4-VA Annual Report from Founding to 2013

Universities Collaborating to Achieve Virginia's Goals for Higher Education

Table of Contents

Letter from the Executive Director

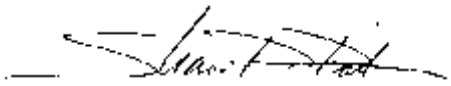
On behalf of the member institutions of 4-VA, I am pleased to present 4-VA's first annual report. In the past year and years proceeding, 4-VA has made meaningful progress. The vision of the innovative group of legislators, industry specialists, and university presidents, who collaborated to found the 4-VA initiative in 2010, is becoming a reality in the wide range of activities undertaken by 4-VA's member institutions.

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. 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.

This year, our partnership has matured. We are evolving from a state-wide initiative to a state-wide collaborative, reflecting our increasing organizational maturity as well as commitment to our common goals. Whether a liberal arts institution, a STEM-oriented institution, or a research institution, each 4-VA member approaches our mission through its unique perspectives and strengths, applying appropriate technologies to educational and research challenges. The 4-VA collaborative consciously adopts a philosophy of technology fit, strength in our diversity, and power of our partnership to forward this exciting effort.

This first annual report of 4-VA demonstrates the progress of our joint efforts in support of the four primary goals of our partnership, as well as our dedication to strategic and intentional collaboration in service to education and research for the Commonwealth of Virginia.
Sincerely,



Sharon P. Pitt
Executive Director, 4-VA

Executive Summary

The 4-VA Annual Report from founding to 2013 provides detailed information on the current state of the collaborative. Sections include:

Context

- Presents the organizational context of 4-VA from founding to 2013

Awards

- Provides information on awards received by or facilitated by 4-VA

Accomplishments

- Discusses accomplishments of 4-VA, particularly related to launching and institutionalizing the organization

Upcoming Initiatives

- Gives an overview of anticipated areas of focus and activities for 4-VA in the coming year

Executive Office and Institutional Reports

- Offers a high-level overview of key accomplishments and future plans for each 4-VA member institution

Appendices

- Supplemental information on the collaborative

Context

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 collaborative is the result of a collaboration undertaken by industry, government and university presidents. The founding group consisted of the Governor of Virginia, the Secretary of Education, the Director of the State Council of Higher Education of Virginia (SCHEV), the presidents of the four founding institutions, and Cisco Systems.

Goals, Mission, and Purpose

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.*

While still in the start-up stage, 4-VA hopes for long term benefits to the state and particularly to smaller institutions that may ultimately accept shared courses, developed through the collaborative. 4-VA strives to:

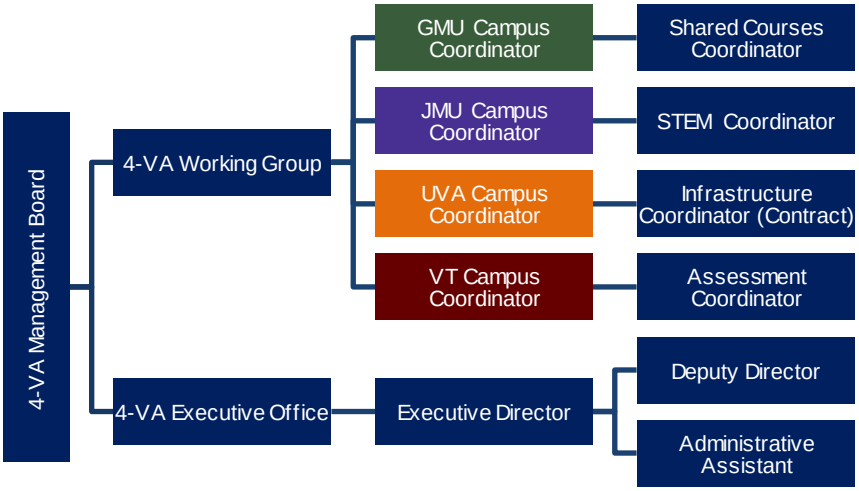
1. Define instructional models, including the clear definition of instructional costs
2. Significantly expand access for all Virginians to programs preparing them for rewarding careers,
3. Increase research competitiveness, and
4. Increase opportunities for and enhance the success of students in Science,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

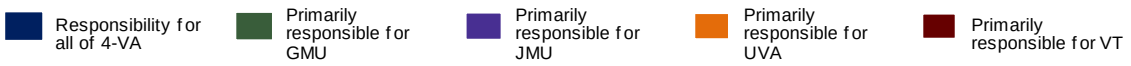
In the spirit of these goals and 4-VA's founding legislation, all projects and activities undertaken by 4-VA will involve the two key elements of technology and sharing.

Organizational Structure

The collaborative is led by the 4-VA Management Board consisting of the four university presidents. The Secretary of Education, the Executive Director of the State Council of Higher Education of Virginia, and a senior vice president at Cisco, Inc. serve in an ex-officio capacity. One president serves as the chair for a one year rotating term. The 4-VA Management Board meets at least twice per year and is attended by Management Board members, ex-officio members, the executive director of 4-VA, the deputy director of 4-VA, and the chair of the 4-VA Campus Coordinators. The executive office of 4-VA is housed at George Mason University and provides support for the ongoing operations of 4-VA.

4-VA Organizational Chart





Governance and Decision Making

Operational governance is conducted through monthly meetings of the 4-VA working group, represented by the 4-VA campus coordinators, 4-VA support staff, and representatives of the executive office. Monthly meetings take place via TelePresence, with at least three in-person meetings per year.

All meetings are used for inter-campus coordination, decision-making, and in-depth discussions. Decisions are made by consensus across the participating institutions. Each institution has the latitude, within the confines of the defined 4-VA mission, to implement and adapt projects relevant to its campus, create 4-VA projects, or opt out of specific 4-VA projects.

Each institution has established an internal structure for decision making and implementation of 4-VA programming and technology support.

F Legend: es and Costs

4-VA is funded by the Commonwealth of Virginia with a significant initial contribution in equipment and technical consultation provided by Cisco Systems. Funds received support 4-VA's mission. Each university also contributed funding to establish the 4-VA Office and hire staff.

Costs varied across member institutions and were dependent on the resource base (e.g. technology infrastructure, staff expertise) at each institution. Costs have included technology (implementation, maintenance, and support), faculty development and support, and administrative and programmatic support. In many cases, extensive facilities renovations have been necessary to support the needs of courses being delivered in fundamentally different ways.

Awards

4-VA was the recipient of two major awards and an instrumental enabler of a $100,000 research grant. Details on the awards are provided below:

2013 International Computerworld Honors Laureate

- 4-VA was named a 2013 Computerworld Honors Laureate in a competitive year for this prestigious award. The 2013 *Computerworld* Honors Program recognizes organizations that create and use information technology to promote and advance the public welfare, benefit society and change the world for the better. The 2013 laureates represented 29 different countries and included organizations and universities such as Cisco Systems, Ford Motor Company, NASA, the Global Health Delivery Project at Harvard, and Medical University of South Carolina.

Innovation in Higher Education Award

- On May 1, 2013, 4-VA at James Madison University was selected for the Shenandoah Valley Technology Council's (SVTC) Innovation in Higher Education Award. The award, sponsored by Lumos Networks, honors the innovative use and/or development of technology within the region's higher educational system or other technology-training program.

Commonwealth Research Commercialization Fund (CRCF)

- On May 29, 2013, the Center for Innovation Technology (CIT) announced the awards for the FY13 Commonwealth Research Commercialization Fund (CRCF). Dr. Peter Hopkins (UVa) and Dr. Costel Constantin (JMU) were awarded $100,000 in funding for their research project *(Thermal Transport Across GaN Interfaces: Linking Structural Imperfections to Thermal Properties)* that they started with a 4-VA mini-grant. Dr. Constantin attributed their success to the collaboration and preliminary work that occurred through the 4-VA mini-grant process.

Accomplishments

4-VA is a start-up collaborative, which has focused in the first years on building infrastructure, defining goals, launching activities, and creating robust organizational structures. TelePresence rooms, the major technological enabler of much of 4-VA's activities, were completed in March 2012. Since that time, and as detailed below, 4-VA has completed a wide variety of initiatives that fall into two broad categories: launching and institutionalizing the organization.

Launching 4-VA

Launching the organization involved completing the initial technology infrastructure of the collaborative as well as defining, planning, and implementing a range of projects in support of the Governor's Top Jobs initiative.

Technological Infrastructure

An initial technology installation for TelePresence was implemented across the four institutions by March of 2012. Each founding institution reallocated physical facilities and technical staff to work with Cisco to install two immersive videoconferencing (TelePresence) rooms on each campus. Eight TelePresence facilities across 4 universities were built, with appropriate network infrastructure enabled.

Start-up Projects

After completing the initial technology infrastructure, the 4-VA founding institutions identified and focused their efforts on four main projects in support of the Governor's Top Jobs initiative:

1. Degree completion
2. Collaborative research
3. Course sharing
4. Course redesign

Plans for and initial accomplishments from each of these four areas are detailed below.

Degree Completion

The objective of this initiative is to work towards 4-VA's aim of providing improved access and educational opportunities to the Commonwealth—primarily through expanded online course offerings focused on economic development, entrepreneurs, small business development, technical certifications, and STEM related fields. 4-VA is working to make 4-year degrees possible for Virginians who were not able to participate in the traditional post-secondary pathways by leveraging existing or pending online degree programs at each of the member institutions to make full degree programs more widely accessible across the state. In the first 18 months of 4-VA, the collaborative made significant progress towards furthering degree completion in the Commonwealth:

- JMU undertook the planning, training, and development of 23 different online courses that contribute directly to the Governor's Top Jobs initiative. These courses are offered through the Adult Degree program at a significantly reduced tuition rate for students. The Adult Degree program has realized a 50% increase in enrollments since the inception of this 4-VA collaborative.
- UVA's Board of Visitors approved a new Bachelor of Professional Studies in Health Sciences, which will be an online degree completion program developed in conjunction with Virginia community colleges and the UVA Health System designed to prepare Virginians for jobs in the growing health professional sector. SCHEV approval is pending. UVA already has 14 degree programs and 17 certificate programs in which at least 50% of the coursework is delivered online that 4-VA plans to utilize as part of this initiative.

Collaborative Research

There are five major objectives of 4-VA's project focused on fostering collaborative research:

1. Increase the competitiveness and capacity of institutional research programs
2. Increase faculty participation in research and generate more high-quality research proposals
3. Foster greater collaboration amongst 4-VA institutions
4. Build and strengthen a network of researchers within the state
5. Increase the success of grants and increase monetary research support coming into the state

The past year saw four key outcomes for collaborative research in the collaborative:

1. 4-VA is working to accomplish these objectives in part by using targeted research funding incentives. In the past year, JMU in particular saw many researchers applying for and receiving 4-VA mini-grants with $110,711.76 invested in nineteen grants. 4-VA has seen a significant return on this initial investment. Dr. Peter Hopkins (UVA) and Dr. Costel Constantin (JMU) were awarded $100,000 in funding from the Commonwealth Research Commercialization Fund (CRCF) to continue their research project *(Thermal Transport Across GaN Interfaces: Linking Structural Imperfections to Thermal Properties)* that began with a 4-VA mini-grant to foster collaborative research.

2. UVA made its High-Performance Computing Bootcamp available to other 4-VA faculty and graduate students each summer via high-definition streaming video.
3. Virginia Tech supported research on visualization via TelePresence with goals of assisting remote manipulation of videoconferencing activities.
4. 4-VA provided organizational ideas, implementation assistance, and contributed to the infrastructure for expanded research opportunities via Internet2® and Virginia's Mid-Atlantic Research Infrastructure Alliance (MARIA). This work was specifically undertaken to provide universities throughout Virginia with access to two, 5 Gigabit per second(2x5G) direct Internet2 connections that will enhance university-based researchers' ability to collaborate on "Big Data" scientific research with national and global counterparts.

Course Sharing

The objective of this initiative is to leverage the expertise and interests of faculty and students across the 4-VA institutions through a seamless process of course sharing. This initiative was designed to significantly expand the opportunities for students and faculty without adding significant costs.

For 2012-2013, 4-VA's initial shared courses were language courses. Offering language courses that required precise expertise allowed a critical mass of students to participate, in a way that perhaps no one institution could have sustained on its own. Factors in selecting courses to share or redesign included faculty interest, course demand and capacity, market demand, and appropriateness to the technology medium of TelePresence. In fact, lessons learned from experience with 4-VA course sharing have enabled UVA to enter into an additional collaboration with Duke University partnering on less-commonly-taught languages. Shared courses offered to date through 4-VA include:

	Course	Host	Students outside host school
Spring 2012	Advanced Business Chinese	GMU	JMU: 6
	Advanced Chinese	GMU	UVA: 1
Summer 2012	Intel Analyst	JMU	UVA: 3
Fall 2012	Persian 2012	UVA	GMU: 2
	Portuguese 101	JMU	VT: 12
	Chinese Literature After Mau	GMU	JMU: 3
	Intermediate Italian	JMU	N/A
Spring 2013	Portuguese 102	JMU	VT: 12
	Intermediate Italian	JMU	VT: 12
	Graduate Ecology	GMU	JMU: 1
	Teaching Strategies for Severe Disabilities	UVA	30 students at GMU, Norfolk State, Radford, VCU
	Collaborative Teamwork	UVA	GMU, Norfolk State, Radford, VCU
Fall 2013	Introductory Korean	GMU	TBD
	Intermediate Korean	GMU	TBD
	Introductory Portuguese	JMU	TBD
	Intermediate Portuguese	JMU	TBD
	Intermediate Italian	JMU	TBD
	Advanced Italian (Phonetics)	JMU	TBD
	Advanced Italian (Grammar & Communication)	JMU	TBD
	Advanced Arabic (Grammar & Communication)	JMU	TBD
	Population Ecology	JMU	UVA: 12
	French (Creole)	Duke	UVA: 4 (Note that this is a part the UVA/Duke spin-off described in the narrative.)
	Tibetan	UVA	Duke (Note that this is a part the UVA/Duke spin-off described in the narrative.)
	Critical Thinking on Business Issues	UVA	Alumni are being brought in via TelePresence to participate in this discussion-format class. Pilot for fuller distribution in Spring 2014.
	Positive Behavior Support	UVA	21 students at Abingdon Higher Ed Center, GMU, Norfolk State, VCU

Course Redesign
The objective of this initiative is to support the redesign of courses within the following categories:

Degree completion

- Redesign courses to support the degree completion initiative.
  - For example, prior to 4-VA, JMU did not have a significant presence in online courses. JMU worked with faculty to redesign their courses for online media and JMU has redesigned 23 courses associated with degree completion and the Top Jobs initiative. These courses are grouped into modules that can be combined to complete a 4-year degree.

Student outcomes

- Redesign courses to improve student outcomes by reducing the incidence of students who drop out, fail, and withdraw
  - 4-VA is actively seeking to redesign courses associated with the STEM fields, in alignment with the 4-VA mission
    - JMU offered a course redesign workshop in August 2013, for faculty at all 4-VA institutions, focused on STEM fields.
    - Virginia Tech is redesigning 2 introductory biology courses and 2 related math courses to improve student learning for approximately 4000 students per semester and with materials, test questions, and student tutoring processes made available to 4VA institutions and beyond. Pilot implementations began in Fall 2013.
  - UVa is implementing an online version of its highly-regarded Course Design Institute, which will make course redesign guidance and coaching available to faculty throughout the academic year.
  - UVa's Hybrid Challenge for Engaged Courses Initiative result in 10 new or redesigned flipped, hybrid, technology-enhanced courses last year and will result in ten more this year. This initiative is targeted at courses with broad student impact.
  - Virginia Tech opened its award-winning Faculty Development Institute to all 4VA faculty at no cost to participating faculty or staff.

Better use of resources

- Redesign courses to make better use of resources
  - Benefits of shared courses include the opportunities for students to take courses at other institutions and for 4-VA members to reduce costs associated with teaching courses locally.
    - Before the 4-VA offering, JMU students had to participate in a semester abroad in order to learn Advanced Business Chinese. When a professor of Korean at JMU retired, JMU relied on 4-VA offerings to teach Korean, rather than filling the faculty position immediately.
    - JMU redesigned an anatomy lab course to reduce the length of the course from 3 to 2 hours by redesigning the course materials and making them available to students online
    - UVa has embarked on a three year program of focused redesign of STEM courses called Nucleus. The first set of eight courses will impact over 2700 students

Course sharing

- Redesign courses specifically for course sharing
  - Teaching in a TelePresence room is different from teaching in a classroom. It is necessary to redesign courses so that students have at least the same experience across universities as they would taking a non-shared course at their local institution and feel engaged and supported by professors. Teaching shared courses requires high levels of planning and coordination to provide support, including shared university calendars and student access to faculty
  - Benefits of shared courses include the opportunities for students to take courses at other institutions and for 4-VA members to reduce costs associated with teaching courses locally.
  - Before the 4-VA offering, JMU students had to participate in a semester abroad in order to learn Advanced Business Chinese. When a professor of Korean at JMU retired, JMU relied on 4-VA offerings to teach Korean, rather than filling the faculty position immediately. The full list of courses shared through 4-VA are listed in the previous section

Institutionalizing 4-VA

Once the technical infrastructure and initial projects were in place, the 4-VA founding institutions turned their attention to creating more formal organizational structures to institutionalize the collaborative. There have been three major initiatives associated with institutionalizing 4-VA to date:

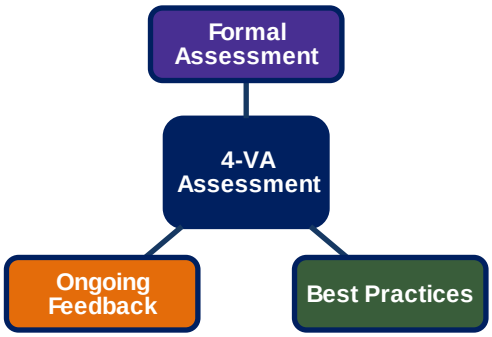
1. Defining a process by which other institutions can become involved in the collaborative
2. Designing and implementing ongoing formal assessment structures and informal assessment opportunities to ensure 4-VA continues to meet the four major goals of the collaborative
3. Engaging and investing people from across the founding institutions and the broader community in the collaborative

Accomplishments in each of these areas are detailed below.

Creating Assessment Structures

4-VA recognizes the importance of ensuring progress is made towards the major goals of the collaborative. Robust and ongoing assessment is a key mechanism for achieving this aim. To address the need for ongoing assessment of 4-VA activities, the group has developed a three-pronged approach to assessment:

1. Formal, ongoing assessment and analysis of performance
2. Ongoing and ad hoc best practices case studies
3. Providing opportunities for participant feedback at participating institutions



The assessment structures of 4-VA are still in the foundational phases. While subsequent annual reports will provide detailed information on 4-VA assessment outcomes in a separate area of the report, this annual report for 2012-2013 provides a summary below of the plans for each assessment area and activities completed in each to date.

4-VA Formal Assessment Plan

An assessment coordinator for 4-VA has been hired and is housed at Virginia Tech. This assessment specialist will help 4-VA institutions accomplish three main assessment tasks:

1. Track progress toward project goals
2. Inform project strategies
3. Knowledge dissemination

A process and plan for reporting on assessment for 4-VA shared courses and course redesigns has been developed in line with these aims (see Appendix II for the full plan). The primary focus of the assessment plan will be centered around 4-VA's four objectives. A fifth objective was added to the assessment plan to reflect the values of the mission statement (* as indicated below). The fifth objective will be used to capture the collaborative efforts that are taking place between university partners. Data will be gathered for each of these objectives to develop a baseline understanding of the project.

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.
5. To foster collaborative efforts between university partners.*

Best Practices Case Studies

Understanding the structures, strategic vision, goals, and activities of organizations with a similar focus to 4-VA is an important way to assess opportunities, compare outcomes, and validate new approaches for 4-VA. Keeping abreast of best practices through the use of case studies, therefore, is a key component of 4-VA's assessment approach to ensure that the collaborative is able to achieve its vision, goals, and projects. To date, 4-VA has selected two ongoing best practices monitoring activities and has engaged in one ad hoc best practices case study at the University of Utah.

4-VA's ongoing best practice case studies will occur via examination of data and reporting provided by the National Center for Academic Transformation (NCAT) and the EDUCAUSE Learning Initiative (ELI). NCAT provides best practices associated with information technology, improved learning outcomes and reduced cost of education. NCAT provides 4-VA with years of data on strategies to maintain quality, while reducing costs, across multiple disciplines. Like NCAT, the EDUCAUSE Learning Initiative seeks to provide organizations with information on how to advance learning through the use of technology.

In addition to 4-VA's plan to engage in ongoing case studies, the collaborative also anticipates that selective, ad hoc best practices case studies will be a valuable way to obtain insight on the way peer institutions and collaboratives operate. 4-VA has already engaged in one initiative of this type: in 2013, JMU organized and completed a site visit to the Office of Technology Venture Development (Tech Ventures) at the University of Utah to examine their structure and successes. The Tech Ventures initiative shares a similar mission to 4-VA and has achieved widespread impact and engagement with the University of Utah students and faculty. This best practices initiative resulted in valuable insight for the collaborative as 4-VA developed structures and selected projects. It also provided ample demonstration of the value of engaging in selective, in-depth best practices case studies.

Ongoing Feedback Opportunities

The campus coordinator model of 4-VA, as well as the collaborative's commitment to full-time employment of staff focused exclusively on running collaborative activities, allow ample opportunity for faculty, student, staff, and external community participants in 4-VA to provide ongoing feedback on their experiences and recommendations for improvement or future directions. To date, feedback from faculty teaching 4-VA courses across the campuses has been particularly helpful in alerting 4-VA to issues, planning for process improvements, and addressing concerns. Additionally, thanks to outstanding participant feedback from a 4-VA hosted conference, a follow-up conference was developed and hosted by 4-VA to address additional participant interest (see the Community Engagement section below for detailed information).

Including Other Institutions

The 4-VA Management Board has developed recommendations for a system to include other universities in the 4-VA collaborative. While new, the founding universities have worked to build a network of stakeholders and develop appropriate procedures in support of 4-VA projects. Each founding institution has an understanding of what is required to build a TelePresence infrastructure to accept shared courses, share courses, and collaborate on research. That understanding led to the design of a process that will allow other institutions to identify their preferred level of engagement and commitment to 4-VA. At this time, the 4-VA team anticipates multiple opportunities of engagement over the following three tiers (see Appendix III for more detail):

1. Take part in individual programs
2. Join the 4-VA Video Network
3. Become a 4-VA member institution

Community Engagement

Knowledge dissemination and providing a platform for community engagement with 4-VA is a major enabler of 4-VA's goals. For 2012-2013, community engagement primarily occurred through 4-VA hosted conferences and professional development opportunities, and an external presentation. Events specifically included:

4-VA Biology Conference

- Between July 15-17, 2012, educators from the 4-VA partner schools met to discuss course redesign strategies to assist faculty in overcoming bottlenecks that can prevent biology students from continuing their studies into higher-level courses.

4-VA Biology Articulation Conference

- Attendees at the 4-VA Biology Conference indicated a high-level of interest in the topic of articulation. As a result, 4-VA organized a Biology Articulation Conference. See Appendix I for addtional edtail on the outcomes of this conference.

Summer Faculty Development Workshops

- 4-VA offered a selection of summer faculty development opportunities for faculty in the STEM-H fields over summer 2013. The workshops were provided at no cost to the attendees, whose expenses were covered by their home institution's 4-VA grant.

Other 4-VA Presentations

- 4-VA presented as part of the "Working Together: Partnerships and Collaboration" track at the EDUCAUSE Mid-Atlantic Regional Conference.
- This panel discussed how 4-VA's public-private partnership provided technology that enabled us to quickly build the trust relationships necessary for any partnership to succeed. Attendees learned how 4-VA accommodates students who need a class that isn't offered, or assists members in filling under-capacity classes

Upcoming Initiatives and Opportunities Moving Forward

Initiatives

The work of 4-VA continues to evolve. At this time, the 4-VA institutions plan to make progress related to the four main project areas:

Degree Completion: 4-VA will continue to adapt courses to meet the needs of students in the Commonwealth and help them meet their educational/career goals and economic capacity. In conjunction with this aim, 4-VA will work with business, educational, industry, and economic development leaders to ensure that courses and programs are aligned with current needs and support future demand. 4-VA will market the opportunities available so that potential students and employers are aware of the services offered in state rather than utilizing an out-of-state program. 4-VA will also work to improve the collaboration between institutions to reduce duplication of effort, improve efficiency, and create a seamless interface for students.

Collaborative Research: 4-VA sees collaborative research as an investment and will work to continue expanding the capacity of member institutions to collaborate and bring in external funding. This will also require 4-VA to continue to build and strengthen the network of higher education researchers within the Commonwealth of Virginia. 4-VA anticipates that once relationships are established, researchers will also be able to leverage the 4-VA TelePresence rooms to reduce travel costs.

Course Sharing: Preparations are underway between 4-VA institutions to create course sharing opportunities in physics and engineering courses. In addition to issues associated with any shared course, this work involves the adaptation of new and existing technologies that will allow the sharing of projects and lab experiences. Current planned courses for Spring 2014 are:

	Course	Host	Students outside host school
Spring 2014	Political Science "International Security"	JMU	TBD
	Italian Literature	JMU	TBD
	Advanced Arabic (Grammar and Literature)	JMU	TBD
	Intermediate Korean	GMU	TBD
	Advanced Arabic (Oral/Written Comm.)	JMU	TBD
	Legal Spanish	JMU	TBD
	Intermediate Italian	JMU	TBD
	Introductory Korean	GMU	TBD
	Advanced Italian (Grammar and Comm.)	JMU	TBD
	Introductory Portuguese	JMU	TBD
	Intermediate Portuguese	JMU	TBD
	Critical Thinking on Business Issues	UVA	TBD
	Digital Photography	JMU	TBD
	Collaborative Teamwork	UVA	GMU, VCU, Radford, Norfolk State
	Vocal-Nonvocal Communication	UVA	GMU, VCU, Radford, Norfolk State
	Teaching Strategies for Severe Disabilities	UVA	GMU, VCU, Radford, Norfolk State
Fall 2014	Engineering/Physics-Mechatronics	VT/JMU	TBD

Course Redesign: Continue to redesign courses in support of 4-VA defined project goals. Courses have just gone through or will go through their first iteration, so it is very early in these courses to judge the impact they have had on student learning outcomes. There are several courses in the redesign process that will be taught during the 2013-2014 school year, which will enable us to assess the overall impact redesigning these courses has had.

Opportunities

4-VA anticipates three primary opportunities to further define and structure 4-VA in the future. They are:

1. Coordination across institutions remains a challenge. In order for 4-VA to be successful, addressing coordination issues for shared courses need to be resolved.
2. 4-VA is still a start-up collaborative. A sustainable business model for 4-VA needs to be developed. This sustainable model would define procedure for the funding of shared courses, as well as how tuition for shared courses will be collected, distributed and reported.

3. 4-VA builds on the strengths of its member institutions. As 4-VA moves forward, ensuring that each institutions continues to add quality and value to the collaborative will be a component of our ongoing success

Executive Office and Institutional Reports

This section focuses on the specific activities and accomplishments of the 4-VA Executive Office and each member institution.

4-VA Executive Office

The executive office of 4-VA is housed at George Mason University and provides support for the ongoing operations of 4-VA.

Achievements

For the first two years of the 4-VA collaborative, the executive office was responsible for the majority of the planning and programming of the collaborative. This included efforts in all goal areas of the program, in addition to fiscal monitoring and reporting. Many of these duties have since transitioned to the 4-VA partner institutions. Ongoing duties include establishing agendas and facilitating meetings, managing contracts associated with non-institutional projects, developing funding proposals, acting as a point of contact for inquiries about 4-VA, representing 4-VA at state and campus events, building relationships with and among the 4-VA campus coordinators, and coordinating certain activities and projects of the 4-VA institutions. Specific achievements have included:

- In 2011, the executive office coordinated a TelePresence event that included the 4-VA university presidents, Virginia Governor Robert McDonnell, Virginia Secretary of Education Laura Fornash, Cisco CEO John Chambers, and other state and university officials to discuss the progress of the 4-VA collaborative and the pilot projects for instructional and resource sharing among Virginia's higher education institutions.
- The executive office coordinated the first two 4-VA shared courses
- The executive office worked with the chief financial officers of the partner universities to reach agreement on how 4-VA funds would be administered. All institutions agreed to treat 4-VA funds in a manner that forwarded the mission of 4-VA, as well as protecting 4-VA funds from year end sweeps, ensuring the sustainability of 4-VA programs across institutions.
- The executive office coordinated the two day Biology conference in July 2012 and follow-up conference on articulation in May 2013, both noted in the community engagement section
- In September of 2013, 4-VA completed a draft plan for how other Virginia institutions might participate in the 4-VA collaborative. 4-VA welcomes participation formally and informally. A proposal for membership expansion is included in Appendix III.

Future Directions

For the 2013-14 year, the 4-VA Executive Office will focus on the following:

- Foster strategies that reduce redundancies between projects and leverage the work of one project to benefit another.
- Continue to monitor progress on projects and, if roadblocks occur, work with project teams to identify solutions.
- Seek to place 4-VA on a continuous path to operational maturity, as well as defined and inclusive governance strategies.

Expenditures for Fiscal Year 2013

Allocation from Participating Universities	$ 200,000.00[1]
In kind salaries and fringe	50,000.00
Salaries and fringes	48,871.69
Conferences and Travel	2,342.22
Equipment	1,096.14
Supplies	3,211.68
Office Operational Expenses	4,646.44
Carry Forward	89,834.30

[1]The budget for the Executive Office has been adjusted for the coming fiscal year. Next year's allocation from participating institutions will be $100,000, or $25,000 per institution.

George Mason University

Achievements

GMU has been involved in a wide variety of activities to further the aims of 4-VA. Accomplishments during the period of this report included:

- **Biology Articulation Conference:** Mason 4-VA was a sponsor of the Biology Articulation Conference held at James Madison in May, noted in the community engagement section of this report.
- **Shared Courses:** Mason shared EVPP 692 Community Ecology this past spring semester with JMU. Our largest participation in shared courses continues to be critical need foreign language offerings. In the past year 2 and 300 level Chinese, Persian and Turkish were shared with other 4-VA partners, giving each institution the opportunity to offer in demand language courses that would not otherwise be available to our students. This fall Italian and Korean language courses will be offered for the first time in the TelePresence classrooms.
- **Grants - School of Physics, Astronomy and Computational Sciences:** Dr. Michael Summers and Dr. Maria Dworzecka, School of Physics, Astronomy and Computational Sciences (SPACS), were provided 4-VA Mason funding to redesign introductory physics to increase student success and retention. Early data indicate demonstrative increases in student retention. SPACS is also redesigning the program website with 4-VA Mason grant monies.
- **Adult Degree Completion Program** Mason 4-VA provided funds to support the start-up of the Bachelor of Applied Science (BAS) degree completion program. Two online concentrations in Technology and Innovation and Health, Wellness and Social Services address 4-VA goals of accessibility and affordability to students throughout the commonwealth. New online concentrations in Cybersecurity and Tourism are coming soon. More information can be found at **bas.gmu.edu.**
- **Mason 4-VA created a shared course coordinator position and hired Linda Sheridan this past April.** She also serves as deputy campus coordinator.

Future Directions

For the 2013-14 year, Mason 4-VA will focus on the following:

- Establishment of a Mason 4-VA campus advisory committee
- Creation of RFP for Innovation Grant proposals that map to 4-VA goals
- Support of increased research opportunities among 4-VA member institutions
- Enhancement of Mason 4-VA sponsored shared courses, including additional technology in TelePresence classrooms

Expenditures for Fiscal Year 2013

4-VA Grant Allocation	$ 850,000.00
Degree Completion Initiative	50,000.00
Allotment to Information Technology - IT Support	250,000.00
Technology Upgrades - Meese and Research I	370,592.61
Biology Conference – July 2012	6,802.50
Shared Courses	3,211.15
Administrative Expenses	50.00
Physics/Astronomy Project	4,867.54
Carry Forward	164,476.20
	$ 850,000.00

James Madison University

4-VA at James Madison University is housed under the Department of Information Technology and works closely with Dale Hulvey, the Assistant Vice President of Information Technology. Nick Swayne serves as the Director and Campus Coordinator. Kai Brokamp serves as the Assistant Director and works closely with the 4-VA Graduate and Undergraduate Assistants.

Achievements

JMU has been involved in a wide variety of activities to further the aims of 4-VA. Accomplishments during the period of this report included:

- **Degree Completion:** While JMU offered online courses prior to 4-VA, JMU did not have a significant presence of online courses focused on degree completion. Within the 4-VA collaborative, JMU and its faculty have been working together to redesign courses, grouping them into modules that can be combined to complete a 4-year degree. Over the past two years, 23 courses have been redesigned to support the degree completion initiative, and the Adult Degree program has realized a 50% enrollment increase since this initiative's inception. See Appendix IV for a detailed accounting of JMU's degree completion work
- **Course Sharing:** Over 125 students have participated in shared courses with JMU since Spring 2012, and preparations are underway to create opportunities for shared courses in physics and engineering between 4-VA institutions. New and existing technologies will be adapted so that students and faculty can effectively share projects and lab experiences.
- **Collaborative Research:** JMU has been able to fund 22 Research Grants with the 19 of these projects involving collaborations between one of more institutions. See Appendix IV for a detailed accounting of these grants.
- **Course Redesign:** As noted, prior to 4-VA, JMU did not have a significant presence in online courses, so 4-VA worked with faculty to redesign their courses for online media. JMU has worked on redesigning anatomy lab course materials, making them available to students online, and reducing the length of the course from three to two hours.
    - Other actions to support this objective include the Vision and Change Conference, the Biology Articulation Conference, and a STEM Course Redesign Workshop mentioned in the community engagement section of this report. The STEM Course Redesign Workshop was planned by JMU's Center for Instructional Technology and Center for Faculty Innovation and was marketed by 4-VA Coordinators at all 4 institutions as well as any institution or individual that participated in previous conferences.

Future Directions

For the 2013-14 year, JMU 4-VA will focus on the following:

- Regional Articulation Workshop
- Lance Ford Theater
- New product development with CISCO
- STEM Lab development
- Creating an Entrepreneurial Center than can be linked with similar locations at other 4-VA schools

Expenditures for Fiscal Year 2013

Initiative	Total Spent
Degree Completion	$258,000.00
Collaborative Research	$126,211.76
Course Sharing	$226,200.00
STEM Lab	$119,200.00
Icehouse Technology	$3,500.00
Biology Next Steps	$40,000.00
Operations	$93,410.00
Rollover	$470,667.00
Conferences	$51,500.00

University of Virginia

Achievements

UVa has been involved in a wide variety of activities to further the aims of 4-VA. Accomplishments during the period of this report included:

- UVa's Board of Visitors approved a new Bachelor of Professional Studies in Health Sciences, noted in the degree completion section of this report.
- Made High-Performance Computing Bootcamp available to other 4-VA faculty and graduate students each summer via high-definition streaming video.
- Secured Commonwealth Research Commercialization Fund funding for a new research collaboration established with a 4-VA mini-grant
- Offered eight shared courses to other 4-VA partner universities, and enrolled UVa students in four shared courses offered by other 4-VA partner universities.
- Launched a three year program of focused redesign of STEM courses called Nucleus, noted in the course redesign section of this report. The first set of eight courses will impact over 2700 students.
- Began a study across the undergraduate STEM curriculum to measure the current level and distribution of adoption of evidence-based teaching techniques. These data and results will guide intervention to programs and departments where it will have the greatest impact.
- Began design of an online version of its highly-regarded Course Design Institute focused on STEM education, noted in the course redesign section of this report
- Launched Hybrid Challenge for Engaged Courses Initiative result in 10 new or redesigned flipped, hybrid, technology-enhanced courses last year and will result in ten more this year, noted in the course redesign section of this report.

Future Directions

For the 2013-14 year, UVa 4-VA will focus on the following:

- Shepherd new Health Sciences degree program through approval and implementation.
- Offer additional shared courses and work with more UVa faculty and departments to accept shared courses for UVa credit.
- Select and launch second cohort of Nucleus program faculty and courses.
- Expand participation in and impact of the collaborative research mini-grant program.
- Analyze the results of the study of evidence-based teaching techniques, and plan targeted interventions in the areas that promise the greatest impact.
- Seek external funding to proceed with implementation of the online Course Design Institute project.

Expenditures for Fiscal Year 2013

Project	Expenditures
NUCLEUS course redesign program	$297,000
Baseline study on evidence-based teaching	$100,000
Design work for online Course Design Institute	$100,000
Research Collaboration mini-grants	$45,000
Usability enhancements to SHANTI Tools in preparation for release to 4-VA partners	$40,000
Infrastructure maintenance and support	$100,000

Virginia Tech

Achievements

VT has been involved in a wide variety of activities to further the aims of 4-VA. Accomplishments during the period of this report included:

- VT was heavily engaged in helping to set up TelePresence and supplemental video conferencing capabilities across the member institution campuses
- Supporting shared foreign language courses
- Offering 4-VA STEM related course(s) in collaboration with JMU
- Supporting research related to managing collaborative visualization projects at a distance
- Offering summer faculty development opportunities to 4VA member institutions
- Providing funding for its first major 4-VA grants: to accomplish the complete overhaul and re-structuring of first-year biology and three related math courses at Virginia Tech, with all new materials and processes available to 4VA members and beyond.
- VT also organized and provided leadership for a 4VA assessment coordinator and associated processes.

Future Directions

For the 2013-14 year, VT 4-VA will focus on the following:

- Developing and implementing a Request for Proposal (RFP) process for all 4-VA grants affiliated with VT
- Developing and implementing a website that advertises and provides information to the VT community on ways to engage with 4-VA
- Working with faculty at VT to introduce new courses into the 4-VA course catalogue

Expenditures for Fiscal Year 2013

Personnel-Salary	
Technology Implementation and Maintenance	$105,873
Classified Salaries	9,302
General Wages	6,174
Administrative + Faculty Wages	3,333
Gen. Student Wages	69
T&R Wages	63,855
Graduate Teaching Assist Wages	1,769
Subtotal	**$190,375**
Benefits	39,119
	$39,119
Direct Expense	
Technology Implementation and Maintenance	87,744
Research	11,105
Program Spending	2,800
Direct Support to GMU-4VA admin	50,000
Subtotal	**$151,649**
Total Expenses	**$381,143**

Appendices

I: Biology Case Study

Between July 15-17, 2012, approximately 80 educators from throughout Virginia, both private and public, 2-year and 4-year schools, met to discuss course redesign and other strategies to assist faculty in overcoming bottlenecks that can prevent biology students from continuing their studies into higher-level courses. Feedback from those attendees indicated a high-level of interest in the topic of articulation. As a response, 4-VA organized a Biology Articulation Conference on May 22, 2013. This conference again drew approximately 80 participants, this time not only from Virginia's 2 and 4-year public and private schools, but also science representatives from K-12. A summary of the recommendations arising from the conference can be found below.

Recommendations that Came Out of the 4-VA Biology Articulation Conference

Desired End State

Attendees at the 4-VA Biology Articulation conference defined the desired end state as a system of transferring credit (either via college level courses taken in high school or community college or via credit based on performance on AP or IB exams) that is fully transparent, communicated broadly, and fully meets the needs of students in the receiving institution's region. Community College curricula should be designed to be equivalent to the comparable courses at the regional four year institution.

Recommendations Related to Uniqueness, Transfer Credit, and Credit by Exam

There are four universities in Virginia that are ranked in the prestigious Shanghai Jiao Tong list of the world's top 100 global universities, and these four are all state universities. This is just one of the many indications of the extraordinary quality of Virginia's higher education system. Both high quality and uniqueness of mission are essential to the survival of today's university given the changing landscape of higher education, including rising tuition and the availability of lower cost educational opportunities. Without significant uniqueness and quality, a university is not likely to survive in the coming years.

Universities depend on attracting a wide variety of students outside their geographical regions. This is a fundamental difference between a university and a community college. The community college looks to its community to sustain its enrollment. A university is pleased to serve students from its community but needs to enroll students from outside its community in order to fulfill its mission as a university.

This imperative -- for a university to provide and demonstrate unique value and to enroll students from outside its region -- has an influence on the ability of the university to construct a curriculum that is totally accepting of transfer credit, no matter what the course, the major, or the academic practices of the school in which the credit was earned.

It is clear from Virginia's code on transferability, however, that Virginia's universities need to do all they can to provide transferability of courses to community college students. The consensus of those who attended the 4-VA Biology Articulation conference is that each university should work with its regional community colleges to ensure transferability of courses. "Regional" in this case refers to those community colleges whose graduates commute to that university. Modest curriculum compromises on each side should be expected and respected.

Similarly, the university needs to work with regional high schools to develop a reasonable policy on the acceptance of AP and IB credit. Modest compromises on each side should be expected and respected.

Conference participants recommended that faculty from the different education sectors in a region meet regularly to discuss their academic programs and to develop strategies to improve articulation and student success.

Participants recommended that a professional level data gathering initiative be mounted in which quantitative and qualitative data are collected. This data should include the success rates of AP/IB and transfer students in the receiving institution as compared to the resident students and the nature (needs defining) of the experiences of students who sought transfer credit or credit by exam.

Other Recommendations

Transparent, Broad, and Clear Communication

Many participants noted that parents and students feel they are in the dark when they make decisions about whether to participate in high school opportunities such as dual enrollment, AP, IB, etc., or when they attempt to choose courses or majors at one college that will transfer to another. The policy statements on university web sites are not easily understood. They often commingle advice for resident students who want to take a

course elsewhere with advice for those seeking to determine what courses taken at their original home institutions will transfer. Some of these advice sheets attempt to serve historical aims (e.g. “In 2008, the rules were changed to …”); such statements confuse the non-academic reader.

While the information sought by the parent or student is usually on the university’s web site, finding and interpreting each relevant piece of information is the challenge. Participants recommended that guidelines and sample templates be developed for effective communication of transfer processes and strategies to parents and students.

Equity of Educational Experiences in the Sending Institution

Participants noted that opportunities for AP, IB and dual enrollment vary across school districts and within school districts. There are also disparities in educational opportunities among community colleges. While these differences do affect the quality of the articulation experience, they have broader societal importance and need to be addressed by the Commonwealth outside of 4-VA.

II: 4-VA Assessment and Evaluation Plan

Assessment Purposes

Track progress toward project goals

Assessment and evaluation will be conducted for purposes of accountability and transparency through the careful measurement of inputs, activities, and outputs.

Inform project strategies

Assessment and evaluation will be conducted to test assumptions and track achievements by measuring outcomes and impacts, and by understanding how and why we have succeeded or failed. Outcomes are the intermediate, intended or achieved changes in technologies, systems, populations or behaviors; impacts are the ultimate, sustainable changes we seek.

Knowledge dissemination

Assessment and evaluation will be conducted to make an informed contribution to accomplishing shared goals by making sure information is appropriately timed to inform strategy and collective efforts in the field. Contributions will include dissemination of findings to member institutions, the broader higher education domain, and to members of the K-12 community through publications, conference presentations, and a publically available website.

4-VA 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.

Assessment Focus: 4-VA Goals

The primary focus of the assessment plan will be centered around 4-VA's four objectives. A fifth objective was added to the assessment plan to reflect the values of the mission statement (* as indicated below). The fifth objective will be used to capture the collaborative efforts that are taking place between university partners. Data will be gathered for each of these objectives to develop a baseline understanding of the project.

1. Define instructional models, including the clear definition of instructional costs.
2. To significantly expand access for all Virginians to programs preparing them for rewarding careers.
3. To increase research competitiveness.
4. Increase opportunities for and enhance the success of students in Science, Technology, Engineering, and Mathematics (STEM) courses and programs.
5. To foster collaborative efforts between university partners.*

Intended Outcomes

In the first year of the assessment plan, interviews with stakeholders will be conducted to determine the project's expected outcomes. Feedback from all stakeholder groups will be synthesized, along with the collected data and reports, to create a set of measurable intended outcomes that will be used to develop a metric system for future assessments.

Methods

The first year of 4-VA assessment will be dedicated to developing a baseline understanding of the work that has taken place since the start of the project. The assessment plan will provide stakeholders with information about current projects and practices, which will be used to inform future decisions about 4-VA. Assessment data will be collected using many of the following techniques:

- Stakeholder interviews
- Focus groups and interviews with students, faculty, university coordinators, and technical/IT personnel
- Collect/compile project activities
- Collect/compile institutional annual reports
- Student evaluations of teaching
- Collect syllabi and student profiles

- Collect data from Institutional Research
- Network analysis
- Co-authored publications

Timeline

September	Complete assessment plan and review the plan with the 4-VA Director and campus coordinators.
October	Share the assessment plan with the Management Board. Discuss intended outcomes with stakeholders.
November	Complete an assessment audit and interviews with campus coordinators in order to develop a baseline of data.
January	Collect and analyze qualitative and quantitative data.
May	Finalize, present, and publish 4-VA evaluation report.
August	At the summer retreat, campus coordinators will examine, share, and act on the evaluation report making data driven decisions.

Deliverables

An evaluation report will be completed, with consideration of the stakeholders, as a result of the 4-VA assessment plan. Institutional annual reports will be created to complement the data and reporting measures needed for the annual 4-VA evaluation. The report will use summative assessments to synthesize the efforts that have taken place since the inception of 4-VA. The primary focus of the assessment plan will be to:

1. Create a baseline understanding of the 4-VA accomplishments
2. Develop a metric system for 4-VA assessment for future analysis.

III: Participating in the 4-VA Collaborative

4-VA is a collaborative of four universities in the Commonwealth of Virginia working together to realize Virginia's goals for higher education. 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 founding partner universities are George Mason University, James Madison University, The University of Virginia, and Virginia Tech. 4-VA's direction is set by the 4-VA Management Board, which consists of the member university presidents with ex officio members consisting of Virginia's Secretary of Education, the Executive Director of the State Council of Higher Education for Virginia (SCHEV), and a member of Cisco's senior corporate leadership team.

Each 4-VA university reallocated physical facilities and technical staff to work with Cisco to implement two TelePresence immersive videoconferencing rooms (a total of eight across the four universities) on each campus. This has enabled the universities' presidents, provosts, vice presidents of information technology, and various research and instructional faculty to meet frequently in a collaborative virtual environment in order to evaluate proposals and select those best suited to facilitate 4-VA making progress on the goals of the Governor's commissions, particularly the "Top Jobs" initiative.

4-VA welcomes proposals for participation from additional potential partner institutions. Any Virginia not-for-profit institution of higher education is eligible to become a formal participant in 4-VA.

4-VA's goals:

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.

To achieve these goals the collaborative has undertaken 4 primary initiatives: Degree Completion, Collaborative Research, Course Redesign, and Shared Courses.

How to participate in 4-VA

Informal participation

4-VA hosts or co-hosts faculty development events and other conferences throughout the year. We are developing and publishing a growing collection of open educational materials. Most often, participation in these events and access to these materials are open to institutions and/or faculty from any institution in Virginia and beyond. Watch the 4-VA Web site (4-va.org) for information on upcoming events and instructions on how to participate. Individual faculty or institutions can participate at this informal level without any pre-arrangement or ongoing commitment. If your institution desires a more structured kind of participation, there are a number of ways for a college or university to become a formal participant in 4-VA.

4-VA Video Network Connector

4-VA operates an advanced videoconferencing network supporting connections ranging from the desktop to high-end TelePresence suites. Connection to the 4-VA Video Network positions the institution to engage in various video-based 4-VA projects, programs, and events. (Participation in 4-VA shared courses will require additional agreements with the participating institutions regarding listing of courses, transfer or waiver of tuition, and awarding of credit. See below…)

- Acquire and/or configure Cisco TelePresence or high-definition standards-based TelePresence endpoints;
- Acquire and/or configure a Cisco TelePresence Server (CTS) or high-definition standards-based TelePresence MCU (or establish a partnership with one of the 4-VA universities to provide CTS/MCU services);
- Establish and/or configure a suitable network connection to a MARIA (www.marialliance.net) point of presence;
- Identify and commit a network engineer and a video engineer from your institution to participate in technical and operational working groups;
- Commit sufficient resources for providing end-user support to your user community for videoconferencing services.

Become a 4-VA Participant institution

At this level, your non-profit institution should expect to:

- Accept shared courses originated from other 4-VA institutions, allowing your students access to areas of study not offered at your institution;

- Participate in
- research mini-grants, stimulating new research collaborations between faculty at 4-VA Participants;
- Take part in various pilot activities and grant proposals, joining in expanding the impact of 4-VA;
- Build organizational and technical capabilities in preparation for a higher level of 4-VA participation;
- Assess readiness and fit for your institution in 4-VA.

In order to participate at this level your institution must:

- Meet all the requirements for 4-VA Video Network Connector;
- Commit to work actively and collaboratively to advance the goals of the 4-VA collaborative;
- Make arrangements for your students to receive credit at your institution for the courses they take through 4-VA (Typically, a faculty member at your institution offers a special topics course.);
- Allocate a level of effort and resources appropriate for your level of participation. The 4-VA collaborative is proving to be a success in part due to the diversity of its funding. Cisco contributed substantial hardware and consulting support. The Commonwealth provided matching funds, and each institution contributed significantly in terms of infrastructure, classroom space, senior leaders, technical staff, and program coordinators.
- Prepare and implement an assessment plan that includes what you hope to achieve from becoming a partner in the 4-VA collaborative, what unique programs and initiatives you plan to bring to the partnership, and how you will measure your success;
- Provide your faculty and students with a level of technology support appropriate for the advanced technology and for your level of participation;
- Designate a shared courses coordinator to work with the coordinators from the other 4-VA institutions.

Become a 4-VA Member institution

At this level, your non-profit institution should expect to:

- Participate in overall governance of the 4-VA collaborative
- Participate in development of collaborative-wide technical and organizational infrastructure in support of 4-VA goals.

In order to become a Member your institution must:

- Meet all the requirements for 4-VA Video Network Connector and 4-VA Participant
- Commit to your president's personal participation in the 4-VA Management Board (Formal meetings take place twice a year, and designees are accepted only rarely and in unusual circumstances.)
- Designate 4-VA leadership for your institution (there may be overlap in these roles)
    - Designate a Campus Coordinator who will devote a significant amount (up to 50%) of his or her time to working on 4-VA; the commitment in the first two years is especially intense;
    - Designate an academic liaison who will work closely with your provost and with your Campus Coordinator on teaching and learning initiatives and programs;
    - Designate an information technology liaison who will work closely with your CIO and with your Campus Coordinator on IT initiatives and programs;
- Identify institutional resources (both funding and personnel) sufficient to be an active participant in initiatives and collaborations advancing the goals of 4-VA. (Current 4-VA Members plan on something in the vicinity of $1M per year in cash and personnel effort in direct support of their participation.)

Should your institution desire to originate shared courses for students at other 4-VA institutions, you must:

- Engage with the 4-VA registrars and provosts to ensure that your shared courses will be accepted by the other institutions, and that appropriate agreements are in place as necessary to support your offerings;
- Coordinate scheduling of shared courses to fit academic calendars where possible (Note that this does not require synchronization of academic calendars.);
- Participate fully in faculty development and course redesign efforts to ensure that your shared courses are effective in the technology-enhanced environment;
- Participate in 4-VA assessment activities to evaluate the impact of alternative approaches and of the 4-VA collaborative as a whole.

Of course, we hope and anticipate that new 4-VA Participant and Member institutions will have great ideas of their own that will add value to the collaborative. We are anxious to hear your ideas! For more information about participation in 4-VA at any of these levels, please contact the Executive Director of 4-VA, the Chair of the 4-VA Working Group, or the Chair of the 4-VA Management Board. Please refer to the 4-VA website for contact information: http://4-va.org

IV: JMU Degree Completion Work and Mini- and Scale-Up Grant Allocations

Degree Completion Course Areas and Enrollments

Course	Semester	Year	Enrolled
Business Technology			
Computer Information Systems for non-College of Business	Fall	2012	6
Analyzing Data	Fall	2013	6
System Planning	Spring	2014	TBD
Designing Web Systems	Spring	2014	TBD
Entrepreneurship			
Management	Spring	2013	13
Entrepreneurship	Spring	2013	2
Design Your Business Venture	Fall	2013	2
Computer Science			
Algorithm Dev	Summer	2013	26
Intro to CS	Summer	2014	TBD
Registered Nurse to Bachelor of Science in Nursing			
Professional Role Transition	Fall	2013	15
Health Assessment	Fall	2013	22
RN/BSN Strategies for Success	Fall	2013	27
Concepts in Aging	Fall	2013	14
Issues in Contemporary Nursing	Fall	2013	23
Informatics	TBD	TBD	TBD
Pathophysiology	TBD	TBD	TBD
Intro to Nursing Research	TBD	TBD	TBD
Leadership and Management	TBD	TBD	TBD
Community Health Practicum	TBD	TBD	TBD
Community Health Nursing	TBD	TBD	TBD
Sustainability			
Population Geography	TBD	TBD	TBD
Environmental Issues in Science and Technology	TBD	TBD	TBD
Selected Topics in Integrated Science and Technology	TBD	TBD	TBD
Industrial Ecology	TBD	TBD	TBD
General Education			
Natural Science	TBD	TBD	TBD
Humanities	TBD	TBD	TBD
Written Communications	TBD	TBD	TBD

Mini-Grants

	JMU Faculty	Collaborator	Project Title	Funding
Oct. '12	Costel Constantin	UVA	Kapitza Conductance of Al2O3/GaN Interfaces.	$5,000.00
	Christine May	UVA	Virginia Trout Streams Research Collaboration	$5,000.00
	Nathan Wright	UVA	Structure/Function studies on dispersin homologues in Enterotoxic bacteria	$5,000.00
	Bob McKown	UVA, VT	Canine Study for Tear Lacritin as a Treatment for Dry Eye	$3,900.00
Jan. '13	Louise Temple	VCU	Methicillin Resistance Genes in Viruses from Environmental Samples	$4,100.00
	Susan Halsell	GMU	Regulations of Dendritic Morphogenesis in Genetic Model Organism	$1,550.00
	Roshna Wunderlich, Mark Gabriele		Design of Virtual Human Anatomy Modules	$5,000.00
	Michele Estes	UVA	Improving STEM Undergraduate Education Through Online Engineering Labs	$5,000.00
	Rob Prins		Energy Usage Analysis of an Electric Motorcycle	$5,000.00
	Anne Henriksen	UVA	Elucidate the Effects of Gonadal vs. Genes on RNA Sequences in the Cerebellum	$5,000.00
May '13	LouAnn Lovin	VT	Fraction Schemes and Operations: An Extension to Prospective PreK-8 Teachers	$4,988.76
	Anca Constantin	UVA	The WISE Search For Megamasers	$5,000.00
	Trudy Cole	UVA	Visual Literacy, Beyond Linguistic Communication	$4,000.00
	Louise Temple	UVA	A Viral Detection System for Pertussis Diagnosis	$5,000.00
	Robert Nagel	UVA	Distributable Stereo Hearing Test Kit	$4,673.00
	Teresa Harris	UVA, VT, GMU	Effects of Preschool Attendance on Middle School Outcomes in Virginia	$5,000.00
	Alleyn Harned		Virginia Clean Fuels Student Partnership 2013-2014	$3,000.00
	Klebert Feitosa	UVA, VT, GMU	Bringing Together a Community of Soft Matter Researchers in Virginia	$5,000.00
	James W. Wilson		JMU-ESRI Geoportal Collaborative	$5,000.00

Scale-Up Grants

	JMU Faculty	Collaborator	Project Title	Funding
Jan '13	Bob Mckown	VT	Canine Clinical Study for Tear Lacritin as a Treatment for Dry Eye	$20,000.00
May '13	Costel Constantin	UVA	Kapitza Conductance of Al2O3/GaN Interfaces.	$20,000.00