have completed a baccalaureate degree, which has been demonstrated to lead to a variety of positive financial, personal and community outcomes.

Fiscal Implications

There could be modest investments required for faculty and staff development, as well as in enhanced academic and career advisement for adults seeking to complete their degrees.

Recommendation #6: Increase and Accelerate Degree Completion (cont.)

Strategy #2: Provide Alternative, Accelerated and Flexible Scheduling

Summary

Most higher education institutions, including Radford University, use an antiquated rationale and structure for designing semesters and scheduling classes.[11] This model is not optimal for serving traditional and nontraditional students. However, the emergence of online education has brought a significant increase in the number of nontraditional learners (e.g., working adults, veterans, etc.) who in turn have required more flexible scheduling options than the traditional 16-week semester could afford.[12] The result has been an explosion of alternative, accelerated and flexible scheduling options, which can now be leveraged for both traditional and nontraditional students. These options fall within two main categories: course design and program design. Examples of flexible course design and program design include:

1. Online, asynchronous courses that enable students to enroll and complete the course at their own pace throughout the academic year.
2. Compressed classes that enable students to complete a course over a 6-8 week time frame rather than a 14-week time frame.
3. Competency-based course and programs that enable the students to earn credits, certificates and/or degrees by demonstrating competency within a predetermined set of skills.
4. Weekend face-to-face courses and programs compressed to enable students to earn credit for a course by attending several of these modularized courses.

Value Added

Potential benefits include attracting more adult degree-completers to RU, enabling both traditional and nontraditional students to optimally align their course and program schedule to meet pre-existing responsibilities (e.g., work) or learning preferences, enhancing retention and accelerating time to graduation.

Fiscal Implications

The higher degree of logistical and administrative complexity could potentially result in greater overhead and increased costs. May involve increased costs associated with providing enhanced academic and career advising as well as other support functions and services to adult degree completers.

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[11]www2.ed.gov/about/offices/list/ous/international/usnei/us/credits.doc

[12]Choitz, V. & Prince, H. (2008). *Flexible learning options for adult learners*. U.S. Department of Labor: http://wdr.doleta.gov/research/FullText_Documents/ETAOP%202008-09%20-%20Flexible%20Learning%20Options%20for%20Adult%20Students.pdf

Recommendation #6: Increase and Accelerate Degree Completion (cont.)

Strategy #3: Develop Structure and Policy to Recruit and Retain Transfer Students

Summary

From 2000 to 2013, community college enrollment in Virginia increased by approximately 38%. During that same period of time, RU's transfer student enrollment only increased by 14%, while the increase in transfer enrollments by other 4-year public universities in Virginia averaged 36%. There is the potential for RU to grow transfer student enrollment. We therefore recommend making RU the most Virginia Community College System (VCCS) transfer-friendly institution in the Commonwealth.

We recommend continuing with our ongoing efforts to strengthen and streamline the transfer admission process. Initiatives are already underway to provide an online tool that will provide comprehensive transfer course review. Students can utilize the tool prior to application to have a better understanding of their degree path as an RU student. Additionally, the implementation of the new Constituent Relationship Manager, Radius, will allow for the development of a new transfer specific application that is better tailored to their needs. Even as Radford University continues to provide an affordable education we must take the appropriate steps to best serve the changing student demographic within Virginia.

In order to establish a presence as the most VCCS transfer-friendly institution, we need to complete a comprehensive review of various agreements, policies, and procedures. The following strategies should be implemented to begin our transition.

1. Review transfer articulation and guaranteed admission agreements. The existing agreements should be evaluated to confirm we are meeting the needs of the students completing community college programs and seeking admission to RU programs.
2. Review of transfer admission policies to determine if there are efficiencies that may be identified within the application process or during the application review process that will simplify the process for prospective transfer students, including those from overseas universities.
3. Review all on-campus transfer enrollment processes from orientation registration, transfer credit articulation, housing policies and applications, advising practices, and so on to determine where efficiencies may be found, as well as revise or develop policies to better support the transfer student population, including international students.

Value Added

Potential benefits include increasing our transfer student population, as well as increasing retention of transfer students and accelerating their progress toward an RU degree.

Fiscal Implications

There are costs associated with enhancing software available to potential transfer students, as well as with providing improved academic and career advisement for transfer students.

Recommendation #7: Welcome visitors to Radford University with attractive and inspiring facilities and services

Summary

Enrollment Management, Admissions, Financial Aid, the Registrar's Office, Alumni Relations, and Visitor Parking are scattered across campus, sometimes housed in difficult to access locations. The result is that RU can be perceived as not as welcoming as it should be to visitors from off-campus, as well as for current RU students seeking multiple student services simultaneously.

We therefore recommend that a comprehensive analysis be completed to determine the offices that guests and visitors to campus need convenient access to and those departments be relocated to an easy to find building with ample parking. (Upon completion of the Science and Humanities buildings this could be accomplished without the need for an additional facility.) The newly formed High Impact Practices Office could also be located there, as well as perhaps Career Services. Further, we recommend there be plentiful and convenient guest parking close to the building housing these services, in close proximity of the RU transit system, as well as a comfortable area for guests to rest and enjoy refreshments.

Offering enhanced customer service and attractive student amenities should be critical elements of RU's overall recruitment and retention strategy. Our association with Noel-Levitz has afforded us data and profile information to respond effectively to students' needs and values. Creating an attractive, comfortable and convenient "one-stop shop" for RU's student services will help to support that strategy.

Value Added

Potential benefits include increased efficacy in recruiting and retention efforts, supporting greater stability in enrollment over time. Such a facility also embodies the ethos of RU's new marketing and branding campaign.

Fiscal Implications

There will be costs associated with repurposing and renovating existing space on campus to support the RU Welcome Center, as well as hiring sufficient staff to administer the enhanced programming located there. There may also be costs involved with ensuring access to plentiful and convenient parking for guests to campus.

Recommendation #8: Be the "Place to Go" for Educators

Summary

Radford University is a leader in preparing K-12 educators. High quality teacher preparation programs have been a central part of our mission since the University's founding. While the College of Education and Human Development (CEHD) produces a large number of Early Childhood, Elementary Education and Special Education teachers, many other departments produce a significant number of teachers, as well (Art, Biology, Physical/Earth Science, English, Math, Music, Social Sciences and others). Our programs have a long history of producing outstanding teachers at all levels, from elementary education to special education to preparing secondary school teachers to deliver instruction in the STEAM (Science, Technology, Engineering, Art, Math)[13] disciplines. CEHD teacher preparation programs have been nationally recognized and include SCHEV award winning faculty.

While preparing teachers for K-12 remains the central focus of our educator preparation programs, there are other avenues through which Radford University graduates find entry into positions in which their primary focus is education. For example, those who graduate from Master's programs at RU may be found teaching at the community college level. Some graduates assume instructional positions in corporate contexts, such as training and development. Given that, when we argue Radford University should be positioned as the place to go for educators, that is not limited to K-12 teacher preparation.

Practicing K-12 educators and others engaged in instructional roles need high quality continuing education experiences, whether for recertification or to keep their skill sets updated. In addition, those engaged in continuing education may decide to pursue additional credentials through post-baccalaureate certificates and graduate degrees at RU.

Radford University already offers a broad range of teacher preparation and continuing education opportunities. The expertise and infrastructure is in place to provide outstanding opportunities to teachers throughout the state and the nation via virtual resources and Continuing Education offerings. The University has invested heavily in instructional technology. We can use those resources to provide high quality learning experiences to educators throughout the state and the nation.

Value Added

Benefits include leveraging nationally recognized teacher preparation programs to increase enrollment at both the undergraduate and graduate levels throughout the university without significant additional costs for instructional resources or information technology.

Fiscal Implications

Student teaching placements in some educational areas are limited. A dramatic increase in student population may force students to travel for placement, which incurs travel costs for them and for the faculty and staff who supervise them.

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[13] http://stemtosteam.org/