

THE SAGE PROJECT: COMMUNITY ENGAGEMENT FOR SUSTAINABLE CITIES

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INTRODUCTION

Our society is faced with a number of increasingly unpredictable and critical challenges that require immediate and transformative solutions. Climate change and the associated loss of natural resources, financial stability, and habitability of communities across the planet are real and present challenges that must be addressed creatively and through interdisciplinary collaboration between local, regional, and federal governments, international organizations, and ordinary citizens. Perhaps now more than ever before, higher education has the responsibility >>>

to prepare our youth to tackle those challenges that are already present as well as those future challenges we have yet to predict (Warlick, 2012).

Learning a skill or professional trade in relevant disciplines, such as public administration, city planning, public health, and sustainability (to name just a few) can certainly help prepare those students who are specifically interested in addressing these challenges in society. However, *every* student that passes through higher education should be prepared to address the challenges of a world we cannot yet imagine. Through the general education of *all* our students by engaging them in high-impact practices, such as community engagement, undergraduate research, and international experiences (Brownell & Swaner, 2010), we invest in the critical thinking and problem solving skills they will need to address these challenges. This is a goal that many higher education institutions across the country are trying to achieve through the development of a variety of different programs and initiatives.

Our communities are challenged with great needs and limited resources; across the globe, they face the challenges of climate change, diminishing resources, and expanding populations. The local governments that serve our communities must balance their commitment to responding to effects of climate change without compromising their commitment to maintaining infrastructure and addressing the needs of residents, often on a restrictive budget. Most local governments lack the staff, resources, and access to cutting-edge research to creatively navigate this complicated balancing act.

AN EPIC MODEL OF CAMPUS-COMMUNITY PARTNERSHIPS

This is where partnerships between universities and local governments come in. Universities can contribute vast amounts of knowledge and resources towards our communities in a way that is transformative and immediately impactful. The Sage Project (sage.sdsu.edu) at San Diego State University (SDSU) is one such program, which is a replication of the University of Oregon's Sustainable City Year Program (SCYP) (Carlson, 2013; Schlossberg & Larco, 2013). The partnership model, now referred to as the "EPIC-N Model" (following from the Educational Partnerships for Innovation in Communities Network [EPIC-N]; more on this below), is being replicated across dozens of universities within the US and now internationally. Below I highlight the basic structure of the model and how it is implemented at SDSU. Following that I describe the process that we followed to launch the Sage Project at SDSU.

In keeping with the EPIC-N Model, the Sage Project at SDSU is a yearlong partnership between the university and a local government that focuses on community engagement for sustainability. Specifically, our city partner provides a list of projects that address pressing economic, environmental, and/or social needs for the city, and these projects are matched with SDSU faculty and existing courses. SDSU students enrolled in these courses work with their instructors, the city partner staff, and community members to conduct research and propose recommendations, solutions, and new designs to help improve the livability of the community in a manner that is socially, fiscally, and environmentally sustainable. Ultimately, this helps our city partners accelerate their long-term goals.

Though partnerships between universities and local governments are not new, the EPIC-N Model is unique in a number of ways, most notably in terms of its scale and impact. In a given year, a partnership will tackle 10 to 15 projects and will include 20 to 30 courses, enrolling over 500 students. These students, who come from a variety of disciplines, dedicate tens of thousands of hours of effort toward projects in that single community. This scale of impact is typical for at least those programs at large universities, such as the University of Oregon's SCYP program, the University of Iowa's Initiative for Sustainable Communities, the University of Minnesota's Resilient Communities Project, and SDSU's Sage Project. Programs may vary across institutions in terms of scale of impact, whereby smaller institutions may take on fewer projects (and therefore engage fewer faculty, classes, and students); the model is adoptable and adaptable according to the specific capacity of institutions and local governments.

The Sage Project follows 12 key tenets of the EPIC-N Model, detailed below, which contribute to the success and the sustainability of our program. (See also (Sustainable Cities Initiative, 2016).)

1. IT IS A UNIVERSITY-COMMUNITY

PARTNERSHIP. SDSU is in a formal partnership with a local community, typically a city (though counties, transit districts, and school districts are also potential partners). The partnership involves effort and collaboration on specific projects that are identified by our city partner as high priority. Only those projects that have undergone an iterative "matchmaking" process between the city, Sage Project staff, and the participating faculty members are selected for the partnership. This iterative process ensures that the city partner's needs are met, but also that the work that is accomplished still aligns with the student learning outcomes for the participating classes.

- 2. IT USES EXISTING RESOURCES. The projects that are proposed by our city partner have already been identified by the city as high priority, and they are projects for which funds (general or grant) are already earmarked. Thus, the city is not expected to find extra funds to support work on lower priority needs. In addition, the projects are matched with faculty members at SDSU who are teaching existing courses that are already project-based. Thus, faculty members do not need to make changes to their teaching loads or even change the way they teach their courses.
- 3. IT IS SCALED FOR IMPACT. Rather than focus on a single project or engage a single class, our partnerships involve 10 to 15 projects in a given year. Twenty to 30 different classes across disciplines participate over the course of the year, and this involves dozens of faculty and hundreds of students. This ensures that the impact on both the community and our students is large and immediate.
- 4. FACULTY MEMBERS OPT IN. Only those faculty members at SDSU who are interested in participating in the partnership volunteer to do so. This allows for flexibility from one year to the next in terms of teaching assignments, project relevance, sabbaticals, and so on. The model is set up to be a "drop-in" for existing courses to make faculty participation easy – perhaps easier than not participating – because course work is centered on pre-established community projects.

5. COMMUNITY PARTNERS ARE IDENTIFIED THROUGH A SELECTION PROCESS. Each

Sage Project partnership is established through a formal, competitive application process, whereby potential community partners submit a proposal with a list of proposed, high-priority projects. Each November, the Sage Project releases a formal request for proposals, and potential community partners submit proposals that include a list of potential projects to be tackled by faculty and the students in their courses. A review panel consisting of Sage Project staff, faculty, and one student evaluates the proposals for their feasibility, commitment to sustainability, and available resources. The community that submits the best proposal is selected as the city partner for the following academic year.

6. PROJECTS ARE IDENTIFIED THROUGH CONSENSUS BETWEEN THE UNIVERSITY AND

COMMUNITY. Once a community partner has been selected through the process described above, there is an iterative matchmaking process where project goals and deliverables are further honed to ensure they meet the needs of both the community and the participating SDSU faculty and their courses. Specific deliverables are identified for each project and each participating course prior to the start of the academic year so that all parties are in agreement and are satisfied with the work that is to be accomplished. This is usually achieved through a series of in-person meetings, emails,

and/or phone calls between the city staff, Sage Project staff, and faculty members.

7. SUSTAINABILITY, OR THE ADVANCEMENT OF SOCIAL GOOD, IS A CORE PRINCIPLE OF THE MODEL. The projects proposed must address a pressing social, economic, and/or environmental issue that aims to enhance the resilience and livability of the community.

8. STUDENTS ARE ACTIVELY INVOLVED IN THE

PROCESS. SDSU students are actively and directly involved in the projects on a massive scale. Our students want the work they do to be relevant, impactful, and meaningful. Through this type of partnership, they have the opportunity to provide research, ideas, designs, and solutions that can directly benefit local communities through participation in high impact practices. This model thus engages more of our students, including those who are less likely to seek out these opportunities on their own and who are perhaps the most likely to benefit from such experiences.

9. THE PROCESS IS MULTIDISCIPLINARY.

Multiple courses from disciplines across the SDSU campus participate in the partnership and collaborate on projects from unique perspectives that are not typically available to our community partners. The participating faculty members identify the specific deliverables that students in their respective courses will provide toward the project effort that can inform the city (e.g., as a final deliverable) and/or other courses that are participating in the project during the same semester or in the following semester. While logistically more challenging, this multidisciplinary effort is achieved through coordination with city staff, Sage Project staff, and participating faculty. In such cases, those who are part of the collaboration will conduct site visits together, attend one another's class presentations, and/or share research findings or design ideas with one another.

10. THE FOCUS IS GEOGRAPHICALLY DEFINED.

The Sage Project focuses resources and energy to a specific, geographicallydefined community, such as a city, a county, a Native American tribal government, a transit district, or a port district in the greater San Diego and US-Mexico border region.

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11. THE PARTNERSHIP IS TIME-LIMITED. The partnership between SDSU and the community typically lasts for a single academic year, after which time we identify a new community partner for another yearlong partnership. Moreover, the projects proposed by the city must be able to be completed within a semester or across two semesters. Thus, specific deliverables are provided at the end of each semester at which time the project is considered complete, or the work completed during the fall semester can be continued by another class during the following spring semester.

12. THERE IS A MUTUAL INVESTMENT BY THE UNIVERSITY AND THE COMMUNITY.

Collaboration on such a massive scale requires a high level of coordination on both sides. Our community partners pay a fee for the partnership and commit staff time and effort toward the projects so that they have "skin in the game." This ensures that the participating SDSU faculty and students have the input and resources they need to complete the work. The partnership fee is what covers Sage Project program operations and sustains the program from year to year.

As part of the formal partnership process, a memorandum of understanding and associated project agreements and scopes of work are developed. As well, participating SDSU faculty members are provided with up to \$1000 in instructional support for each participating course. Deliverables for our community partners are usually in the form of professionally prepared reports that are provided to the city at the end of the partnership. Typically, at the end of each term, a student is hired from each participating class to consolidate the work into a single report that has been developed carefully with input from the faculty member and Sage Project staff. In other cases, the deliverable may not be a report, but instead a more tangible product, such as a collection of geographic information system layers or specific wayfinding or gateway designs.

The EPIC-N Model is adoptable and adaptable in context-specific ways that have allowed for its successful replication at small liberal arts colleges and large public research institutions, in geographical areas that are highly urban to those that are more rural. Indeed, approximately 30 institutions across the US have replicated the EPIC-N Model, and it is gaining momentum internationally, with a program already established at Technion University in Israel (see, for instance, Carlson, 2013; Fernandez, Barlow, & Bloch, 2015, June; Franklin, Franklin, Barlow, Raulston, & Sebastian, 2014, June; Hartley, 2016; Maynard, 2016, September; Schlossberg, 2016, September; "Smart Communities Initiative working on projects for downtown Lenoir City," 2016; Strandberg, 2015; "Universities lend a hand with sustainability," 2016). Specific funding varies across programs, and is dependent on available resources, the number of projects, and the size of the participating community partners. In any type of partnership, however, it is crucial that the community partner make a significant financial investment to ensure their involvement in the projects.

THE SAGE PROJECT REPLICATION: HOW WE LAUNCHED OUR OWN EPIC-N PROGRAM AT SDSU

The Sage Project evolved from an earlier model aimed at infusing sustainability throughout the curriculum. The Sage Curriculum Project, as it was briefly called, was a university workshop series at SDSU that helped faculty members identify ways they could incorporate concepts of sustainability into their courses regardless of the discipline. Geoffrey Chase, who was the Dean of the Division of Undergraduate Studies at the time, introduced this workshop to the SDSU campus. Chase had created the Ponderosa Project at Northern Arizona University, which had been replicated across universities through train-the-trainer workshops (Chase & Rowland, 2004), and then brought that model to SDSU. After offering this workshop for several years at SDSU, the number of attendees began to decline and we began to search for other ways to engage faculty from across the campus who were interested in sustainability.

Around that same time, we learned of the University of Oregon's SCYP and invited Marc Schlossberg, Co-Founder and Co-Director of SCYP (along with Nico Larco), to SDSU so that the campus and community stakeholders could learn more about SCYP. This was critical for attracting interest and buy-in from potential community partners and launching our pilot program, and the result of the presentation was a strong interest from the city manager's office of the City of National City. To further pursue the possibility of launching such a program at SDSU, Mariah Hudson-Dula (the campus sustainability coordinator at the time) and I attended the annual Sustainable City Year Conference at the University of Oregon in April 2013. This annual conference provides training, resources, and support for universities

that have launched, are in the process of launching, or wish to learn how to launch an EPIC-N program at their own institutions. We also invited Brad Raulston, Executive Director of Development for the City of National City, to accompany us to this conference, which was critical to the successful launch of the Sage Project. The annual conference provides specific guidelines for launching an EPIC-N program in a context-specific way. Attendees from both sides of the equation (universities and local governments) learn how to get a partnership off the ground. They are better able to understand the value that such partnerships provide to cities, and gain a better understanding of how universities operate as well. This workshop helps to bridge the two sides for mutual understanding and a common language.

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While at the conference, the three of us began brainstorming potential projects that we could tackle for the City of National City, and we created a list of 10 potential disciplines and faculty members at SDSU that might fit well with these projects. Upon return to San Diego, we sent an email announcement to all campus faculty members about the launch of the partnership and the opportunity to participate. We had hoped to receive enough interest to get about five classes involved for the fall semester. In fact, we received an overwhelming response from over 30 different faculty members – many on the same day that the message was sent (in mid-June, well after the summer had begun)! So many faculty members

were interested that the five-course pilot year exploded into a full-scale partnership involving 15 projects, 33 faculty members, 30 courses from 17 disciplines, enrolling nearly 1,000 students.

We focused on projects that included redesigning streets in the downtown/civic center of the city, creating sustainable development solutions for city parks, creating the city's long-range property management plan, designing a wayfinding system for the city, designing branding for the city's distinct neighborhoods, evaluating industry and freeway impact on air quality and noise pollution, developing of a disaster preparedness and response plan, proposing budget solutions in anticipation of a possible loss of local sales tax, and recommending ways to enhance programs and services for seniors. Undergraduate and graduate students from across the SDSU campus participated in the partnership. Disciplines included anthropology; audiology; business of craft beer; city planning; civil engineering; communication; construction engineering; finance; geography; graphic design; homeland security; international securities and conflict resolution; marketing; political science; public administration; public health; and speech, language and hearing sciences. Refer to Table 1 for a list of courses, disciplines, and projects associated with the first year of the program.

While overwhelming, this scale of engagement created incredible momentum that attracted the attention of the California State University Chancellor's Office, other high-level campus administrators, faculty, students, and alumni, as well as the university's marketing and communications department, the San Diego Union-Tribune, other news organizations, other local communities, and other universities during that pilot year. This attention created incredible momentum for the program that energized city staff and councilmembers and drew more faculty interest. Students began contacting us to find out what other opportunities there were for them to get involved with the partnership with National City. This momentum helped move the program along into the following year.

As part of the partnership with the City of National City, we agreed to partner for two years (rather than one) so that we could further evaluate how the model could be implemented locally. This gave us a full year to identify key faculty who would likely want to be involved in the program from year to year; it allowed us to better understand the cost of running the program; and it helped us to better understand local city government. The two-year partnership with the City of National City ended with a total of 18 projects completed, involving 55 courses (30 the first year, 25 the second) taught by 35 different faculty members from 24 different disciplines and nearly 2,000 students. Some projects, such as the Marina District, Craft Beer Industry, and

Course No.	Title	Discipline/Department	Project
ANTH402	Honors Dynamics of Biocultural Diversity	Anthropology	Corner Store Project
ANTH531	Methods In Applied Anthropology	Anthropology	Sage Project Partnership Documentation
ART341	Graphic Design II	Graphic Design	Neighborhood Branding
ART454	Environmental Graphic Design	Graphic Design	Wayfinding System
ART541	Graphic Design IV	Graphic Design	Branding
AUD899	Doctoral Project (Fall)	Speech, Language, & Hearing Sciences	Port Industry and Freeway Mitigation
AUD899	Doctoral Project (Spring)	Speech, Language, & Hearing Sciences	Port Industry and Freeway Mitigation
CB003	Marketing of Craft Beer	Business of Craft Beer	Craft Beer Industry
CIVE495	Capstone Design Project (Fall)	Civil, Construction, & Environmental Engineering	Various
CIVE495	Capstone Design Project (Spring)	Civil, Construction, & Environmental Engineering	Downtown Green Streets
COMM721	Seminar in Health Communication	Communication	Corner Store Project
CONE301	Construction Ethics Law & Contracts	Civil, Construction, & Environmental Engineering	Sustainable Development
CP670	History of Urban Planning	City Planning	Various
CP700	Urban Design & Land Use Planning Studio	City Planning	Marina District
FIN498	Investigation & Report	Finance	Property Management Plan
GEOG354	Geography Of Cities (Fall, sect. 1)	Geography	Sustainable Development
GEOG354	Geography Of Cities (Fall, sect. 2)	Geography	Sustainable Development
GEOG354	Geography Of Cities (Spring)	Geography	Port Industry and Freeway Mitigation
GEOG572	Land Use Analysis	Geography	Marina District
HSEC602	Sem. in Science Tech. & Homeland Security	Homeland Security	Disaster Preparedness and Response
ISCOR310	Our Global Future (Fall)	International Securities & Conflict Resolution	Kimball Park
ISCOR310	Our Global Future (Spring, sect. 1)	International Securities & Conflict Resolution	Kimball Park
ISCOR310	Our Global Future (Spring, sect. 2)	International Securities & Conflict Resolution	Kimball Park
MKTG371	Consumer/Buyer Behavior	Marketing	Corner Store Project
MKTG372	Retail Marketing Methods	Marketing	Craft Beer Industry
PA350	Contemporary Urban Issues	Public Administration	Various
PA660	Administration & Public Policy Development	Public Administration	Budget Solutions
PH632	Air Quality	Public Health	Port Industry and Freeway Mitigation
POLS422	Urban Politics	Political Science	Property Management Plan
SLHS580	Communication Processes & Aging	Speech, Language, & Hearing Sciences	Senior Center

Table 1. Courses, Disciplines, and Projects for the 2013-2014 Academic Year

Branding projects, continued across the two years. Other projects, such as the Corner Store and Wayfinding projects, were completed the first year; the second year included addition of Homelessness, Strategic Planning, and Public Records Act projects, to name just a few. Similarly, 12 faculty members participated across both years, while 11 participated in the first year only and 12 participated in the second year only. Faculty engagement was (and continues to be) dependent on the nature of the projects and faculty teaching assignments.

We held our Sage Project Symposium in April of 2014 and again in 2015, which included celebratory remarks by SDSU Provost Nancy Marlin (in 2014) and SDSU President Elliot Hirshman (in 2015) and City of National City Mayor Ron Morrison, among others. These remarks were then followed by a poster symposium where approximately 30 different presentations were made by students who had participated in Sage Project courses. Reporters from the San Diego Union-Tri*bune*, Univision, and SDSU's marketing and communication department covered the event. A highly-popular video was also created to highlight particular efforts in the National City Marina District (Chatowsky, 2014). The video features footage of a visit made by US Environmental Protection Agency (EPA) Chief Administrator Gina McCarthy, who came to National City to specifically learn about the Sage Project and our partnership with the city.

Since our partnership with National

City, we have taken on projects in partnership with the Cities of Santee, San Diego, Tijuana, and, most recently, Lemon Grove. Projects with Santee, San Diego, and Tijuana were different in that they happened simultaneously and on a smaller scale during the 2015-2016 academic year. That year, the original plan was to have a full yearlong partnership with the City of Santee; however, leadership changes and budgetary cutbacks necessitated an unfortunate and last-minute scaling back of the partnership to just two projects: mapping of park assets, storm drains, sidewalks, and pedestrian ramps; and assessing water quality along the San Diego River. As mentioned, Sage Project operations are supported by the fee paid by the community partner. With so few projects, funding was not sufficient to sustain the program. Thus, to keep momentum over the course of that year. we took on individual projects through partnerships with the Cities of San Diego (focusing on homelessness) and Tijuana (addressing park improvements in underserved areas). Program operations were further supported through those partnership projects as well as through one-time funds provided by the university. However, because the work was diffused across these different communities, our presence and impact were not as apparent. Fewer people from the respective communities were aware of the partnerships, and fewer city staff and community members from each partnership were involved. This attests to the importance of scale of the EPIC-N Model.

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As of the 2016-2017 academic year, we have launched a yearlong partnership with the City of Lemon Grove. Projects include addressing homelessness outreach resources; parks and recreation programming; place-making and tactical urbanism; image development, branding, and gateway improvements; infrastructure maintenance; and public art. We are also assisting the city with their climate action planning process in collaboration with the United Nations (UN) Habitat program by using their Guiding Principles (UN-Habitat, 2015) Toolkit. This collaboration came about through efforts to promote the EPIC-N Model internationally, and will be discussed further below.

In addition to our partnership with the City of Lemon Grove during the 2016-2017 academic year, we are continuing our collaboration with the City of Tijuana on the park restoration project, referred to as *Comuniparques*. The goal of this project is to improve the safety, accessibility, and environmental sustainability of parks in underserved areas of Tijuana. Geography, graphic design, and Latin American studies students from SDSU are collaborating with one another and with the City of Tijuana, other university students in Tijuana, and community members to develop park designs and programming that help to maintain the parks and the community investment in them for the long-term. Key stakeholders and community partners involved in this project currently include the Sage Project at SDSU; the Department of Environmental

Protection for the City of Tijuana: Ecoparque, which is a project of El Colegio de la Frontero Norte (El Colef); the San Diego Padres Foundation: Universidad Autónoma de Baja California (UABC); Pro-Salud; and Universidad de las Californias Internacional (UDCI). Together, we work directly or indirectly with community members and leaders at each park location to determine how best to improve the individual parks in a manner that is socially, fiscally, and environmentally sustainable. There are 13 parks in total, and we have collaborated on three parks thus far. An anthology featuring a collection of chapters written by different stakeholders in this project will be published and will include two chapters contributed by Sage Project students, faculty, and staff (De La Parra & Patrón Soberano, forthcoming).

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Crossing the international border creates additional logistical challenges, as all who cross the border must have a valid passport or visa. For those students who are unable to cross, alternative options must be provided to them. Fortunately, not all projects require that students physically visit the partnering community, though doing so tends to make the experience more meaningful for the students and faculty. Moreover, international partnerships also have the advantage of giving students international experiences that meet degree requirements for some majors at SDSU. Thus far, SDSU's Sage Project is the only EPIC-N program that has created an international partnership.

The Sage Project at SDSU is fortunate to be located in a highly urban area. There are 18 incorporated cities within San Diego County, all of which are within an hour's commute from SDSU. Our hope is that we have the opportunity to partner with all 18 municipalities, perhaps more than once; however, we do not wish to limit ourselves to just those 18 cities. There is the possibility of partnering with unincorporated towns throughout San Diego County, as well as further afield, with cities in neighboring counties, Native American tribal governments, and with other border cities in Mexico. Partnerships with such entities could create logistical challenges due to distance, but this is an issue that other EPIC-N programs in more rural locations overcome on an annual basis.

IMPACT: STORIES OF SAGE PROJECT SUCCESS

Since the fall of 2013, the Sage Project at SDSU has worked with five community partners on 37 different projects. Our campus-wide engagement has included 46 faculty members from 28 different disciplines, 110 courses, and nearly 3,000 students. Together, we estimate that these students have dedicated over 150,000 hours of effort toward local communities since the launch of our program in 2013. Again, these hours of effort are part of students' overall effort in their courses, as required by the projects that are built into their coursework. Moreover, while the number of faculty members (and therefore courses) participating each year has remained relatively steady, there is a growing cohort of faculty members that are interested in participating in the Sage Project, and several of them elect to participate each year. We make efforts to recruit new faculty participants through SDSU's new faculty orientation, email announcements, and presentations at SDSU's Center for Teaching and Learning luncheons. Each year, the number of faculty members and courses that participate is dependent on the number and types of projects proposed by our city partner, as well as the faculty members' teaching assignments, as mentioned above. As the program grows, so will the number of faculty members and courses that participate.

We launched the Sage Project in the fall of 2013, and I have served as the primary person overseeing the entire program, though I receive assistance of the Division of Undergraduate Studies resource coordinator (to manage budget needs) and the input and support of the dean's office. As director of the Sage Project, I have a half-time buyout from my tenured position with the School of Speech, Language, and Hearing Sciences. Over the last three years, our program has expanded to include a graduate student assistant at 10 to 20 hours per week, a graphic design intern at 10 hours per week, and a social media intern at 5 to 10 hours per week. As of the 2016-2017 academic year, we have hired a program administrator to help manage day-to-day

program operations. In addition to these staff members, we regularly hire report writers from each participating class to consolidate the students' work into professional reports that serve as the official deliverables for the city partner.

Our program has enjoyed a great deal of success, media attention, and recognition, not only locally, but also nationally and internationally as part of our efforts to help spread the EPIC-N Model. Since we first launched the program, the Sage Project has been featured in numerous news stories through the SDSU NewsCenter (Elko, 2015; Esterbrooks, 2016; "High-Stakes Learning," 2013; Jacobs, 2013, 2014; "Music Education," 2015; White, 2016), 360 Magazine (SDSU alumni magazine; Geraghty, 2014), and The Daily Aztec (SDSU student newspaper; Burkhart, 2013; Navarro, 2014; Valdez, 2014). as well as the San Diego Union-Tribune (Pearlman, 2016a, 2016b, 2016c; Rowe, 2014a, 2014b; Sampite-Montecalvo, 2013, 2014; Warth, 2015a, 2015b, 2016), Uniradio Informa ("Ayuntamiento Fomenta Conciencia Ambiental," 2016; Merlo, 2015), San Diego Red ("Ayuntamiento Lanza el Programa 'Comuniparques'," 2016; "Municipio Lanza Programa," 2015), Diario Tijuana (Santillán, 2015), East County Magazine (Goetz, 2016), and West Coaster (Quintero, 2014), plus newsletters and blogs of other EPIC-N programs, the EPIC Network, and the EPA ("Universities lend a hand with sustainability," 2016). These laudatory stories have brought

positive attention to SDSU and the partner cities and have garnered interest in the program from potential community partners.

Still, recruiting new community partners requires ongoing effort, such as regular contact with city managers throughout the county, presentations at meetings of the San Diego Association of Governments (SANDAG) and at conferences and community events. These efforts are critical to maintaining interest in and drawing further attention to the program. In addition, we work with the university's marketing and communications department to send out press releases announcing new partnerships, our annual request for proposals, and our annual symposium. We also actively promote our program through our newsletter, Sage Words, as well as through our website (sage.sdsu. edu) and social media, including Facebook, Twitter, Instagram, and YouTube.

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We have also received awards and recognition for the program that help further our efforts. We received an award from the Aztec Parents Fund to support our collaboration with A Reason To Survive, a non-profit organization in National City, so that SDSU music students could provide violin lessons to at-risk youth ("Music Education," 2015). This was later supported by a grant from the Parker Foundation that has allowed the partnership to expand. The National City Chamber of Commerce nominated SDSU for the Green Business Award in 2015 for their partnership with National City through the Sage Project. That same year, the Chamber nominated the Sage Project for the Community Leader Award. Finally, I was honored to be awarded an SDSU President's Leadership Fund Faculty and Staff Excellence Award, which provided additional monetary support for Sage Project program operations.

For our students, participating in a course that is part of the Sage Project partnership is often impactful enough that they will list such participation on their resumes and LinkedIn profiles. Moreover, many students are presented with unique opportunities as a direct result of participating in a Sage Project course. As of writing, the Sage Project has provided assistantships and internships to 65 students since Fall 2013. Thirty-six of these students were hired as report writers to consolidate the work from their courses into reports for the city partners (http://sdsu-dspace.calstate.edu/ handle/10211.3/165566). In addition, our city partners have hired numerous students after their participation in a Sage Project course to work as interns on additional projects. Two such students eventually landed full-time jobs with the City of National City and remain employed there as of the time of writing. (Note that this was the result of enrolling in a single *undergraduate class that participated* in the Sage Project.) A team of civil engineering students who participated in a capstone design course through the Sage Project was awarded the Outstanding SDSU Design Day Project of Transportation Engineering and received special recognition during the American Society of Civil Engineers' San Diego June 2014 Luncheon for their "Green Streets Improvement Project" for the City of National City. The City ultimately implemented aspects of the students' designs that same year. Another student from SDSU's School of Music and Dance was hired by A Reason To Survive to continue providing string lessons to National City youth after the original funding for that program expired.

Approximately 100 students have had the opportunity to present their work at our annual Sage Project Symposium, which serves as our culminating event for the yearlong partnership with our community partner, as described above. This is an expo-style symposium where students present their research, designs, solutions, and recommendations as poster presentations. The symposium is open to the public; university administrators, participating students and faculty, city staff and elected officials, and community members are especially encouraged to attend. Thus far, we have limited the number of presentations, with faculty members selecting their top students to present on behalf of their participating courses. As we build capacity, we expect to increase participation by students. Other students have had the opportunity to present their work at the larger, university-wide SDSU Student Research Symposium (e.g., McKinstry, 2016; Monteverde & Novak, 2016), as well as at city council meetings, at the annual

Sustainable City Year Conference, and for other opportunities that arise that involve highlighting the partnership and student work. One graduate student was invited to serve on SDSU's Climate Action Planning Council because of his efforts with the Sage Project. Finally, some students expand their work with the city partner into graduate thesis or doctoral projects (Brennan, 2016; Cao, 2015; Penunuri, 2015). Experiences such as these help prepare our students for the workforce, and help to make them more knowledgeable about and invested in local communities.

For our faculty, participating in the Sage Project affords opportunities for professional growth by establishing new connections in the community and new directions for research, scholarship, and creative activity, including grant funding from local foundations and federal agencies. Some faculty members elect to involve additional students from their research labs, often leading to undergraduate honors and master's theses, as mentioned above. For instance, SDSU faculty members have presented results of their work with the Sage Project at national conferences, often in collaboration with Sage Project and/or city partner staff (Appleyard, Barlow, Flanigan, & Raulston, 2016, March; Blumenfeld, Barlow, & Manriquez, 2016, March). Many participating faculty members list their affiliation with the Sage Project on their curriculum vitae and highlight their work with the Sage Project on their periodic reviews as evidence of teaching excellence.

For our city partners, the partnership can help advance stagnant projects, re-energize city staff, and bring positive attention to the city. Documenting the immediate impact of the partnership can be a challenge because it may take several years before designs or recommendations can be implemented. Nevertheless, there is anecdotal evidence of the benefits of the partnership. For example, SDSU's environmental graphic design students developed a wayfinding system for the City of National City in Spring 2014, and this effort helped National City to obtain numerous grants to implement a wayfinding system in the city. To date, the city has obtained over \$1 million in grant support for their wayfinding improvements, and Brad Raulston (Executive Director of Development for the City of National City) cites the partnership as a key factor in this success. In addition, as part of our partnership with the City of National City, an interdisciplinary team of SDSU students developed a preliminary draft of the city's long-range property management plan, which the city ultimately submitted to the State of California. As well, a graphic design student's design for the new branding of the City of National City's youth center, Casa de Salud, has already been installed as part of a renovation of the facility.

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EXPANSION OF THE MODEL: THE EPIC NETWORK

The Sage Project is a member of the EPIC Network (www.epicn.org). This is a fledgling network of institutions that work together and with key stakeholders, such as the US EPA, to serve as a resource for existing EPIC-N programs and to help promote the EPIC-N Model nationally and internationally, through conference presentations (Fernandez et al., 2015, June; Franklin et al., 2014, June; Ibrahim et al., 2016, July), as well as through workshops, newsletters, podcasts, and weblogs. The Network hosts the annual Sustainable City Year Conference, which originally was hosted by the University of Oregon, but now is hosted regionally at member institutions (University of Minnesota, 2015; San Diego State University, 2016; Texas A&M University, 2017).

As representatives of EPIC-N, Marc Schlossberg and Nico Larco (Co-Directors of University of Oregon's SCYP) and I have led efforts to promote the model through conference presentations, as well as workshops, colloquia and site visits (Barlow, 2015, October, 2016, May, 2016, October; Fernandez et al., 2015, June; Franklin et al., 2014, June; Ibrahim et al., 2016, July; Schlossberg, 2013, June). With support from and collaboration with the US EPA, a two-day replication workshop was held at the annual California Higher Education in Sustainability Conference (CHESC) in 2015, in order to promote the EPIC-N Model to California institutions. Seven California State University (CSU) institutions have launched EPIC-N programs as a direct result of that workshop, bringing the total number of CSU EPIC-N programs to nine. The EPA has been heavily engaged

in efforts to promote the EPIC-N Model because they also see it as an opportunity to make their own resources for local governments more accessible and useful. As part of the two-day CHESC workshop, EPA representatives presented a series of EPA tools (https://www.epa.gov/research/ methods-models-tools-and-databases) to help cities address sustainability-related goals. A similar EPA/EPIC-N workshop was held in the Midwest in November 2016.

Efforts to promote replication of the EPIC-N Model internationally began in the summer of 2016, at the Resilient Cities 2016 conference in Bonn, Germany, where I presented the model as part of a panel with representatives from the EPA, the UN Environmental Program, the National Science Foundation, and other agencies that highlighted partnerships between local governments and different organizations (Ibrahim et al., 2016, July). This brief presentation about the Sage Project specifically and the EPIC-N Model more generally drew great interest from representatives from several different UN programs, particularly the UN Habitat program. Like the US EPA, the UN Habitat representatives saw these campus-community partnerships as an opportunity to help cities make use of resources and toolkits they have developed to guide the climate action planning process.

Thanks to this connection, the Sage Project and the City of Lemon Grove are working together on the city's climate action planning process for the current academic year. Undergraduate students in

public health will propose mitigation and adaptation solutions for reducing greenhouse gases in Lemon Grove and will apply the UN Habitat's Guiding Principles (UN-Habitat, 2015) Toolkit to guide and evaluate the city's climate action planning process. A subset of these students will have the opportunity to directly interact with UN Habitat representatives as part of this project. I presented our work thus far at the United Nations Habitat III conference in Quito, Ecuador (Barlow, 2016, October), in effort to continue to spread the EPIC Model internationally and to highlight how such collaborations can be mutually beneficial.

Another focus of the FPIC Network is the development of evaluation and assessment methods for the purpose of documenting the impact of such programs on student learning and on the community partner's short- and long-term goals. This is important at a local level, so that university administration can reliably evaluate the impact that such programs have on student learning, graduation and retention rates, faculty teaching, and community engagement. As well, documentation of the impact of such partnerships on the community partner, with respect to enhancing livability of the community and helping the city to advance projects, is also needed for promotion of the model both locally and globally. Evidence that such programs can make a positive and meaningful impact on all those involved is thus far based on anecdotal evidence, or based on counts (number of cities, projects, faculty,

courses, students), which are interesting and useful but also limiting. For instance, anecdotal evidence is not sufficient for applying for grant funding to support expansion of these types of partnerships. Thus far, each individual EPIC-N program has made attempts to evaluate and assess themselves using resources and strategies developed at their own institutions. However, there is an advantage to developing a more standard set of tools to evaluate the programs, should the EPIC Network wish to seek out grant funding, or even become an evaluative ("accrediting") entity itself. Members of the EPIC Network, including those whose expertise is in service learning, applied research, and impact evaluation have begun work on this, and have led presentations at the annual Sustainable City Year Conference to guide current programs and discuss directions as a Network (Ellenberg, Schlossberg, & Vargo, 2016, March; Moon, Avin, Farrell, & Slotterback, 2015, April). However, currently, those of us spearheading EPIC Network efforts are doing these things above and beyond our current responsibilities at our own institutions. As such, progress is slow. As the Network expands and further establishes itself as a more official entity, the goal is to have paid staff members or outside entities to oversee efforts such as these.

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JUST START: RECOMMENDATIONS FOR LAUNCHING AN EPIC-N PROGRAM

A mantra of the EPIC Network is to "just start". Many institutions are eager to launch such large-scale programs, but are

intimidated by the high level of coordination that is required, often in the absence of sufficient funds to start a pilot program. Those who are interested in replicating the EPIC-N Model locally are encouraged to contact EPIC-N member institutions, attend the annual Sustainable City Year Conference, and host a site visit by representatives of established programs. Buy-in from university administration is key, as is having a good working relationship with a local government representative willing to launch the (pilot) partnership. Start-up funds from the university can allow for a successful launch of the pilot year, and then through the fee paid by the city partner, the program can be self-sustaining. Regular promotion of the program is also key to its long-term success and recruitment of city partners.

The collective effort to sustain the Sage Project relies on ongoing development of and collaboration on events, activities, and communication between diverse participants, a specific goal of SDSU's Strategic Plan (https://go.sdsu.edu/strategicplan/). In addition, by participating in real-world projects, our students have more opportunities to engage in research and creative activities, by working on complex problems that require a great deal of prospective community research, as well as critical thinking and problem solving, in order to develop designs, solutions, and recommendations for our community partners. These opportunities afford our students innovative and transformational

international and community engagement experiences, which are also important goals of SDSU's Strategic Plan.

These goals also align well with the Degree Qualifications Profile (DPQ; Adelman, Ewell, Gaston, & Geary Schneider, 2014), which emphasizes that the fundamental knowledge and skills necessary for postsecondary education must include specialized knowledge, broad and integrative knowledge, intellectual skills, applied and collaborative learning, and civic and global learning (2014, p. 5). Institutions of higher education use the DPQ to enhance their general education requirements or to strengthen studentlearning outcomes in specific disciplines or degree levels. Perhaps institutions could adopt and adapt their own EPIC-N program to help achieve DPQ goals.

The Sage Project has been referred to as a "marquee program" by SDSU administration, and this reputation came about very quickly, as we are only in our fourth year. Implementing the EPIC·N Model at all university and college campuses has the potential to transform higher education in a way that can have a profound impact on not only our students and future leaders, but also communities across the globe.

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