How to set up a High-Impact, Online Mentoring Program

There is a flurry of activity and interest in online mentoring, the best platform to use, best matching software, how to train everyone to use video platforms etc. Our ancient brains are finely tuned to seek the dopamine that technical devices release with their buzzes, vibrations, flashes of light and limitless information readily available.

It's no surprise that when we try to tackle complex, social issues with technology, we get mired in the very first step - creating a virtual environment with fast feedback, tightly controlled learning experiences under the guise of "personalization".

We, at Technovation, are guilty of doing this over the past 14 years to motivate and nurture self-directed, online learners and mentors. We have engaged ~20,000 mentors from industry to support ~163,000 students. Last year we were hoping to engage ~1000 mentors for our Technovation AI Families program and were only 30% successful. It's not just a recruiting challenge, it's a retention challenge and a challenge in ensuring that our collective efforts (industry, NGOs, volunteers) provide a meaningful experience with long-term impact.

Through our mistakes we have learned much about what doesn't work. Our biggest lessons may be helpful as we all navigate a world of increasing virtual interactions, and seek to make effective decisions around virtual employee engagement:

1. Identify the goals of the volunteering opportunity
2. Understand driving forces in a complex system
3. Identify and address behavioral barriers to adoption
4. Listen to the silence, and work to understand it
5. Manage for change

Step 1: Identify the goals of the volunteering opportunity

When we think about online mentoring much of the focus is on the platform that enables the virtual connection. What is usually not discussed is the purpose - why would a mentor want to spend time mentoring, what is she hoping to get out of the experience, how will this become part of her identity, what is the long-term impact

on the mentee, what will motivate the mentee to overcome technology issues (that are bound to occur) to invest time in building an online connection with a stranger etc. Our ancient brains do not like planning that far ahead. We do not spend as much time planning the long-term impact of online mentoring, as we do choosing the platform. And that is backwards.

Recommendations:

At a system level

- When setting up a virtual mentoring experience, think about the main gap the mentors will be filling - social capital, technical expertise, career knowledge, role modeling and so on. For instance, if the gap is a technical resource gap, it may not be worth it to set up an elaborate online mentoring program that will have lukewarm results the first year. Instead the resource gap could be more easily filled by curating relevant youtube tutorials and training near-peer mentors to engage students in watching, discussing and applying the skills.
- Identify what success would look like when these gaps have been filled and how you would measure that success. For instance, if the goal is to increase social capital in an under-resourced community, and provide career knowledge to students, then a meaningful metric could be increased access to resources and achievements for the community members. This of course means that the intervention cannot be a single instance, and impact measurement also has to be short-term and longitudinal. Without that, the program goals will not be authentically met.

At the individual level

- Identify what would motivate an individual to volunteer and how this experience would help shape her identity
- Similarly, identify what would motivate the mentee to engage in such a relationship and how the mentee would grow as a result.

Step 2: Understand Driving Forces in a Complex System

Effective, online social interactions are complex systems with positive and negative feedback loops and variables operating at different timescales. To increase success,

we need to understand critical structuring forces that drive not just individual behavior but also that of the organizations that the individuals represent, such as the school or the corporation. Sometimes the corporate structural forces (such as quarterly revenue cycles) may not be aligned with the force needed to drive the mentoring experience. Sometimes the reason why an approach fails could be more mundane, obvious, but still structural! For instance, we learned the hard way that recruiting mentors during the "dog days of summer" just doesn't work because people are not in the mood to make a commitment.

And now in a COVID-19 environment, we need to take into account this global driving force as we try to plan and execute on our collective impact efforts.

Recommendations:

- Identify the goals of the system, such as quarterly revenue, employee well-being, improving a brand, etc.
- What are the rules of the system (incentives, punishments, constraints)? For instance, women software engineers in the gaming industry are highly sought after as role models and brand ambassadors, but this heavy demand on their time may actually slow their career down.
- What is the distribution of power over the rules of the system? Who has the power to add, change, evolve, or self-organize the system structure?
- Are there any negative feedback loops associated with the volunteering opportunity? For instance, in many organizations, the same individuals raise their hands for volunteering opportunities resulting in burnout.
- Are there any positive feedback loops? In volunteering opportunities that are well set up, the volunteering experience for the individual is meaningful to her, makes an impact on the community, while also aligning with the organization's larger goals (brand strengthening, employee well-being, revenue etc).

Adapted from Donna Meadows Primer on Thinking in Systems

Step 3: Identify behavioral barriers to adoption

The research conducted by Ideas42 introduces a missing step to the design thinking process - diagnosing behavioral barriers to adoption at every step. Instead of rushing headlong into finding the right mentoring platform, and matching people based on their stated interests, needs and geographies, we would recommend spending time looking at past impact data from groups that have been struggling with online mentoring, looking at the dosage of interaction, the multi-year impact (or

lack thereof), and teasing out the behavioral barriers to adoption. At Technovation we have found that students make the most resilient gains in self-efficacy when they are supported by a mentor, and for a significant period of time - more than 40-50 hours of technology entrepreneurship. Mentors who have had previous experience with mentoring are more likely to persist through this long commitment. And so our goal this year is to sequence small engagements that help nurture a mentor's identity as someone who gives back to their community, as someone who is making a positive impact in their community, and then follow up with higher dose volunteering opportunities.

Recommendations:

If we do not set aside time to identify and address barriers, then we will not be able to widen the pool of volunteers, beyond the usual who raise their hands.

At a system level

- Think about the barriers that may stand in a volunteer's way - from her manager, her peers, her reports, project deadlines etc that conflict with the volunteering opportunity.
- When possible, try to remove such barriers, or offer support and incentives to overcome them.

At the individual level

- Work with the partner community organization to identify behavioral barriers to volunteering.
- This is where the right technology platform and program design can be a powerful way to overcome behavioral barriers through online social support, feedback, positive reinforcement etc.

Step 4: Listen to the Silence, and Work to Understand it

In a culture driven by KPIs and management by objectives, much emphasis is placed on the quantitative data gathered through the online platforms. What is much harder to understand is the silence - the mentors and mentees who drop out after registering, those who just simply stop responding. Surveys and interviews shed some light, but not nearly enough. It requires much dedication and detective work to identify the people who dropped out, to engage with them and try to understand the historical, social and psychological context of the path not taken.

Step 5: Manage for change

Despite the above set of lessons, one insight from complex systems has been that attempts at truth seeking, may in reality just lead to the development of new myths. I

think this humility and clarity is important - for practitioners as well as funders. Annual grant cycles limit everyone's view to the static timeframe of one year. A new and multi-year view of this complex system is needed, that stresses adaptability and learning through thoughtful probing. For instance, instead of optimizing for short-term increased interest in STEM, both practitioners and funders should aim for increased capability - increased resources, voice, influence, agency and tangible achievements - for it is these gains that will truly help under-resourced communities become stronger and more resilient.

In the end, the final truth is that we need to continuously manage for change - managing for how global needs evolve, how environments change and what mentoring communities need to thrive and be future-ready (Panarchy, 2002).

"I love encouraging young people to be world class, creative and critical thinkers and ultimately, problem solvers" - Technovation Mentor