Strengthening Learning Ecosystems in Qatar
Improving access to opportunity for all learners
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A discussion paper

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1: Introduction
WISE has been at the forefront in leading global thinking and practice around the concept of learning ecosystems, publishing one of the first major reports, *Local Learning Ecosystems: Emerging Models*¹, in 2019. This report set out a definition that has since been used to shape the field, and a series of defining characteristics of learning ecosystems.

The report suggested that a significant step change is needed in how we think about learning, with diverse combinations of providers (non-profits, schools, businesses, creative, cultural and community organizations as well as government agencies) creating new learning opportunities and, together, new pathways to success for learners.

The study reviewed existing literature and noted that writers exploring the concept and potential of learning ecosystems are driven by a shared sense of the predicament facing conventional education systems.

They highlight three interrelated issues:

1. The exhaustion of the existing educational paradigm, on its own terms (especially with regards to equity and access)
2. The need for a shift in purpose and outcomes, in the context of rapid, fundamental change (beyond foundational competencies and the accumulation of qualifications)
3. The need for a new organizational model to deliver this shift.

This final point, the need for new organizational models - that are, in practice, collaborative structural formations between different actors and institutions which deliver shifts in purpose, practice and outcomes - is where the concept of learning ecosystems really starts to take root.

WISE has since focussed on applying this thinking to the educational context of Qatar. In particular looking at how the local learning ecosystem can be strengthened through better knowledge sharing and collaboration to distribute learning opportunities more equitably.

WISE’s 2021 research report *Developing Local Learning Ecosystems in Qatar to Advance Equity, Inclusion and Social Cohesion*² provided an in depth study of the educational landscape through the lens of a learning ecosystem. It looked at the variety of actors and organizations involved in education and learning provision, and the ecology of supports that help young people to thrive inside and outside of formal education, and develop crucial knowledge, skills and attributes for success in life and work.

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The role of the informal learning sector in particular was identified as crucial to the development of knowledge, skills and social capital in Qatar, through rich contextualized real world learning experiences outside of school in the workplace and community.

Sever and Tok (2023) undertook a mapping exercise of the full range of learning ecosystem institutions and initiatives in Qatar, see below visual representation.\(^3\)

The WISE 2021 report noted that significant progress has been made in Qatar over the last decade to improve the education system overall, driving up learning participation and investing in the skills of the current and future workforce, including through high quality higher education and vocational training.

However a number of ongoing structural challenges were identified which are holding back Qatar’s economic and human capital potential, and in particular, inequalities in access to opportunity and the unequal distribution of the assets and resources available.

The reasons for this are multidimensional, and include:

- Weak knowledge sharing and poor communications infrastructure for disseminating information and promoting learning opportunities
- Low levels of collaboration between different types of schools and education providers
- A lack of recognition of the value of informal learning

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\(^3\) S. Duygu Sever and Evren Tok (2023), Education for Sustainable Development Learning Ecosystem in Qatar. National Priorities Research Program Grant [NPRP12C-0804-190009] from the Qatar National Research Fund (a member of The Qatar Foundation)
• A lack of coordination capacity to broker relationships and partnerships across the learning ecosystem, and a lack of implementation support - for example supporting teachers to engage and connect with informal learning providers

For young people growing up in Qatar, this translates into a number of barriers to accessing and engaging with the array of opportunities that are on offer, including:

• A lack of visibility and knowledge about what is available
• A lack of understanding about how to access opportunities
• Challenges with practical access to opportunities
• For some learners, a lack of motivation to engage in learning

This latter point stimulates questions around the types of opportunities and experiences that will effectively motivate and engage young people in Qatar in learning, and encourage them to pursue learning particularly outside of formal education. See Annex 1 (Learner’s Voice case study).
2. Learning ecosystems and policymaking
In the wake of a number of significant international publications which have provided the theoretical rationale, powerful exemplars of learning ecosystems in practice, and a growing evidence base around impact, policy makers are starting to see the potential of this approach to provide the tools, methodologies and levers to address the kinds of systemic challenges outlined above.

The Global Education Leaders Partnership, Dream a Dream and Learning Planet Institute conducted a study in 2022 which brought global policy makers firmly into the learning ecosystems dialogue to identify their distinct role in the development of learning ecosystems, and some of the different policy levers that can be utilized across complex systems to drive change.

As noted by Maria Brown Perez, the Minister of Education in Ecuador:

“Families and communities are at the center of the education ecosystem. The formal education system cannot solve everything. Teachers cannot solve all the problems or challenges children face. Our objective is to make our education system more equal for all children. We need inclusion and equal opportunities for all - and need to accelerate policies that bring us closer to these objectives. We are pursuing three pillars - cognitive, social emotional skills, attitudes and behaviors - to guide education. We believe change has to be drastic, not just tweaking.”

Qatar faces a relatively unique policy context. It is commonly regarded as a ‘transformative state’ - one that is proactively pursuing large-scale societal and economic transformation in its efforts to transition into an advanced knowledge-based economy. The country’s national vision for 2030 puts skills and education at the heart of achieving this, while also emphasizing the need to harmonize modernisation with local cultural and religious norms.

The challenges inherent in balancing a transformational agenda for societal and economic modernisation with a commitment to local context has created a complex policy environment.

On the one hand, Qatar has invested heavily in cultivating new and innovative institutions and world leading models of practice, seen for example in Education City. On the other hand, decision-makers are hesitant about relaxing a centralized, top-down educational model because of the experience of past reforms such as Education for a New Era (EFNE). Such reforms did not account for the importance of local context, capacity and knowledge.

A policy framework that prioritizes learning ecosystems offers a way of balancing these complex priorities.

Learning ecosystems help to cultivate institutions and practices for 21st century learning, driven by principles of equity, learner agency, local autonomy and pedagogical innovation. At the same time, learning ecosystem models are iterative and collaborative - putting the views of educators, students and parents, and the wider community at the heart of governance, and working with the grain of local culture and expertise.

This project started with that premise.

Following the publication of the 2021 research report, WISE initiated a consultation exercise with the aim of identifying a number of practical solutions and policy recommendations to address the barriers young people face in accessing quality and relevant learning and skills opportunities - inside and outside of school.

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4 Global Education Futures conducted a comprehensive study of learning ecosystems with over 30 case studies of different types and forms, in a variety of global contexts, illustrated. See Learning Ecosystems: an emerging praxis for the future of education: https://drive.google.com/file/d/1PJPblvChw1ElcoHY402oTqw9Mf2sR6/view

The project brought together a group of multi-sectoral local stakeholders, including Ministry of Education officials, to participate in a series of co-design workshops and a policy roundtable (informed by design thinking methodologies⁶) to explore strategies, tools and approaches for strengthening the local learning ecosystem, and look at what policymakers could do to support innovative practices to flourish. For example by:

- Mobilizing resources, networks and partnerships
- Strengthening infrastructure - such as communications and collaboration
- Aligning standards, regulations and rules (e.g. curriculum timetabling) with the needs of 21st century learning⁷
- Shaping teaching practice through professional development
- Brokerage - smoothing the administration and coordination of learning systems
- Shaping norms, behaviors and incentives of key stakeholders

We think that learning ecosystems - as multi-stakeholder collaborations addressing complex challenges through activating and sharing resources for learning in new ways, and from diverse sources - should become a central part of the policy architecture and policy response to the challenges faced in countries and by governments around the world.

Collaboration and partnership working is commonplace between the public, private and social sectors, and grassroots led innovation helps seed and grow new ideas, initiatives and programs.

But institutional and system wide shifts in mindsets and practice requires a supportive and strategic national policy environment, with the necessary incentives and supports. Around the world, we see increasing numbers of exemplars of this now happening.

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**Policy case study: Delhi government Schools⁸**

The learning ecosystem instigated and orchestrated by the Delhi government’s Department of Education is a leading example of a government led education reform to transform the purpose of school, the learning experience that young people receive in the public education system, and their life outcomes as a result.

The overarching goal is to transform the education system towards a broader set of purposes for learning.

Away from rote memorization towards learning by doing and a more holistic vision of learner outcomes based around:

- Future readiness
- Holistic development of students
- Thriving and human dignity

The reform process started in 2015 and is based around four key principles:

- High quality education for all
- Excellence at the core
- Community building and stakeholder engagement
- Equity and dignity at the center - build new pathways, broaden the entire spectrum.

This translates into four strategic pillars: School infrastructure; Investing in teachers and school leaders, increasing their autonomy and agency; Changing the role of parents and community members, as agents of change; Curriculum and assessment reforms.

To help deliver this vision, the Delhi government has brought in 25+ leading non-profits (Pratham, Avanti Fellows, Dream A Dream, Udhyam Learning Foundation, Teach For India, Pravah and others), higher education institutions (IIT Delhi, Ashoka University, Tata Institute of Social Sciences and others), research and policy organizations, and created an ecosystem of partners to support changes to curriculum, pedagogy and assessment.

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⁷ '21st century learning’ is used as a term to describe learning models, pedagogies and learning experiences that take a holistic whole person approach in developing learners’ knowledge, skills and attributes

⁸ From Exploring Local Learning Ecosystems in the Global South: Pathways to thriving for every child: [https://drive.google.com/file/d/1PmRUCQSJcQ-6KVY8bSnD0uNDXfe3GH4/view](https://drive.google.com/file/d/1PmRUCQSJcQ-6KVY8bSnD0uNDXfe3GH4/view)
3. Practice case study: designing a local learning ecosystem approach with Qatari stakeholders
At the start of this project participants were asked to define an overarching goal, related to Qatar’s National Vision, to orientate the inquiry and underpin Qatar’s learning ecosystem efforts:

Through a series of workshops participants explored these three areas in depth, and worked collectively to co-design a roadmap for action and innovation. See action and innovation roadmap on P.13

This roadmap sets out key actions that multi-sectoral stakeholders can take to better communicate, incentivise and implement a learning ecosystems approach that drives learner engagement with formal, non-formal and informal learning.

We see the roadmap as especially relevant to educators and practitioners – showing how they can coordinate their resources, systems and programmes more effectively around 21st century learning. Also policymakers, who can use the roadmap to prioritize policies that address administrative and structural barriers, and invest in tools for learning ecosystem development. In particular, strengthening those systems which underpin effective knowledge sharing and collaboration across the learning ecosystem.

The consultation process also surfaced a number of significant insights which are particularly relevant for decision-makers, budget holders, educational leaders and policy makers.

**Key insight 1:** Knowing and communicating the value proposition and impact of informal learning can boost engagement. If it is clear to educators that such opportunities are valuable, and that they positively impact their students’ learning and respond to their own needs as teachers, then collaboration and engagement is more likely. A clear value proposition is also more likely to encourage students and their parents to participate.

Three specific areas were identified as critical enablers for improving access to learning (particularly informal learning), and to embedding skills learning in the formal education system:

1. **The effective communication of learning opportunities** to schools and directly to students and parents. This includes both formal and informal learning, opportunities that promote 21st century skills.⁹

2. **Creating incentives for stakeholders to engage in such opportunities.** This includes demonstrating the value proposition, quality and impact of such learning, and exploring specific forms of incentives such as teacher accreditation, student portfolio building and credits.

3. **Providing support for the implementation of opportunities** in schools, for example direct teacher support, external partners delivering sessions in schools, timetable adaptations, and the practical support needed at a school and classroom level to enable learners to participate meaningfully in innovative learning programmes.

⁹ There are many terms in use for 21st Century Skills - often called learning dispositions, competencies, attributes, or employability skills. The term includes areas like communication, collaboration, creativity, critical thinking, teamwork, and leadership.
Key insight 2: A learning ecosystems approach can help stakeholders find effective ways to promote and embed ‘21st century skills’ (including industry specific skills and programs) into school curricula and core teaching practices. This has been a major goal of a plethora of strategies and initiatives across Qatar, and is something that existing digital platforms can also contribute to.

Key insight 3: Legitimacy and endorsement from key stakeholders is a critical enabling factor. The policy environment needs to be conducive not only to the growth of new types of learning models and approaches, but also to the types of organizations that can support the delivery of new forms of learning. Particularly in the informal learning sector. Leadership and buy-in is important not only from institutions, but also from young people, for student-centered approaches.

Key insight 4: Any digital platforms that are used to support learning ecosystems need to be usable, practical and enable educators to use seamlessly as part of their everyday teaching experience. This means having an understanding of how teachers currently seek support / collaboration, and what the practical opportunities are to better facilitate this and to improve the ‘connecting infrastructure’. (see Annex 2)

Co-designing a learning ecosystem roadmap for Qatar

A diverse group of local educators, informal learning providers and front-line practitioners were convened online over a number of months to identify practical and innovative strategies for deepening Qatar’s learning ecosystem, through the use of collaborative strategies and platforms.

The WISE team used a set of design thinking methodologies to support local stakeholders to work through a design process that helped them to identify key assets and opportunities within Qatar’s education system, and surface a range of actions and innovations that could be adopted. The resulting roadmap provides the basis for an intervention “prototype” that local leaders can take forward.

The design methodology involved two stages.

Stage 1 - Identifying systemic problems and translating them into a set of design challenges and opportunities. Participants produced problem statements and then used a “How Might We” design technique to translate those problems into a number of opportunities and solution areas. The key areas prioritized were the communication of informal learning opportunities and their value, incentives for participation, and implementation of a learning ecosystem approach in Qatar’s schools.

Stage 2 - Scoping out and surfacing possible ideas and solutions under these three headings. The WISE team used scenario and persona-based exercises to help practitioners and young people develop ideas for solutions in the above areas. This was followed by identifying the key actions that would be needed to achieve these in practice. The resulting “action and innovation road map” provides local stakeholders with a framework to take this work forward, identifying the key actions, strategies and stakeholders that could be involved.
4. How can policy facilitate stronger and more collaborative learning ecosystems?
These four insights, and broader learnings from the consultation, formed the basis of four policy provocations which were presented to participants of a roundtable held in June 2023, with representatives from the Ministry of Education and Higher Education.

Complementing the action and innovation roadmap, the four provocations provide tangible ideas which could be taken forward by policymakers to help strengthen the learning ecosystem in Qatar - and address some of the barriers to accessing learning opportunities that have been identified.

The four provocations were presented for table based discussion and deliberation.

Participants broadly agreed with the framing of the four provocations as thematic recommendations, and the discussion oriented around the practical implementation of each recommendation.

Provocation 1 - Policymakers introduce new ‘learner entitlements’ - providing every young person with guaranteed access to careers / out of school experiences / informal learning

Roundtable participants were supportive of the idea of learner entitlements (or learner opportunities) and discussed that it would be helpful to have a definitive centralized list of opportunities available on an annual basis, and a clear pathway for getting approvals for learners to participate in these opportunities.

A shared platform between private and public schools and nurseries / providers was seen as essential in making something like this work, so opportunities can be promoted and viewed in one place.

Various existing initiatives around volunteering were highlighted, that are proving motivational to learners, and could be better harnessed. Requiring non academic stakeholders to offer learning across the school curriculum could also help realize this recommendation.

It was felt that quality assurance structures for learning opportunities should also be developed, and thinking about how best to align them to school extracurricular / curricular activities - so young people can start to build a portfolio of experiences from an early age.

Questions were raised about how learning experiences are categorized, for example would a framework be needed to help educators and learning experience providers promote and understand what is on offer.

It is also important for parents to understand the value of informal learning and out of school learning, and for their expectations around the knowledge and skills gained to be influenced. Funding entitlements for schools are essential to effectively implement this recommendation.

PRACTICE EXAMPLE: QAST WORK EXPERIENCE AND PLACEMENT OFFER

The Qatar Academy for Science and Technology has a comprehensive industry engagement scheme, with a dedicated member of staff for developing partnerships and placement opportunities. Students have access to real world learning opportunities within the school curriculum, through extra-curricular activities, and through an internship program. Employers and research institutes involved currently include QEERI, ExxonMobil, QBRI, QBB, QU, and Doha Bank, offering placements across design and manufacturing, environmental engineering, data analysis and statistics, green energy, retail and operations.

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10 Policy provocations are proposals or statements that challenge decision-makers to explore solutions to systemic problems that may involve a significant shift in practice
Digital credentialing of informal learning should also be piloted and coordinated with the Ministry of Education, learning from promising practices elsewhere in the world. It was seen as important to guard against the ‘informal learning entitlement policy’ becoming akin to the existing volunteering hours. Achievement should be based on learning outcomes and skills gained, not hours participated, and this is something that digital credentialing can help with, also in bringing rigor and quality assurance to the process.

As a starting point, the Ministry of Education could initiate a process for reviewing, endorsing and validating informal learning opportunities, to create a clear value proposition for schools and providers.

**PRACTICE EXAMPLE: RSA Badge Standard**

The Royal Society of Arts, Manufacturers and Commerce in the UK has developed a ‘Standard’ for recognising and validating informal learning, in partnership with City & Guilds, an awarding body for vocational and skills based learning.

This framework sets out a process for quality assuring different modes of learning, and providing a digital record of:

- the content of the learning
- the context of the learning
- the contribution of the learner.

*In the 19th century, the RSA invented the modern exam. Now we’re championing a 21st century innovation to validate the skills and capabilities that exams miss. We want to make all learning visible.*

You can read more about the RSA Badge Standard here.
PRACTICE EXAMPLE: New Roles in Schools

When thinking about coordinator and brokerage across a learning ecosystem, some key roles and functions are needed. Including:

- the Partnership Broker
- the Enabler (someone from the Ministry of Education who can create the conditions for educators and other providers to engage in learning ecosystem activity)
- the Advocate (actors within institutions that champion learning ecosystems / coordinate opportunities within their institution)
- the Facilitator (this could be someone from tech / civil society / community that helps support and provide the infrastructure for learning ecosystems approaches. For example a technology provider like Microsoft could tailor and expand access to their online platforms and courses, and create APIs for a connective infrastructure of learning).

This recommendation was seen as essential to achieving the overarching strategic goal, and facilitating greater access to out of school learning experiences and innovative opportunities. Participants discussed that each school should have a dedicated role focussed on partnership development - with a remit of both identifying new informal learning opportunities AND sharing best practice with other schools. This should be a paid role with a specific budget attached.

The infrastructure for developing partnerships, particularly between the public sector and private sector, is significantly lacking in Qatar, and all high performing systems around the world place a strong emphasis on brokerage and collaboration. Existing digital platforms mentioned in this paper could also be better leveraged to promote non-formal learning opportunities and foster collaboration.
Provocation 4 - Policymakers support the expansion of professional learning opportunities for teachers to build their knowledge of industry and informal learning provision, and their skills and capabilities to create relevant curricula

Teacher professional learning and development has been highlighted consistently as an area for improvement, and participants discussed making mandated professional learning much more adaptive, relevant, and meaningful for educators. So they are motivated to seek out CPD, and it is not just seen as a tickbox exercise.

Experiential modules should start early in a teacher’s career, and the idea of a teacher credit profile which builds up over time and incentivises lifelong learning was suggested. Peer to peer professional learning for educators was discussed, and thinking about ways to normalize innovative pedagogies and practices which speak to the strategic goal, in all schools.

Being mindful of teacher workload is an important consideration - as is learning not just for teachers but for parents, caregivers and community learning.

Practice Example: Remake Learning

Remake Learning (remakelearning.org) is a peer network based in the city of Pittsburgh in the USA, comprised of over 1,200 teachers, artists, librarians, designers, learning scientists, out-of-school educators, technologists, school administrators, and more. The network brings educators and innovators together to create learning opportunities that are engaging, relevant, and equitable for students. In the 15 years since its inception, Remake Learning has hosted over 220 events, transformed over 400 learning spaces into STEM labs, media hubs, makerspaces, and collaborative classrooms, and brought over 150,000 children, youth, and families together at Remake Learning Days festivals in Pennsylvania and over 20 regions around the globe.
5. A way forward
We invite all stakeholders to engage with the ideas and recommendations set out in this paper, and to explore the action and innovation roadmap and policy provocations.

We hope it provides a useful stimulus for further discussion in thinking about how different actors can play a role in strengthening the learning ecosystem, for initiating better collaborations, and for taking action.

In particular, we think there is a powerful opportunity for Qatar to adopt policies and approaches for institutionalizing informal learning, and the policy provocations provide some clear steps forward in this regard.
6. Acknowledgements
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Dreesha

Dadu (Children’s Museum)

HBKU

Qatar Museums

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The voice and perspectives of learners - young people growing up and studying in Qatar today - were a core dimension of this project, and the WISE team worked with a range of young people through the Learners Voice programme to gather insights directly from students on what would incentivise and motivate them to participate in out of school learning.

The illustration below captures perspectives and feedback from this session, where young people came up with the concept of a “learning ecosystem of tasters and experiences”, where learning programmes are passion and interest-driven, and enable fun and experiential methods of learning.
This illustration highlights ways of motivating young people to participate in learning, along with the key stakeholders and institutions that can support this.

The insights are taken from a focus group with learners, who were asked:

**What are the ways of learning that young people enjoy?**

**What influences engagement / motivation to participate?**
We were interested to understand the role that digital platforms and infrastructure could potentially play in improving knowledge sharing and collaboration, and how existing platforms could be better leveraged to improve communication and support the implementation of innovative learning experiences in schools.

As noted in existing literature, digital technologies are being harnessed by learning ecosystem instigators and leaders around the world for many different purposes, including:

- For developing and sharing ideas
- For creating and sharing resources
- For convening dialogue online, allowing more diverse participation
- For mobilizing communities around a cause and to take action together
- To enable online and remote learning, and engagement in new forms of learning content
- To recognise and certificate learning in new ways, for example through digital credentialing systems

Annex 2: How can digital platforms support better knowledge sharing and collaboration?
One powerful example of this is AprendoEnCasa.org 11, a digital learning ecosystem that promotes radical collaboration and collective impact between educational organizations from different countries in Latin America. They do this by connecting different disciplines and perspectives from expert organizations that are working in science, arts, pedagogy, technology, humanities, socioemotional learning, anthropology and other areas - all aligned around a common goal to support learning that ensures greater inclusion and participation of children and young people in society.

Their learning ecosystem started as a Twitter / X hashtag, then evolved into a website using free tools such as googleforms, then became a wordpress site which now hosts over 80 organizations in one place.

Through their work they map opportunities and consider where they can have the most impact. They have created a content repository and a digital platform for teachers and parents and students to:

- explore content
- join groups
- share information
- see a calendar of events

The platform supports teachers by showing them nearby organizations that offer skills based learning opportunities, and provides teachers with playlists of resources - with a focus on challenge based learning. Fundacion REimagina which initiated the ecosystem is the ‘backbone organization’ providing coordination and tools to support the diverse community of stakeholders. Champions are identified, and small grants are also given for challenges to drive activity.

In Qatar, there is a strong interest in the role of digital technologies and platforms to support learning and better coordination and knowledge exchange.

Through desk based research we identified at least 10 platforms that already exist that are providing this kind of infrastructure, and are being used widely by practitioners for learning and collaboration.

These include:

- Online portals that connect people to learning or training resources and courses
- Online portals that support youth and community development
- Online portals that support networking, collaboration and community-building between professionals and service providers
- Digital apps that connect people to events, activities and enrichment opportunities in their locality, and create connections between users and service providers

11 See: https://www.k12digest.com/learning-ecosystems-transforming-latin-american-education/
Having shared this information with working group participants, two messages came through strongly from our subsequent discussions:

- Firstly, how digital technologies should be seen as one of a number of types of ‘infrastructure’ for enabling learning ecosystems. There are a plethora of existing platforms already being used across the education ecosystem, and the focus should be on how these can be better leveraged by stakeholders and the Ministry of Education, rather than creating any new app or product for the purpose of strengthening learning ecosystems.

- Secondly, the physical, human and social ‘infrastructure’ of learning ecosystems should remain front and center. In Qatar, this includes: physical spaces that support collaborative innovation processes to address societal challenges; physical spaces that support youth and community development; physical spaces that provide a forum for collaboration, knowledge sharing and consensus building.

Learning ecosystems operate most effectively when combining physical, relational and digital infrastructure to orchestrate and drive action across a community. See *Learning Ecosystems as New Public Leadership* 12

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