

Introduction

Less than 67% of global learners have digital skills and nearly 850 million learners have not yet attained secondary-level skills.¹ We will not make progress in addressing these critical global challenges in isolation. Globally, we need intentional, collaborative opportunities that build capacity, are informed by research on learning, and are empowered by educational technologies that can help bring learning that builds secondary-level and digital skills to scale.

“We must push forward together, with a focus on tangible actions where it matters most: on the ground, in the classroom, and in the experience of teachers and learners alike.” - United Nations Secretary General of Transforming Education

Academic achievement does not happen by chance. Rather, experiences that result in skills (both digital and academic) engage learners in multi-modal learning, where learners do more than select an answer from a list. Our world’s learners need more opportunities to engage in authentic learning that is prioritized over mastery of facts. Those authentic learning experiences are applied, relevant, and make use of problems that matter to the lived experiences (regardless of the physical location) of our learners. Further, we must support our teachers so that they can enable access to personalized learning that sticks.

The bold task of addressing global learning cannot happen through traditional models, pathways, or policies alone. Our learners have demonstrated that those approaches and tactics are not creating the results they need to be economically independent, lifelong learners. The barriers to their success can be overcome, but no one can do it alone.

In short, we need to accelerate localized education efforts, and we need creative, networked stakeholders to accelerate their collaborations and connected works immediately.

About Team4Tech

Team4Tech is a nonprofit impact accelerator, bridging the global digital equity gap in education to create inclusive opportunities for under-resourced learners. Since 2013,

¹ World Skills Clock Database (2022). [Worldskillsclock.org](https://www.worldskillsclock.org)

Team4Tech has supported 50+ education-focused nonprofit partner organizations in 23 countries through long-term pro bono consulting services and over 15 million dollars in technology grants. Our nonprofit partners work in under-resourced areas and are using educational technologies as a driver for improved learner outcomes and engagement. The Team4Tech program team facilitates leadership training, visioning and strategy support throughout three-to-five-year partnerships. These partnerships accelerate the nonprofit organization's impact on learning by building organizational capacity, developing internal digital literacy skills, creating programs that leverage technology to transform learning, and ultimately enable grant-supported nonprofits to obtain a point of sustainability and scale. As a result nonprofits directly serving learners in under-resourced communities have achieved noteworthy success.

At the core of the work at Team4Tech is the belief that educational technologies coupled with long-term training and support presents the best (most malleable) opportunity to positively impact learners in under-resourced communities.

The program team at Team4Tech continues to nurture collaborations between corporate volunteers and vetted global nonprofits. However, our organization has realized that the work we do, the tools that are created, and the models that are sustained must be shared.

To enable this sharing and accelerate the impact our organization has on education-focused nonprofits in under-resourced areas, Team4Tech launched a newly envisioned global Community of Practice. The design framework for this community is intentional, research-driven, and focused on long-term impact.

The following provides an overview of how this unique design framework is allowing members of the Team4Tech Community of Practice to engage, inspire, connect, and amplify impact.

Why a Community of Practice?

Team4Tech engages in high-touch partnerships, providing extensive leadership training, facilitation, support, and programming. These projects focus on building digital literacy and infrastructure, while supporting partners as they address student engagement and agency. Each project creates a unique pathway for sustainability and scale at the local level. The resulting materials from the collaborative work of educators, volunteers, and nonprofit staff have a global application—even years later.

When Team4Tech initially started to think about all the digital assets that we have amassed, we had several options to share those resources. We could...

1. Create a resource library.
2. Create a project directory.
3. Create a community of practice.

Considering our organizational foundations, which continue to promote connection and collaboration, the decision to create a community of practice was obvious.

With this choice, we could create a space that continues and strengthens our work and enables our mission of acceleration.

What is a Community of Practice?

As described by Wenger, McDermott, and Snyder, “communities of practice are groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis.”² Relying on the research, we identified core learnings from previous work in developing communities of practice that would promote collaboration, bring together our target audience (education-focused nonprofit organizations serving under-resourced communities), and empower (rather than direct) relevant interactions and learning opportunities.

As noted by Richardson, Hunyh, and Sotoo, successful communities pinpoint a group of people who share a common purpose, get them talking, and through those conversations do something together that is of value to each of them in unique and varied ways.³ As we sought to design our community, we wanted to strengthen our impact by creating a new pathway to reach more of our target audience.

We decided that while we engage strategic nonprofit partners as part of our programming, we wanted our community of practice to be open to like-minded peer organizations: those education-focused nonprofit organizations serving learners in under-resourced communities. In essence we wanted to open our

² Wenger, E., McDermott, R. & Snyder, W. (2015). *Cultivating Communities of Practice: A Guide to Managing Knowledge*. Boston, MA: Harvard Business School Press.

³ Richardson, B., Huynh, K., and Sotou, Kai (2019). *Get Together: How to build a community with your people*. Stripe Press. Kindle Edition.

space to all education-focused nonprofit organizations serving learners in under-resourced communities to lay a strong foundation for the connected, collaborative work that can solve global learning challenges.

Communities are most productive when there are continual actions towards collaboration.⁴ As part of our organizational commitment towards equity, we wanted our community to be a place of empowerment—where there is more to do *with* than doing *for*—a place free of the power dynamic where one group is educating and the other being educated. We latched onto two key ideas to enact our commitments to an equitably-designed community of practice: co-design and collective knowledge.

According to Burkett, “co-design is a process that uses creative and participatory methods. There is no one-size-fits-all approach. Instead, there are patterns and principles that can be applied in different ways with different people.”⁵ As a form of citizen-led advocacy, co-design empowers the people directly experiencing the problem they are trying to solve to act by integrating solutions into their own unique situations. As opposed to a structured curriculum or program that community members move through, we committed to having a community that was responsive to the needs of our members and uses data-informed decision-making to continually design (rather than simply implement staged and predetermined content).

“Participatory experience is not simply a method or set of methodologies, it is a mindset and an attitude about people. It is the belief that all people have something to offer to the design process and that they can be both articulate and creative when given appropriate tools with which to express themselves.”
E. Sanders

Collective knowledge describes the outcomes when individuals openly share their knowledge with a group. When this knowledge is connected in ways that allow for problem solving, troubleshooting, and planning, it becomes collective intelligence. Collective intelligence is the application of collective knowledge to solve large-scale social issues.⁶ In communities of practice this collective knowledge (or ideally, collective intelligence) happens when individuals with shared purpose engage in thinking together about problems and solutions.

⁴ Darling-Hammond, L., Hyster, M.E., Sheffield, R., & Gardner, M. (2018). How California Districts Can Support Best Practices in Effective Teacher Professional Development. Stanford, CA: Learning Policy Institute.

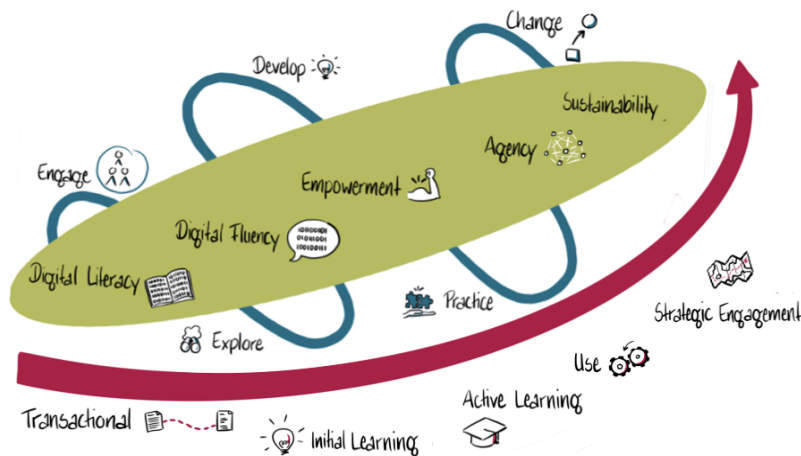
⁵ Burkett, I. (2002). An introduction to co-design. Sydney, Australia: Center for Social Impact.

⁶ The National Endowment for Science Technology and the Arts (2022). London, England.

One of the most often cited benefits of a community of practice is the availability of a space for making sense of experiences, challenges, and innovations.⁷

The Team4Tech Design Framework

The key ideas of co-design and collective knowledge, along with our commitment to using the extant literature on communities of practice, drove us to think critically about our organizational mission, our role in accelerating impact, and identifying how our programmatic solutions could lay the groundwork for an interconnected design framework.



As part of our overall organizational strategy, we have articulated our Solutions Roadmap. This roadmap is grounded in organizational change literature (especially that related to educational technologies). Articulated in this Solutions Roadmap is how Team4Tech supports education-focused nonprofit organizations serving learners in under-resourced communities. Team4Tech intentionally moves nonprofit organizations' use of educational technologies that advances agency, empowerment, and engagement of all learners.

Our Solutions Roadmap creates a pathway for our Community of Practice to support our members and our strategically-engaged partners. As we have laid the groundwork for our Community we have intentionally built space that can support engaged nonprofit organizations in learning and collective knowledge sharing around each of

⁷ Wenger-Trayner, Etienne & Wenger-Trayner, Beverly (2020). *Learning to Make a Difference: Value Creation in Social Learning Spaces*. Cambridge University Press.

the three phases of our roadmap. The Community of Practice allows us to continuously engage with and support nonprofit organizations with just in time research, carefully curated resources, and opportunities to engage with others.

Example Supports for Solutions Roadmap Phases in the Community of Practice

- To support the policy making as part of Phase One of our Solutions Roadmap there is a Community of Practice course in creating your acceptable use policies.
- To support the integration goals of Phase Two of our Solutions Roadmap there is a group dedicated to sharing training materials for nonprofit staff, volunteers, and facilitators of programs that integrate technology.
- To support the integration goals of Phase three of our Solutions Roadmap there is a resource library of freely available assessment tools that can be used to demonstrate impact and capture data around learner trajectory and mastery of key skills.

However, the Solutions Roadmap alone does not help us to co-design or build collective knowledge. To do that we needed to adopt a knowledge acquisition model. After seeking out vetted, research-based options we found that, by and large, the knowledge acquisition models were not aligned with co-design processes. Using the research base available to us, we formulated and tested a knowledge acquisition model that would provide the guide rails that ensure our Community of Practice is a space that empowers members to build knowledge through an intentional yet co-designed experience that balances levels of engagement with levels of experience, skill, and access to technology.

After testing and refinement, our knowledge acquisition model moves from low level engagement with our Community of Practice to high-level more strategic engagement with outcomes that can be articulated (see Table 1).

Table 1: The Team4Tech Knowledge Acquisition Model for Community of Practice Members

Level 1	Level 2	Level 3	Level 4	Level 5
Transactional	Initial	Active	Application	Strategic
<i>Connecting to the CoP to access a specific</i>	<i>Engaging in interactions inside the CoP that are</i>	<i>Trying new ideas and approaches learned from</i>	<i>Connecting, reflecting, planning, applying new learning from the</i>	<i>Engagements in the CoP are bringing new opportunities</i>

<i>article, experience, etc. that is connected to their work.</i>	<i>supporting their work through addressing immediate pain points.</i>	<i>the CoP directly related to their work to improve overall impact.</i>	<i>CoP directly to their work and reflecting on what additional resources are needed to make sustainable change within their organizations.</i>	<i>for their work.</i>
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It is assumed that members of our Community will not move from level one to level five. Instead, we know through our co-design process that members will continually bounce between and through levels. This allows our members to integrate solutions into their own unique situations without prescribing what those solutions are or what the importance of those solutions should be to local contexts.

Team4Tech incorporated self-check actions to hold us accountable as we carefully and strategically embedded the co-design process. This self-check would help us to ensure that we were not being over prescriptive and holding true to our commitment to design *with* not *for* our Community.

Co-designing in the Team4Tech Community means that our internal teams are committed to:

1. Posing questions that are connected yet flexible.
2. Providing access to existing tools that help guide self-reflection and planning.
3. Practicing thought leadership to advance practice.
4. Thinking systematically to ensure the success of our members.

It is our belief that by practicing these internal commitments members will have key experiences including:

1. Engaging in our Community of Practice and developing a culture of input.
2. Exploring current practice, connecting with others, and investigating new ways of thinking, creating, and producing.
3. Developing new toolkits: identifying skills that are still needed, creating pathways to master those skills, and identifying supports available.
4. Practicing new skills, models of impact, and plans for future work.
5. Engaging with a support network of edtech partners, volunteers, and thought leaders that can help them achieve change that is sustainable and scalable.

This iterative co-design process holds us accountable to our members and ensures that we are using data and feedback to meet the needs of our members, and committing to various types of Community experiences and embracing varying levels of engagement.

Initial Implementation, Experimentation, and Evaluation

As we aim to co-design our Community of Practice so that our effort engages our target audience and leverages our existing partnerships to facilitate collective knowledge construction and sharing, we are using an agile design approach. This agile design is allowing us to use a rapid-cycle prototyping to design for engagement, continuously reach out to engaged members through private chats, listen to community needs as they are shared, and celebrate the impromptu contributions of community members that model the level of engagement and connection that we are striving to support.

After just 30 days, our Community of Practice boasted over 115 education-focused nonprofit organizations from nearly 30 countries. To date, member organizations are directly serving over 9.2 million learners annually. The most important data point for us is that out of 114 posts, nearly 60% were made by community members (i.e., not Team4Tech staff).

We are guided by Millington who suggests measuring the value and impact of our Community of Practice rather than return on investment models.⁸ To clearly measure value and impact we are using an adapted community-driven impact model (quarterly surveys, post-event reviews, and annual focus groups designed to support continuous improvement of our Community of Practice).

“We should be measuring outcomes the community can and does directly influence. We should be measuring these outcomes using a methodology developed precisely for the community.”

R. Millington

⁸ Millington, R. (2018). Community-Driven Impact – A Better Way To Prove The Value of Community. CMX Summit.

Our initial implementation and experimentation is allowing us to monitor what is engaging our Community of Practice, better understand their needs and goals, and test varying engagement opportunities and content approaches. So far, we have learned what facets of our platform to leverage more, what times and days allow for higher engagement, what communication tools can help pull members back into the community, and how we can be responsive to ideas in an effort to continually co-design this experience.

We are doing something great in our Community of Practice, and in the months ahead, we will know more about how to grow our reach and share more of the magic that seems to be happening.

Long-Term Goals for Global Impact

Team4Tech as an impact accelerator sits in a unique position to work with organizations directly impacting learning (while operating as nonprofit or nongovernment organizations). Nonprofit organizations who are funded by our foundation receive \$15,000 grants to purchase technology to provide much-needed access to technology, and they receive between three and five years of pro-bono consulting, coaching, and support from the Team4Tech team and its tech-sector volunteers. While not all Community of Practice members are funded, we are currently providing certificates for events and courses, and we are designing more in-depth learning opportunities that can help each of our members to strengthen their individual and organizational skills to directly support learners.

We know that addressing global learning challenges cannot be achieved in isolation. Our hope is that through intentional design the Team4Tech Community of Practice will enable knowledge sharing that ignites better use of technologies, more access to research on learning, and design tools that empower member organizations to do great things for learners.

The bold task of addressing global learning can be achieved through community-building, enabling collective knowledge, and continual learning.

We truly believe that through intentional commitments, nonprofit members, and shared ownership, our Team4Tech global Community of Practice can help us come one step closer to empowering economically independent, lifelong learners across the globe.

