Siegel Family Endowment: Building Towards Systems Change

"If we aren't learning, we're failing...and while these lessons aren't going to change the course of history, they can help us nudge things along the way."
—David Siegel, chairman and founder, Siegel Family Endowment[1]

When David Siegel founded the Siegel Family Endowment (SFE) in 2011, he identified a need to better understand and shape the impact of technology on society. Siegel's understanding of a future technology-driven economy grew out of his more than 35 years of experience developing computer-driven, model-based trading systems. Siegel cultivated his lifelong passion for building intelligent computational systems to improve the human experience during his studies at the Massachusetts Institute of Technology (MIT), where he received his PhD in computer science. In 2001, he co-founded Two Sigma Investments—a technology-driven algorithmic investment firm—on the belief that innovative technology and data science could help discover value in the world's data.[2] Over time, David strengthened his conviction that education, science, and technology were the keys to a better world.

ARTICULATING A VISION

In 2014, SFE began its work in mission-informed grantmaking. Siegel recognized a growing disconnect between the way individuals were being educated to enter the workforce and what he identified as the demands of the future economy and society. As such, SFE devised a grantmaking strategy to support organizations that worked to understand and shape changes in the work and education landscapes. This mandate to better understand and shape learning in an innovation-driven world would drive SFE's strategy development and grantmaking approach.[3]

SFE outlined three core values to inform their work:

- **Collaboration**: SFE worked closely with grantees and partners in the field to develop strategies and solutions that drove progress and promoted greater access and opportunity.
- **Relationship-Driven**: SFE adopted a grantee-centered approach and considered the "full picture" when developing engagement strategies with grantees and other philanthropic partners.

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[1] Interview, David Siegel, chairman and founder, Siegel Family Endowment, October 22, 2018. Subsequent unattributed quotes of David Siegel in this case are from this interview.
[2] "About Two Sigma," Two Sigma Investments, https://www.twosigma.com/about/ (October 16, 2018).
[3] "About Us," Siegel Family Endowment, https://www.siegelendowment.org/ (October 15, 2018).
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- **Risky and Experimental**: SFE was eager to develop new solutions and worked to go beyond the limits of traditional funder responsibilities by creating new opportunities to solicit grantee feedback and participation.[4]

IDENTIFYING AREAS OF FOCUS

In order to better prepare individuals for success in a technology-driven economy, SFE identified three primary areas of focus to guide their work: learning, workforce, and infrastructure.

- **Learning**: SFE believed that rapid changes in technology affected how and what people learned. It feared that without adaptable skills, more people risked being left behind by digital transformation. To advance the work of its grantees, SFE funded organizations that promoted student-centered learning and teacher professional development, broadened access to future-relevant skills, and built platforms and participation for open knowledge (**see Exhibit A**).
- **Workforce**: SFE sought to prepare all individuals to meaningfully engage in a technology-driven economy; however, access to education, training, and skills that would be relevant in the future economy were not widely available. To address this gap, SFE funded organizations that aimed to understand the future of work, facilitate connections between education and application, and broaden access to the innovation economy (**see Exhibit A**).
- **Infrastructure**: The internet and new technologies changed the ways individuals engaged with both institutions and one another, and reshaped the foundational elements that underpinned civil society. Through its emerging infrastructure portfolio, SFE supported organizations that promoted a new understanding of "modern infrastructure," mitigated the potential risks and harms of ubiquitous technology, strengthened civil society, and leveraged technology and data to inform better public sector decision making (**see Exhibit A**).

DEFINING A PHILANTHROPIC APPROACH FOR SYSTEMS CHANGE

SFE understood that systems change required a significant shift in philanthropic practice. According to Jessica Traynor, SFE executive director and president, SFE defined systems change as the process of "facilitating creative collaboration between the organizations and individuals already working on a problem in order to achieve impact at scale."[5] Although there was no industry-accepted definition of systems change, SFE embraced the notion that systems change addressed policies, procedures, and cultures within a particular issue area; elevated the voices of

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[4] "SFE 2018-2019 Strategy Deck (internal)," *Siegel Family Endowment*, January 2018, p. 9.

[5] Interview, Jessica Traynor, executive director and president, Siegel Family Endowment, October 15, 2018. Subsequent unattributed quotes of Jessica Traynor in this case are from this interview.

those served by the system (i.e., their target beneficiaries); and attempted to improve the experiences and outcomes of all stakeholders.[6]

To achieve its mission at a systems-level, SFE developed a three-pronged grantmaking approach that it believed would allow its grantees to better leverage SFE's entire portfolio of assets:

- **Invest**: SFE found that it was increasingly difficult to predict the ways that rapid digital advances would impact the future economy, and they were committed to supporting organizations that brought research-informed and creative perspectives to problems faced across all of society.
- **Amplify**: SFE was committed to using their resources and platform to spotlight the work of their grantees.
- **Connect**: SFE wanted to systematically create connections that steered the growth of a dynamic network. SFE staff cultivated relationships between partners and grantees across traditional silos, and they started conversations that could change the way the field approached problem solving.

DEVELOPING A GRANTMAKING PROCESS FOR SYSTEMS CHANGE

Unlike traditional philanthropic models that outlined investment criteria that were rigidly applied across various portfolios, SFE's interest in systems change and scalable solutions required a more nimble, adaptable, and grantee-centered approach. With this in mind, SFE devised a four-step grantmaking process to reflect the frequently changing and increasingly complex social context it operated within.

- **Source**: SFE met organizations across a number of channels—via referrals from its peers or existing grantees, through an existing tie to SFE's network, and from active research and scouting in the field. SFE did not solicit Requests for Proposals (RFPs). Instead, SFE's relationship managers—full-time staff who worked closely with grantees and potential grantees—invested time to gain a comprehensive understanding of an organization's work through strong and transparent relationship building.
- **Learn**: SFE worked to understand an organization's priorities, philosophy, impact, and vision. It explored potential new relationships by getting to know key players within a particular ecosystem through in-person meetings, site visits, conversations with beneficiaries, and information about organizational and fiscal health.
- **Recommend**: When building a relationship with an organization, SFE assessed how it could best leverage its resources—financial, in-kind services, or access to its network—to support that organization's mission. Once a relationship manager determined organizational fit, they wrote the grant and acted as the organization's advocate throughout the recommendation process. This eliminated the often time-consuming process grantees underwent to meet an RFP's requirements. When making grant recommendations to the SFE board, SFE staff asked: How has the organization defined

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[6] Kris Putnam-Walkerly, "The Role of Philanthropy in Systems Change," *Putnam Consulting Group,* 2017, p. 2.

success and can this grant unlock further funding in this space? What is the organization's ability to mitigate potential risk? Instead of applying a standard definition of risk across their various portfolios, SFE approached risk relative to the specific context of each grantee.

- **Execute**: SFE worked with nonprofits to create an individual engagement plan for each grant, which included at least one formal check-in per year. In order to give its grantees greater autonomy and facilitate a more trusting relationship, SFE allowed grantees to select the type of check-in that they preferred—additional site visits, conversations with leadership, in-depth phone calls, or reporting. According to Traynor, "our [SFE's] grantmaking process is designed to absorb some of the more time-consuming elements of the traditional donor cycle so that our grantees may dedicate more time to fulfilling their missions and achieving greater impact."

CONFRONTING CHALLENGES

Over time, SFE sought to create new opportunities to build meaningful connection and partnership across its portfolio of grantees. Thus, beginning in 2017, SFE hosted *SFE Connects*, a series of small, intimate meetings with grantees and partners to strategically help grantees make connections beyond their traditional networks **(see Exhibit B)**.

In addition to creating new opportunities for purposeful dialogue between its grantees, SFE pursued an opportunity to advance the work of a grantee partner at the national level. In early 2018, SFE deepened its philanthropic investment in CSforALL, a nonprofit that worked with content providers, education associations, teachers, and researchers to bring high-quality computer science education programs to students through local partnerships with content providers, education associations, researchers, and funders of computer science education. Through this partnership, SFE hoped to equip all students in the U.S. with the computational thinking skills necessary to become active citizens in a technology-driven world.

With this partnership and support, which included providing CSforALL with office space and additional operational resources, SFE hoped to enable CSforALL to broaden its focus to cover national systems change, and act as a central organizer for the growing community of computer science education leaders. Under the terms of the partnership, SFE and CSforALL would operate in tandem as "sister organizations." Although CSforALL staff became employees of SFE and SFE served as the institutional home for CSforALL's full-time employees, CSforALL would remain an independent 501(c)(3) organization. While both teams worked independently in pursuit of separate organizational missions, they cooperated to develop and implement programs that furthered their shared purposes. The agreement explicitly addressed human resource management such as performance, compensation, and hiring, as well as intellectual property, confidentiality, dispute resolution, and liability. According to the terms of the partnership, a representative from SFE sat on CSforALL's Board of Directors and served on the Executive Committee to advise CSforALL's strategy for scale.

For Siegel, the partnership with CSforALL was a groundbreaking opportunity to lead on scaling access to high-quality computer science education.

> "Incorporating computational thinking education into formal education is critical to the success of all students, and together we can be thought leaders and supporters of computer science education on a national scale."[7]

The partnership showed early signs of success. For example, SFE relationship managers leveraged the knowledge capital of CSforALL content specialists to inform grant recommendations and to better understand the shifting K-12 computing education landscape. In addition, SFE began to build relationships with CSforALL's partners, providing a new pipeline of potential grantees for its learning portfolio. The partnership also afforded CSforALL a unique opportunity to connect to new funders. With additional in-house support from SFE, CSforALL could spend more time on executing its core mission. SFE also realized the need to further explain the nature of the partnership to current and potential funders of CSforALL's work to ensure that they still understood the urgency of supporting CSforALL's work, and that SFE's significant institutional support would not create a barrier to CSforALL receiving additional funding.

As SFE continued to build out its focus areas, its staff needed to better understand the impact of its investments by updating its measurement and evaluation (M&E) system. As of 2018, SFE tracked grantee progress along six key indicators, including: grant information, assessment scores, feedback (grantee satisfaction), milestones, and grant impact. While that system was easily managed, SFE realized that its M&E system was not aligned with the organization's specific goals and approach, standardized, nor used effectively to inform future practice.

In October of 2018, SFE began initial planning to revamp its M&E system to facilitate three roles. First, it sought to devise a system to ensure accountability—of SFE and its grantees—by creating a high bar of expectation for alignment, transparency, and effectiveness. Second, the system needed to facilitate an efficient data collection and management process. Finally, the system had to enable learning through the data collected to drive internal improvement. SFE would continue to investigate M&E systems to better inform future practice and strengthen its grantee partnerships.

LOOKING FORWARD

While grantmaking was the core of SFE's work, it had increasingly become engaged in a hybrid of venture and field-building philanthropy. SFE believed its role as a funder transcended its areas of focus: it was also responsible for strengthening the greater philanthropic ecosystem. To fully

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[7] "Siegel Family Endowment and CSforALL Announce New Partnership for K-12 Computer Science Education," Siegel Family Endowment, October 9, 2018, https://medium.com/csforall-stories/siegel-family-endowment-and-csforall-announce-new-partnership-for-k-12-computer-science-education-5f9d9bc48c8e (October 16, 2018).

maximize the impact of its philanthropic investments, SFE committed to establishing and refining its internal knowledge management processes in order to better share its learning and expertise from the CSforALL partnership, and support academic research on the field of philanthropy.

In four years, SFE transformed Siegel's mandate to better understand and shape learning in an innovation-driven world to develop a grantmaking strategy and approach to achieve systems-level impact. Reflecting on the organization's rapid growth, Traynor emphasized that, "Our [SFE's] grantees drive our work...and the real power is in the relationships we build and maintain. Moving forward, we will continue to embrace a grantee-centered model that values creative collaboration, relationship building, mutual accountability, and patience."

CASE QUESTIONS FOR STUDENTS

- Discuss the pros and cons of developing social change goals on an annual basis. How might this approach advance or limit systems-level impact?

- You are an SFE relationship manager. At an *SFE Connects* session, multiple grantees from the learning portfolio express their desire for SFE to pursue a cohort funding model—wherein the funder creates specific programming and learning opportunities for grantees within a particular portfolio that share similar traits (e.g., lifecycle stage, mission, strategy, target beneficiary, etc.). Given SFE's current capacity and funding strategy, discuss the benefits and associated risks of a cohort model.

Exhibit A
Sample SFE Investments

Learning

SFE made a number of investments to connect research-informed best practices to service providers, including, but not limited to:

- **Cornell Tech Teacher in Residence**: A program that provides in-school exposure to computer science and trains other educators on incorporating computational thinking principles—a set of problem-solving methods and computing education that involved expressing problems and their solutions in ways that a computer could execute.[8]
- **Scratch Foundation**: A nonprofit that helped young learners use coding as creative expression.
- **MIT Integrated Learning Initiative**: A research institute that funded, connected, and shared research investigating learning effectiveness.

Workforce

SFE made investments in a number of bold, diverse initiatives, including:

- **Aspen Institute's Future of Work Initiative:** A nonpartisan effort to identify concrete ways to address the challenges American workers and businesses faced due to the changing nature of work in the twenty-first century.[9]
- **Center on Rural Innovation**: A nonprofit that aimed to create a playbook to help rural towns leverage their assets to attract new, digital economy employers and close the rural opportunity gap.
- **ICA Fund Good Jobs**: A nonprofit that provided hands-on support to high potential businesses to create jobs for vulnerable and underserved individuals.[10]

Infrastructure

Investments in this portfolio included:

- **Data & Society**: A research institute focused on the social and cultural issues arising from data-centric and automated technologies.[11]

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[8] "Cornell Tech Program Prepares K-12 Teachers to Teach Computer Science," Cornell Tech, https://tech.cornell.edu/news/cornell-tech-program-prepares-k-12-teachers-to-teach-computer-science/ (October 16, 2018).

[9] "Future of Work Initiative," Aspen Institute, https://www.aspeninstitute.org/programs/future-of-work/ (October 18, 2018).

[10] "Impact Report 2018," ICA Fund Good Jobs, http://impact.icafundgoodjobs.org/ (October 18, 2018).

[11] "What We Do," Data & Society, https://datasociety.net/about/ (October 18, 2018).

- **Stanford Center on Philanthropy and Civil Society**: A research center that developed and shared knowledge to improve philanthropy, strengthen civil society, and affect social change.[12]
- **Wikimedia Foundation**: A nonprofit that empowered people to develop, share and utilize education content under a free license or in the public domain.[13]

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[12] "About - Stanford PACS," Stanford Center on Philanthropy and Civil Society, https://pacscenter.stanford.edu/about/ (October 18, 2018).
[13] "Wikimedia Foundation Mission," Wikimedia Foundation, https://wikimediafoundation.org/about/mission/ (October 18, 2018).

Exhibit B
SFE Connects

Goals

Through *SFE Connects* work, SFE hoped to achieve the following outputs and outcomes:

- Forge connections between thought leaders and ensure that the promising innovations of individual organizations did not occur in a vacuum;
- Catalyze new partnerships and conversations between organizations doing similar work or tackling similar issues; and
- Introduce SFE's work to its peers, to build broader support for its initiatives and work.[14]

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[14] Laura Stankiewicz, "SFE Connects - TechTalent Pipeline (internal)," *Siegel Family Endowment*, October 2017, p. 1.