



ANNUAL REPORT

2014-2015

Showcasing the mutual relationship between the missions of five universities and 4-VA

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FACT SHEET

Initiative	Collaborative Research	Course Redesign	Course Sharing	Degree Completion
Annual Accomplishment	47 collaborative research grants involving 69 undergraduates and 33 graduates in research	15 course redesigns, 2 redesign workshops, 1 teaching and learning conference, 1 digital learning research community, STEM writing center support, and 2 STEM readiness projects	16 shared courses: 3 STEM+ courses, a graduate course, and 12 Foreign Language course; Piloted a remote STEM lab	Supporting 5 academic degree programs and advising support for community college partnerships
Investment	\$634,624	\$502,813	\$53,640 (faculty stipends) + \$1,108,197 (TelePresence support)	\$113,511
Impact	Resulting in almost 2 million dollars in external grant awards	Benefiting over 1,000 new undergraduate students this year	To date, 4-VA supported almost 800 students through 50 shared courses	Concentrations in cyber security, business technology, entrepreneurship, and nursing
Collaborative Value to the Commonwealth	Increased economic development as external funds are awarded to Virginia faculty, shared state-of-the-art equipment, and creation of a graduate pipeline	Enhanced success in STEM programs, student success best practices shared across the Commonwealth	Expanded access to courses that may have prolonged time to degree, maximizing faculty resources and expertise for increased efficiencies	Expanded access for Virginians to programs preparing them for rewarding careers

EXECUTIVE SUMMARY

INITIATIVES

Collaborative Research – A strong contributor to faculty success and external funding

2014-15 marked a robust year of collaborative research with 47 awarded grants. Almost 2 million dollars in external funds were reported by faculty collaborators at James Madison University (JMU). These returns are a product of a formalized Request for Proposals (RFP) at Virginia Tech (VT) in addition to the strength of the existing grant programs at George Mason University (GMU) and JMU. As the University of Virginia (UVa) develops a research grant program for 2015-16 and Old Dominion University (ODU) aims to contribute, contingent upon funding, this initiative prepares to make significant contributions to increasing the research competitiveness of Virginia's universities and encouraging cross-institutional research projects.

Course Redesign – A high impact initiative supporting introductory STEM courses

The Collaborative funded 73 faculty members and 22 course redesign projects that have impacted more than 1,318 students in an effort to enhance STEM opportunities and further 4-VA goals. Projects in this area align closely with university and state initiatives focused on student success. Introductory STEM courses at UVa better promote student engagement and learning with course redesigns through the Nucleus program. Redesigns at VT supported the improvement of STEM general education courses. JMU supported two course redesign workshops and GMU supported five unique projects in this area. In the coming year, the Collaborative hopes to target courses with high drop and/or fail rates and connect faculty across the state to find solutions to address commonly shared issues.

Course Sharing – A founding initiative that increases access to remote expertise

The initiative increases efficiency, maximizes shared resources, and supports collaboration among partner institutions to provide students greater access. To date the course sharing initiative has proudly provided specialized courses with remote expertise to almost 800 students across Virginia. This year 12 foreign language courses supported departments across the Commonwealth in addition to a graduate history course that focused on digital media, a political science course with interactive simulations, a dynamic population ecology course, a project focused course in environmental science and technology, as well as piloted robotics STEM lab. Moving forward, more STEM+ courses are being planned as outreach and faculty connections across institutions are being developed.

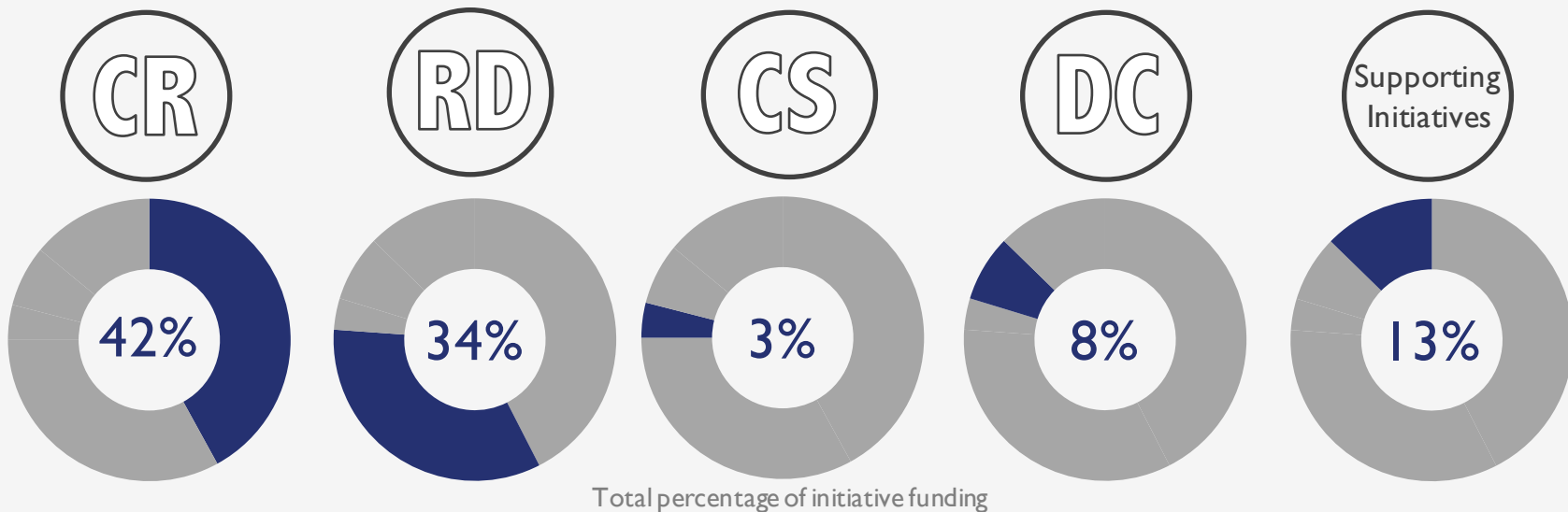
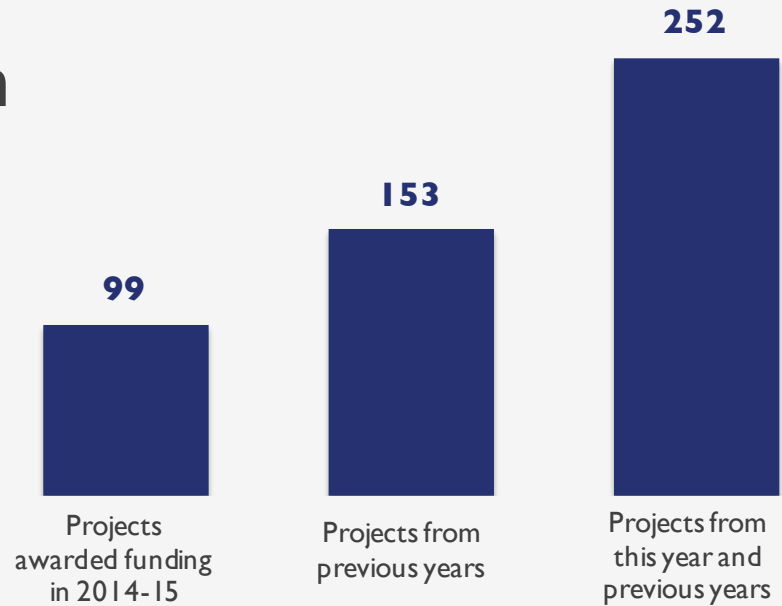
Degree Completion – A sustained initiative that focuses on completing Baccalaureate degrees

For over two years, the Collaborative has supported five academic programs that advance degree completion programs. A new online concentration in cyber security was created at GMU. These programs respond to areas of high demand for local businesses and entrepreneurs. Strong ties between GMU and Northern Virginia Community Colleges foster essential relationships that lead to the seamless transfer of community college students to a four-year degree.

EXECUTIVE SUMMARY

A productive year with projects advancing all goals and initiatives

\$1,494,188 direct funding for initiatives



LETTER FROM THE EXECUTIVE DIRECTOR

4-VA EXECUTIVE OFFICE AT JAMES MADISON UNIVERSITY

With the transition of the executive office to JMU, we've been working to grow our strategic partnership with state level stakeholders at the State Council of Higher Education for Virginia (SCHEV) and in the Governor's office. SCHEV's recently published strategic plan identifies goals and initiatives that generally mirror those of 4-VA addressing issues of affordable access, improved student success, as well as improvements through innovation and economic prosperity.

The power of a networked system grows with each new node so we welcome ODU to the team and look forward to leveraging their experience with course design and online learning to help 4-VA better serve the Commonwealth.

We have established bold objectives for creating collaborative courses that truly fulfill our mission to do more together than we could do on our own. 4-VA institutions are working together to quickly respond to urgent issues such as big data, robotics, and cybersecurity in order to make a lasting impact on the future of the Commonwealth.

Nick Swayne
4-VA Executive Director

Introducing the 2014-2015 4-VA Member Institutions



OVERVIEW

MISSION OF THE COLLABORATIVE

4-VA's mission is to promote inter-university collaborations that leverage the strengths of each partner university in order to accomplish much more than any individual university could achieve alone. A statewide initiative founded through Top Jobs legislation, 4-VA fosters collaboration among Virginia universities with the goal of improving Virginians' access to higher education. By working together, faculty from the 4-VA schools can share ideas, create shared resources, cultivate new relationships, connect faculty with shared interests, collaborate on course redesign to reduce duplicate efforts, and find solutions to commonly held issues in higher education.

Aligning 4-VA Goals to SCHEV's Strategic Plan for Higher Education

4-VA attempts to work strategically with other state higher education associations, such as SCHEV, to further the interests of the Commonwealth

4-VA Goals	SCHEV Goals	Alignment
Define instructional models, including the clear definition of instructional costs	1 Provide Affordable Access for All	● ●
Significantly expand access for all Virginians to programs, preparing them for rewarding careers	2 Optimize Student Success for Work and Life	● ● ● ●
Increase the research competitiveness of the partner universities	3 Drive Change and Improvement through Investment and Innovation	● ●
Increase opportunities and enhance the success of students in STEM courses and programs	4 Advance the Economic and Cultural Prosperity of the Commonwealth and its Regions	● ● ● ●

OVERVIEW

INITIATIVES

Since 4-VA was founded in 2011, Campus Coordinators have worked to realize the goals of the Collaborative through four main initiatives. Each university aligns the goals and efforts of their university with that of the Collaborative. The partnership's strengths are evident in the commonality of goals reflected in 4-VA's mission and the strategic plan of participating universities.

Each initiative embodies one or more of the goals. Universities have developed a RFP to engage faculty or the Campus Coordinators advance initiatives on a case-by-case basis. Campus Coordinators work within each university to achieve 4-VA goals through unique projects that embrace the mission of the Collaborative.

Big Picture

4-VA MISSION

Founding Principles

Define instructional models, including the clear definition of instructional costs

Significantly expand access for all Virginians to programs, preparing them for rewarding careers

Increase the research competitiveness of the partner universities

Increase opportunities and enhance the success of students in STEM courses and programs

INITIATIVES

A Mission in Action

Course Sharing



Degree Completion



Collaborative Research



Course Redesign



FINANCIALS

2014-15 4-VA Funding Distribution

INITIATIVE FUNDING	Amount	
Collaborative Research	\$634,624	
Course Redesign	\$502,813	
Course Sharing	\$53,640	
Degree Completion	\$113,511	
Supporting Initiatives	\$189,600	
	Total \$1,494,188	41% of total funds
RESOURCES AND INFRASTRUCTURE		
Carryover	\$481,274	13%
TelePresence Technology	\$1,108,197	31%
Operating	\$544,619	15%
	Total \$2,134,090	
TOTAL FUNDS*	Total \$3,628,278	

SUCCESSSES OF THE COLLABORATIVE

A DEVELOPED GRANTS PROGRAM SHOWS IMPACT

The Collaborative saw increased interest from faculty with record high submissions for research grants. GMU reported increased faculty interest and participation. JMU showcased exceptional outcomes as many of their faculty collaborations resulted in external awards. VT awarded more research grants this year than the previous two years combined. This initiative is expected to see continued growth as UVa releases an RFP in fall of 2015 and ODU looks to contribute, depending on funding.

Faculty at 4-VA universities have forged strong relationships, reinforcing their projects and making them strong contenders for external funding. Many faculty who started with a small seed grant of 4-VA funds have gone on to apply for a larger 4-VA grant that will allow researchers to scale their idea. With success, 4-VA faculty researchers have gone on to receive external funding.

This initiative has also demonstrated a wide array of positive outcomes for students, faculty, departments, and universities. Collaborative research reflects a multitude of impacts from undergraduate student researchers, recruitment for graduate school, access to specialized equipment, strong faculty partnerships, publications, and external grants.

HEIGHTENED COLLABORATIVE EFFORTS

Across the board, 4-VA has seen more collaboration between universities as a result of the maturing Collaborative. The new Campus Coordinators at UVa and ODU have increased the information sharing across universities. 4-VA best practices and lessons learned are distributed to new members and these discussions have been at the forefront of our monthly meetings.

With this, 4-VA is better able to realize their mission to promote inter-university collaborations that leverage the strengths of each partner university in order to accomplish much more than any individual university could achieve alone. Through working group meetings and bi-annual retreats the Collaborative is developing strategies to find efficiencies in higher education. This work is accomplished by connecting faculty and departments across the Commonwealth. An added benefit is continual communication among the institutions about best practices in various areas and specific faculty and administrative contacts.

CHALLENGES OF A GROWING COLLABORATION

REFINED PROCESSES

While 4-VA improved processes during 2014-15, more work is necessary to improve efficiencies and track outcomes resulting in external funding. Some schools experienced funding receipt delays that extended the timeframe for configuring and distributing grant funding. The process is complicated and involves budget requests and transfers.

The coordination of research grants between institutions continues to be a challenge though results do indicate real progress. Improvements for a streamlined grant process and cooperation between institutions are planned, but it remains a work in progress.

4-VA is hampered by the limited ability to implement STEM courses in the course sharing format, due to a variety of reasons such as scheduling difficulties and generalized institutional resistance. The Collaborative is developing better ways to engage faculty across universities to establish course sharing relationships and thus improve opportunities.

COLLABORATION ACROSS FIVE UNIVERSITIES

Conducting collaborative efforts across five universities is a not a trivial task. This requires vast knowledge of university faculty and departments on campus. Campus Coordinators need to be engaged and involved on campus in a capacity that allows them to learn about upcoming issues or new ideas in order to share them with the 4-VA working group. Gauging interest for a project at each university can be challenging. This work is slow and requires substantial relationship-building both within and between institutions. Collaboration of this magnitude requires dedicated support and resources from all university levels and stakeholders.

COLLABORATIVE RESEARCH



SUMMARY

An important component of 4-VA's mission is improving research competitiveness within the Commonwealth by providing funding for faculty to engage in pilot research that could be used as a springboard for subsequent, major external grants. This aim is consistent with the goals for research and innovation articulated within each university's strategic plan.

The 2014-15 RFP at all universities prioritized research or required proposals that included cross-institutional collaborations. JMU and GMU also prioritize the inclusion of undergraduate students in original research. Because these research grants are intended not only to advance the goal of research competitiveness but also the general mission and success of 4-VA, the Collaborative has specified that projects should focus on dissemination (e.g., conference presentations, journal publications, outreach, open access projects, websites, and educational information).

During this period, VT implemented a robust grants program to complement existing efforts at GMU and JMU. UVa has actively participated by providing matching funds as requested through 4-VA faculty collaborators. JMU also reduced the number of calls for research a year from four to

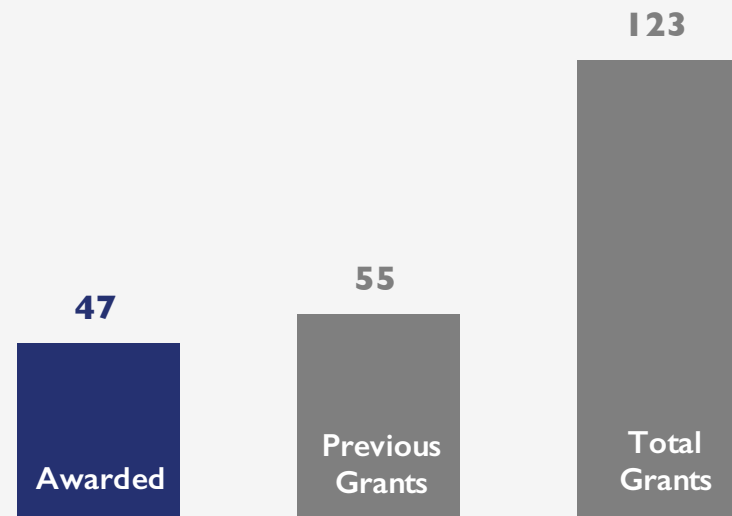
Making an Impact on faculty, graduate and undergraduate students through participation in original scholarship

69
Undergraduate
Researchers

37
Graduate
Researchers

55
Faculty
Researchers

Increasing the scholarly impact of Virginia faculty through small collaborative research grants



COLLABORATIVE RESEARCH

two in order to align with participating university schedules. With this, 47 collaborative research grants were awarded that impacted 55 faculty members and 69 undergraduate and 37 graduate students. 4-VA invested \$634,624 in research. All grants noted an interest in seeking external funding upon successful completion of their research.

Two examples of collaborative research in action are detailed below.

1

An example of the benefits from this initiative can be seen in the project titled, “Development of an Interactive Human Body Digital Learning Object to Provide Whole Body Systems Based Learning in Vitamins and Minerals” at VT. To date, the research team has a functional digital learning object (DLO) that highlights the roles of Vitamin D, Calcium, Vitamin C, Vitamin A, and phosphorus in bone metabolism. The DLO is freely available for use, with some material available for open access. The project aims to increase research competitiveness through the testing and development of a DLO that enhances STEM education and increases student access to resources.

2

A grant from 2013 requested a small amount of 4-VA funds to bring together soft matter colleagues, researchers, and students in the Commonwealth. This niche area of physics has developed a strong and robust community since their initial summit at JMU. Since then, the community has grown with VT hosting the second annual workshop and plans to host the 2015 workshop at UVa. Strong research collaborations have developed as a result of this community and their work aligns closely with 4-VA goals.

RETURN ON INVESTMENT

The collaborative research initiative brings researchers together across 4-VA institutions. Research grants open up lines of communication between faculty and institutions that were not present before the initiative began. The result of this initiative is new ideas for research, the increase of submissions to external granting agencies, and a developed research community across institutions. 4-VA grants are viewed as an integral and vital contributor to faculty productivity in research and teaching. The impact on scholarship is evident as grantees reported as many as 83 planned and in-press presentations and publications (see appendix B for a list of selected publications).

COLLABORATIVE RESEARCH

Collaborations take time to mature and develop into strong proposals that result in larger financial rewards. With an established and mature grant program at JMU, 4-VA collaborators reported almost 2 million in external awards as a result of their pilot research. These awards showcase the strong financial return on investment and a positive rate of success in a time of declining federal support. Granting agencies include the National Science Foundation, Carnegie Foundation for the Advancement of Teaching, U.S. Department of Energy, Office of Naval Research, Luna Innovations, and the Commonwealth Health Research Board among others.

Grantees also reported submissions to external agencies in which their decisions are pending. The Collaborative strives to support faculty research and an increased return on investment is expected in coming years.

Beyond the financial return on investment, faculty involved in collaborative research have reported many value added experiences such as new and strengthened research relationships with faculty, access to lab equipment, and funding for student researchers. A full list of faculty reported areas of impact can be found on the following page.

A successful initiative that supports faculty across the commonwealth with promise for great return

EXTERNAL AWARDS

\$ 1,984,479

Small collaborative grants serve as a springboard for faculty to competitively submit for and receive external funds

Data collected by JMU from faculty with 4-VA collaborators, we expect future numbers from other universities as their grant programs mature

COLLABORATIVE RESEARCH



Leads to Impactful Outcomes

Grants dynamically increase scholarly impact by enriching many facets of faculty research

BUILDING RELATIONSHIPS



Strengthening faculty relationships



Creating new relationships and communities



Mentorship and recruitment opportunities for graduate school

INCREASING ACCESS



Generating proposals and evidence for external awards



Sharing state-of-the-art equipment and maximizing resources



Addressing gaps in traditional funding

SUPPORTING UNIVERSITIES



Involving undergraduate and graduate researchers



Promoting faculty research and scholarship



Streamlining proposals with flexible funds for productive research

COLLABORATIVE RESEARCH

LOOKING AHEAD

Dependent upon funding, ODU aims to contribute with a grants program that mirrors the structure at JMU. Until then, the Collaborative hopes to engage ODU faculty through existing granting mechanisms at the four funded universities.

With the addition of ODU and a grants program at UVa, the Collaborative expects to see great returns and impact made through this initiative.

COURSE REDESIGN



SUMMARY

To support 4-VA's goals of defining instructional models, expanding access, and improving STEM success, each university contributes to the course redesign initiative. VT and UVa use an RFP while GMU and JMU accept proposals for course redesign on a case-by-case basis.

The Collaborative invested \$502,813 in 22 course redesign projects. These projects include 15 course redesigns, two course redesign workshops, a teaching and learning conference, STEM writing center support, two STEM readiness projects, and a digital learning research community. Overall this initiative impacted over 1,318 middle school, high school, and college students and well over 73 faculty members.

More specifically, this initiative supported 20 faculty members and impacted 1,066 university students taking part in the redesign of 15 undergraduate and graduate courses. Course redesign projects in this area align closely with university and state initiatives focused on student success.

Two examples of course redesign are detailed below.

The Nucleus program at UVa improves student learning by considering aspects of student motivation and incorporating evidence-based pedagogies (e.g. peer instruction, collaborative

Making an Impact on Students Through High Impact Course Redesign

1,318

Students were impacted by course redesigns projects

73

Faculty Redesigners



Undergraduate and Graduate Teaching Assistants

13

Resulting Scholarship presentations and publications (planned and presented)

3

Seeking External Funding faculty submissions

COURSE REDESIGN

learning techniques, learning analytics, etc.). Nucleus participants begin the program by attending the Center for Teaching Excellence's Course Design Institute (CDI). During the Institute, an interdisciplinary group of instructors spend five days designing or substantially redesigning courses so that they promote significant, long-term learning. They explore learning-focused design principles in a large group setting and then work on their individual course design in a small, discipline- or pedagogy-focused learning team. Participant portfolios document the details of each redesign, as well as instructor-driven assessment data. Eight courses were redesigned this year through the Nucleus program.

VT identified and funded four course redesign grants as an area of strategic focus in support of the university's initiative on general education. The RFP required that courses selected for redesign have a clear relation to the mission of 4-VA and support VT's Pathways to General Education program. Due to the Collaborative's explicit emphasis on STEM courses, preference was given to redesign proposals for courses in those, or closely related, fields.

The following examples showcase projects toward STEM success.

1

GMU implemented this initiative through five unique projects that all support the advancement of teaching and learning in STEM fields. First, a STEM Boot Camp engaged incoming STEM majors through preparatory camps to improve freshmen academic performance and retention in STEM. Second, sponsorship for the Innovations in Teaching and Learning Conference was provided as many 4-VA grantees led panel sessions. GMU also funded a one-year cross-disciplinary and collaborative learning community devoted to the self-study of teaching and learning in visually rich digital learning environments. STEM students at the writing center were supported through 4-VA.

2

4-VA at JMU supports the Center for Faculty Innovation's yearly workshop on course redesign titled jmUDESIGN STEM workshop. The workshop was made available to faculty at all 4-VA member institutions, public universities, and community colleges. Nine different institutions attended the conference and 42 faculty members attended the five day workshop. The purpose is to make faculty realign their objectives with the articulation details.

COURSE REDESIGN

RETURN ON INVESTMENT

Through this initiative, the Collaborative stresses sharing developed course materials and information for the benefit of the Commonwealth.

Grant recipients share information, best practices, and results through online websites, blogs, and social media. Faculty plan to submit their course redesign efforts to journals and give presentations at local, national, and international conferences that focus on higher education while promoting 4-VA. Course redesign faculty are asked to share the resources they create from 4-VA grants and make curricula and course materials available to Virginia universities.

Faculty note that funding has given them more opportunities to think about their courses on a deeper level, to hire graduate assistants, and to build relationships with colleagues. All of these factors help to increase resources and enable more time for planning, development, and assessment.

Through a new faculty partnership, one faculty member was able to integrate STEM principles into a humanities-oriented course. With the additional resource of a teaching assistant, they were able to scale up the course for over 100 students, thus increasing access to students and increasing impact of the course.

To date, participants in UVA's Nucleus program have redesigned 23 large-enrollment, introductory STEM courses to better promote student engagement and learning. Over the years, with 4-VA support, these courses positively impact the learning experiences of over 6,400 students. In addition to the enrollment numbers, a pre-/post-analysis of the learning focused syllabus reveals that all participants develop significantly better learning-focused documents as a result of CDI. The data indicate that participants are more actively engaging students in class and value their time in the learning community.

Funds provided to the STEM Boot Camp at GMU allowed the program to host 52 incoming freshmen STEM majors and provide them with a unique opportunity to enhance their freshman experience. Many of the students reported taking biology, chemistry, and calculus in high school, however after the camp, some realized they were not prepared to "jump" into calculus, for

COURSE REDESIGN

example, and registered for pre-calculus instead. By recognizing their weaknesses early, students are less likely to fail their first course and more likely to remain in their major, further advancing their success in STEM programs.

LOOKING AHEAD

VT faculty experienced some confusion between the 4-VA Course Redesign grant and the Technology-enhanced Learning and Online Strategies (TLOS) Design & Develop grant program, along with possible other factors, which resulted in a lower number of applicants than anticipated. Campus Coordinators are taking measures, such as partnering the two grant programs, to modify this issue with the goal to improve operations. Additionally, they plan to strengthen measures to improve assessment and evaluation of course redesign projects.

ODU is looking to make an impact in the area of course redesign once they are funded by leveraging the expertise of their instructional designers.

In future years, Campus Coordinators would like to target courses with high drop and/or fail rates. The Collaborative also sees potential in connecting departments across 4-VA to address commonly held issues. One area of consideration is to organize the instructional designers across the Commonwealth to share ideas, develop best practices for student success, and consider the potential of adaptive learning as a new course pedagogy.

Moving forward, 4-VA aims to connect similar faculty and administrators in order to address commonly held issues and to create solutions for Virginia's higher education. For example, using TelePresence meetings to connect University Registrars can serve to better align institutions across the Commonwealth. This is in direct alignment with 4-VA's mission to leverage the capacity of five universities for the betterment of the Commonwealth.

COURSE SHARING



SUMMARY

Course sharing allows 4-VA universities the ability to offer courses that would otherwise be unavailable to students. The initiative increases efficiency and promotes collaboration among the partner institutions to provide students greater access to specialized courses. Faculty expertise and knowledge is without geographic boundaries as courses are shared across universities.

This year 12 foreign language courses and four STEM+ courses were shared through 4-VA resulting in a total of 50 shared courses since 4-VA was founded. The foreign language courses fill a much needed gap in the languages curriculum. A competitive research grant that also involved sharing a new course, using digital technology to teach hidden history, provided an opportunity for two institutions to work together. Collaborators created a course sharing model for graduate digital technology that aims to include all five 4-VA universities.

The Collaborative is working to see increased shared course engagement, both from a programmatic perspective and from the perspective of student engagement. Balancing student

Foreign language courses continue to support departments across the commonwealth and more stem+ courses are desired

Course offerings from Fall 2014 and Spring 2015

GMU provides all of JMU's Korean courses after an instructor left the department

- Elementary Korean I
- Gateway to Advanced Korean
- Intermediate Korean
- Advanced Korean Language & Culture

Two of the STEM+ courses have been offered for over two years through 4-VA

- Political Science and International Studies
- Teaching Hidden History
- Special Topics in Environmental Science & Policy
- Population Ecology

COURSE SHARING

and faculty interest, resources and scheduling is an ongoing challenge. The Collaborative continues to provide a substantial amount of support to maintain and to grow the program, with the goal of improving current operations and future outcomes. TelePresence technology directly supports this initiative and 4-VA invested \$1,108,197 in technology support and maintenance.

Small stipends are used to support course sharing faculty and department activity. This stipend is valued by recipients and promotes interest in the new opportunities associated with course sharing and TelePresence technology. The stipend recognizes the additional workload associated with remote office hours, conflicting academic calendars, and additional students. All shared courses include a defined assessment component. 4-VA awarded \$53,640 in faculty stipends.

RETURN ON INVESTMENT

Despite the complexities involved with this initiative, course sharing yields value by making great impact in concentrated areas. Shared courses fulfill the critical need for languages not available at other institutions within the Collaborative. Upper division language courses can maximize enrollment numbers by including students from 4-VA universities, thus increasing efficiency and access to students.

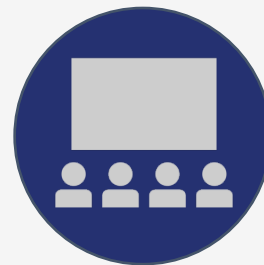
JMU no longer has a Korean instructor and GMU provides Korean language shared courses to JMU for the past two years. GMU also shares Mandarin Chinese with students at VT who would otherwise not be able to take the course. This is a wonderful benefit for receiving institutions.

A founding initiative that increases student access to remote expertise

TelePresence Rooms Share Expertise

20-25

hours per week for course sharing, 4-VA meetings, and university related events



196 Students Enrolled This Year

769 Total Course Sharing Students

COURSE SHARING

The initiative increases accessibility for students to a variety of courses, increases diversity in course content and classroom participation, and decreases the cost of hiring new faculty to meet students' needs. Course sharing facilitates maximized resources, shared expertise across universities, and as a result efficiencies are gained within the Commonwealth.

Another benefit can be seen as collaboration and increased communication between member institutions and departments are developed as a result of course sharing and the discussion of curriculums. Foreign Language department chairs at JMU, VT, and GMU meet before the semester begins to discuss course need and course interest. There is great value in these discussions.

STEM courses have been successful as a result of pre-existing multi-university faculty connections. The population ecology and ornithology courses have been shared with success because of the strong pre-existing relationships faculty have between the partnering university and department.

LOOKING AHEAD

Two examples of dynamic course sharing in action are detailed below.

1

During the spring of 2015 JMU offered its first version of a collaborative robotics course in partnership with Nova Labs, a nonprofit organization. This course brought field engineers and industry experts into the STEM lab through remote technologies. Students directly benefited from a course that would have otherwise been unavailable to them. The connection to industry insights helped the students, the robotics minor, and the physics department. The course was piloted with the intent to develop future advanced courses in robotics and to share these courses with 4-VA universities.

2

Future advances in course sharing can be seen through the Sustainability Symposium, a 4-VA funded initiative. Faculty, staff and food service personnel from 4-VA institutions met at the Smithsonian Mason School of Conservation in May 2015 to discuss sustainable food systems, climate change, and future partnerships to share courses and resources. The results of this gathering are being studied and will be implemented in the coming semesters.

COURSE SHARING

4-VA staff are continuously improving shared course processes and trying to create more efficiencies. Campus Coordinators are actively soliciting STEM courses that leverage the TelePresence technology as an experience that brings added value to the pre-existing outcomes in order to maximize the collaborative and interactive expertise.

The Collaborative is developing a strategy that provides more courses to Virginians. This requires working with the foreign language department chairs to develop a set of core courses that will be routinely available for course sharing across 4-VA universities. This will foster greater enrollment numbers with courses available on the registrar's system. The core courses promote advanced planning which helps to address some of the challenges with scheduling, registrars, and recruitment.

The Collaborative agrees that there are more opportunities for collaboration and this can be expanded by dynamic and varied uses of TelePresence technology.

VT is taking the lead in this area by putting together a collaborative endeavor RFP for 2015-16. The grant provides opportunities to leverage the TelePresence space for a speaker series, special interest topics and meetings. The TelePresence rooms could also be used to connect researchers and administrative departments to address state issues. 4-VA aims to use TelePresence technology as a means of connecting individuals across Virginia through the facilitation of premier discussions.

With this, the Collaborative believes that greater impact can be made in the course sharing initiative, moving us beyond the limitations of one mechanism for expanded access and maximized resources.

DEGREE COMPLETION



SUMMARY

The degree completion initiative strongly aligns with 4-VA's goal to significantly expand access for all Virginians to programs preparing them for rewarding careers as well as the goal to increase opportunities and enhance the success of students in STEM courses and programs. Through this, the Collaborative aims to increase online delivery for Virginia citizens, to increase access to people who live in places where they cannot commute to a 4-year university, and to focus degree completion efforts on program areas with increased employment opportunities in Virginia. The initiative supports Top Jobs legislation and the role of universities in economic growth.

For over two years the Collaborative has supported five academic degree programs and more than 7 concentrations that advance degree completion programs. Degree completion work is advanced by JMU and GMU with an investment of \$113,511.

GMU committed resources during the 2014-15 academic year to strengthen ties with Northern Virginia Community College (NVCC), a key stakeholder and GMU partner. Associate of Applied Science (AAS) degrees at NVCC transfer to seven concentrations in GMU's Bachelor of Applied Science (BAS) degree, including the new online cyber security concentration. The BAS program provides a pathway to degree completion for adult learners who have been out of school seven years and have obtained an AAS degree at a Virginia Community College System (VCCS) institution.

In February, 2015, GMU sponsored a daylong advising symposium for 69 NVCC first year advisors, counselors, and faculty advisors to increase communication between the institutions and provide valuable information regarding transfer and degree completion offerings at GMU.

Wayne Adams, Mason School of Art academic advisor, said that the symposium improved "communication and collaboration" between the two institutions. Transfer students are coming into GMU at a time of transition, and they need additional support and information. Julia Brown, NVCC's Coordinator for Transfer Policy, said the event was a "most worthwhile day" for the NVCC staff, and "provided an excellent and much needed opportunity" to talk directly to GMU advisors about transfer programs and the application process.

DEGREE COMPLETION

JMU partners with the Office of Outreach and Engagement (O&E) to conduct degree completion activities. This office manages all online courses for non-traditional students and continues to improve the process as needed. The Center for Instructional Technology trains faculty on how to redesign and deliver their courses in an online medium.

RETURN ON INVESTMENT

The strong ties developed between GMU and NVCC administrators fosters essential relationships that lead to the seamless transfer of community college students to the completion of a four-year degree. The partnership's strengths are evident in the pursuit to produce 100,000 graduates within the next ten years and to serve as a catalyst for economic growth in the Commonwealth. The realization of this goal requires the inclusion of and concerted efforts to support adult learners.

The advising symposium between NVCC and GMU faculty advisors and counselors created efficiencies in communication between the two large institutions. The transfer and degree completion offerings at GMU were made clear. By strengthening advising at NVCC, the Collaborative aims to improve community college students access to higher education. There are ongoing plans to make this an annual event.

Degree completion courses are developed to identify areas of high demand for local businesses and entrepreneurs. The largest demand in the Harrisonburg region was identified as the need for a program that would help non-traditional students transition from Registered Nurses (RN) to Bachelors of Science in Nursing (BSN). Prior to 4-VA this program did not exist and the

Creating and Funding courses with increased employment opportunities

Entrepreneurship

RN to BSN

JMU has seen great success in these programs over the last two years of development supported by 4-VA.

Sustainability

Business Technology

DEGREE COMPLETION

prospects of creating one would be a four to five year endeavor. In the first year four courses were developed and filled to capacity. Last year four more courses were developed and now all eight are fully subscribed, enrollment has eclipsed 200 students. Courses are organized and grouped together into modules that meet degree requirements.

LOOKING AHEAD

With sustained efforts, the Collaborative intends to provide continued support for these courses and programs. ODU looks to be a strong contributor to degree completion and online learning.

Through the degree completion initiative, 4-VA has served as an excellent mechanism to pilot some revolutionary ideas to create a more efficient future for higher education. Some of this work has positively contributed to collaborating on a statewide degree completion network with GMU and ODU taking the lead on developing the initiative.

VT plans to engage in the degree completion initiative next year through the exploration of online adaptive learning strategies. Adaptive learning is an approach that enables institutions to tailor the presentation of course materials to each student's unique background and needs in a scalable fashion. A potential outcome of the VT initiative is a shared strategy for widely accessible, modular, adaptive courses on identified STEM bottleneck areas.

TECHNOLOGY

TELEPRESENCE TECHNOLOGY

4-VA was founded in partnership with Cisco Systems, Inc. which provided the TelePresence technology for shared courses. A portion of 4-VA funds is spent each year maintaining the technology. Expenses vary from school to school. The Collaborative reported spending \$1,108,197 on technology or related activities including SMART-NET, a Cisco software that supports and optimizes the TelePresence network.

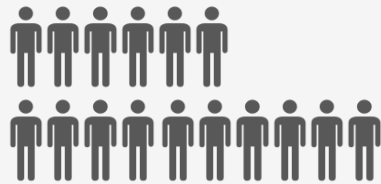
ODU joins the Collaborative with a robust TelePresence system. Their classrooms use standard and custom TelePresence technology with support and management systems for capture and sharing courses. The technological capabilities provide evidence for ODU's capacity to be a strong contributor to 4-VA.

Excluding maintenance and updates to the TelePresence classrooms, GMU, UVa, and VT reported no significant changes to the course sharing classrooms.

A NEW STEM LAB AT JMU

JMU made some exciting additions to their campus by expanding and enhancing the capabilities of their course sharing classrooms. The 4-VA office moved into dedicated office space and also installed two new teaching and learning spaces. One space is the 36-seat TelePresence room

Universities are Investing in 4-VA



+ Advisory Boards

In-kind administrative and technical support
Providing leadership and advancement
of 4-VA initiatives

138

TelePresence seats available
for students, faculty, and staff

12

+ **STEM Lab**
Rooms dedicated to
TelePresence

TECHNOLOGY

which was custom-built with the latest video conferencing technology to increase global access to large shared courses.

The second space is a shared STEM lab. This space was designed as a place where professors and students from different academic disciplines can come together, create, teach new courses, and share courses with 4-VA schools. The room is equipped with a suite of instructional technology allowing students and faculty to participate remotely on any device.

ASSESSMENT AND EVALUATION

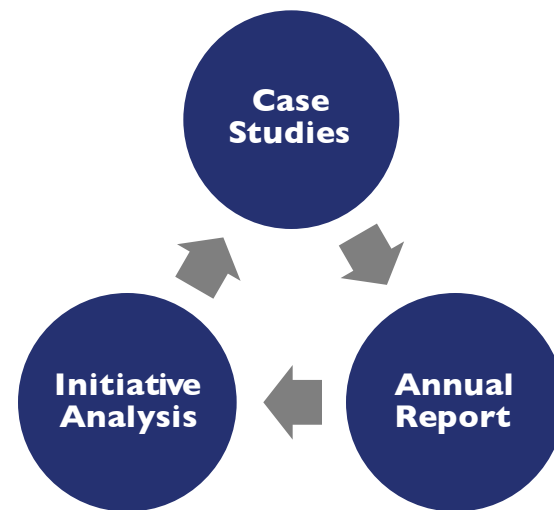
COMPREHENSIVE ASSESSMENT

Assessment efforts focused on 4-VA initiatives and the subsequent collaborations taking place across universities. A more robust and comprehensive approach was taken to capture impact and efficiencies that moved beyond 4-VA's historic data collection efforts. The collaborative nature of 4-VA was documented in an effort to better understand collaboration across universities. Data collection of this kind provided evidence for the question, "What are we doing together?" further showcasing the unique efforts and leveraging capabilities of 4-VA.

Based on the pervious year, the Assessment Coordinator sought to provide greater alignment between multilevel reporting structures. The annual report was streamlined for ease and use of reporting within universities. In response to the expressed needs of 4-VA, the Assessment Coordinator also pursued documentation and analysis of lessons learned in order to develop best practices and to more accurately capture collaborative efforts. A three pronged approach was developed to provide a comprehensive assessment plan that addressed the goals and desires of the Collaborative.

Case studies, a research design that involves an intensive study of one or more cases with multiple sources of evidence, were conducted at each of the member institutions. The case study focused on a specific project that exemplified strong collaborative value.

At GMU, the case study focused on a multi-initiative collaboration (course sharing, collaborative research, and course redesign) with VT. At JMU, the case study explored a pilot course sharing project for advancing and connecting remote STEM labs. At UVa, the case study focused on an early collaborative research relationship with a faculty member at JMU. At VT, the case study focused on a strong



ASSESSMENT AND EVALUATION

collaborative research relationship with a JMU faculty member that resulted in a newly developed and growing research community. The case studies richly described the impact of 4-VA collaboration on students, faculty, departments, universities, and Virginia.

The annual report for member institutions was co-created with 4-VA staff in order to provide greater alignment between university and project level reports. Campus coordinators benefited from the co-creation of reporting and data collection requirements, ultimately giving them more time to organize and collect programmatic information. The Assessment Coordinator supported each university with project level reporting and data collection. In the next reporting cycle, an effort will be made to further streamline reporting requirements by embedding data collection into existing real-time information systems.

The initiative analysis is an intensive study of projects from each of the 4-VA initiatives at all member institutions. A core set of questions relevant for all initiatives (such as maturation, processes, goals, successes, challenges, impact, and collaboration) as well as a set of initiative specific questions were developed. The focus of this analysis will be the collaborative value and efforts across member institutions. A course sharing analysis began in the summer of 2015 and this work continues.

SHARED ASSESSMENT

As of July, 2015 the Assessment Coordinator will be hosted by ODU and jointly funded by participating 4-VA universities. The rationale for this adjustment is to (1) foster increased relationships between all 4-VA universities and the Assessment Coordinator; (2) support a funding model that reflects shared services across universities; (3) support the envisioned role of a shared position within the Collaborative; and (4) continue our advancements in assessment while providing consistency across universities. The Assessment Coordinator supports the evaluation of the Collaborative as well as the assessment, data collection, and reporting needs at each university. An individualized course of action will be determined by the specific needs of each campus coordinator throughout a given semester.



UNIVERSITY NARRATIVE

George Mason University (GMU) is a relatively young and energetic university, and 4-VA shares that newness and sense of possibility. GMU plans to produce 100,000 graduates within the next ten years and to serve as a catalyst for economic growth in the Commonwealth. GMU 4-VA provides resources and support for the BAS degree completion program for adult students, and is also collaborating on a statewide degree completion network with 4-VA partner ODU.

GMU is committed to “research of consequence” that will provide social, cultural, and economic impact to the region and Commonwealth, as well as opportunities for undergraduate researchers. Increasing efficiencies in instructional delivery and design are critical to both 4-VA and GMU initiatives.

STRENGTHS

- The GMU 4-VA program staff have a strong team approach to achieving goals and initiatives. A solid sense of community aids the program in communicating to 4-VA stakeholders.
- There is increased faculty interest in the 4-VA grant program, more faculty are applying for grants and seeking advice from the office as the visibility of 4-VA has increased on campus.
- The number of grants awarded and special initiatives has increased. The turnaround time has decreased for the processing of funds to support faculty research, so that faculty are notified and funding provided within 8 weeks.
- GMU 4-VA continued to support and enhance adult learning initiatives.
- GMU 4-VA provides most of the courses shared through the Collaborative, particularly in the foreign languages area.

CHALLENGES

- The GMU 4-VA program continues to be challenged by the coordination of research grants between institutions and the organization of shared courses. There are improvements that will appear in the coming months as streamlined grant processes and cooperation between institutions, but it remains a work in progress.
- The program is focused on increasing the number of STEM courses offered in the shared course format, despite scheduling difficulties and the non interest of other 4-VA institutions’ faculty. More outreach and faculty connections across institutions will address this challenge.

PLANNING PROCESS

GMU 4-VA's planning process is centered in the Office of the Provost - Undergraduate Education in conjunction with Instructional Technology Services (ITS). The GMU 4-VA Campus Coordinator and Deputy Campus Coordinator meet weekly to review regular progress and plan ahead. The Deputy Campus Coordinator works closely with ITS to discuss technology and shared course faculty needs and the shared course schedule. The GMU 4-VA Advisory Board meets at least once each semester to review and discuss research proposals, utilizing a proscribed rubric.

IMPLEMENTATION

Throughout the year GMU has made specific efforts to:

- Develop more shared courses delivered in non TelePresence formats but shared between 4-VA member institutions. Examples are online, hybrid and utilization of HD videoconferencing which is more flexible for the instructor.
- Focus on an RFP for spring 2016 that addresses open educational resources as a type of course redesign. This call for proposals will be done in partnership with GMU Online and the University Libraries.
- Expand work in Adult Education area to build online programs in BIS/BAS.
- Continue to establish streamlined processes for the GMU 4-VA operational activities, such as grant processes and shared course planning and delivery.

FUNDING

Funding for 4-VA initiatives is provided automatically each year as a regular budget. Additional funds are negotiated through ITS. This process is informal and is usually handled through a simple email process.

The RFPs are received by the 4-VA staff via email, and then disseminated to the GMU 4-VA Advisory Board. The board reviews each grant with a rubric that emphasizes the goals of 4-VA (see appendix for RFP form). The rubrics are tallied, and the campus coordinator makes the final decision based on the board results. Grant award recipients receive GMU 4-VA funds through the creation of a budget code attached to GMU 4-VA.

If a grant award includes undergraduate research, a budgeted amount is given to the Office of Student Scholarship, Creative Activities and Research (OSCAR), GMU's program that supervises undergraduate research funding.

There were several challenges in this second year as the workflow was refined to accommodate the grant awards process in a more timely manner. There was a small time gap between creation of the grantee subcodes and the funding of the grants, but the gap was significantly smaller this year. Regular communication with the Provost financial analysts, grantees and the Coordinator and Deputy Campus Coordinator improved the communication process this year.

CHANGES FROM LAST REPORTING CYCLE

GMU 4-VA added Tarra Morgan to the 4-VA staff in a part time status. She is an organizational planner and research assistant. The program added the expertise of our Manager of Undergraduate Academic Affairs, Marcy Glover, who attends 4-VA meetings and aids the team with in kind assistance. A perpetual calendar for GMU 4-VA activities was developed, which will aid in the planning process.

ADMINISTRATIVE PROFILE

Janette Muir, Associate Provost, Undergraduate Education, GMU 4-VA Campus Coordinator (in-kind): assembles the advisory board, manages overall operations and outreach, and distributes 4-VA funds.

Linda Lane Sheridan, GMU 4-VA Deputy Campus Coordinator (fully funded by 4-VA): responsible for shared courses, coordinates grant process, liaison with grantees, and compiles annual reports.

Marcy Glover, Manager, Undergraduate Programs in the Office of the Provost (in-kind): responsible for assisting the 4-VA team with events and provides budget support.

Tarra Morgan, Program Assistant (partially funded by 4-VA): responsible for supporting the campus coordinator and deputy campus coordinator.

GEORGE MASON UNIVERSITY

Cherie Galantis, Manager; Collaborative Video Technologies, Enterprise Infrastructure (in-kind): responsible for managing the Collaborative Video Technology team and resources.

Christina Sander, TelePresence Specialist, Collaborative Video Technologies, Enterprise Infrastructure (in-kind): responsible for managing TelePresence rooms and schedule, trains faculty/staff to teach in the Telepresence rooms.

Casey Campbell, Engineer; Collaborative Video Technologies, Enterprise Infrastructure (in-kind): an engineer who troubleshoots technical issues in the Telepresence classroom.

FINANCIAL STATEMENT

Initiatives	Amount	% of Total Initiative Funding
<i>Shared Courses</i>	\$11,000	3%
<i>Degree Completion</i>	\$11,011	3%
<i>Collaborative Research</i>	\$154,290	38%
<i>Course Redesign</i>	\$84,650	20%
<i>Supporting Initiatives</i>	\$146,600	36%
<i>Total</i>	\$407,551	

Infrastructure and Resources	Amount	% of Total Infrastructure Funding
<i>Technology</i>	\$319,590	72%
<i>Operating 4-VA</i>	\$122,900	28%
<i>Anticipated Carryover</i>		
<i>Total</i>	\$442,449	

GEORGE MASON UNIVERSITY

2014-2105 GRANTEES

COLLABORATIVE RESEARCH GRANTS

Grant Name	Awardee	Title	Department	Amount	Collaborator
The Rain Project –building a floating wetland for sustainable storm water management	Changwoo Ahn, PhD	Associate Professor	Environmental Science & Policy	\$16,380	Virginia Tech
Genetically-encoded chimeras reveal functional properties of NMDA receptors that separately support spatial learning or memory	Theodore Dumas, PhD	Assistant Professor	Molecular Neuroscience, Krasnow Institute	\$12,860	University of Virginia
Caps-for-Caps Research	Anna Evmenova, PhD	Assistant Professor	Assistive & Special Education Technology	\$18,000	University of Virginia
The Mason Water Data Information System (MWDIS): Empowering water data sharing and discovery at George Mason University and beyond	Celso Ferreira, PhD	Assistant Professor	Civil, Environmental & Infrastructure Engineering	\$20,000	Virginia Tech & James Madison University
Mechanisms of susceptibility to nicotine addiction in adolescents: A focus on the addition of menthol to tobacco products	Nadine Kabbani, PhD	Assistant Professor	Molecular Neuroscience, Krasnow Institute	\$10,000	University of Virginia
A search for the origin of super massive black holes	Shobita Satyapal, PhD	Associate Professor	School of Physics, Astronomy, Computational Sciences	\$15,600	James Madison University
Wind energy and watershed action partnership	Cynthia Smith, PhD	Assistant Professor	Environmental Science & Policy	\$11,500	James Madison University
Discovery of antimicrobial peptides in Bedbugs	Monique van Hoek, PhD	Associate Professor	Systems Biology	\$20,000	James Madison University
Mason Water Forum	Paul Houser, PhD	Associate Professor	Geography & Geoinformation Science	\$19,950	

GEORGE MASON UNIVERSITY

2014-2105 GRANTEES

COLLABORATIVE RESEARCH GRANTS

Grant Name	Awardee	Title	Department	Amount	Collaborator
Development of an Interactive Human Body Digital Reusable Learning Object (RLO) to provide whole body-systems-based learning in vitamins and minerals - grant originated at Virginia Tech.	Sina Gallo, RD, PhD	Assistant Professor	Nutrition and Food Studies	\$5,000	Virginia Tech
Leveraging inter-university collaborations to decipher proteomic mechanotransduction pathways in stem cell-seeded tendon scaffolds in a dynamic bioreactor – a complementary grant with Virginia Tech	Lance Liotta, PhD	Co-Director	Applied Proteomics & Molecular Medicine	\$5,000	Virginia Tech

GEORGE MASON UNIVERSITY

2014-2105 GRANTEES

COURSE REDESIGN GRANTS

Grant Name	Awardee	Title	Department	Amount	Collaborator
Introduction to Civil Engineering	Colin Reagle, PhD	Assistant Term Professor	Civil Engineering	\$7,000	James Madison University
Teaching Hidden History: Implementation Grant	Kelly Schrum, PhD	Associate Professor	Higher Education Program, Roy Rosenzweig Center for History and New Media	\$39,000	Virginia Tech
Investigating phage ecology: an interdisciplinary summer research experience for undergraduate and Governor's School high school students	J. Reid Schwebach, PhD	Term Assistant Professor, Coordinator, COS HS Outreach & Recruitment, Governor's School	Systems Biology	\$18,950	James Madison University
Engaging incoming STEM majors through preparatory camps to improve freshmen academic performance and retention in STEM	Padmanabhan Seshaiyer, PhD	Professor	Mathematical Sciences, Director, STEM Accelerator Program	\$19,700	

GEORGE MASON UNIVERSITY

2014-2105 GRANTEES

COURSE SHARING GRANTS

Grant Name	Awardee	Title	Department	Amount
Fourth Year Chinese	Lili Ren	Assistant Professor	Confucius Institute	\$1,000
Gateway to Advanced Korean	Young Jung	Assistant Professor	Modern and Classical Languages	\$1,000
Elementary Korean	Hye Young Shin	Instructor	Modern and Classical Languages	\$2,000
STEM Outreach and Community Engagement	Cynthia Smith, PhD	Assistant Professor	Environmental Science and Policy	NA
Intermediate Korean	Hye Young Shin	Instructor	Modern and Classical Languages	\$1,000
Advanced Korean	Young Jung	Assistant Professor	Modern and Classical Languages	\$1,000
Modern and Classic Language Support: Travel, Conference, and Supplies	Modern and Class. Lang.	Department	Modern and Classical Languages	\$4,000
Biology Department Support: Travel, Conference, and Supplies	Biology	Department	Biology	\$1,000

JAMES MADISON UNIVERSITY



UNIVERSITY NARRATIVE

The goals of 4-VA at James Madison University (JMU) are strongly aligned with the overall goals of the 4-VA Collaborative. There is also strategic direction placed on the Innovation, Collaboration, and Entrepreneurship (ICE) collaborative at JMU and STEM course sharing.

JMU focuses on improving opportunities for Virginians to complete a four-year degree by working closely with the Office of Outreach and Engagement to create online courses and modules that meet the needs of employers and citizens. JMU also delivered the first year of a pilot program (9th period) to simultaneously provide professional development for K-12 educators and teach computer science at regional high schools.

JMU put particular emphasis on the competitive research goal through the collaborative mini and scale up grant program. The grant program also puts a strong emphasis on developing undergraduate research in order to increase retention rates in STEM disciplines.

JMU supports the Center for Faculty Innovation's yearly workshop on course redesign to support faculty in realigning course objectives with articulation details. This year's workshop included a total of 42 participants from nine institutions.

STRENGTHS

- The collaborative research program has grown and matured with many grantees reporting external awards yielding a high return on investment. Many new collaborations have been made possible by the grant program. JMU is proud to offer high levels of support to their grantees in order to ensure a strong and successful research collaboration.
- The university recognizes and supports 4-VA by providing additional resources and spaces to expand programs with the newly created STEM Lab and expanded TelePresence classroom.
- JMU has encouraged academic and instructional collaborations across campus through 4-VA as well as the development of administrative partnerships across campus.

CHALLENGES

- A challenge that began to surface this year is JMU's capacity to support videoconferencing activity on campus. Unlike other 4-VA schools, JMU does not have a preexisting office that supports these activities so the support has fallen onto 4-VA staff and David Lamm within IT.

- Most departments at JMU do not have the support staff to assist research faculty with processing expenditures from grant funding. These grants are also considered internal funding so they are not managed through JMU's Office of Sponsored Programs. Supporting faculty through the process of spending grant funds while following state rules is time consuming. The Deputy Campus Coordinator tries to educate faculty on how money is spent, reimbursed, and transferred and this process is challenging.

PLANNING PROCESS

The 4-VA staff holds bi-weekly meetings between Dale Hulvey, Assistant Vice President of Information Technology (IT) and the IT staff to meet technological demands. Quarterly meetings with the Provost, Jerry Benson are held to discuss strategic direction and program updates. An annual strategic planning meeting was held and a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis was conducted with various participants and stakeholders. The annual budget and project alignment to 4-VA goals is discussed with the Steering Committee and presented to JMU's President and Provost.

IMPLEMENTATION

The original TelePresence equipment does not support hands-on STEM courses; therefore, in order to meet the goals of sharing STEM courses, a shared STEM lab was developed to meet demands. In June of 2015 4-VA offices at JMU moved to Lakeview Hall and began developing versions of shared STEM classes.

The ICE collaborative is an initiative focused on Innovation, Collaboration, and Entrepreneurship. The initiative is supported by a cooperative alliance between the College of Business' Center for Entrepreneurship, JMU Technology Innovation, and 4-VA. In the past year 4-VA at JMU has supported several events, and classes that promote the ICE collaborative. 4-VA at JMU also sponsored a team of University Innovation Fellows consisting of five JMU students from various majors.

4-VA is supporting an ongoing course redesign project with the biology department. After analyzing the university's drop, fail, and withdraw (DFW) rates, 4-VA is taking a targeted approach to address courses with high DFW numbers. Introductory biology courses are being redesigned based on these data driven decisions.

FUNDING

The Campus Coordinator manages 4-VA funds from an account with Information Technology. An annual budget is produced and presented to the President and Provost. Most funding is kept in the 4-VA office so that 4-VA can assist with procurement and track expenditures.

The RFP is distributed through a university email from the Provost's Office (see appendix for RFP form). Grants are reviewed by the JMU steering committee. The 4-VA Director meets with steering committee members to review grants and discuss options for funding. Merit review is accomplished through the collaborative partnership with faculty at the other 4-VA institutions.

CHANGES FROM LAST REPORTING CYCLE

The biggest change this year for JMU was assuming the additional role and responsibilities of the 4-VA Executive Office. The second biggest change was acquiring dedicated office and instructional space. The staffing at JMU has remained consistent. Nick Swayne became director of 4-VA in 2010 and has remained the Director Kai Brokamp became the Assistant Director in 2012 and has remained. JMU continues to employ two students in the 4-VA office to assist with technology and program support.

ADMINISTRATIVE PROFILE

Nick Swayne, 4-VA Director (in-kind): responsible for coordinating campus 4-VA activities, meeting with stakeholders, and managing 4-VA funds.

Kai Brokamp, Assistant Director (fully funded by 4-VA): responsible for implementing, monitoring, supervising, and supporting all 4-VA programs at JMU, and coordinating with the other 4-VA schools.

Kim Reedy, 4-VA Communications (part-time funding by 4-VA): responsible for creating the JMU 4-VA marketing booklet and maintaining the 4-VA website.

Tom Wilcox, Inventor in Residence (part-time funding by 4-VA): responsible for supporting faculty innovation and the ICE Maker Space.

JAMES MADISON UNIVERSITY

Chris Ashley, Technology Assistant and student (funded by 4-VA): responsible for supporting technology in 4-VA spaces.

Tess Wilbur, Undergraduate Student Assistant, (funded by 4-VA): responsible for assisting David Lamm with videoconference technology.

Claire Fulk, ICE Space Assistant and student (funded by 4-VA): responsible for supporting instructional technology and maker space technology in the ICE Maker Space.

Dale Hulvey, Assistant Vice President for Information Technology (in-kind): manages the annual budget and the 4-VA funds.

David Lamm, Network Manager (in-kind): responsible for supporting videoconferencing technology.

Jim West, Director of Classroom Technology (in-kind): supports TelePresence and instructional technology.

FINANCIAL STATEMENT

Initiatives	Amount	% of Total Initiative Funding
<i>Shared Courses</i>	\$27,640	8%
<i>Degree Completion</i>	\$102,500	28%
<i>Collaborative Research</i>	\$152,500	42%
<i>Course Redesign</i>	\$36,000	10%
<i>Supporting Initiatives</i>	\$43,000	12%
<i>Total</i>	\$361,640	

Infrastructure and Resources	Amount	% of Total Infrastructure Funding
<i>Technology + Shared Classroom</i>	\$581,000	81%
<i>Operating 4-VA</i>	\$133,000	19%
<i>Anticipated Carryover</i>		
<i>Total + 13-14 Carryover</i>	\$714,000	

JAMES MADISON UNIVERSITY

2014-2105 GRANTEES

COLLABORATIVE RESEARCH GRANTS

Grant Name	Awardee	Title	Department	Amount	Collaborator
Probing Short-range Interactions of Interfacial Bubbles	Klebert Feitosa	Assistant Professor	Physics	\$8,800	Virginia Tech
Deployment of a Working Prototype for Stereo Hearing Tests	Lincoln Gray	Professor	Communication Sciences and Disorders	\$1,200	University of Virginia
Gene expression analysis in the developing vertebrate retina using next generation sequencing	Ray Enke	Assistant Professor	Biology	\$5,000	University of Virginia
Towards Assessing the Breadth of Expertise in Science and Engineering Education	Shannon N. Conley	Assistant Professor	Integrated Science and Technology	\$5,000	University of Virginia
Development and testing of a heterologous vaccine to treat Bordetella avium and other poultry pathogens	Louise Temple	Professor	Integrated Science and Technology	\$12,000	Virginia Tech
Manufacturing Innovation through Sustainable Design	Jacquelyn Nagel	Assistant Professor	Engineering	\$15,000	Virginia Tech
Music Technology Engagement for Adults with Intellectual and Developmental Disabilities	David A. Stringham, Ph.D.	Assistant Professor	Music Education	\$3,000	Virginia Tech, The Arc of Harrisonburg-Rockingham
Fraction Schemes and Operations: An Extension to Prospective PreK-8 Teachers (Scale-Up Grant Proposal)	LouAnn Lovin	Professor	Mathematics and Statistics	\$5,000	Virginia Tech
Short-range interactions of interfacial bubbles	Klebert Feitosa	Assistant Professor	Physics	\$3,500	Virginia Tech

JAMES MADISON UNIVERSITY

2014-2105 GRANTEES

COLLABORATIVE RESEARCH GRANTS

Grant Name	Awardee	Title	Department	Amount	Collaborator
Fossil Evidence for Early Human Predation on Rhinos	Elizabeth (Beaux) V. Berkeley	Assistant Professor	Biology	\$5,000	George Washington University & Smithsonian Museum of Natural History
Connecting MDID and Omeka: Two Powerful Open Source Products	Grace Barth	Visual Resource Librarian	Art Design and Art History	\$5,000	George Mason University
Development of a Real-time Data Collection and Intervention Platform for Classrooms: The Rapid Assessment Platform and Intervention Delivery (RAPID) System	Kenn Barron	Professor	Psychology	\$20,000	University of Virginia

JAMES MADISON UNIVERSITY

2014-2105 GRANTEES

COURSE SHARING GRANTS

Grant Name	Awardee	Title	Department	Amount
Elementary and Intermediate Portuguese	Lilian Feitosa	Instructor	Foreign Languages	\$6,000
Topics in Italian Literature and Intermediate Italian	Gian Frongia	Instructor	Foreign Languages	\$4,000
Population Ecology	Patrice Ludwig	Assistant Professor	Biology	\$2,000
Simulations	Bernard Kaussler	Associate Professor	Political Science	\$2,000

OLD DOMINION UNIVERSITY



UNIVERSITY NARRATIVE

After joining 4-VA in December, 2014, Old Dominion University (ODU) is committed to providing resources to support 4-VA's efforts in a variety of areas. Within course sharing ODU is interested in providing remote expertise in Graduate Nursing/VA Consortium, Cybersecurity of Critical Infrastructures, and foreign languages. ODU is also interested in sharing resources from their Center for Learning and Teaching and a Summer Institute web conference.

Course Redesign through distance learning will be supported through TelePresence used for live connection between sites with WebEx and Adobe Connect. ODU has eight design teams building online programs that can also be used to support this initiative.

ODU also foresees a strong technology collaboration building between the universities. The university is committed to supporting and growing these efforts through TelePresence system disaster recovery support, joint test environment for new TelePresence systems and scheduling system, as well as providing support for bandwidth constraints and operating systems.

STRENGTHS

- ODU's strengths align with 4-VA in the areas of degree completion, collaborative research, course redesign, shared courses, STEM-H Education, and technology. Of these areas, ODU hopes to make early achievements in shared courses focusing on foreign languages and other specialty courses serving a specific niche of student needs.
- ODU also expects to introduce technologies and capabilities the university currently has in place and offer support to the Collaborative and participating institutions.
- ODU believes that one of the first areas where cooperation will begin is in the area of research. Campus Coordinators have already received an inquiry from JMU to work with colleagues in the College of Education.

CHALLENGES

- At present, ODU's major challenge is funding. Without funding ODU is limited in terms of becoming a full partner in 4-VA. However, ODU is trying to find some ways to be active and helpful with degree completion as well as in some research areas.

- Once funding is secured, ODU's next challenge will be to market the program and the opportunities to faculty and staff on the ODU campus. In some ways this has already begun but Campus Coordinators are reluctant to raise expectations without funding.

IMPLEMENTATION

ODU's major goal was to become the fifth higher education institution in 4-VA. With the help of the 4-VA institutions and support of the management board, ODU was able to successfully petition for and receive support in joining the 4-VA Collaborative.

ODU's goal for 2015-2016 is to obtain support funding for 4-VA initiatives. With funding ODU hopes to:

- Actively receive at least three courses from the 4-VA course sharing initiative
- Host at least one course for the 4-VA course share initiative
- Establish a research funding program similar to JMU's program providing start up grants and encouraging collaboration with other 4 VA institutions
- Provide support from the Center for Learning and Teaching for the course redesign efforts at ODU and across the 4-VA Collaborative
- Provide leadership to 4-VA efforts in degree completion

FUNDING

ODU developed a budget for 4-VA activities that reflects funding to address the four major goals and initiatives and has included the 4-VA request to the Governor for consideration in his biennial budget.

CHANGES FROM LAST REPORTING CYCLE

The major change at ODU is the engagement of appropriate upper administrators in interactions with the 4-VA project and colleagues at 4-VA institutions. Once funding is in place ODU will invest in appropriate individuals for collaborative research, course redesign, course sharing, as well as degree completion.

ADMINISTRATIVE PROFILE

Andy Casiello, Campus Coordinator, Associate Vice President for Distance Learning (in-kind): responsible for coordinating 4-VA initiatives, requesting funding, and building capacity on campus.

James Shaeffer, Deputy Campus Coordinator, Founding Dean, College of Continuing Education and Professional Development (in-kind): responsible for assisting in coordination of 4-VA initiatives, requesting funding, and building capacity on campus.

Rusty Waterfield, Vice President for Administration and CIO (in-kind): responsible for consulting on information technology and the MARIA collaboration.

Dean Claud, Director of New Online Program Development for the College of Continuing Education and Professional Development (in-kind): responsible for distance education and adult education and development.

Wayne Jones, Director of Network Technology and Operations (in-kind): responsible for information technology.

Morris Foster, Vice President for Research (in-kind): responsible for research.

Brian Payne, Vice Provost, Academic Affairs (in-kind): responsible for academics.

Miguel Ramlatchan, Assistant Vice President for Distance Learning (in-kind): responsible for distance learning engineering.



UNIVERSITY NARRATIVE

The University of Virginia (UVA) seeks to advance the goals of 4-VA by aligning 4-VA activities with the UVA Cornerstone Plan. Four of the five Pillars of the Cornerstone Plan are clearly congruent with the goals of 4-VA and pillar four is a contributing factor to all 4-VA goals:

1. Enrich and strengthen the University's distinctive residential culture
2. Strengthen the University's capacity to advance knowledge and serve the Commonwealth of Virginia, the nation, and the world through research, scholarship, creative arts, and innovation
3. Provide educational experiences that deliver new levels of student engagement
4. Assemble and support a distinguishing faculty
5. Steward the University's resources to promote academic excellence and affordable access

STRENGTHS

- The funding provided through collaborative research has been successful.
- The Nucleus program, that focuses on course redesign, is organized by the Center for Teaching Excellence (formally the Teaching Resource Center) and has affected more than 6,400 students taking large enrollment, introductory STEM courses.

CHALLENGES

- In the past, UVA had a more passive role; if faculty found out about 4-VA they could get funding. This did not engage UVA faculty in working towards 4-VA goals as much as would have been liked.

PLANNING PROCESS

The planning process is being revised at UVA to involve the Office of the Vice President for Research in collaborative research funding decisions and the Center for Teaching Excellence in course redesign funding decisions. This change will allow appropriate faculty involvement and oversight to be part of the process. These bodies will make funding recommendations to the 4-VA Campus Coordinator who will make the final funding decisions.

IMPLEMENTATION

- Our specific goals are to engage more of the faculty around the goals of the 4-VA Collaborative. The redesigned RFPs in research and course innovation are designed to do that.
- In 2015-2016, the Campus Coordinator will dedicate time and resources to meeting with faculty in order to educate them about the program and encourage them to submit their ideas for funding.

Two different research funding mechanisms will be available in the fall of 2015. Collaborative research grants are intended to improve research competitiveness within the Commonwealth by providing funding for faculty teams to engage in pilot research, which could be used, as a springboard for subsequent external funding (e.g., federal or foundation grants). Average awards will be between \$20,000 and \$30,000.

Catalyst research grants are intended to assist UVa faculty in completing the work needed to establish new research collaborations within the Commonwealth, improve competitiveness for future research funding opportunities, or increase the scholarly impact of the faculty member's current and future research and scholarly activities. Average awards will be between \$3,000 and \$5,000.

A course innovation funding mechanism is being developed; it is expected to be available in the spring of 2016. This funding will advance goal one, two, and four of the 4-VA Collaborative.

FUNDING

The Campus Coordinator has full authority over and responsibility for all 4-VA funds at UVa. For the past academic year, UVa did not have an independent grant process. The university received matching requests for projects at participating 4-VA schools and provided matching funds for UVa faculty.

Moving forward, RFPs will be focused on collaborative research and course innovation.

The current plan is to conduct a call for proposals once a year. Collaborative research will be conducted in the fall in a partnership with the Provost Office and the Office of the Vice President for Research (who will provide administrative support). Funding recommendations will be

made to Archie Holmes, Vice Provost for Educational Innovation and Interdisciplinary Studies and 4-VA Campus Coordinator. Course innovation will be conducted in the spring of 2016 with the Center for Teaching Excellence providing administrative support.

CHANGES FROM LAST REPORTING CYCLE

To help create better alignment, responsibility for the 4-VA program at UVa shifted from Michael McPherson, Associate Vice President for Information Technology, to Archie Holmes, Vice Provost for Educational Innovation and Interdisciplinary Studies. During this transition, the process by which funds are distributed has been reviewed and revised.

ADMINISTRATIVE PROFILE

Archie Holmes, 4-VA Campus Coordinator; Vice Provost for Educational Innovation and Interdisciplinary Studies (in-kind): took over as Campus Coordinator during the spring of 2015.

Michael McPherson, Campus Coordinator; Associate Vice President for Information Technology (in-kind): Campus Coordinator for the fall of 2014 and part of the spring 2015 semester.

UNIVERSITY OF VIRGINIA

FINANCIAL STATEMENT

<i>Initiatives</i>	<i>Amount</i>	<i>% of Total Initiative Funding</i>
<i>Shared Courses</i>		
<i>Degree Completion</i>		
<i>Collaborative Research</i>	\$127,358	30%
<i>Course Redesign</i>	\$300,000	70%
<i>Supporting Initiatives</i>		
<i>Total</i>	\$427,358	

Infrastructure and Resources	Amount	% of Total Infrastructure Funding
<i>Technology</i>	\$104,704	25%
<i>Operating 4-VA</i>	\$0	
<i>Anticipated Carryover</i>	\$317,937	75%
<i>Total</i>	\$422,641	

UNIVERSITY OF VIRGINIA

2014-2105 GRANTEES

COLLABORATIVE RESEARCH GRANTS*

Grant Name	Awardee	Title	Department	Amount	Collaborator
Towards Assessing the Breadth of Expertise in Science and Engineering Education	Michael E. Gorman and Rider W. Foley	Professor	Engineering and Society	\$6,592	James Madison University
Development of a Real-time Data Collection and Intervention Platform for Classrooms: The Rapid Assessment Platform and Intervention Delivery (RAPID) System	Chris Hulleman	Research Associate Professor	Center for Advanced Study of Teaching and Learning	\$20,000	James Madison University
Genetically-encoded chimeras reveal functional properties of NMDA receptors that separately support spatial learning or memory	Peter Brunjes	Professor	Phycology	\$5,000	George Mason University

* This list is incomplete due to the transition in Campus Coordinators at UVa.



UNIVERSITY NARRATIVE

The operation of 4-VA at Virginia Tech (VT) is managed by IT in coordination with the Provost's Office and academic units through the Technology-enhanced Learning and Online Strategies (TLOS) stakeholders committee. The committee provides input approval of proposed allocations and grants in addition to annually reviewing grant progress and outcomes report.

Funding for 4-VA grants at VT is intended to support activities that further the goals of both VT and the Collaborative through four activities: course sharing, competitive research grants, collaborative research grants for researchers working with a 4-VA grantee at a partner institution, and course redesign grants.

STRENGTHS

- In 2013-14 VT engaged in a significant self-study and implemented improvements in 2014-15. Based on the foundational work in 2013-14, 2014-15 saw an increased understanding of needs, robust documentation of processes, and increased opportunities for collaboration with partners.
- The definition of a robust grants program with defined processes, pools, and assessment mechanisms is a major advancement for 4-VA at VT and has enabled a rapid expansion in the number and variety of grants, faculty members, and students involved with 4-VA at VT. In 2014-15, 4-VA at VT awarded almost \$300,000 across 24 grants in our four pools.
- The rapid expansion of our grants program is a major achievement for VT.

CHALLENGES

- Funding receipt delays extended timeframe for configuring and distributing grant funding.
- Grantees found the RFP, Memorandum of Understanding (MOU), and subsequent reporting process to be overly burdensome and confusing.
- Partner institutions in 4-VA found that some faculty were requesting grants multiple times a year, every cycle.

PLANNING PROCESS

The Campus Coordinators are responsible for administering and managing 4-VA grants. The TLOS Stakeholders Committee is actively involved in the program's planning process.

The committee has five responsibilities in the context of the 4-VA Collaborative:

1. Providing input on and approval of proposed grant funding allocations to each of the four VT 4-VA grant areas on an annual basis
2. Providing input on and approval of the 4-VA grant RFPs and process for shared courses, competitive research, and course redesign grants before each grant cycle
3. Approving recommended 4-VA grant recipients during each grant application cycle
4. Approving on an annual basis the continuation of funding for multi-year 4-VA grants
5. Annually reviewing and providing input on grant progress and outcome reports.

A small group of faculty help the Campus Coordinators review and provide feedback on competitive research and course redesign grants as part of the proposal review process. Where appropriate, other faculty and units at VT may also be consulted, as noted above. This will occur prior to grant approvals.

IMPLEMENTATION

The following directions were implemented for the grant cycle (see appendix for RFP form).

Course sharing grants support the faculty interested in sharing a STEM or a foreign language course with 4-VA partner institutions and require the support of the applicant's department and college. 4-VA at VT offered \$5,000 per course in unrestricted funds (within state and university rules). These grants can be packaged with a course redesign grant.

Competitive research grants are intended to improve research competitiveness within the Commonwealth and at VT by providing funding for faculty to engage in pilot research that could be used as a springboard for subsequent, major federal grants. 4-VA at VT expected to offer no fewer than four of these grants and no more than twenty in a given academic year. The planned allocation was between \$5,000 - \$25,000.

Course redesign grants support the redesign of courses in STEM+ or a foreign language, connect to the Pathways to General Education program at VT, and require the support of the applicant's department and college. 4-VA at VT expected to offer no fewer than ten course redesign grants

and no more than twenty-five in a given academic year. The planned allocation was between \$10,000 - \$25,000.

Collaborative Research grants support work between faculty at VT and our 4-VA partner institutions. Collaborative research grants will generally involve funds-matching for research where the primary or principal investigator (PI) is housed at one of the 4-VA partner institutions and a Co-PI or investigator is located at VT. The typical matching grant is expected to be significantly smaller than a competitive research grant. Although smaller, collaborative research grant recipients are also required to engage in assessment activities. The planned maximum allocation was \$5,000 per collaborative grant.

FUNDING

In order to internally request funds, IT submits a request to the Provost's Office, the Provost's Office approves the request and sends it to the Budget Office. The Budget Office then approves the request and sends funds to the Provost's Office, who then sends the request to IT. IT works with departmental units to configure access to funding for 4-VA awarded grants.

The RFP process begins with discussion and approvals from the TLOS Stakeholders Committee: allocations, timelines, descriptions, MOUs, evaluation rubrics, and any changes from the previous year are approved by the committee. The RFPs are announced on the TLOS Grants website. Proposal submissions are analyzed with evaluation rubrics. An example criteria is evaluating the levels of specificity, comprehensiveness, and alignment with 4-VA goals, ensuring that selected proposals are detailed, clearly articulated, innovative, well-conceived, and thoroughly developed.

When the grants are awarded, grantees are required to complete MOUs, including signatures of the grantees, the Grants Manager, and, in some cases, the department head. Grantees agree to the assessment requirements stated in the MOU.

CHANGES FROM LAST REPORTING CYCLE

This was the first year of the newly implemented 4-VA Grants Initiative, with defined pools, RFPs, MOUs, and required assessment mechanisms.

In the past, the 4-VA Assessment Coordinator was housed on campus within the Office of Assessment and Evaluation. The Assessment Coordinator has emerged as an important shared position for all 4-VA participants. In the 2015 academic year, the Coordinator will be working from the ODU campus with more regular visits to all universities in the collaborative. VT will retain administrative/supervisory accountability, coordinating evaluation, and supervisory roles as appropriate. Shared funding of this role is, as of the 2015-16 fiscal year, still being worked out

ADMINISTRATIVE PROFILE

Dale Pike, Campus Coordinator (in-kind): responsible for providing oversight of 4-VA activities and focuses on strategic directions.

Claire Gilbert, Deputy Campus Coordinator (in-kind): responsible for providing support for 4-VA activities and assists in the development of strategic directions.

Teggin Summers, Manager of Grants and Shared Courses (in-kind): responsible for overseeing the grants program and shared course activities.

Kelsey Kirland, 4-VA Assessment Coordinator (fully funded by 4-VA): responsible for advancing assessment and reporting of the entire Collaborative.

John Krallman, IT Finance Director (in-kind): responsible for assisting with oversight of 4-VA finances.

Cindy Kelley, 4-VA Finance Director (in-kind): responsible for overseeing 4-VA finances.

Cindy Keister, Web Designer in Instructional Design (fully funded by 4-VA): responsible for assisting with 4-VA web presence and serves as 4-VA's contribution to the Instructional Design group, which contributes staff time and expertise to course redesign efforts.

Dan DeGraff, VNOC Technician (fully funded by 4-VA): responsible for 4-VA's contribution to the Technology and Operations group, which contributes staff time and expertise to running 4-VA technical operations.

Technology and Technical Operations staff - Computer Systems Chief Engineer/Field Engineer, VNOC Network Architect, VNOC Supervisor/Lead Engineer, VNOC operators, DMS Director/Manager, DMS Customer Accounts Manager, Distance Learning Classroom Support Supervisor, Distance Learning Classroom Support Technicians, Computer/Multimedia Systems Engineers (in-kind): responsible for providing technical oversight and support for 4-VA technical operations.

FINANCIAL STATEMENT

Initiatives	Amount	% of Total Initiative Funding
<i>Shared Courses</i>	\$15,000	5%
<i>Degree Completion</i>		
<i>Collaborative Research</i>	\$200,476	67%
<i>Course Redesign</i>	\$82,163	28%
<i>Supporting Initiatives</i>		
<i>Total</i>	\$297,640	

Infrastructure and Resources	Amount	% of Total Infrastructure Funding
<i>Technology</i>	\$102,944	19%
<i>Operating 4-VA</i>	\$288,719	52%
<i>Anticipated Carryover</i>	\$163,337	29%
<i>Total</i>	\$555,000	

VIRGINIA TECH

2014-2105 GRANTEES

COLLABORATIVE RESEARCH GRANTS

Grant Name	Awardee	Title	Department	Amount	Collaborator
Short-range Interactions of Interfacial Bubbles	Shengfeng Cheng	Associate Professor	Physics	\$5,000	James Madison University
Turkey Poult Research	Nicholas Evans	Research Scientist	Population Health Sciences	\$4,500	James Madison University
Lacrimostimulant properties of canine recombinant lactritin: Investigating a novel therapy for dry eye	Ian Herring	Associate Professor	Small Animal Clinical Sciences	\$5,000	James Madison University
Development and testing of a heterologous vaccine to treat Bordetella avium and other poultry pathogens	Nicholas Evans	Research Scientist	Population Health Sciences	\$4,500	James Madison University
Music Technology Engagement for Adults with Intellectual and Developmental Disabilities	Kelly A. Parkes, Ph.D.	Associate Professor	School of Education	\$3,148	James Madison University
Manufacturing Innovation Through Sustainable Design	Brook Kennedy	Associate Professor	School of Architecture and Design	\$5,000	James Madison University
Fraction Schemes and Operations: An Extension to Prospective PreK-8 Teachers (Scale-Up Grant Proposal)	Anderson Norton	Associate Professor	Mathematics	\$5,000	James Madison University
Fraction Schemes and Operations: An Extension to Prospective PreK-8 Teachers (Scale-Up Grant Proposal)	Jesse Wilkins	Professor	School of Education	\$20,000	James Madison University
Leveraging inter-university collaborations to decipher proteomic mechanotransduction pathways in stem cell-seeded tendon scaffolds in a dynamic bioreactor	Jennifer Barrett	Associate Professor	Large Animal Clinical Sciences	\$25,000	George Mason University

VIRGINIA TECH

2014-2105 GRANTEES

COLLABORATIVE RESEARCH GRANTS

Grant Name	Awardee	Title	Department	Amount	Collaborator
Using Digital Technology to Teach Hidden History	Mark Barrow	Professor and Chair	History	\$22,000	George Mason University
Exploring Engagement and Learner Agency in Large Undergraduate Engineering Mechanics Courses	Jake Grohs	Instructor	Engineering Education	\$23,000	
Short-range Interactions of Interfacial Bubbles	Shengfeng Cheng	Associate Professor	Physics	\$15,379	James Madison University
Development of an Interactive Human Body Digital Reusable Learning Object (RLO) to Provide Whole Body Systems-based Learning in Vitamins and Minerals.	Deborah J. Good	Associate Professor	Human Nutrition, Foods, & Exercise	\$22,000	George Mason University
Efficient Measurement of Cognitive / Spectrum Sharing Radio and Network Performance	Carl Dietrich	Research Associate Professor	Electrical and Computer Engineering	\$21,000	James Madison University
Leveraging Data To Create Personalized Learning Environments	David Knight	Assistant Professor	Engineering Education	\$19,950	

2014-2105 GRANTEES

COURSE REDESIGN GRANTS

Grant Name	Awardee	Title	Department	Amount
Love Minor	Aaron Ansell	Assistant Professor	Religion and Culture	\$24,086
Statistics Course: Data Science	Eric P. Smith	Professor & Department Head	Statistics	\$15,000
Biology of Sex	Ignacio Moore	Associate Professor	Biological Sciences	\$25,000
Principles of Conserving Fish and Wildlife in a Global Context	Sarah M. Karpanty	Associate Professor	Grad Program Coordinator & Assistant Department Head Fish and Wildlife Conservation	\$18,077

VIRGINIA TECH

2014-2105 GRANTEES

COURSE SHARING GRANTS

Grant Name	Awardee	Title	Department	Amount
Latin Course: Ovid and Virgil	Christine Steer	Instructor	Foreign Languages and Literatures	\$5,000
Physical Chemistry for the Life Science	Herve Marand	Professor, Associate Chair	Chemistry	\$5,000
Senior Seminar in International Studies Seminar Topic - International Security & Conflict Management	Yannis Stivachtis	Associate Professor	Director of International Studies	\$5,000

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APPENDICES

SELECTED 4-VA PRESENTATIONS AND PUBLICATIONS

Ahn, C. 2015. EcoScience + Art Initiative: The New Paradigm for College Education, Scholarship, and Service. Balance Unbalance International Conference, Arizona State University, Tempe, AZ

Ahn, C. 2015. EcoScience + Art to innovate college education, Invited speaker, TEDx talk George Mason U, May 3, "Gathering STEAM, Harris Theater, George Mason University.

Ahn, C. 2015. The Rain Project- the floating wetland project, Mason Water Symposium by Water Forum, Highlighting Inter-disciplinary Water Research and Conservation, April 30.

Ahn, C. 2015. EcoScience + Art Initiative: The New Paradigm for College Education, Scholarship, and Service. Multi-disciplinary Research Symposium 2015, Office of Provost, GMU, April 27 (poster).

Ahn, C. 2015. Art-Science Collaborations for Sustainable Stormwater Green Infrastructure at a College Campus, "Inspiring a Love of Science with S. T. E. A. M.", Mini-conference, Virginia Association of Science Teachers, Metz Junior High School, Manassas, VA.

Ahn, C. 2015. EcoScience + Art Initiative: The New Paradigm for College Education, Scholarship, and Service, The STEAM Journal.

Good, DJ, Baab, L, Walz, A., Gallo, S, Akers, J. and Hu, D. Creating Digital Learning Objects for Use in Large Lecture Classes, CIDER Conference on teaching large classes, July 23, 2015. Oral Presentation with hands on demonstration.

Good, DJ, Baab, L, Walz, A., Gallo, S, Akers, J. and Hu, D. Development of an Interactive Human Body Digital Reusable Learning Object to Provide Whole Body Systems-based Learning in Vitamins and Minerals, .2015 Innovations in Teaching & Learning Conference: Proposal "The Science of Learning: Using Research to Improve Teaching", George Mason University, September 2015.

Grohs, J.R., Kinoshita, T., Brozina, C., Novoselich, B., Ogilvie, A., & Knight, D.B., (2015). Exploring Engagement and Achievement in Undergraduate Mechanics Courses. American Society for Engineering Education Annual Conference, Seattle, WA.

Grohs, J.R. & Knight, D.B. (2015). Reclaiming student and faculty agency through data-informed reflective practice. Conference on Higher Education Pedagogy, Blacksburg, VA.

GMU Newsdesk (10 April, 2015), Mason Science, Communication Students Come Together for School Environmental Action Showcase.

Haney, J. (13 April, 2015) "4th School Environmental Action Showcase draws 500 students to GMU". Web log post. Mindful Healthy Life of Wash. DC <http://www.mindfulhealthylife.com/4th-school-environmental-action-showcase-draws-500-students/>.

Knight, D.B., Brozina, C.*, Stauffer, E.M.*, Frisina, C.*, & Abel, T. (under review). Developing a learning analytics dashboard for undergraduate engineering using participatory design. Proceedings of the 122nd Annual Conference of the American Society for Engineering Education, Seattle, Washington.

Lovin, L. A., Stevens, A., Siegfried, Z., Wilkins, J. L. M., & Norton, A. (in review). PreK-8 preservice teachers' understanding of fractions: An extension of fractions schemes and operations research. *Journal of Mathematics Teacher Education*.

R. Walker, J. Evans, B. Fairbanks, E. Hogan, M. Lipscomb, K. Meisel, M. Rosenzweig, R. Sheppard, S. Voshell, J. Watkinson. Creating an Active Classroom for the Masses. 2015. 7th Annual Conference on Higher Education Pedagogy at Virginia Tech Proceedings, pp. 248-249.

Smith, C. 2015. Water education and outreach, Mason Water Symposium: Highlighting Inter-disciplinary Water Research and Conservation. George Mason University, Fairfax, VA April 30.

"Teaching Hidden Histories in Online Asynchronous Courses," Poster session, Teaching History: Fostering Historical Thinking Across the K-16 Continuum, University of California, Berkeley, May 1-2, 2015.

"The Active Classroom: Redesigning Intro Biology" to the Networked Learning Initiatives (NLI) Summer Program: Exploration of Emerging Technologies for Active and Engaged Learning (5/29/14).



Mason 4-VA Innovation Grants



The Mason 4-VA Innovation grants support activities that help Mason further the goals of the 4-VA program of the Commonwealth of Virginia. In collaboration with the University of Virginia, Virginia Tech and James Madison University, Mason is one of the four institutions selected to further the four goals of:

- improving efficiency in course delivery to reduce the cost of instruction
- increasing research competitiveness
- improving access to degree completion programs to underserved populations
- increasing access and success rates of STEM/and or other underserved courses

Please collect all the required materials below and submit (in pdf format) by email to Hazel Moon, Mason 4-VA Program Support at hmoon5@gmu.edu. If you have any questions or issues, please feel free to contact her. **The deadline for proposal submission is Oct. 24, 2014.**

PLEASE PROVIDE THE FOLLOWING INFORMATION

Required materials:

1. Cover Sheet with title, unit, and signatures (see final page of this form).
2. Statement, no more than three pages, that gives the rationale for this Innovation Project and addresses each of the following questions.
 - How does your grant proposal address the goals of 4-VA? Please provide a project summary and identify what initiatives are being addressed.
 - Who is involved in your grant proposal? Innovation grants are only available to full-time faculty or administrative faculty who have been with Mason for at least three years.
 - What is the nature of your collaboration? **Projects that extend to at least one of the other 4-VA institutions will be given funding priority.**
 - What will your measures or indicators for success be with this project? What is the anticipated outcome of the proposal, and what deliverables are expected?
 - How will the results of the overall project be disseminated on campus and beyond? 4-VA grant recipients may be asked to present at the annual *Innovations in Teaching and Learning Conference*, as an example.
 - What roles, if applicable, will be available to graduates or undergraduates to participate in this innovation grant and how will they be selected?
3. Timeline for developing, implementing, and assessing the project. Projects that do not have articulated strategies for assessing success, or outcomes, **will not be considered.**
4. Budget and budget justification that clearly describes the funding needed. Please break your budget down into the categories listed below. Depending on state funding, projects may be extended for up to 2 years.

Please note that grant proposals promoting collaborative research among the 4-VA Institutions will be given first priority in the awarding of funds.

	Fall 2014	Spring 2015	Summer 2015	Fall 2015
Faculty Stipends	\$	\$	\$	\$
Graduate Student Stipends	\$	\$	\$	\$
Undergraduate Pay	\$	\$	\$	\$
Materials (list)	\$	\$	\$	\$
Other (list)	\$	\$	\$	\$



**Mason 4-VA Innovation
Grant Proposal
Cover Sheet**

Title of Project: _____

Lead Proposer: _____

Additional Participants (list name and institution):

Approval Signatures

Local Unit/Department Approval Date College/School/Unit Approval Date

Campus Coordinator Review Date

For Provost Office's Use Only: T/L: ____ RES: ____ COL: ____ STU: ____ APP: ____ AMT: _____

4-VA Grant Program: Request for Proposals

Collaborative Research Grant RFP at James Madison University

General Information:

4-VA is a collaborative of four universities in the Commonwealth of Virginia that are working together to realize Virginia's goals for higher education. The group is the result of a collaboration undertaken by industry, government, and university presidents at George Mason University, James Madison University, University of Virginia, and Virginia Tech. 4-VA's mission is to promote inter-university collaborations that leverage the strengths of each partner university in order to accomplish much more than any individual university could achieve alone. The legislation creating 4-VA explains that it was established:

...to utilize emerging technologies to promote collaboration and resource sharing to increase access, reduce time to graduation and reduce unit cost while maintaining and enhancing quality. Instructional talent across the four institutions will be leveraged in the delivery of programs in foreign languages, science, technology, engineering and mathematics. It is expected that funding will be pooled by the management board as required to support continuing efforts of the 4-VA priorities and projects.

4-VA strives to:

1. Define instructional models, including the clear definition of instructional costs
2. Significantly expand access for all Virginians to programs preparing them for rewarding careers,
3. Increase research competitiveness, and
4. Increase opportunities for and enhance the success of students in Science, Technology, Engineering, and Mathematics (STEM) courses and programs

Guidelines

The purpose for awarding 4-VA grants is to support faculty efforts that contribute to 4-VA initiatives related to research and instruction. Specific goals involve 1.) encouraging collaboration among faculty in developing research capacity and partnerships, 2.) developing shared courses and 3.) redesigning existing courses. Other proposals that demonstrate innovative approaches relevant to the 4-VA project will also be considered. Potential outcomes include:

- Collaborative Research Projects
- Shared Courses
- Redesigned Courses

Aims of 4-Va Collaborative Research Grants

The aim of JMU 4-VA collaborative research grants is to invest in innovative ideas that not only impact James Madison University's campus but have the potential for future funding and collaborations beyond campus. The program aims to combine the interests and expertise of faculty from multiple 4-VA institutions to increase their research competitiveness and capacity. Potential outcomes include:

- Original research
- Creating new partnerships
- Events/conference that bring together researchers on common subjects
- Future funding and competitive research

Funding Information

4-VA at JMU plans to award funds totaling \$150,000 each fiscal year. These funds will be awarded in the form of mini-grants which will range from \$1,000-\$5,000, or scale-up grants which will go up to \$20,000. In order to be considered for a scale-up grant faculty must have either previously received a mini-grant from 4-VA or show evidence of their capacity to take existing research to the next level.

Matching funds can be requested from the other 4-VA Institutions as long as a collaborator is located there. If you are interested in requesting matching funds contact the 4-VA Assistant Director at brokamkm@jmu.edu or (540)568-7170

Funding Priorities

4-VA at James Madison University encourages projects to focus on funding priorities of the program but it is not a required aspect. Funding priorities include:

- Incorporate undergraduate and graduate student researchers into the project
- Create and/or strengthen partnerships across the Commonwealth
- Projects that show a strong plan of future funding from other resources

Screening Criteria

1. Grants are open to James Madison University faculty. Faculty may name staff as Co-PIs.
2. Applicant must obtain departmental chair support especially when departmental resources are utilized.
3. Projects must contain an aspect of collaboration.

Evaluation Criteria

1. Alignment of proposal to 4-VA funding priorities
2. Alignment of proposal to 4-VA screening criteria
3. Strength and evidence of collaboration with 4-VA institutions or other partners in the commonwealth
4. Potential for strategic impact
5. Innovation in research
6. Sustainability
7. Alignment with institutional goals

Proposal Format

Proposals should be double spaced, 12 point – Arial font, PDF file (saved, not scanned) and include the following:

1. Project Summary (1-2 pages)
 - a. Title
 - b. Director (PI)
 - c. Partners/Collaborators (if known or partner institutions if not known)
 - d. Type of Grant. What initiative(s) are being addressed
2. Narrative (1-3 pages)
 - a. Project activity summary
 - b. Research questions
 - c. Research plan (framework/methods/phases/specific approach)
 - d. Assessment plan
 - e. Outcomes and deliverables
3. Timeline
4. Budget
5. Proposals that involve JMU departmental resources or release time will require approval from the appropriate academic unit head.

Submission Deadlines

Grant applications are accepted at any time. Specific quarterly deadline dates will be announced for each funding cycle – funding decisions and an award ceremony will be scheduled three times a year- July, January, and May – subject to available funds. Please complete the form listed here and attach your proposal to the form—

<http://www.formpl.us/form/0B4JWVSZ8joeUVldtVlpwVWdfVTA/>

Submit questions to the JMU 4-VA Director at swaynedd@jmu.edu. Only grants submitted through the procedure listed above will be considered for funding.

Expectations

1. Grantees must participate in yearly 4-VA assessment activities (survey)
2. Upon completion of an awarded 4-VA grant, awarded but unused 4-VA grant funds may be requested for use in other teaching or research activities based on two conditions:
 - a. First, the request must be made within one year of the completion of the grant
 - b. Second, the original grant must have been completed in good standing
3. Any publication or product resulting from activity assisted by the JMU 4-VA grants should include the following statement:

“This work was supported by the 4-VA Collaborative at James Madison University”

Legal and Ethical Considerations

Depending on your project, certain federal, state, and university grant rules and regulations may apply. For further information regarding these rules, contact John Hulvey, Director of Sponsored Programs Accounting and Administration, at hulveyjd@jmu.edu. If you believe your project will result in patentable work, you should discuss requirements and policies with the Director of the Office of Technology Transfer, Mary Lou Bourne (bourneml@jmu.edu), MSC 4904.

A number of ethical practice review protocols are required for some research activities. If you have questions about the requirements that may apply to your project, contact JMU's IRB Compliance Officer, Carolyn Strong at strongcd@jmu.edu or 8-6872.

If you have questions or would like more information or clarification on this RFP or 4-VA initiatives, please contact the 4-VA Campus Director at swaynedd@jmu.edu or (540)568-6093

4-VA Grants Program: Requests for Proposals for Academic Year 2014-2015

RFP Introduction

The 4-VA Grants Program at Virginia Tech is intended to advance the mission and goals of 4-VA within the context of Virginia Tech. The explicit goals of the 4-VA Collaborative are to:

1. Define instructional models, including the clear definition of instructional costs,
2. Significantly expand access for all Virginians to programs preparing them for rewarding careers,
3. Increase research competitiveness, and
4. Increase opportunities for and enhance the success of students in Science, Technology, Engineering, and Mathematics (STEM) courses and programs

The Virginia Tech 4-VA Grants Program has been designed to advance these goals via specific grant initiatives that also advance the priorities and interests of Virginia Tech. To this end, 4-VA at Virginia Tech has identified three RFP categories, each with a unique focus within the context of 4-VA goals:

1. **Competitive research grants** are intended to improve research competitiveness within the Commonwealth and at Virginia Tech by providing funding for faculty to engage in pilot research that could be used as a springboard for subsequent, major federal grants. Active dissemination of outcomes is a key requirement. Involves an RFP.
2. **Course redesign grants** support the redesign of courses in STEM or a foreign language, connect to the Pathways to General Education Program at Virginia Tech, and require the support of the applicant's department and college. Active dissemination of outcomes and materials is a key requirement. Involves an RFP.
3. **Course sharing grants** support the faculty interested in sharing a STEM or a foreign language course with 4-VA partner institutions and require the support of the applicant's department and college. Active dissemination of outcomes and materials is a key requirement. Involves an RFP.

Competitive Research Grant RFP

General Information:

The 4-VA Collaborative is a program between Virginia Tech, James Madison University, University of Virginia, and George Mason University. 4-VA's mission is to promote inter-university collaborations that leverage the strengths of each partner university in order to accomplish much more than any individual university could achieve alone. The legislation creating 4-VA explains that the collaborative was established:

...to utilize emerging technologies to promote collaboration and resource sharing to increase access, reduce time to graduation and reduce unit cost while maintaining and enhancing quality. Instructional talent across the four institutions will be leveraged in the delivery of programs in foreign languages, science, technology, engineering and mathematics. It is expected that funding will be pooled by the management board as required to support continuing efforts of the 4-VA priorities and projects.

4-VA strives to:

1. Define instructional models, including the clear definition of instructional costs,
2. Significantly expand access for all Virginians to programs preparing them for rewarding careers,
3. Increase research competitiveness, and
4. Increase opportunities for and enhance the success of students in Science, Technology, Engineering, and Mathematics (STEM) courses and programs

The Virginia Tech 4-VA Grants Program has been designed to advance these goals. Virginia Tech has identified four grant categories: competitive research, collaborative research, course redesign, and course sharing. Grant proposals should address a question or challenge in line with one or more of the 4-VA goals as detailed in grant-specific application information below. All projects and associated materials will be shared across the four institutions and possibly with a wider audience. For more information visit: <http://4-va.org>.

Aims of 4-VA Competitive Research Grants:

An important component of 4-VA's mission is improving research competitiveness within the Commonwealth by providing funding for faculty to engage in pilot research that could be used as a springboard for subsequent, major federal grants. This aim is consistent with the aims for research and innovation articulated in *The Plan for a New Horizon*. Because these research grants are intended not only to advance the goal of research competitiveness but also the general mission and success of 4-VA, the Collaborative has specified that projects should, at minimum, focus on both technology (e.g., as described in the general information section above) and sharing (e.g., information, conclusions, outcomes). 4-VA at Virginia Tech has further articulated a preference for grants that promote or relate to as many of the other three 4-VA aims as possible (instructional models, access, STEM success). Proposals are encouraged to consider cross-institution collaborations, especially with the 4-VA partners. As articulated in the RFP process described below, all grants must include a robust assessment model.

Competitive Research Grant Process

1. The primary investigator (PI) submits a grant proposal with the aforementioned focus to the Deputy Campus Coordinator
2. The proposal is reviewed by the Deputy Campus Coordinator
3. The PI and any Co-PIs are responsible for participating in at least one meeting with the Deputy Campus Coordinator to further develop the concept, better define resource requirements, and finalize the proposal
4. Once the proposal is submitted, the Campus Coordinators work with a small group of faculty reviewers to review submitted grant proposals. Depending on the nature of the proposal, the Campus Coordinators will, also, seek guidance with other university units that are relevant to the proposed activities
5. The Campus Coordinators compile the suggestions and feedback from the faculty reviewers and use the information to guide recommendations for grant receipt
6. The Campus Coordinators then submit all received proposals—including recommended grantees—to the TLOS Stakeholders Committee to approve the recommended grants
7. Funds for approved grants are released to the grantee(s) and grant work is permitted to commence
8. The Deputy Campus Coordinator and 4-VA Assessment Coordinator work with the grantees throughout the year to understand progress and document outcomes.

Deadline for application: October 1, 2014

Who may apply for a 4-VA grant: 4-VA grants are open to all Virginia Tech faculty. Faculty may name staff as Co-PIs and are encouraged to include undergraduate and graduate students on their research teams.

Funding information: 4-VA at Virginia Tech expects to offer no fewer than four grants and no more than twenty in a given academic year. The expected minimum allocation is \$5,000. The expected maximum allocation is \$25,000.

Expectations:

1. Active dissemination will be a major project outcome. At minimum, funded projects will:
 - a. Have a defined dissemination plan for the 4-VA community
 - i. This should include ongoing project updates via a broadly accessible online media platform (e.g., blogging, a YouTube channel)
2. Projects can be eligible for ongoing funding with appropriate agreed upon progress and reporting
3. Prior to submitting the grant application, applicants must have an introductory meeting with the Deputy Campus Coordinator to discuss and refine their grant application
4. Grantees must participate in assessment activities and produce an annual report
5. Upon completion of an awarded 4-VA grant, awarded but unused 4-VA grant funds may be requested for use in other teaching or research activities based on two conditions:
 - a. The request must be made within one year of the completion of the grant, and
 - b. The original grant must have been completed in good standing

Contact for questions or assistance: Claire Gilbert, 4-VA Deputy Campus Coordinator, 1-7492, gilbertc@vt.edu

Application Instructions:

Complete a Request for Proposal with the following information:

1. Project Definition
 - a. Proposed Project Title
 - b. Project Activities
 - i. Work to be done overview (summary of project)
 - ii. Justification (merit/need for the research)
 - iii. Research questions
 - iv. Anticipated outcomes, intellectual contribution, impacts, and/or deliverables
2. Research team
 - a. Director (PI)
 - b. Collaborators/Partners
3. Alignment to grant program and 4-VA aims
4. Dissemination plan
 - a. As noted in the grant expectations, applications should have:
 - i. A defined dissemination plan for the 4-VA community that includes ongoing project updates via a broadly accessible online media platform (e.g., blogging, YouTube)
5. Budget
6. Proof of IRB certification (if not in place, must be obtained and provided to the Deputy Campus Coordinator prior to the commencement of the grant)
7. General project management plan and timeline
 - a. How will the project be completed?
 - b. Should include a progress and reporting plan to keep the Deputy Campus Coordinator advised of progress
8. References (if applicable)
9. A list of any additional sources of funding for this research

Shared Course Grant RFP

General Information:

The 4-VA Collaborative is a program between Virginia Tech, James Madison University, University of Virginia, and George Mason University. 4-VA's mission is to promote inter-university collaborations that leverage the strengths of each partner university in order to accomplish much more than any individual university could achieve alone. The legislation creating 4-VA explains that the collaborative was established:

...to utilize emerging technologies to promote collaboration and resource sharing to increase access, reduce time to graduation and reduce unit cost while maintaining and enhancing quality. Instructional talent across the four institutions will be leveraged in the delivery of programs in foreign languages, science, technology, engineering and mathematics. It is expected that funding will be pooled by the management board as required to support continuing efforts of the 4-VA priorities and projects.

4-VA strives to:

1. Define instructional models, including the clear definition of instructional costs,
2. Significantly expand access for all Virginians to programs preparing them for rewarding careers,
3. Increase research competitiveness, and
4. Increase opportunities for and enhance the success of students in Science, Technology, Engineering, and Mathematics (STEM) courses and programs

The Virginia Tech 4-VA Grants Program has been designed to advance these goals. Virginia Tech has identified four grant categories: competitive research, collaborative research, course redesign, and course sharing. Grant proposals should address a question or challenge in line with one or more of the 4-VA goals as detailed in grant-specific application information below. All projects and associated materials will be shared across the four institutions and possibly with a wider audience. For more information visit: <http://4-va.org>.

Aims of 4-VA Shared Course Grants:

As part of its participation in 4-VA, Virginia Tech is expected to both receive and offer shared courses from and to the 4-VA partner institutions. All 4-VA shared courses include a defined assessment component run by the 4-VA Assessment Coordinator, which participating faculty must complete. To qualify for shared course grant funding, the course must be foreign language, STEM, or STEM-related, in keeping with the goals of the Collaborative.

Shared Course Grant Process

1. The primary investigator (PI) submits a grant proposal with the aforementioned focus to the Deputy Campus Coordinator
2. The proposal is reviewed by the Deputy Campus Coordinator
3. Faculty must have at least one meeting with the Deputy Campus Coordinator to further develop the concept, better define resource requirements, and finalize the proposal¹
4. Faculty must demonstrate department head and associate dean approval as part of the proposal submission
5. The final proposal is reviewed and a decision is rendered by the Campus Coordinators
6. Funds for approved grants are released to the grantee(s) and grant work is permitted to commence
7. The Deputy Campus Coordinator works with faculty recipients to arrange any needed course logistics and transfer any allocated support funds.
8. The faculty member or the academic unit to which the faculty member belongs is responsible for working with the Office of the Registrar to schedule the course and enroll students.
9. The Deputy Campus Coordinator and 4-VA Assessment Coordinator work with the grantees throughout the year to understand progress and document outcomes.

Deadline for application: October 1, 2014

Who may apply for a 4-VA grant: 4-VA shared course grants are open to all Virginia Tech faculty.

¹ Note: Shared course proposals can be packaged with course redesign proposals as needed and appropriate.
Virginia Tech

Funding information: 4-VA at Virginia Tech expects to offer \$5,000 per course in unrestricted funds (within state and university rules). These grants can be packaged with a course redesign grant.

Expectations:

1. Approved grants are contingent upon the course being accepted for sharing by at least one 4-VA partner institution or the course. If no partner institutions wish to offer the course funding approval will be rescinded.
2. Prior to submitting the grant application, applicants must have an introductory meeting with the Deputy Campus Coordinator to discuss and refine their grant application.
3. Faculty must solicit and provide proof of department head and associate dean approval as part of the application.
4. Grantees must participate in assessment activities and produce an annual report
5. Upon completion of an awarded 4-VA grant, awarded but unused 4-VA grant funds may be requested for use in other teaching or research activities based on two conditions:
 - a. The request must be made within one year of the completion of the grant, and
 - b. The original grant must have been completed in good standing

Contact for questions or assistance: Claire Gilbert, 4-VA Deputy Campus Coordinator, 1-7492, gilbertc@vt.edu

Application Instructions:

Complete a Request for Proposal with the following information:

1. Course Information
 - a. Faculty member information
 - b. Proposed course name and number
 - c. Description of course offering and alignment with 4-VA course sharing requirements
2. After meeting with Deputy Coordinator: signed approval letters from relevant department head and associate dean
3. Assessment plan

Course Redesign RFP

General Information:

The 4-VA Collaborative is a program between Virginia Tech, James Madison University, University of Virginia, and George Mason University. 4-VA's mission is to promote inter-university collaborations that leverage the strengths of each partner university in order to accomplish much more than any individual university could achieve alone. The legislation creating 4-VA explains that the collaborative was established:

...to utilize emerging technologies to promote collaboration and resource sharing to increase access, reduce time to graduation and reduce unit cost while maintaining and enhancing quality. Instructional talent across the four institutions will be leveraged in the delivery of programs in foreign languages, science, technology, engineering and mathematics. It is expected that funding will be pooled by the management board as required to support continuing efforts of the 4-VA priorities and projects.

4-VA strives to:

1. Define instructional models, including the clear definition of instructional costs,
2. Significantly expand access for all Virginians to programs preparing them for rewarding careers,
3. Increase research competitiveness, and
4. Increase opportunities for and enhance the success of students in Science, Technology, Engineering, and Mathematics (STEM) courses and programs

The Virginia Tech 4-VA Grants Program has been designed to advance these goals. Virginia Tech has identified four grant categories: competitive research, collaborative research, course redesign, and course sharing. Grant proposals should address a question or challenge in line with one or more of the 4-VA goals as detailed in grant-specific application information below. All projects and associated materials will be shared across the four institutions and possibly with a wider audience. For more information visit: <http://4-va.org>.

Aims of 4-VA Course Redesign Grants:

To support 4-VA's goals of defining instructional models, expanding access, and improving STEM success, 4-VA at Virginia Tech has identified the funding of course redesign grants as a grant area for 4-VA activities at the institution. Courses selected for redesign should have a clear relation to the mission of 4-VA and relate to one or more of the four major goals of the Collaborative. Additionally, courses proposed for redesign should relate to and support Virginia Tech's [Pathways to General Education](#) program. Due to the Collaborative's explicit emphasis on foreign language and STEM courses, preference will be given to redesign proposals for courses in those, or closely related, fields.

Course Redesign Grant Process

1. The primary investigator (PI) submits a proposal with the aforementioned focus to the Deputy Campus Coordinator
2. The proposal is reviewed by the Deputy Campus Coordinator
3. Faculty must hold at least one meeting with the Deputy Coordinator, a general education specialist, and a TLOS course redesign expert to further develop the course redesign concept, better understand resource requirements, and finalize the proposal.
4. Faculty must demonstrate department head and associate dean approval as part of the proposal submission
5. Once the proposal is submitted, the Campus Coordinators work with a small group of faculty reviewers to review submitted grant proposals. Depending on the nature of the proposal, the Campus Coordinators will, also, seek guidance with other university units that are relevant to the proposed activities
6. The Campus Coordinators compile the suggestions and feedback from the faculty reviewers and use the information to guide recommendations for grant receipt
7. The Campus Coordinators then submit all received proposals—including recommended grantees—to the TLOS Stakeholders Committee to approve the recommended grants
8. Funds for approved grants are released to the grantee(s) and grant work is permitted to commence
9. The Deputy Campus Coordinator and 4-VA Assessment Coordinator work with the grantees throughout the year to understand progress and document outcomes.

Deadline for application: October 1, 2014

Virginia Tech

Who may apply for a 4-VA grant: 4-VA course redesign grants are open to all Virginia Tech faculty. Faculty may name staff as Co-PIs and are encouraged to include undergraduate and graduate students on their teams.

Funding information: 4-VA at Virginia Tech expects to offer no fewer than ten course redesign grants and no more than twenty-five in a given academic year. The expected minimum allocation is \$10,000, while the expected maximum allocation is \$25,000.

Expectations:

1. Prior to submitting the grant application, faculty must hold at least one meeting with the Deputy Coordinator, a general education specialist, and a TLOS course redesign expert to further develop the course redesign concept, better understand resource requirements, and finalize the proposal
2. Grantees must participate in assessment activities and produce an annual report
3. Faculty must solicit and provide proof of department head and associate dean approval as part of the application.
4. Active dissemination will be a major project outcome. At minimum, funded projects will:
 - a. Have a defined, continuous dissemination plan for the 4-VA community
 - i. This should include ongoing project updates via a broadly accessible online media platform (e.g., blogging, a YouTube channel)
 - b. Have a defined dissemination plan for sharing project outcomes outside the 4-VA community
5. Upon completion of an awarded 4-VA grant, awarded but unused 4-VA grant funds may be requested for use in other teaching or research activities based on two conditions:
 - a. The request must be made within one year of the completion of the grant, and
 - b. The original grant must have been completed in good standing

Contact for questions or assistance: Claire Gilbert, 4-VA Deputy Campus Coordinator, 1-7492, gilbertc@vt.edu

Contact for General Education questions: gened@vt.edu

Application Instructions:

Complete a Request for Proposal with the following information:

1. Course Information
 - a. Faculty member information
 - b. Course name and number
 - c. Description of course offering
 - d. Work to be done overview (summary of project)
 - e. Justification (merit/need)
 - f. Anticipated outcomes
2. Alignment to grant program and 4-VA aims
3. Alignment to and support for Pathways to General Education aims
4. Assessment plan
5. Dissemination plan
 - a. As noted in the grant expectations, applications should have:
 - i. A defined, continuous dissemination plan for the 4-VA community that includes ongoing project updates via a broadly accessible online media platform (e.g., blogging, a YouTube channel)
 - ii. A defined dissemination plan for sharing project outcomes outside the 4-VA community
6. After meeting with Deputy Coordinator, general education specialist, and course redesign specialist: signed approval letters from relevant department head and associate dean
7. Timeline
8. Budget
9. References (if applicable)
10. A list of any additional sources of funding for this research
11. Anticipated professional development needs

IMAGE CREDIT

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