Leveraging Internal Partnerships and Existing Data Infrastructure to Track and Assess Community Engagement across the University

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Abstract

Universities increasingly see community engagement as a means to achieve their mission. In order to assess the impact of these efforts, it is necessary to gather and analyze data from across the institution on community-engaged activities. This article presents a case study of Virginia Commonwealth University's efforts in developing enterprise data mechanisms that track and assess community engagement across teaching, research, and service activities. We focus attention on the importance of internal collaboration and reliance on existing internal data mechanisms as key strategies. Lessons learned and uses of the data are discussed.

Despite the value of community engagement enterprise data, few tools exist to support their systematic identification, tracking, measurement, and monitoring (Adams, Badenhorst, and Berman 2005; Greenburg and Moore 2012; Hart, Northmore, and Gerhardt 2009). This is due, in part, to the challenges associated with designing and implementing data collection mechanisms across large, complex institutions. Feasibility constraints are often around lack of funding, personnel, and the decentralization of large, complex universities (Furco and Miller 2009; Holland 2005). Additionally, there are no standardized operational definitions or models associated with community-engaged activities and outcomes (Furco and Miller 2009; Greenburg and Moore 2012; Holland 2001). To add further complexity, institutions often need both comprehensive campus-wide data as well as unit-level and project-specific data that provide more detailed information (Greenburg and Moore 2012). Consequently, the data needed are multifaceted and complex, necessitating data mechanisms that must reflect this reality.

This article presents a case study of Virginia Commonwealth University's (VCU) approach to developing enterprise data collection mechanisms that capture information about its community-engaged activities. This is intended to add to the growing literature on this topic (Furco and Miller 2009; Greenburg and Moore 2012; Hart, Northmore, and Gerhardt 2009; Holland, Scott, and Grebennikov 2010; Janke 2014). The aim in this article is to highlight VCU's approach of leveraging the resources of

internal partnerships and existing data systems to track and assess community-engaged teaching, research, and service. The ability to collect this information internally is seen as an important first step in the larger effort to assess these efforts. The article begins with a brief description of VCU followed by a discussion of the approach used to systematically track and assess five types of community-engaged activities: service-learning, student volunteer service, twelve-month employee volunteer service, community-engaged research, and community-university partnerships. The following section provides detailed information about the data infrastructure for the key university-wide community-engaged activities. The paper concludes with a discussion of how the data can be used and lessons learned.

Virginia Commonwealth University

Virginia Commonwealth University (VCU) was founded on a commitment to improve the health and well-being of its community through the education of its citizenry, development of new knowledge, and outreach. The founding schools of its two campuses were social work and medicine – both professional disciplines with an explicit focus on linking research and teaching to improve the quality of lives in the community. Later, as the commonwealth considered the creation of VCU from these campuses, the Wayne Commission recommended the establishment of an "urban-oriented state university" with the following statement that evokes VCU's founding public mission:

> "It has become increasing apparent that the conditions prevailing in our urban centers present many of our most critical national, state, and local problems. However we may view the social, political, or economic issues facing our nation today, we are aware that our future depends in large part upon the wisdom with which we attack and solve the dilemmas of our…cities….Rarely has so challenging an opportunity to combine the free pursuit of knowledge in its own right with the ready availability of that knowledge for the enlightenment and enrichment of the larger community of which it is a part been presented to an institution of higher education."

> Report of the Commission to Plan for the Establishment of a Proposed State-Supported University in the Richmond Metropolitan Area, 1967

VCU institutionalizes its mission through its strategic priorities and resource allocation. Notably, community engagement and regional impact is one of three themes in the university strategic plan and explicit language about community-engaged teaching, research, and service has been added to the university and unit-level promotion and tenure policies (http://future.vcu.edu). Following its initial designation in 2006, VCU again received the Carnegie Foundation's 2015 community engagement classification; one of fifty-four universities designated as being "community-engaged" with "very high research activity." Since 2007, VCU has also been recognized for

student service through the US President's Higher Education Community Service Honor Roll, receiving "Honor Roll with Distinction" in 2013 and 2014.

VCU's current strategic plan, the Quest for Distinction, emphasizes university-wide integrated planning, data-driven decision-making, and continuous assessment. Central to this effort has been a focus on establishing a sustainable enterprise data infrastructure and sustainable processes and information that can support strategic decision-making. Enterprise data refers to data that is shared across the many departments and units in the university (or organization). In the following sections we describe the efforts and the collaborations that were necessary to support the work, the specific data collection strategies, and provide examples of data collected. We begin by overviewing the key terms and concepts related to community engagement in use at VCU.

Development of Terms and Definitions

As part of the university's larger effort to institutionalize community engagement as a distinctive part of its identity, VCU's Council for Community Engagement (CCE) led the initiative to identify and define community engagement terms. The CCE, tasked with promoting community-engagement across the university, is composed of representatives from all university academic units, key research centers and institutes, and many of the support units. It was thought that this would contribute to a shared understanding of community engagement and associated activities as well as serve as the foundation for comprehensive data collection efforts. The process included a comprehensive literature review and small and large group discussions to refine the core elements of 'community-engagement' and related terms. Once finalized, these terms were reviewed and approved by the President's Cabinet in 2013 (Virginia Commonwealth University 2013). It should be noted that VCU officially adopted its definition of service-learning in 1997 using a similar process.

Building upon the Carnegie Foundation for the Advancement of Teaching's definition (2006), VCU defines community-engagement as "the collaboration between institutions of higher education and their larger communities for the mutually beneficial exchange of knowledge and resources in the context of partnership and reciprocity. It can involve partnerships and coalitions that help mobilize resources and influence systems and serve as catalysts for initiating and/or changing policies, programs, and practices." This definition and related VCU defined community-engagement terms, summarized in Table 1, served as the foundation and key starting point for VCU's efforts to collect data about the various community-engagement components. For each community-engagement activity described later, an effort was made to create operational definitions. Collaboration among internal stakeholders was instrumental to those efforts.

Table 1: VCU Community Engagement Terms and Definition

Term	Definition
Community	A group of people external to the campus who are affiliated by geographic proximity, special interest, similar situation, or shared values. Communities may share characteristics such as age, ethnicity, gender, or sexual orientation.
Partnership	Sustained collaboration between institutions of higher education and communities for the mutually beneficial exchange, exploration, and application of knowledge, information, and resources. Examples are research, capacity building, or economic development.
Community Outreach	The application and provision of institutional resources, knowledge, or services that directly benefit the community. Examples include music concerts, athletic events, student volunteers, public lectures, or health fairs.
Community Engagement	The collaboration between institutions of higher education and their larger communities for the mutually beneficial exchange of knowledge and resources in the context of partnership and reciprocity. It can involve partnerships and coalitions that help mobilize resources and influence systems and serve as catalysts for initiating and/or changing policies, programs, and practices.
Community-Engaged Scholarship	The creation and dissemination of knowledge and creative expression in furtherance of the mission and goals of the university and in collaboration with the community. Community-engaged scholarship (CES) addresses community needs through research, teaching, and service in a mutually beneficial partnership. The quality and impact of CES are determined by academic peers and community partners.
Community-Engaged Service	The application of one's professional expertise that addresses a community-identified need and supports the goals and mission of the university and the community. Community-engaged service may entail the delivery of expertise, resources, and services to the community.
Community-Engaged Teaching/ Learning	A pedagogical approach that connects students and faculty with activities that address community-identified needs through mutually beneficial partnerships that deepen students' academic and civic learning. Examples are service-learning courses or service-learning clinical practica.
Community-Engaged Research	A collaborative process between the researcher and community partner that creates and disseminates knowledge and creative expression with the goal of contributing to the discipline and strengthening the well-being of the community. Community-engaged research (CER) identifies the assets of all stakeholders and incorporates them in the design and conduct of the different phases of the research process.

Internal Collaboration

A primary tactic in VCU's approach to the development of the community-engagement data infrastructure has been to identify and leverage existing internal collaborations among units that have strategic involvement in the particular area. These collaborations often arise when internal stakeholders see an opportunity to more easily accomplish a strategic initiative or project by sharing information, resources, and personnel effort. Most of the project teams have been small and included members who had a shared interest in and understanding of data. These teams have been successful, at least in part, due to this shared understanding and commitment (Franz 2005). The teams also relied on informal relationships and processes. These ad hoc internal collaborations are especially prolific in a complex organization like VCU, with fourteen schools and colleges and an academic health system (Franz 2005; Ghoshal, Korine, and Gabriel 1994; Weick 1976).

A second tactic was identifying and intentionally complementing work that was already underway. VCU has attempted to coordinate and communicate community-engagement efforts through the CCE, but even this body of representatives drawn from across the university is challenged to keep informed of the wide-range of activities. One strategy that has proved helpful has been to ask project teams to develop and share talking points and project descriptions with others across the university.

The university's explicit focus on creating enterprise data infrastructure related to community engagement chiefly builds upon several ongoing, formal collaborations involving the Division of Community Engagement (DCE) and the Office of Planning Decision and Support, among other units. The DCE leads and supports efforts across the university related to community-engaged work and is housed within the Office of the Provost and Vice President for Academic Affairs. Its mission is to mobilize university-community partnerships that generate innovative solutions to societal challenges and prepare our students as engaged citizens of tomorrow. A key function of DCE is to monitor, assess, and celebrate the university's success in deepening its engagement through its core mission and functions. The DCE accomplishes that through efforts such as directing signature outreach programs; providing technical assistance and professional development for individual faculty and students; and overseeing ASPiRE, a living-learning community that promotes community engagement through academic coursework and co-curricular experiences for undergraduate students. In partnership with the Office of Planning and Decision Support, the DCE leads the development, implementation, and dissemination of data related to VCU's community engagement efforts.

The Office of Planning and Decision Support (OPDS), also housed in the provost's office, provides the foundational structure for data-driven decision-making. OPDS pairs data and analysis with decision-making throughout the institution to identify information needed for decisions that are consistent with the university's mission and strategic direction and to ensure that decision-makers have ready access to that information. The office has taken the lead in identifying institutional data "gaps,"

developing mechanisms and processes to collect new data, and vetting and standardizing data for internal and external use.

In reviewing the accomplishments to date, we see that the reliance on internal collaborations as well as the balance of formal and informal collaborations has contributed to VCU's success in these efforts. Consistent with the principles of community engagement, these collaborations were approached as a way to value and benefit from the diverse expertise found across the university. Similarly, the collaborations ensured that the initiatives were mutually beneficial both in terms of the data infrastructure and the outputs. This reliance on internal collaborations also supported the use of existing data infrastructure since many of the stakeholders were familiar with or actively using these systems.

Existing Data Collection Mechanisms

As VCU has developed its internal enterprise data infrastructure around community-engaged efforts, one consideration has been when (and whether) to alter existing enterprise data systems within the university and when (and whether) to develop or purchase an additional system (Furco and Miller 2009). The literature reflects the reliance on project-specific data collection mechanisms like one-time or annual survey tools to gather internal community engagement data (Greenburg and Moore 2012; Hart, Northmore, and Gerhardt 2009; Furco and Miller 2009). There is also a growing availability of software systems specific to capturing internal community engagement data. For example, University of North Carolina Greensboro (UNCG) is collaborating with Treetop Commons to build the Community Engagement Collaboratory® (The Collaboratory®), a cloud-based software application that tracks partnership and public service activities between universities and communities. Additionally, Digital Measures' Activity Insite is a platform for collecting, aggregating, and reporting on all faculty activities, and they have added a model specifically for community-engaged activities (http://www.digitalmeasures.com). These are but two examples among many systems currently available to gather engagement data; this high level of activity signals the growing focus on data collection and impact analysis.

VCU has prioritized the use of existing data collection mechanisms to collect community engagement related data from our faculty, staff, and students. This approach has proved to have multiple benefits. Because many of the existing data systems are on a routine schedule and have mandatory completion requirements, they contain comprehensive population data – that is, data on all known instances of the activity across the university. For example, the use of the IRB application to track community-engaged research means that all approved human-subjects protocols involving community partners can be identified. This approach of using existing systems also limits response burden since information does not have to be entered multiple times. Finally, the inclusion of a few additional engagement related questions into existing mechanisms does not require the additional costs associated with the purchase and maintenance of a separate system.

In the following section, we present five examples of how VCU used internal collaborations to combine existing and novel data infrastructures (Table 2). These examples relate to the three dimensions of the university's mission: teaching, research, and service. For each, we provide some background information, the definition used, and a description of the data collection mechanism. We then illustrate the types of findings that are available through that mechanism and conclude with a summary of strengths and limitations. (See Holton, Jettner, Early, and Shaw 2015 for a description related to partnerships.)

Community-Engaged Teaching/Learning: Service-Learning

Background. Since 1997, VCU has officially recognized service-learning as a distinct pedagogy. It defines community-engaged teaching/learning as "a pedagogical approach that connects students and faculty with activities that address community-identified needs through mutually beneficial partnerships that deepen students' academic and civic learning. Examples are service-learning courses or service-learning clinical practica." VCU views service-learning as an intentional teaching strategy that engages students in organized service activities and guided reflection. The service activities must benefit the community and, in combination with reflection and other classroom-based learning activities, enhance the academic curriculum of participating students. Successful completion of a service-learning course is reflected on official student transcripts. The DCE is responsible for providing technical assistance to academic units and individual faculty members who design and offer service-learning courses.

Definition. The operational definition of service-learning requires the following three elements: (1) twenty hours of student service, (2) the service meets a community-identified need, and (3) student reflection that connects service and learning. Service-learning courses are approved by the DCE and are designated in Banner.

Data Collection Mechanisms. Service learning is tracked and assessed using three mechanisms: (a) web reports generated through the university's Banner system, (b) student surveys, and (c) faculty surveys.

University's Banner system. Approved service-learning courses are tracked by the university's Office of Records and Registration (registrar office) using Banner, a higher education administrative software application that tracks student, faculty, and course-related information. Once DCE reviews and approves service-learning courses, the registrar office tags courses in Banner as 'SRV LRN.' The OPDS and registrar office were critical partners for developing automated and reliable web reports for service-learning courses. Reports are available by semester and include the following information: student demographics, instructor demographics, and number of distinct courses and class sections by academic unit.

Table 2. Summary of VCU's Community Engagement Data Enterprise Systems

Data Component	Inclusion criteria	Collection Tool	Centralized Database[a]	Key Collaborators[b]	Responsible Party & Timeframe	Data Type	Population vs Sample	Data Use
Service-Learning (SL)	Courses officially designated as service-learning	Web-Reports (SL courses tag embedded)	Banner[c]	Registrar Office; OPDS	Faculty request SL course approval; Registrar Office adds SL tag; Semester basis	Descriptive data (# SL courses, enrollment, student data, & faculty demographics)	Population	Tracking & Monitoring; and Impact on Students
		Student Survey (SLIM)			Division; Annual basis[d]	Student perceptions	Sample	Impact on Students
		Faculty Survey			Division; Annual basis[d]	Faculty perceptions	Sample	Impact on Faculty
Student Volunteer Service	Activities that meet President's Honor Roll requirements	Email requests to identified unit contacts	In Development (RamServe)[d]	Student Affairs	Division; Annual basis	Descriptive data (# of hours, # of students)	Sample	Tracking & Monitoring
12-month Employee Volunteer Service	Approved service leave requests for 12-month employees	Electronic leave requests (CSL category embedded)	Human Resources[c]	Human Resources	Individual personnel; Ongoing basis	Descriptive data (# of hours, # of employees)	Population	Tracking & Monitoring
Community-Engaged Research (CEnR)	Approved human-subjects protocols	IRB application (questions embedded)	Internal Review Board (IRB) database[c]	Office of Research	Principal Investigator; Ongoing basis	Descriptive data (# CEnR, level of involvement, partner contact)	Population	Tracking & Monitoring
University-Community Partnerships	Satisfy official definition of "partnership"	Unit Survey	Partnership Map[d]	CCTR, OPDS	Division; Annual basis	Descriptive data (# partners, contact info, focus area)	Sample	Tracking & Monitoring

[a]Centralized refers to mechanisms that collect university-wide data.

[b]The Division of Community Engagement collaborated with the listed departments/units.

[c]Existing mechanisms

[d]Novel mechanisms

Service-Learning Impact Measure (SLIM). The SLIM is an online survey used to evaluate the impact of service-learning on students. Developed by DCE, the SLIM measures the impact of service-learning experiences on a variety of learning and behavioral outcomes. For example, the SLIM assesses students' intent to continue serving, skills they gained through service-learning opportunities, and the extent to which service-learning was beneficial in developing awareness of local issues, increasing their ability to work in diverse groups, and understanding their own biases and privileges. At the end of each semester, DCE emails the survey to all students enrolled in service-learning courses. SLIM is separate and distinct from the academic units' course evaluations (Virginia Commonwealth University, Office of Service-Learning, Division of Community Engagement 2014-2015; see SLIM Report Appendix for SLIM tool).

Online Survey of Service-Learning Faculty. Faculty members who teach service-learning courses are emailed an online survey to inform program evaluation efforts. Developed by DCE, this survey assesses perceived level of support and impact of service-learning on their teaching and scholarship. For example, faculty members are asked to what degree they perceive administration (e.g. president, their dean, committee chair) to be supportive of service-learning and what services provided by DCE were useful to them. Beginning this year, this survey will be conducted yearly (up from every two years).

Examples of Findings. Banner reports show that for the 2014-2015 academic year, ninety-two instructors delivered 117 distinct service-learning courses to 3,608 enrolled students. Among the instructors, 71 percent were female, and 17 percent were tenured. According to the 2014-2015 SLIM report, the majority of service-learning students reported that the course helped them develop specific skills, such as working effectively in diverse groups and being more aware of their own biases and prejudices. Qualitative data revealed that students generally perceived their service-learning experience to be positive and 31 percent indicated that they intended to continue to serve with the partner organization.

Faculty who had taught service-learning courses during the 2011-12 academic year (n=69) were surveyed, of which 77% responded. Faculty members agreed or strongly agreed that they have been impacted by their service-learning/community-engaged activities in the following ways: 98% reported the classroom experience was enriched, 91% reported a strengthened sense of community, 89% reported they were more satisfied with their jobs, 82% saw their teaching improve, 62% had increased innovation in their scholarship and research, and 47% reported their research had increased relevance. Approximately half of faculty members (53%) had generated a total of seventy scholarly products from their service-learning/community-engaged activities. In addition, the majority of faculty perceived leadership to be supportive; 88% described the president and provost as very or extremely supportive followed by students (79%), department chairs (76%), deans (67%), and colleagues (58%). (See Virginia Commonwealth University, Office of Service-Learning, Division of Community Engagement 2013 for full report).

Summary. Data from the automated web reports, SLIM survey, and faculty survey supports the development of high-quality, high-impact service-learning courses and provides the university with critical information about its service-learning courses that enables ongoing evaluation of the impact of service-learning on university-level priorities and promotes high quality research on service-learning. Banner data combined with SLIM surveys have been used to compare various outcomes between service-learning and non-service-learning students (Lockeman and Pelco 2013) and to assess the differential impacts of service-learning on first-generation students (Pelco, Ball, and Lockeman 2014).

Community-Engaged Service: Student Volunteer Service

Background. The collaboration between the DCE, University of Student Commons and Activities (USCA), and Career Services has been central to the university-wide effort to encourage and document student service. The USCA promotes student volunteer opportunities and sponsors several signature volunteer events on campus (e.g., annual blood drive). They also manage student organizations, many of which also promote service and document their service through online self-report surveys. The career center promotes experiential learning (i.e., service, co-curricular experiences, and internships) as key to identifying and launching a career. The center is implementing a mechanism to track and assess these experiential learning opportunities and how they affect students' career trajectories and impact local partners.

One way that VCU tells the story of student service is through recognition by the US President's Higher Education Community Service (PHECS) Honor Roll (Honor Roll). The Honor Roll annually "highlights the role colleges and universities play in solving community problems and placing more students on a lifelong path of civic engagement by recognizing institutions that achieve meaningful, measurable outcomes in the communities they serve" (Corporation for National Community Service n.d.). VCU has successfully applied for recognition since 2007 and achieved "with distinction" recognition in 2013 and 2014.

Definition. VCU defines student volunteer service according to the definition used by the Honor Roll as "activities designed to improve the quality of life of off-campus community residents, particularly low- income individuals. Community service activities may include but are not limited to: academic service-learning, co-curricular service learning (not part of an academic course, but utilizing service-learning elements) and other co-curricular student volunteer activities as well as work-study community service and paid community service internships. Community service includes both direct service to citizens (e.g., serving food to the needy) and indirect service (e.g., assessing community nutrition needs or managing a food bank)" (Corporation for National Community Service n.d.).

Data Collection Mechanism. Each fall the DCE solicits aggregate student volunteer service data from key stakeholders across the university. Units are asked to provide: (a) number of students engaged in community service, (b) number of students who did twenty hours or more per semester, and (c) total number of service hours. Table 3 summarizes the service types and associated data sources.

Table 3. Summary of Student Service Data Sources

Service Type	Inclusion Criteria	Contact	Data Source	Data Source Characteristics
Service-learning	Approved designated service-learning courses	Division's Office of Service-Learning	Banner web-reports	University-wide
Internships/ practicums/ clinical education	Internships students engage in for academic credit	Various units across university	Internal database	Records maintained by individual units
Co-curricular activities	Service that is not associated with an academic course, but includes service-learning elements (e.g., reflection)	USCA & ASPiRE Director	Internal database	Records maintained by USCA & ASPiRE
Community Federal Work Study (FWS)	FWS located off-campus. Eligible on-campus FWS are positions in the library and recreation (service to students is allowable)	Federal Work Study Coordinator	Human Resources	University-wide
AmeriCorps	AmeriCorps program	AmeriCorps Director	Internal database	Records maintained by AmeriCorps
General community service	Service that benefits the community	USCA & miscellaneous	Internal database & sign-in sheets for miscellaneous unit service projects	Records maintained by USCA and miscellaneous units

Examples of Findings. For the 2013-2014 academic year, 18,236 students engaged in over one million hours of service (see Table 4 for more details). This was a 13 percent increase in the number of students who engaged in service and an 18 percent increase in the number of hours served compared with the prior academic year.

Table 4. Overview of Student Service Data

Student Service	2012-2013		2013-2014	
	# Students	# Hours	# Students	# Hours
For Academic Credit (service-learning, internships, co-curricular)	7,725	899,806	8,137	1,115,523
Not for Academic Credit	8,412	208,978	10,099	200,657
TOTAL	**16,137**	**1,108,784**	**18,236**	**1,316,180**

Summary. This mechanism allows for the tracking of unit-level, and some project-level, student community service. However, it is time consuming, likely underrepresents the number of hours, and only provides high-level information. In response to these limitations, representatives from the DCE, USCA, Career Services, OPDS, and VCU Technology Services are collaborating to develop RamServe, a data collection mechanism that will integrate data from various systems, and they also created a mobile application (and desktop version) for students to track and manage their service information. Data from this app will be integrated with existing data mechanisms (i.e., Banner and a newly-purchased internship database) to assess student impact and identify community partners. The app rolled this fall (2015). Ultimately, this mechanism will be able to provide data to explore the following questions:
- What is the impact of these activities on student learning outcomes (e.g., retention, GPA) and future employment?
- Does impact, if any, vary by type of service experience (e.g., service-learning, general community service), frequency, and quality?
- Who are the community partners engaging these students, and what community needs are being addressed?
- What is the quality of these relationships, and can VCU identify strategic university-level partnerships based on this information?

Community-Engaged Service: Twelve-Month Employee Community Service

Background. The university promotes community service and the use of state-sanctioned community-service leave to promote an institutional culture of service. VCU defines community-engaged service as "the application of one's professional expertise that addresses a community-identified need and supports the goals and mission of the university and the community. Community-engaged service may entail the delivery of expertise, resources, and services to the community."

Effective 2001, the Commonwealth of Virginia passed legislation that grants state employees up to sixteen hours of paid leave to provide volunteer services. At VCU, the Department of Human Resource Management (human resources) is responsible for interpreting and implementing this state policy. Community service leave (CSL) may only be used for volunteer activities provided to nonprofit organizations or for school assistance. VCU defines eligible agencies as public or private nonprofit organizations that are "engaged in meeting human, education, environmental, or public safety community needs." A maximum of sixteen hours is available to all full-time employees on an annual basis, and is pro-rated for part-time employees (Virginia Commonwealth University, Human Resources n.d.) The DCE promotes service opportunities and encourages the use of CSL.

Definition. VCU defines community-engaged service as the approved use of CSL as reported through the human resource department.

Data Collection Mechanism. Tracking and monitoring the use of CSL is managed through the VCU human resource department. Employees request the use of their leave in the same way they request the use of other types of leave (e.g., sick, vacation). Once supervisors provide approval, employees are able to received paid leave for volunteering during normal business hours. DCE works with the HR department to provide regular reporting of the use of CSL.

Examples of Findings. Information on the use of CSL is quantitative and collected on a calendar year basis. In 2014, 1,452 VCU twelve-month employees used their community service leave hours, an increase of 4 percent compared to 2013. These employees provided a total of 15,522 service hours which represents an increase of 5.4 percent compared to 2013.

Summary. This mechanism systematically collects data on employees who use CSL. However, anecdotal evidence indicates that this benefit is underutilized. The DCE, in partnership with a local organization that specializes in linking people with volunteer opportunities, develops and promotes service and the use of CSL.

Community-Engaged Research:
Approved Human Subjects Research Protocols

Background. Prior to 2013, VCU had not systematically collected information on community-engaged research (CEnR). This created challenges in establishing a baseline of activity against which to measure progress in increasing high quality, high impact CEnR. Furthermore, it was becoming increasingly important to key external audiences that VCU identify and track CEnR. Of note were the impending 2014 CTSA renewal and Carnegie re-classification applications. In both applications, VCU wanted to highlight its commitment to CEnR through, in part, the institutionalization a data tracking system as well as data highlighting the degree of community partner involvement in research.

A team representing the DCE, Office of Research, and the federally-funded Center for Clinical and Translational Research (CCTR), along with several established community-engaged research faculty developed a strategy to systematically identify CEnR across VCU. The university's institutional review board (IRB) held the only known university-wide mechanism for collecting data related to research projects that might involve community partners. Given that the main intent of the IRB process is to protect human subjects, the addition of CEnR-related questions had to be brief and align with the overall purpose of the review process (for more information, see Holton 2013).

Definition. VCU defines community-engaged research (CEnR) as "a collaborative process between the researcher and community partners that creates and disseminates knowledge and creative expression with the goal of contributing to the discipline and strengthening the well-being of the community." It is operationalized as all human-subjects protocols approved by the Institutional Review Board involving a community partner.

Data Collection Mechanism. The IRB application asks the principle investigator (PI) to specify if community partners are involved in the proposed study, provide partner information, and indicate the degree of each partner's involvement by categorical levels (adapted from Khodyakov et al. 2013) (Table 5).

Table 5: CEnR Questions Included in the IRB Application

Is there at least one community partner* involved in the proposed study? (Yes/No)

If yes …
Please provide the following details about each community partner. If there are more than five community partners, please provide the following information on the five most significant community partners. If a community partner is a collaboration of multiple partners, please indicate the name of the larger collaboration and the zip code or country of the location where the majority of the research is taking place.
• Name of the organization
• Zip code or Country of the organization

Which of the three statements below best describes the role of the community partner in the study?
• Community partners only provide access to study subjects or project sites. They *are not involved* with study design, subject recruitment, data collection, or data analysis.
• Community partners do not make decisions about the study design or conduct, but *provide guidance to the researcher* about the study design, subject recruitment, data collection, or data analysis.
• Community partners *make decisions* with the researcher(s) about the study's research activities and/or help conduct those activities (i.e., study design, subject recruitment, data collection, and/or data analysis).

*A community partner is an individual or organization that is not affiliated with VCU or VCU Health Systems (e.g., Veterans' Administration Health Systems, a nonprofit

or NGO, a business) but who is engaged with VCU or VCU Health Systems in this proposed study.

Examples of Findings. This mechanism revealed that fifty-nine CEnR projects were carried out by twenty-one academic units and departments from July 2014-June 2015. Sixty-five community partners were involved at different levels of engagement with the research project: 53% provided access to study participants or project sites; 22 percent provided guidance to the researcher about the study design, subject recruitment, data collection, or data analysis; 25 percent made decisions with the researchers about the study's research activities and/or helped conduct those activities. The projects were conducted internationally and nationally, with 69 percent occurring in Richmond, Virginia and the surrounding area. Thirty-seven percent of the CEnR projects received some form of external funding.

Summary. This mechanism provides population data on all the IRB approved (human subjects) community-engaged research across VCU. Reports pulled from the IRB application reveal information about the faculty who are conducting the research (e.g., name, home department), the partners involved (e.g., name, geographic location) and the research itself (e.g., title, intensity of community partner involvement, type of research). Differentiating levels of partner involvement was determined to be highly valuable because it provides greater sensitivity in the measurement of the changes in the level of stakeholder involvement, thereby providing an impact measurement for the efforts to increase the degree of involvement of the community partner. It also provides flexibility in reporting since it satisfies the varying operational definitions of community-engaged research, with some emphasizing more integral involvement of partners in the research activities (Stanton 2012). DCE and CCTR are developing a complimentary process for assessing CEnR that includes a broader range of process, product, and outcome measures (Calleson, Jordan, Seifer 2005; Maurana et al. 2001). Key assessment areas under consideration include evidence that community-identified priorities direct research activities, numbers of publications in peer-reviewed journals, innovative dissemination products, and improved community outcomes.

Discussion

In an atmosphere of increasing demand for data to guide planning, inform decisions, and conduct impact assessments, VCU has used internal collaborations to create opportunities to gather enterprise data on community-engaged teaching, research, and service. Through these collaborations, existing data mechanisms have been identified and, in some cases slightly adapted or paired with novel instruments to provide systematic data collection infrastructure on engagement efforts across the university. These efforts are part of the larger university effort to engage in university-wide integrated planning, data driven decision-making and continuous assessment, and allow VCU to take the next critical step in our assessments – incorporating the community perspective on and experiences with these efforts.

Data are critical to university-wide planning efforts around community-engagement and regional impact. Using the mechanisms described here, VCU can track key types of community-engaged teaching, research, and service across the university. This enables senior leaders to determine where additional resource investments or changes to organizational structure and administrative processes may be needed.

A key to enterprise data infrastructure is the ability to provide clear, relevant information in a timely manner to the stakeholders to support decision-making. For instance, the data gathered through the faculty service-learning surveys have influenced the development of additional resources and professional development opportunities for faculty. The CEnR data from the IRB mechanism are being used to inform conversations about the possible need to provide more research coordination in specific geographic regions.

To support decision-making, it is necessary to engage in continual evaluation of the mechanism to determine the quality and usefulness of the data. For instance, an evaluation is underway of the CEnR data collection mechanism linked to the IRB application. While a definition of community partner is included in the questions related to CEnR, anecdotal reports have indicated that there is confusion over who or what actually counts as a community partner. Some PIs have indicated their assumption is that a community partner can only be a nonprofit organization. This may result in inconsistent reporting of partner involvement and may also overlook the involvement of critical partners.

Continuous assessment efforts target students, faculty, staff, and community partners and inform the evaluation and improvement of engagement efforts. Data obtained from the service-learning mechanism informed recent dissertation research at VCU on the impact of service-learning on student retention, which has, in turn, begun the conversation about how to provide service-learning opportunities to those students who are at-risk of dropping out (Lockeman and Pelco 2013). Feedback and insights from community partners inform the focus of professional development for faculty and staff as well as needed educational trainings for students.

Community perspective. A critical area under development is the assessment of the impact of community-engaged teaching, research, and service on our community in general and on our community partners specifically. VCU continues to explore and develop ways to incorporate the perspectives of community partners into the information gathered about these activities. For instance, as the number of service-learning courses offered increases, it is important to understand the perspectives of our community partners who provide these experiential opportunities. Similarly, as more faculty members seek to initiate and engage in research partnerships, feedback from community partners will shape professional development offerings to support mutually beneficial partnerships. To that end, we have included requests for information on community partners in each of these mechanisms (where possible) and are developing mechanisms to collect their feedback and perspectives.

Lessons learned. Several general lessons emerge from VCU's experiences to date. One key consideration is the need to balance the constraints and purposes of existing data collection mechanisms with the information sought related to community-engaged activity. For example, the primary purpose of the IRB application is to support the protection of human subjects. Therefore, it was important to structure the additional questions in a way that both advance the reviewers ability to identify possible ethical risks while also providing information relevant to the efforts to advance high quality, high impact, community-engaged research.

A second lesson is that it is important to communicate the importance of engagement and engagement data to faculty, staff, and students. It is necessary to shape this message to convey the importance to their interests as well as to the university as a whole. This message is particularly important in promoting the use of the voluntary mechanisms such as RamServ. The DCE has developed several tools to promote awareness, including an infographic highlighting how community engagement data are used, a data dashboard on its website (www.community.vcu.edu), internal stories and blog posts that highlight community-engagement activities and data, and unit-level data reports. Another key message is to highlight the existence and appropriate use of available engagement opportunities and data systems. For instance, significant efforts have been made to promote the availability of CSL including a series of internal news stories to highlight how employees have used their time and an infographic outlining how to use the leave system.

Next steps. Because of these strategies to integrate community engagement data into ongoing enterprise data collection efforts, VCU has embarked on an intentional conversation to identify a limited number of thematic areas in which engaged activity would leverage strengths and existing resources within VCU to meet specific community-identified needs or opportunities. An analytical review of a wide array of community-generated reports and strategic plans has been recently completed and will be used to engage members of the VCU and regional community in a conversation about benefits and limitations of a more focused approach as well as to start identifying potential areas of focus (Holton and Jettner 2015). This approach has the potential to deepen VCU's impact on our students, faculty, staff, and broader community. It will also be an opportunity for the university to further refine its enterprise data infrastructure and processes to guide its ongoing planning, decision-making, and efforts to continually advance its community-engaged mission.

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