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An Evaluation of the Videoconferencing Grants Program

PRESENTED TO: The William and Flora Hewlett Foundation



Introduction

The William and Flora Hewlett Foundation's Videoconferencing Grants Program has provided real value to many grantees. More than two-thirds of the grantees were able to document time, cost and travel savings, as was the original goal of the program. However, two important factors were identified that suggest modifications of the program if it is to continue. First, the technological landscape continues to evolve rapidly and low cost, flexible, quality videoconferencing options are now more readily available than when the program started. Second, many nonprofits that the Foundation might fund in this way need time and assistance to adapt culturally to the opportunities afforded by video equipment. Within the existing budget parameters of the program, a shift in emphasis from dedicated equipment to subscription services, greater flexibility in terms, and more front-loading of assessing needs and capacities within organizations would improve the program's success.

It should also be noted that the videoconferencing program generated many benefits beyond travel savings. The Foundation should consider whether it wants to continue a focus on decreasing travel and, if so, which technologies or interventions beyond video might help accomplish that. If the Foundation is committed to providing technologies that facilitate other organizational benefits (greater collaboration, better recruiting) or that are more directly linked to the purposes of the foundation's other funding support, there may be other technological interventions needed or valued by grantees.

To maximize the program's impact and stay within the realm of funding video equipment and access, the Foundation should invest more expertise in determining a grantee's communications needs and limitations before a grant is even made. Although cloud-based subscription services represent the future of videoconferencing technology, for grantees that have strong IT resources, multiple locations, and partners with compatible equipment, room-based systems could be a preferred option. Regardless of the service or the equipment provided, all grantees would benefit from additional support on how to plan and conduct virtual conferences, as well as stronger connections with other videoconferencing grantees.

What has the Videoconferencing Grants Program Accomplished?

In our survey of 38 grantees, a majority (77 percent) indicated that their videoconferencing system helped them better achieve their missions, and one of the principal ways it did so was by improving internal communications and productivity. Grantees used their videoconferencing systems to hold working-group meetings, brown-bag lunches, and other decision-making gatherings. The systems allowed staff across multiple, dispersed offices to see each other, making meetings feel more participatory and dynamic. Most grantees used the equipment for internal communications, and over 60 percent of surveyed grantees used the equipment frequently (one to three times a month or more) for this purpose.

The videoconferencing systems were particularly useful for grantees that installed equipment in multiple locations; among grantees that used their videoconferencing equipment on a weekly basis for internal meetings, 74 percent had multisite installations. One multisite grantee said that their system made their organization feel more connected because it provided greater opportunities for co-leadership and participation at every level of the organization. This was especially valuable for this

organization, as its new strategic plan emphasized cooperative and participatory leadership. Another grantee said that the equipment made it easier to hold brown-bag lunches and other semi-formal events for staff across offices; these interactions greatly improved staff morale and cohesion, bringing a sense of collegiality that was absent prior to obtaining their videoconferencing system.

Grantees also used their videoconferencing systems for other purposes: Seventy-nine percent used their systems for external project development, partnerships, and planning; 63 percent used their systems to provide employees with education, training, and professional development opportunities; and 42 percent said that the equipment helped them hire, interview, and recruit.

Many grantees took advantage of the videoconferencing system's advanced features. Sixty-five percent of surveyed grantees used their equipment's content-sharing features, and 52 percent used their equipment for multi-point videoconferences. In both cases, nearly all grantees described the features as "very" or "extremely" useful.

Over two-thirds of grantees (68 percent) saved either time or money by using the videoconferencing equipment to reduce travel. The amount of savings varied for each grantee based on the number and location of participants in a conference, but one grantee estimated that a single videoconference saved their organization up to \$1,000 per conference.

What Challenges has the Program Experienced?

Technical challenges, unease with using the videoconferencing equipment, and a mismatch between the equipment and the grantee's needs posed the greatest obstacles to the successful use of videoconferencing systems, especially for those grantees that installed equipment at just one site.

Fifty-five percent of grantees experienced some trouble using their videoconferencing equipment because external partners did not have compatible equipment. This was particularly problematic for grantees with Tandberg systems; some assumed—incorrectly—that they could only conduct videoconferences with external partners who also had Tandberg systems. But even when grantees found partners with compatible equipment, they often had difficulty overcoming other technical barriers, or were otherwise discouraged by the extensive coordination required to make videoconferences possible. This coordination included the need to schedule videoconferences weeks in advance, to conduct test calls, or to have IT staff on-call to monitor every videoconference. As a result, grantees with single-site installations were generally less satisfied than those with multisite installations; among grantees for which the videoconferencing equipment did not help them achieve their mission, 89 percent were single site installations.

For some grantees, simply getting the equipment delivered and installed was problematic. One grantee said that their equipment had to be redelivered two to three times because of miscommunication between the vendor and the delivery company. Other grantees experienced longer-than-anticipated installation and set-up times. For nearly 50 percent of grantees, more than three months elapsed between when they received their grant and installed their equipment.

Some grantees also experienced long periods of time between when they installed the equipment and felt comfortable using it. For nearly 40 percent of grantees, it took more than three months before their

staff was comfortable using the system. These grantees found it difficult to overcome technical challenges, and relied on systems that they already knew—such as phone calls, conference calls, GoTo Meeting, and Skype—even though these options had inferior video and audio quality compared to the videoconferencing systems. Several grantees reported that additional staff training would have accelerated the adoption and use of their videoconferencing equipment.

Vendors also contributed to some of the challenges faced by grantees, especially Vendor A. A third of the grantees that used Vendor A had either an unsatisfactory or extremely unsatisfactory experience. Some reported that Vendor A did not provide training and provided very poor support. In some cases, Vendor A also installed the system incorrectly. Grantees said the installation process would have been much smoother if Vendor A had been more responsive and supportive, or if they had used another vendor.

International grantees experienced a host of problems that prevented them from using their videoconferencing systems effectively. For some, customs procedures delayed receipt of equipment. For others, firewall issues prevented proper connections, causing further delays. Limited bandwidth also was troublesome for international grantees in rural areas; even when they purchased additional bandwidth, it often was insufficient to conduct a videoconference. In addition, the instability of local power supplies was problematic. Because the videoconferencing equipment needs power stabilization and protection equipment to guarantee its performance, one grantee was forced to purchase a separate power source and stabilizer in order to hold a videoconference. Even when videoconferences were successfully established, many of the international grantees still experienced jumpy audio and pixilated video.

Recommendations

There are two principal approaches for future videoconferencing grants: 1) Continue to provide roombased systems, or 2) Provide subscriptions to cloud-based services. To determine the best option, the Foundation will need to better examine the unique needs, size, and capacity of each grantee. Regardless of the chosen approach, the Foundation can implement several practices to improve all grantees' videoconferencing experiences:

- Invest additional time and resources in an up-front needs assessment: After program officers identify a potential videoconferencing grantee, they should dedicate additional time to pinpoint the grantee's specific communications needs. The Foundation's technical experts could identify trusted technology consultants to work with Program officers in the initial assessment of potential grantees. These consultants can determine what kind of system would best meet the grantee's needs, or if their needs could be satisfied by free services that are readily available. This additional investment will decrease the likelihood that grantees will receive videoconferencing equipment that doesn't serve their purpose. A worksheet of criteria for dedicated versus cloud-based equipment might be useful for program officers.
- **Opt for grant terms that are not rigidly time-bound:** The additional investment in an up-front needs assessment can be offset by shorter terms for subscriptions to videoconferencing services (for grantees using cloud-based services) or for included technical support (for grantees using room-based systems). Because technology in this field is advancing at such a rapid pace, a

shorter term of service would allow grantees to adopt services that are better suited for their needs as they become available.

- **Provide resources on how to plan, organize, and conduct successful videoconferences:** A lack of familiarity or comfort with virtual meetings was one of the greatest barriers to the videoconferencing systems' use. This challenge was distinct from issues of technical complexity with the equipment itself. The staff at some organizations were unsure about how to develop agendas for videoconferences, how (and who) should lead such meetings, or even how to arrange the furniture in the rooms that would host videoconferences. Resources to help grantees surmount these organizational and cultural barriers would accelerate the use of the videoconferencing equipment. These resources may already exist from third parties and could be included as a simple "resource package" with grant contracts.
- **Connect grantees with each other:** The Foundation should provide a forum for grantees to share challenges and best practices, and to be introduced to organizations with which they can share videoconferencing facilities. This forum could take the form of an online chatroom or a social media page, or it could simply be an accessible and up-to-date list of grantees' names, equipment, and locations. The Foundation should place greater emphasis on the stipulation that grantees that install room-based systems make their equipment available for use by other grantees to communicate with external partners.

Criteria for room-based systems

In many ways, room-based systems are a dying breed. But these systems can still provide superior video and audio quality, and they may be the most appropriate videoconferencing option for organizations with the following characteristics:

- Robust IT staff capacity: Even grantees that had great success with room-based systems indicated that they required extensive IT staff support to troubleshoot individual videoconferences and to encourage staff to take advantage of the systems. One grantee assigns an IT staff member to occupy a "help desk" during every videoconference. This kind of support is not sustainable for smaller organizations or for organizations with limited internal IT capacity.
- **Multiple sites for installation:** Grantees that have had the greatest success with room-based systems have been those with multiple office locations, each with its own system. The systems provided these grantees with a videoconferencing intranet, of sorts. Grantee staff felt more confident when each participating site in a videoconference had compatible systems, and they were thus more likely to fully utilize the superior video and audio quality of their room-based systems. One grantee said that only room-based systems were "board-worthy" (ie, suitable for conducting board meetings).
- Partners that have compatible equipment: Among the greatest barriers to successful use of room-based systems were grantees' inability to find sites with compatible equipment for their partners to use. This was especially challenging when grantees tried to conduct videoconferences with new partners, in new locations. Grantees should have a list of external partners with whom they plan to conduct videoconferences, and who have access to compatible equipment themselves.

Criteria for Cloud-Based Services

Cloud-based services such as BlueJeans, MegaMeeting, and Vidyo represent the future of videoconferencing. They allow users to conduct videoconferences across a wide range of compatible devices and services (including Skype, in some cases), without imposing the technical burdens inherent

with room-based systems. Video and audio quality for cloud-based services is not as high as that provided by room-based systems, but it is improving as the technology advances. We recommend that the Foundation continue to provide high-quality televisions, cameras, and audio equipment on mobile carts for grantees using these services. Organizations most suited for a cloud-based option have the following characteristics:

- Limited in-house IT capacity: Most cloud-based services can be accessed through any web browser, and many include technical support as part of a user's subscription. For grantees with small IT staffs, web-based services mean that there is one less piece of hardware to maintain.
- A single site for installation: The inherent disadvantages in video and audio quality of cloudbased systems can be mitigated somewhat by the use of a high-quality television, camera, and audio equipment, which the Foundation provided in its initial experiments with cloud-based services. But because such equipment is not necessary, grantees with only a single office can install a high-quality television and camera at that location and not be precluded from conducting videoconferences with other locations that lack such equipment.
- Need for great flexibility: Users of a cloud-based videoconferencing service only need a webenabled device, a video camera, and a screen. Many cloud-based services also allow participants to conduct videoconferences using room-based systems (on H.323 equipment), desktop systems (on PCs), or mobile systems (on laptops or phones), depending on their requirements. Some cloud-based services are also compatible with popular consumer services, such as Skype or Google chat. (Lack of Skype compatibility, in particular, was a major barrier to adoption for several recipients of room-based systems.) The flexibility offered by cloud-based services is well suited for grantees that plan to conduct videoconferences with a wide range of partners, or that are uncertain about their future videoconferencing needs.
- **Poor experience with existing videoconferencing systems:** Because some cloud-based services can be used with the same equipment that comprises room-based systems, organizations that have had unsuccessful experiences with such systems including some Foundation grantees could benefit from subscriptions to cloud-based options. This would allow grantees to take advantage of their existing televisions, cameras, and audio equipment, and it would mean that the Foundation would only need to provide support for the service subscription itself.

Appendix A: Grantee Survey Findings

Findings by number of site installations

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- Among the survey respondents:
 - o 20 were grantees with single-site installations of their videoconferencing equipment
 - o 18 were grantees with multisite installations
- In general, grantees with multisite installations had more positive experiences with their equipment
- Among grantees for whom the videoconferencing equipment did *not* help them achieve their mission, 89% were single site installations
- Grantees with multisite installations reported greater reductions in travel and greater increases in productivity across offices than those with single-site installations
- Among grantees who used their videoconferencing equipment on a weekly basis for internal meetings, 73% were multisite installations
- Among grantees for whom the videoconferencing equipment did *not* increase collaboration with external partners, 58% were single site installations



Grantees by Number of Site Installations (Survey Respondents Only, n=38)



¹HF provided funding for up to 3 sites. Some grantees had existing equipment.



Successful:

Videoconferencing

Distribution of Grantees by Number of Sites and Belief that the Videoconferencing Equipment Helped Grantee Achieve its Mission (n=35 grantees)





Distribution of Grantees by Number of Sites and Experience with Videoconferencing Equipment-Related Reduction in Travel (n=28 grantees)



Distribution of Grantees by Number of Sites and Videoconferencing Equipment-Related Increase in Productivity Across Offices (n=23 grantees)



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Distribution of Grantees by Number of Sites and Frequency of Use for Internal Working Groups and Decision-Making Meetings (n=35 grantees)



Distribution of Grantees by Number of Sites and Videoconferencing Equipment-Related Increase in Collaboration with External Partners (n=31 grantees)



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Findings by vendor



- Among the survey respondents:
 - o 16 grantees used Vendor A
 - o 13 grantees used Vendor B
 - 8 grantees used other vendors
 - o 1 grantee did not identify a vendor
- 69% of grantees who used Vendor B were either "somewhat satisfied" or "very satisfied" with their vendor experience; 44% of grantees who used Vendor A felt similarly satisfied
- In general, the choice of vendor did not have a major effect on whether the videoconferencing equipment helped grantees achieve their missions
- Among grantees who reported that the videoconferencing equipment reduced travel "a great deal" or "quite a bit," 45% used Vendor B
- Among grantees who used their videoconferencing equipment on a weekly basis for internal meetings, 50% used Vendor B
- Among grantees for whom the videoconferencing equipment increased collaboration with external partners at least to some degree, 79% used Vendor A



Grantees by Vendor (survey respondents only, n=38)





Grantee Satisfaction with their Vendor







Distribution of Grantees by Vendor and Experience with Videoconferencing Equipment-Related Reduction in Travel (n=28 grantees)







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Vendor



Distribution of Grantees by Vendor and Frequency of Use for Internal Working Groups and Decision-Making Meetings (n=35 grantees)



Vendor





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Vendor

Findings by year of grant award



- Among the survey respondents:
 - 9 grantees received their grant in 2006
 - 4 grantees were awarded their grant in 2008
 - 8 grantees were awarded their grant in 2009
 - 7 grantees were awarded their grant in 2010
 - 10 grantees were awarded their grant in 2011
- Among grantees who reported that the videoconferencing equipment reduced travel "a great deal" or "quite a bit," 82% received their grant *since* 2009
- Among grantees who used made limited use of their videoconferencing equipment for internal meetings (0-3 times/year), 60% received their grant *before* 2009
- Among grantees for whom the videoconferencing equipment did *not* significantly increase collaboration with external partners, 83% received their grant *since* 2009



Grantees by Year of Grant Award (n=38)





Distribution of Grantees by Year and Belief that Videoconferencing Equipment has Aided in Achieving Organizational Mission (n=35 grantees)



Successful: Videoconferencing equipment helped grantee achieve its mission

Unsuccessful: Videoconferencing equipment did not help grantee achieve its mission



Distribution of Grantees by Year and Experience with Videoconferencing Equipment-Related Reduction in Travel (n=28 grantees)





Distribution of Grantees by Year and Videoconferencing Equipment-Related Increase in Productivity Across Offices (n=23 grantees)





Distribution of Grantees by Year and Frequency of Use for Internal Working Groups and Decision-Making Meetings (n=35 grantees)





Distribution of Grantees by Year and Videoconferencing Equipment-Related Increase in Collaboration with External Partners (n=31 grantees)



Findings by program area



- Among the survey respondents:
 - 12 were in the Education portfolio
 - 7 were in the Environment portfolio
 - 3 were in the Global Development portfolio
 - 2 were in the Performing Arts portfolio
 - 1 were in the Philanthropy portfolio
 - 13 were in the Population portfolio
- Among grantees who reported that the videoconferencing equipment reduced travel "a great deal" or "quite a bit," 45% were within the Education portfolio
- Among grantees who used made limited use of their videoconferencing equipment for internal meetings (0-3 times/year), 47% were within the Population portfolio
- Among grantees for whom the videoconferencing equipment did *not* significantly increase collaboration with external partners, 50% were within the Education portfolio



Grantees by Program Area (n=38)





Successful:

Videoconferencing

Distribution of Grantees by Program Area and Belief that Videoconferencing Equipment has Aided in Achieving Organizational Mission (n=35 grantees)





Distribution of Grantees by Program Area and Experience with Videoconferencing Equipment-Related Reduction in Travel (n=28 grantees)



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> Distribution of Grantees by Program Area and Videoconferencing Equipment-Related Increase in Productivity Across Offices (n=23 grantees)





Distribution of Grantees by Program Area and Frequency of Use for Internal Working Groups and Decision-Making Meetings (n=35 grantees)



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> Distribution of Grantees by Program Area and Videoconferencing Equipment-Related Increase in Collaboration with External Partners (n=31 grantees)



Findings by site location



- Among the survey respondents:
 - 28 grantees had sites solely within the United States ("domestic")
 - 10 grantees had sites outside the United States ("international")
 - Note: A grantee was identified as "international" if it received funding for a site installation anywhere outside of the United States. Some grantees with multiple sites had installations both within and outside of the United States – those grantees were considered "international" in this analysis..
- Among grantees who reported that the videoconferencing equipment reduced travel "a great deal" or "quite a bit," 82% were domestic (U.S.-only)
- Among grantees who used made extensive use of their videoconferencing equipment for internal meetings (1-3 times/week), 82% were domestic (U.S.-only)



30 25 20 Number of Grantees 15 28 10 5 10 0 Domestic International

Grantees by Site Location (n=38)*

Site Location



Successful:

Videoconferencing

Distribution of Grantees by Site Location and Belief that Videoconferencing Equipment has Aided in Achieving Organizational Mission (n=35 grantees)*





Distribution of Grantees by Site Location and Experience with Videoconferencing Equipment-Related Reduction in Travel (n=28 grantees)*



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> Distribution of Grantees by Site Location and Videoconferencing Equipment-Related Increase in Productivity Across Offices (n=23 grantees)*





Distribution of Grantees by Site Location and Frequency of Use for Internal Working Groups and Decision-Making Meetings (n=35 grantees)*





Distribution of Grantees by Program Area and Videoconferencing Equipment-Related Increase in Collaboration with External Partners (n=31 grantees)*

