

Lessons from the Social Network Analysis of the Networks for School Improvement Community of Practice

2019-2023

VisibleNetworkLabs



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We are grateful for the support from the Bill & Melinda Gates Foundation to complete this report; the views expressed are those of the Intermediaries within the Networks for School Improvement Community of Practice (NSI CoP) and do not necessarily reflect those of the Bill & Melinda Gates Foundation.

The social network analysis of this NSI CoP Network was conducted using PARTNER by Visible Network Labs, with funding from The Bill & Melinda Gates Foundation. For more information about Visible Network Labs and the tools and resources available, please visit www.visiblenetworklabs.com.

VISIBLE NETWORK LABS is a data science company developing tools and technology to help people measure, understand and evolve the personal and professional networks that influence the communities where they live.

PARTNER is a social network analysis data tracking and learning tool designed to measure and monitor collaboration among people/organizations. It is a scientifically validated way to design data-driven network strategies that generate social impact.

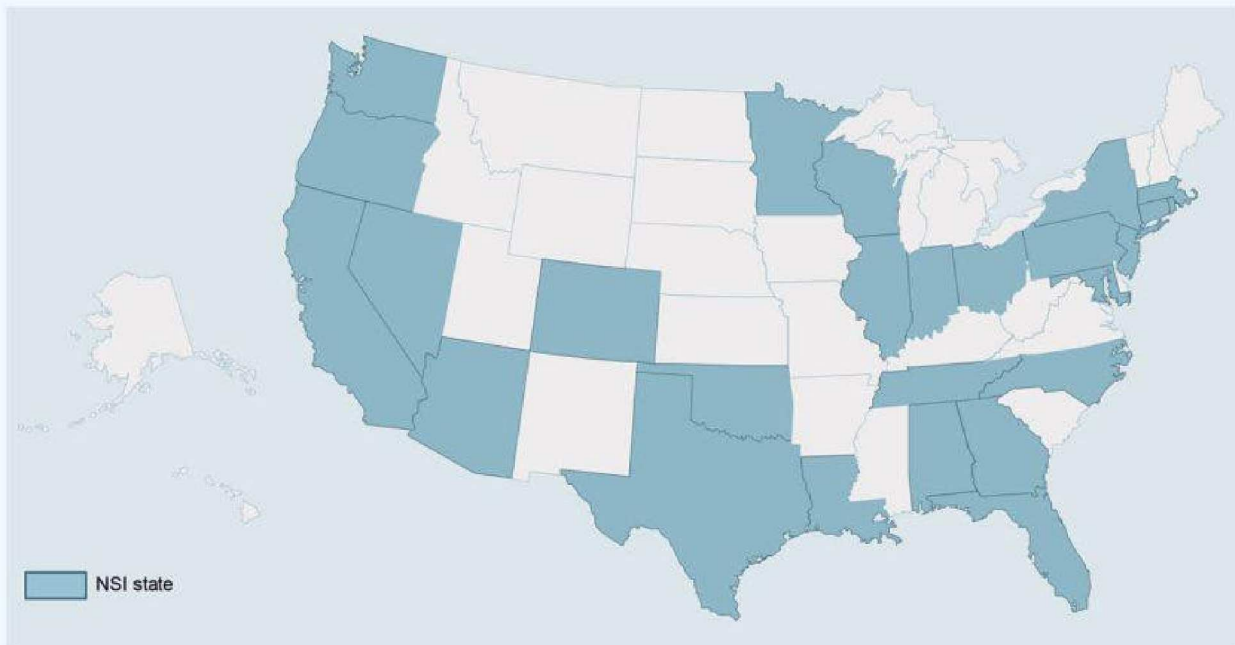
Introduction

The Networks for School Improvement (NSI) portfolio, funded by the Bill & Melinda Gates Foundation, supports organizations that bring groups of middle and high schools together to advance high school graduation and college success rates, particularly for Black and Latino students and students experiencing poverty. These organizations serve as Intermediaries for the school networks they organize to identify and solve common problems using evidence-based interventions and approaches that are best fit to meet their local needs.

While each network decides what approach will work best to address their biggest challenges, there are at least three things NSI have in common — unwavering commitment to equity, adherence to continuous learning and improvement practices, and a focus on using indicators proven to predict student learning, progress, and success. **Since August 2018, 24 organizations supporting 38 networks of middle and high schools in 23 states have been funded through three competitive grant processes.** A priority within this strategy is to help each NSI be successful by bringing Intermediaries together to learn with and from one another through the NSI Community of Practice (CoP).

The NSI CoP was launched in the Fall of 2018 when the Foundation convened participants from the first cohort of 21 grantees. The NSI CoP was established and operates with two primary goals: 1) to build the capacity of Intermediaries to improve student outcomes, and 2) to create a “network of networks” to foster resource-sharing and cross-pollination of effective practices.

NETWORKS FOR SCHOOL IMPROVEMENT: SCHOOL LOCATIONS



Introduction

COMMUNITIES OF PRACTICE

A Community of Practice (CoP) has been broadly defined as “groups of people informally brought together by shared expertise, who interact regularly to learn about or improve their practice” (Nicolini et al., 2022). The NSI CoP has been designed to be a place where educators can regularly and consistently connect and work together, share evidence-based practices and tools, and learn about specific strategies to improve college readiness and postsecondary persistence for Black students, Latino students, and students experiencing poverty.

Wenger et al. (2002) established five phases of a CoP:

- (1) Potential - where members identify common ground;
- (2) Coalescing - where members begin to collaborate;
- (3) Maturing - where the group sets norms and identifies its direction;
- (4) Stewardship - where the group cultivates sustainability and innovation; and
- (5) Transformation - where the group goes through a renewal or dissolves according to the needs of the members.

The NSI CoP has gone through the first four of these phases within the past five years, starting with a focus on coalescing and maturing, then aiming to achieve stewardship in 2022, and eventually reaching transformation in 2024, when the CoP is no longer funded/convened by the Foundation.

The social and relational nature of the groups engaged in a Community of Practice make Social Network Analysis (SNA) a useful tool for understanding how they develop over time. Exploring Communities of Practice as networks can illuminate the social structures that facilitate or constrain the development of a community, information sharing, and resource exchange. Over time, CoPs can support members in developing network connections to other members who have unique knowledge and skills that can be tapped into when challenges arise (Hatmaker et al., 2011).

PROJECT BACKGROUND

Since 2019, the participants of the NSI CoP have engaged in multiple SNAs conducted by Visible Network Labs using the PARTNER CPRM. The Foundation has used the information and results for the strategic planning of future events. This paper describes the findings and lessons learned from the SNA of the NSI CoP. The analysis draws on information and responses submitted by participants from each Intermediary about their connections to others within the CoP, their contributions to the CoP, how they have utilized the information/resources shared within the CoP, and how the CoP has benefited their organization and network(s) for school improvement.

Introduction

SUMMARY OF RESULTS

VNL and the Foundation observed four trends, based on the data collected from 2019-2023:

Resilient and Adaptable CoP Structure

01

The NSI CoP found itself needing to adapt its structure and modify offerings due to the COVID-19 pandemic in 2020. The data highlights that the NSI CoP was resilient and adaptable in meeting the needs of participants by shifting the mode in which convenings were held and how participants were connected and matched.

Critical Intermediary Leaders

02

Throughout the five years, there have been Intermediary Organizations that have consistently emerged as critical leaders in the NSI CoP, either as a key player, an information sharer, or broker. The data highlights that these organizations can serve in pivotal roles as the NSI CoP shifts to the transformation phase.

Leveraging Partnerships

03

As participants connected at each convening, gained experience, and learned from each other at the NSI-led sessions, they have strengthened and deepened their relationships with one another. The data highlights that Intermediaries are leveraging the knowledge, skills, and resources that one another brings to the CoP in a much more focused and deliberate way.

NSI CoP: Improving Over Time

04

The CoP organized a group of support partners to help Intermediaries with their school improvement work and/or network building activities. These partners, along with the Foundation, have provided key support, technical assistance, and opportunities for Intermediaries to collaborate. The data highlights the ways in which the NSI CoP and its partners have brought immense value to the individual Intermediary Organizations, the work they do, and the networks for school improvement they support.

Introduction

WHAT IS SOCIAL NETWORK ANALYSIS

Social network analysis (SNA) is a particularly useful methodology to measure the strength of inter-organizational partnerships in a CoP; evaluate how organizations are positioned and leverage resources within a CoP; and assess the quality and impact of the exchanges among them to identify gaps that can be filled and strengths that can be leveraged (Varda & Sprong, 2020). SNA provides a mathematical approach using specific algorithms to measure the number, strength, and quality of connections between members. Social network analysis “describes structure and patterns of relationships and seeks to understand both their causes and consequences” (Streeter and Gillespie, 1992 p. 201).

Social Network Analysis of NSI CoP using PARTNER

SNA was conducted at three time points by Visible Network Labs using PARTNER CPRM to analyze how connections changed and evolved as a result of Intermediaries participating in the NSI CoP offerings. PARTNER (Platform to Analyze, Record, Track Networks to Enhance Relationships) is an innovative software platform used to map, measure, and enhance social networks, partnerships, and collaborations among individuals and organizations and is based in network science (Varda & Sprong, 2020). Connectivity between individuals and Intermediary Organizations were measured via survey, and results were analyzed using PARTNER CPRM and Excel.

TIME POINTS

Time Point 1 – December 2019

- Goal: Measure the different outcomes of the two goals of the NSI CoP.
- 30 individuals representing 30 Intermediary Organizations were invited to participate.
- Contacts from all 30 Intermediary Organizations responded for a 100% response rate.
- The survey was sent to one point of contact at each of the 30 Intermediary Organizations.

Time Point 2 – December 2020

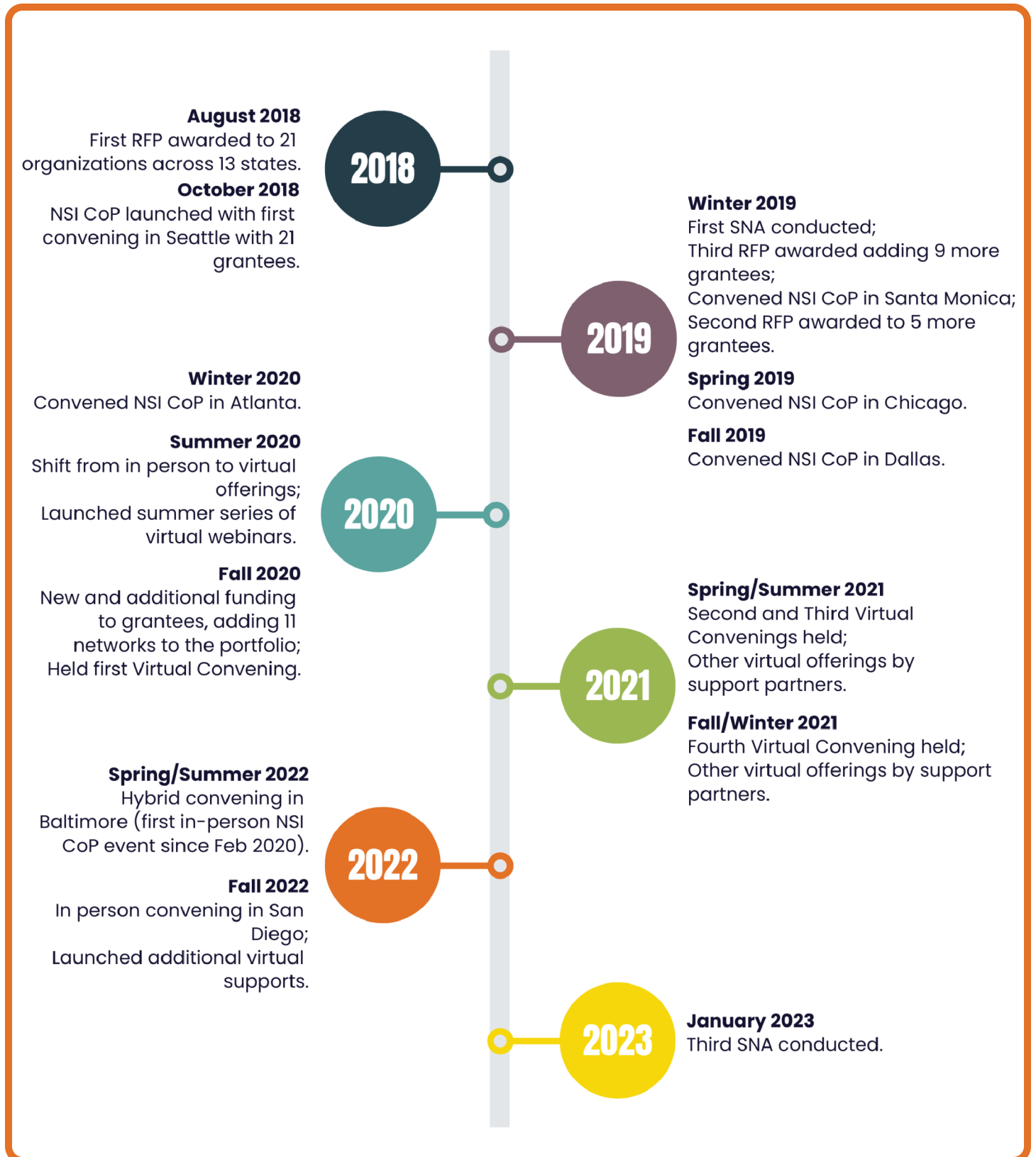
- Goal: Capture the evolving relationships of NSI members as they engaged in innovative and alternative Virtual Offerings after COVID-19 such as the Virtual Subgroups and Webinars and Convenings.
- 146 individuals representing 29 Intermediary Organizations were invited to participate.
- 73 individuals representing 28 of the 29 Intermediary Organizations responded for a 97% response rate across Intermediaries.
- The survey was sent to multiple points of contact at each of the 29 Intermediary Organizations.

Time Point 3 – January 2023

- Goal: Capture the evolving relationships of NSI members as they engaged in innovative and alternative Virtual and In-Person Offerings hosted by the Bill & Melinda Gates Foundation along with DeliverEd, High Tech High, WestEd, The Carnegie Foundation, and other support partners.
- 483 individuals representing 32 Intermediary Organizations were invited to participate.
- 156 individuals representing 30 of the 32 Intermediary Organizations responded for a 94% response rate across Intermediaries.
- The survey was sent to multiple points of contact at each of the 32 Intermediary Organizations.

Introduction

TIMELINE



01

Resilient and Adaptable CoP Structure

“Although it has been harder to establish relationships during COVID, the CoP has been innovative and continues to be a support to us. As with my other work, I miss the informal interactions that we used to have when we met in person.”

**-Cohort 1a/3
Intermediary**



Resilient and Adaptable CoP Structure

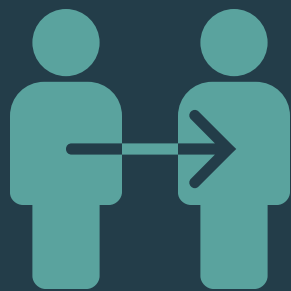
Time Point 1

The setup and structure of the NSI CoP started out as something that revolved around in person gatherings and hands-on learning between partners. There were four in-person gatherings before the December 2019 data collection time point. As Intermediary Organizations joined the NSI CoP, they were assigned to subgroups based on their grantee cohort. This setup allowed for those who were joining the CoP to be connected with similar staged partners in a facilitated small group environment.

Network measures from Time Point 1 (December 2019) showed there was a high level of connectivity and activity reported among Intermediaries. At that time, a total of 205 reported partnerships existed between Intermediaries in the network and the average number of partnerships per organization was 6 out of a possible 29 (see Figure 1 on page 10 for a network map). Network measures were obtained by having respondents select from a list of partners or those with whom they have a “formal or informal relationship” within the context of the NSI CoP. As expected, Intermediaries with the longest tenure in the NSI CoP (Cohorts 1a, 1a/2 and 1a/3) had the highest average number of partnerships per Intermediary and the highest number of partnerships overall (see Table 2 on page 14).

“Resource, information, and best practice sharing. It is great to have a thought partner in this often complex work.”

-Cohort 1b Intermediary



When asked to describe how their relationship with each of their partners was developed, 53% of the reported 182 partnerships were developed through the NSI CoP (no prior relationship). Additionally, 17% reported the NSI CoP connection deepened their prior relationship with their Intermediary partners. Intermediary Organizations reported mostly connecting with their partners at in-person CoP events (66%), through information sharing emails (52%), or at other events within the CoP (46%). Initial partnership outcomes that were reported between partners were mostly informative only (54%) or involved an exchange of resources (30%).

Resilient and Adaptable CoP Structure

List of Intermediaries

The table below lists all intermediaries in the NSI CoP, their map labels, and their cohorts.

Intermediary	Map Label	Cohort
Access ASU (Arizona Meta Network)	ASU	Cohort 2
Achieve Atlanta	AA	Cohort 1a
AIR Florida NSI	AIR	Cohort 1b
AIR Long Beach NSI	AIR (LB NSI)	Cohort 3
Baltimore City Public Schools (City Schools) - Cohort 1 BSLIC or Cohort 3 9GOT	BCPS	Cohort 1a/3
Bank Street College of Education (Cohort 1 - Yonkers or Cohort 3 - Brooklyn)	BSCE	Cohort 1a/3
BARR Center	BARR	Cohort 1b
California Education Partners (Ed Partners)	CEdP	Cohort 1a
City Year/Everyone Graduates Center at JHU	CY	Cohort 1a/2
Commit!2Dallas (The Commit Partnership)	CP	Cohort 1b
Community Center for Education Results (CCER)	CCER	Cohort 1a
Connecticut RISE Network	CTRISE	Cohort 2
CORE (Cohort 1 and 3)	CORE	Cohort 1a/3
Denver Public Schools	DPS	Cohort 1b
Eskolta School Research and Design	Eskolta	Cohort 2
High Tech High GSE - CARPE Network and CARE Network	HTH	Cohort 1a/3
Institute for Learning (IFL)	IFL	Cohort 1a
KIPP	KIPP	Cohort 1a/2
LA Promise Fund	LAPF	Cohort 1a
Network for College Success (NCS) - Freshman Success Cohort 1 (FSIC) or Cohort 3 (FSEIN)	NCS	Cohort 1a/3
New Tech Network	NTN	Cohort 1b
New Visions for Public Schools (NVPS) CR NSI or Instructional NSI	NVPS	Cohort 1a/3
New York City Department of Education (NYCDOE)	NYCDOE	Cohort 2
NYC Outward Bound Schools	NYCOBS	
Partners in School Innovation	PiSI	Cohort 1a/2
Seeding Success	SS	Cohort 1a
Teach Plus	TP	Cohort 1a/3
Teaching Matters	TM	Cohort 3
The Center for Leadership and Educational Equity (CLEE)	CLEE	Cohort 1a
The Northwest Regional Education Service District (NWRES D)	NWRES D	Cohort 1a
The Southern Regional Education Board (SREB)	SREB	Cohort 1a
Tulare County Office of Education	TCOE	Cohort 3
TX NSI (Educate Texas, Dana Center, Learning Forward)	TXNSI	Cohort 1a/2

Table 1: List of Intermediaries

Resilient and Adaptable CoP Structure

The NSI CoP gathered 125 grantees and partners in February 2020 in Atlanta. The agenda focused on multiple opportunities to connect with one another, learn from one another in topic specific participant-led breakout sessions, and work within their subgroups.

As the year and the COVID-19 pandemic unfolded, the NSI CoP found itself needing to adapt its structure and decided to modify their offerings to help Intermediary Organizations and their NSIs tackle the growing challenges they were facing with their students and schools.

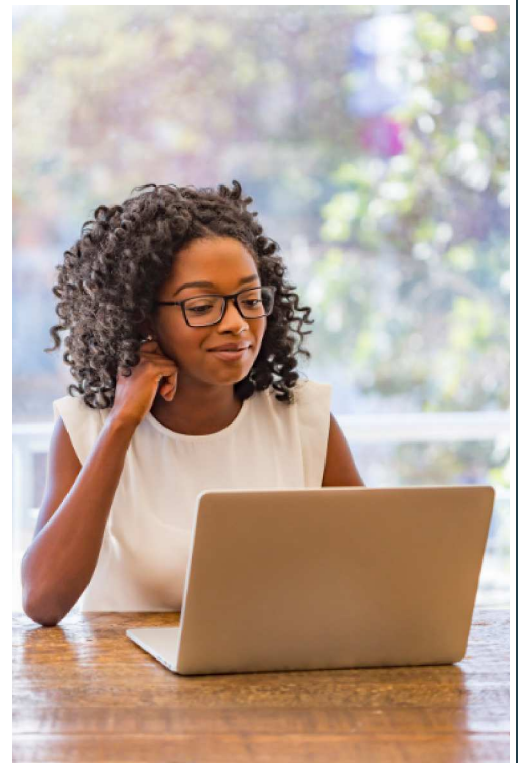
The initial virtual meetings focused on creating multiple opportunities to connect with one another, learn from one another in topic specific participant-led breakout sessions, and work within their subgroups. Throughout the Summer of 2020, there were multiple webinars held by Catalyst:Ed and other support partners to help NSI CoP members navigate their new realities, like Supporting Networks Virtually, Equity in Networks, Sustaining CI in Uncertain Times, and Leveraging SEL to Reopen and Renew Schools. There was also a shift to outcome-based subgroups, including 8th Grade On-Track, 9th Grade On-Track, College Ready On-Track, and Well-Matched Post-Secondary (WMPS).

Time Point 2

In the second data collection in late 2020, network measures showed there was still a high level of connectivity and activity reported among Intermediaries. At that time a total of 216 reported partnerships existed between Intermediaries in the network and the average number of partnerships per Intermediary organization was 6 out of a possible 31 (see Figure 1 on page 10 for a network map).

Interestingly, Intermediaries with the shortest tenure (Cohorts 2 and 1b) experienced the most growth in the average number of partnerships per Intermediary since Time Point 1. Not surprisingly, Intermediaries with the longest tenure in the NSI CoP (Cohorts 1a/2 and 1a/3) continue to have the highest number of partnerships overall (see Table 2 on page 14).

Similar to the previous year, Intermediary Organizations reported mostly connecting with their partners at the NSI CoP Fall virtual event (61%) and through information sharing emails (57%). Additionally, nearly half of the reported partnerships (46%) indicated communication between partners occurred in the chat during the virtual events. When asked to what degree their relationship with this partner has changed since the switch to virtual offerings after COVID-19, 53% reported less interaction with partners, while 24% of reported partnerships were strengthened due to CoP Virtual gatherings.



Resilient and Adaptable CoP Structure

The shift to virtual events did not seem to impact the quality of the partnerships between Intermediaries.

This may be in part due to the change of focus to the outcome-based subgroups that were created in Summer 2020. Intermediary Organizations and their NSI members could participate in multiple offerings and sessions concurrently where in the past that was not the case. Subgroup, webinar, and CoP convening sessions could also be recorded and easily shared with participants and then passed along to colleagues within Intermediary Organizations and their networks. The data highlighted that the most connectivity occurred at the virtual Fall 2020 CoP Convening, followed by more reported connectivity between partners occurring within subgroups than in webinars. Respondents also used the information, tools, and resources shared within those virtual offerings in a wide variety of ways, such as: "[reviewing] best practices and lessons learned" and "[sharing] what [they] learned with [colleagues in their] organization."

"We are starting to have deeper, more focused conversations in our subgroup, which is very helpful. Topic-specific relevant conversations help us to think more deeply about a problem of practice and bring back new perspectives to our NSI."

-Cohort 2 Intermediary



Resilient and Adaptable CoP Structure

Between the second and third data collection time points there were a variety of Virtual and In-Person Offerings provided to NSI CoP participants, including webinars, virtual subgroups, trainings, events, the Spring and Fall 2021 virtual convenings, the Summer 2022 hybrid convening, and Fall 2022 in person convening. These offerings were hosted by the Foundation along with DeliverEd, High Tech High Graduate School of Education, WestEd, CPRL, the Carnegie Foundation, and other support partners. Those who participated in at least one of the events were invited to take part in the third SNA administration in January 2023.

Network measures showed a similar level of connectivity and activity reported among Intermediaries as in previous data collections. In January 2023, 268 reported partnerships existed between Intermediaries in the network and the average number of partnerships per Intermediary Organization was 8.6 out of a possible 31 (see Figure 1 on page 10 for a network map). **As in previous time points, Intermediaries with the longest tenure in the NSI CoP (Cohorts 1a/3, 1a/2, and 1a) have maintained their high level of connectivity within the network.** Those in Cohorts 1a/3 and 1a/2 also grew their average numbers of partners per Intermediary by 4 from Time Point 1 to Time Point 3. The most growth occurred for those within Cohort 1b who saw an increase in the average number of partnerships per Intermediary, from 4 in Time Point 1 to 10.6 in Time Point 3 (see Table 2 below).

Cohort	Time 1			Time 2			Time 3		
	# of Orgs	Total # of Partnerships	Average # of Partnerships Per Intermediary	# of Orgs	Total # of Partnerships	Average # of Partnerships Per Intermediary	# of Orgs	Total # of Partnerships	Average # of Partnerships Per Intermediary
1a	9	63	7	7	41	5.9	4	34	8.5
1a/2	4	27	6.8	4	30	7.5	4	44	11
1a/3	7	70	10	7	84	12	7	96	13.7
1b	5	20	4	5	34	6.8	5	53	10.6
2	4	18	4.5	3	27	9	4	23	5.8
3							3	18	6

Table 2: Cohort Partnerships

Similar to the previous years, Intermediary Organizations reported mostly connecting with their partners at virtual events within the CoP (53%) and through information sharing emails (59%). There was less interaction reported within the chat at virtual events (down 19% from last time point). When asked to what degree has your relationship with this partner changed since January 2021, 40% of the reported partnerships indicated more interaction with partners, while 43% of reported partnerships were strengthened due to CoP gatherings. Participants report that these relationships continue to be informative (73%), lead to an exchange of resources (31%), and improve their Intermediary Organization’s capacity (29%).

Resilient and Adaptable CoP Structure

Time Point 3

In Time Point 3, the in-person connections at the CoP Convening in San Diego returned to a level similar to that in Time Point 1 (T3: 61%; T2: 0%; T1: 66%, see Figure 2 below). Respondents reported they used the information, tools, and resources shared at that in person convening in a wide variety of ways, in particular, they shared what they learned with a colleague in their organization (49%); reviewed best practices and lessons learned (40%); directly applied shared resources/tools to their work (39%); directly applied best practices and lessons learned to their work (34%); and shared what they learned with a colleague outside their organization (25%).

These data highlight that the NSI CoP was resilient and adaptable in meeting the needs of participants despite the COVID-19 pandemic by not only shifting the mode in which convenings were held but also how participants were connected and matched together. As time went on and participants were able to gather again for in person events, the NSI CoP was able to maintain and strengthen the level of connectivity between Intermediary partners.

In the last two years (since January 2021), which of the following channels have you used to connect and communicate with this partner? (Select all that apply).

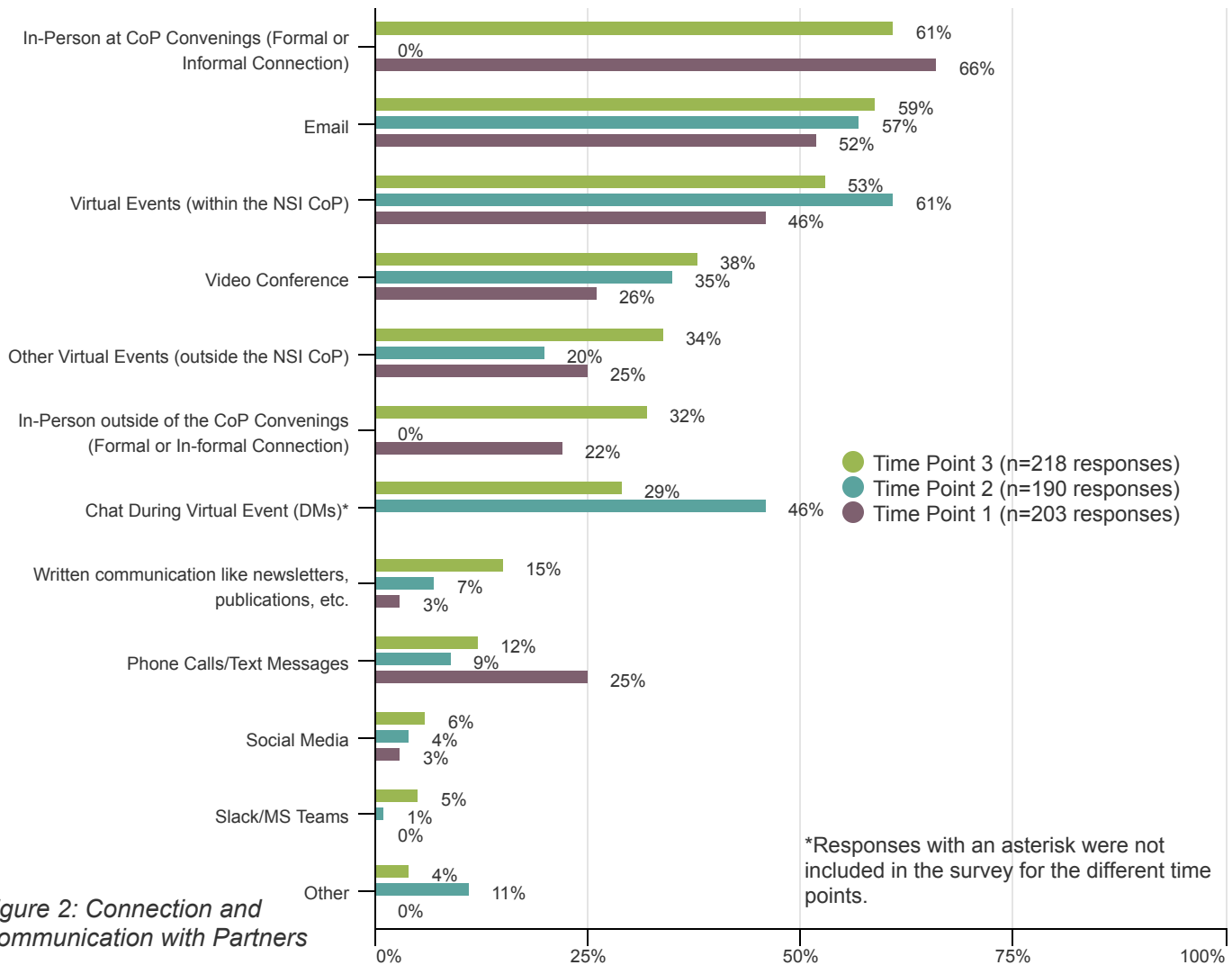


Figure 2: Connection and Communication with Partners

02

Critical Intermediary Leaders

Throughout the five years, there have been **Intermediary Organizations** that have consistently emerged as critical leaders in the NSI CoP, either as a key player, an information sharer, or a broker.



Critical Intermediary Leaders

Not every NSI CoP participant grew their network over the past five years - some have lessened their participation in activities and are less active than they once were, which could be in large part due to the type of grant and funding they received. However, some Intermediary Organizations were able to maintain their level of connectivity with partners over time and during the pandemic, while others grew and/or shifted relationships to new ones. The data shows that many Intermediaries added and let go of relationships throughout the three Time Points which could be due to a shift in priorities, the inability to connect virtually, or reduced involvement in the same virtual/hybrid/in-person offerings.

Throughout the five years, there have been Intermediary Organizations that have consistently emerged as critical leaders in the NSI CoP, either as a key player, an information sharer, or a broker. These organizations can serve in pivotal roles as the NSI CoP shifts to the transformation phase. In SNA, we use three components of centrality to look at the role and influence a member can have within a network, including degree (key player), betweenness (network broker), and closeness (information exchanger). See image on page 19 for definitions of each of these measures.

Key players are members of the system who are connected to most of the network and they have the most reported partners within the network (either partners they chose or who chose them as a partner). Since key players are so central to the network and they act as visible leaders, if they leave the network it may be more difficult to mobilize network members without that leadership. All five key players from Time Point 3: High Tech High (HTH): (84% connected); Bank Street (BSCE): (65% connected); Connecticut RISE Network (CTRISE): (58% connected); Educate Texas (TX NSI): (58% connected); and New Visions Public Schools (NVPS): (52% connected) were also identified as key players in Time Point 2 as well.

High Tech High, Bank Street, and New Visions Public Schools were the three Intermediary Organizations that maintained key player status over all three time points. The other key player from Time Point 1 was Network for College Success (NCS) (55% connected).

Network brokers act as a bridge between distinct clusters of members in the network. Brokers can influence what information flows within the network since they are connected to the members both giving and receiving information. The NSI CoP heavily relies on brokers to connect and share information between clusters of the network; if they no longer participate, sub-groups in the network may struggle to access novel resources and information across the network.

Six Intermediary Organizations were identified in Time Point 3 as network brokers: High Tech High; Network for College Success; New Visions for Public Schools; Bank Street; Institute for Learning; and Teach Plus; the first four of which were also identified as a network broker in either Time Point 1 or Time Point 2. High Tech High, Bank Street, and New Visions Public Schools were the three that maintained network broker status over all three time points. The other network brokers from previous time point include Achieve Atlanta from Time Point 1 and Denver Public Schools and Partners in School Innovation from Time Point 2.

Critical Intermediary Leaders

Information exchangers play a unique role in the system because, between their direct connections and the connections of their partners, they have the shortest path to all other network members. Information exchangers influence how fast information flows through a network and are broken into two categories; **accessibility** and **communication skills**. Network members that are most accessible can be easily reached by all others in the network. Members with high communication skills can directly communicate with most of the network. The NSI CoP heavily relies on information exchangers to quickly spread information throughout the network; if they no longer participate in the network there is a risk that information may not flow within the system as quickly.

These six Intermediary Organizations were identified in Time Point 3 as the most accessible: High Tech High; Network for College Success; Institute for Learning; Bank Street; New Visions for Public Schools; and New Tech Network; the first four of which were also identified as most accessible in either Time Point 1 or Time Point 2. High Tech High and Network for College Success (NCS) were the two that maintained most accessible status over all three time points. The other Intermediary Organizations identified as most accessible from previous time points include CORE, Achieve Atlanta, and AIR (FL NSI) from Time Point 1 and CORE and Eskolta School Research and Design from Time Point 2.

These five Intermediary Organizations were identified in Time Point 3 as having the highest communication skills: High Tech High; New Visions for Public Schools; Connecticut Rise Network; Bank Street; and New York City Department of Education; the first four of which were also identified as most accessible in either Time Point 1 or Time Point 2. High Tech High and Bank Street were the two that maintained highest communication skill status over all three time points. The other Intermediary Organizations identified with high communication skills from previous time points include The Northwest Regional Education Service District and Network for College Success from Time Point 1 and Educate Texas (TX NSI) and Institute for Learning from Time Point 2.



High Tech High, Bank Street, and New Visions for Public Schools not only maintained their connectivity within the network over time, they were also able to maintain multiple unique roles within the NSI CoP.

As the NSI CoP enters the next phase of work, how can the consistently central players mobilize others in the network to accomplish goals? For organizations that were highly central but not high in communication skills, the Foundation might consider providing some additional support for skill-building. For organizations that were in the top centrality groups but fell out over time, the Foundation might explore how their participation in the network changed and if additional support might help them to maintain effective connections.

Critical Intermediary Leaders

NETWORK ROLES

Centrality measures can be used to define specific roles for members to play within the network. Here is how the three most common roles are defined.



NETWORK BROKERS

Network Brokers are people or organizations with high betweenness centrality scores. They are often considered gatekeepers of information and resources. In this example, the most central node falls in the shortest path between four other pairs of nodes in the network. The least central node doesn't fall on the shortest path between any of the other nodes in the network.



KEY PLAYERS

These are people or organizations directly connected to a large number of others. Key players are considered more central as they can access or deliver more resources and opportunities. In this example, the most central node is directly connected to five others in the network. The least central nodes are only connected to one other node in the network.



INFORMATION EXCHANGERS

These are people or organizations close to a large number of network members. Information exchangers can communicate more quickly and easily with others in the network compared to less central nodes. Information Exchangers have low closeness centrality scores and do not have to "travel" as far along paths to get to others in the network. Nodes with high closeness centrality scores are less central and have to travel farther along the paths to get to others in the network.



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03

Leveraging Partnerships

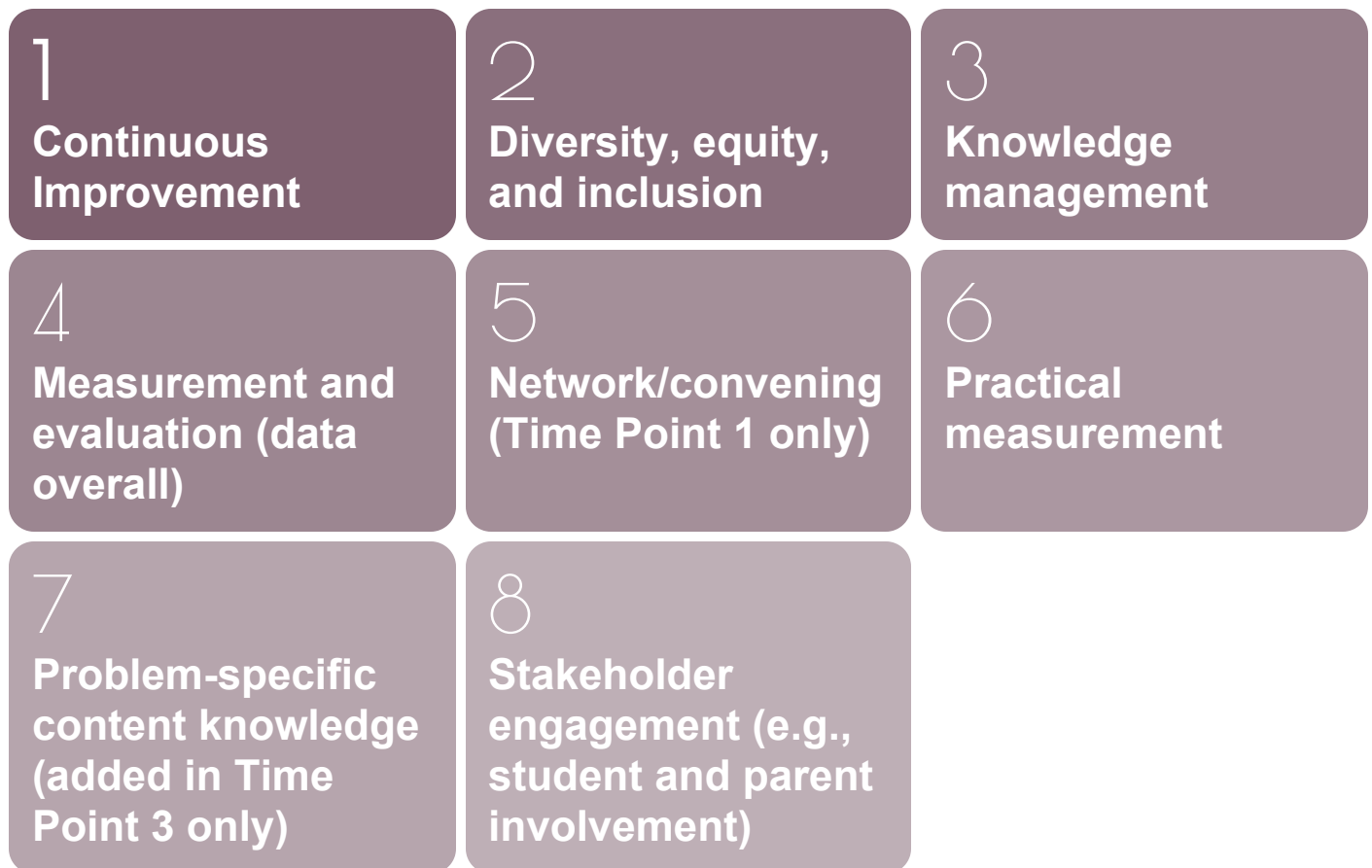
“Having a shared language and set of resources around continuous improvement has been incredibly beneficial and being connected with other intermediaries is helping us learn from others, kick the tires on our strategy, and drive change toward our goals.” -Cohort 1a/2 Intermediary



Leveraging Partnerships

Intermediaries Leverage Partnerships with One Another to Build Knowledge and Capacity, Share Resources and Tools.

Over the course of the five years, the Foundation and support partners have facilitated numerous opportunities for Intermediary Organizations to share lessons learned, resources, tools and artifacts with other NSIs as part of participant-led breakout sessions, webinars, informal conversations, and through the NSI Exchange. These opportunities have allowed participants to strengthen and deepen their relationships with one another, connect at each convening, gain experience, and learn from each other. The data highlights that as time in the NSI CoP has gone on, intermediaries are leveraging the knowledge, skills, and resources that one another brings to the CoP in a much more focused and deliberate way. To explore this further, the SNA measured engagement in eight content areas:



Leveraging Partnerships

Time Point 1

In 2019, Intermediary Organizations were mostly engaging with their partners in 1:1 shared learning activities (46%), information sharing emails (46%), exchanging unpaid advice around particular content areas (40%), and learning from another Intermediary in a breakout (37%). The types of content most often shared between partners were continuous improvement expertise (53%), measurement and evaluation expertise (33%), networking/convening (23%), and practical measures (22%). Content expertise that the fewest amount of Intermediaries shared with their partners included knowledge management (15%), stakeholder engagement (getting students involved) (15%), and diversity, equity, and inclusion (19%).

“Building relationships and learning about work across the country has been extremely helpful in uncovering tools, strategies and approaches to improve our approach, particularly in more fully centering our work on equity.”

-Cohort 1a/3 Intermediary

“Learning practical implementation ideas, sharing resources, collaborating on obstacles and common problems pushes the thinking of our team.”

-Cohort 1a Intermediary

The partnership activity outlined just above aligns with the most commonly available expertise contributed by Intermediaries to the NSI CoP, which included networking/convening (83%), continuous improvement expertise (63%), stakeholder engagement expertise (56%), and measurement and evaluation expertise (53%). The content expertise areas where the fewest Intermediaries were able to contribute in 2019 were knowledge management expertise (27%), practical measure expertise (37%), and diversity, equity, and inclusion expertise (40%). This data shows that Intermediaries were able to contribute expertise in content areas to the larger CoP that they were not yet sharing with their specific partners. Specifically, more than half of participants in the NSI CoP contribute stakeholder engagement expertise, but only 15% of reported partnerships were around that content area.

Through continuous efforts to match intermediaries to one another through Foundation Program Officers and support partners, facilitated conversations at convenings, and asking participants who they want to connect with, NSI members began to rely more and more on each other to learn new skills, share information, hear about new tools, and share best practices and resources. In 2020, Intermediary Organizations increased their engagement with partners around information sharing messages/emails (53%) and learning from their partner in a session (in person or virtual) (44%), while 55% indicated they share best practices and lessons learned within their partnerships in the NSI CoP.

“Breakout sessions during in-person or virtual sessions provided the opportunity to really get to know partners in a deeper way.”

-Cohort 1a Intermediary

Leveraging Partnerships

Time Point 2

When asked which Intermediaries their organization would like to partner with in the future and around what content areas, most respondents in 2020 indicated three Intermediary partners they want to connect with across all content areas: High Tech High, New Visions for Public Schools, and the New York City Department of Education.

The most growth around shared content from 2019 to 2020 occurred around diversity, equity, and inclusion (20% growth), stakeholder engagement (19% growth), and knowledge management (11% growth). (See Figure 3 on page 24). The most commonly shared content between Intermediaries and their partners in 2020 continued to be continuous improvement (62%) and measurement and evaluation (40%), which also saw slight growth in engagement from 2019.

Time Point 3

Between Time Points 2 and 3, there were more intentional efforts to match Intermediaries to one another through the efforts of the Catalyst:Ed dance cards and critical friends pairings, which took into account who participants wanted to be connected to (using SNA and interview data). The efforts have improved the way participants leverage their partners' skills and expertise (i.e., learning new skills/information/tools/best practices). In 2023, Intermediary Organizations increased their engagement with partners by learning from them in a breakout session at a convening (55% in T3 from 37% in T1) and continuing to engage in information sharing messages/emails (46%) or sharing best practices and lessons learned with one another (50%). Respondents also identified the activities that they shared with their partners in the NSI CoP: engaging in 1-1 shared learning activities with their partners (46%); debriefing a meeting (29%); and furthering conversations from meetings (28%).

“It's just nice to have extended time with groups of people doing the same work as you. It's often the informal conversations that become just as useful as the more formalized ones.”

-Cohort 1a/3 Intermediary

“I was able to speak with two other NSIs who I met in CoP spaces after those meetings to learn how they had adjusted some of their NSI practices in a virtual space.”

-Cohort 2 Intermediary

Leveraging Partnerships

The most growth in shared content from 2019 to 2023 occurred around continuous improvement (19% growth) and diversity, equity, and inclusion (17% growth). There was 24% less activity around stakeholder engagement from 2020 to 2023 (see Figure 3 below). In 2023, the most commonly shared content between Intermediaries and their partners continued to be continuous improvement (75%) and measurement and evaluation (41%), while 39% work on problem specific content knowledge (this was not a choice in other years).

What content do you and this Intermediary work on/discuss together? (Select all that apply).

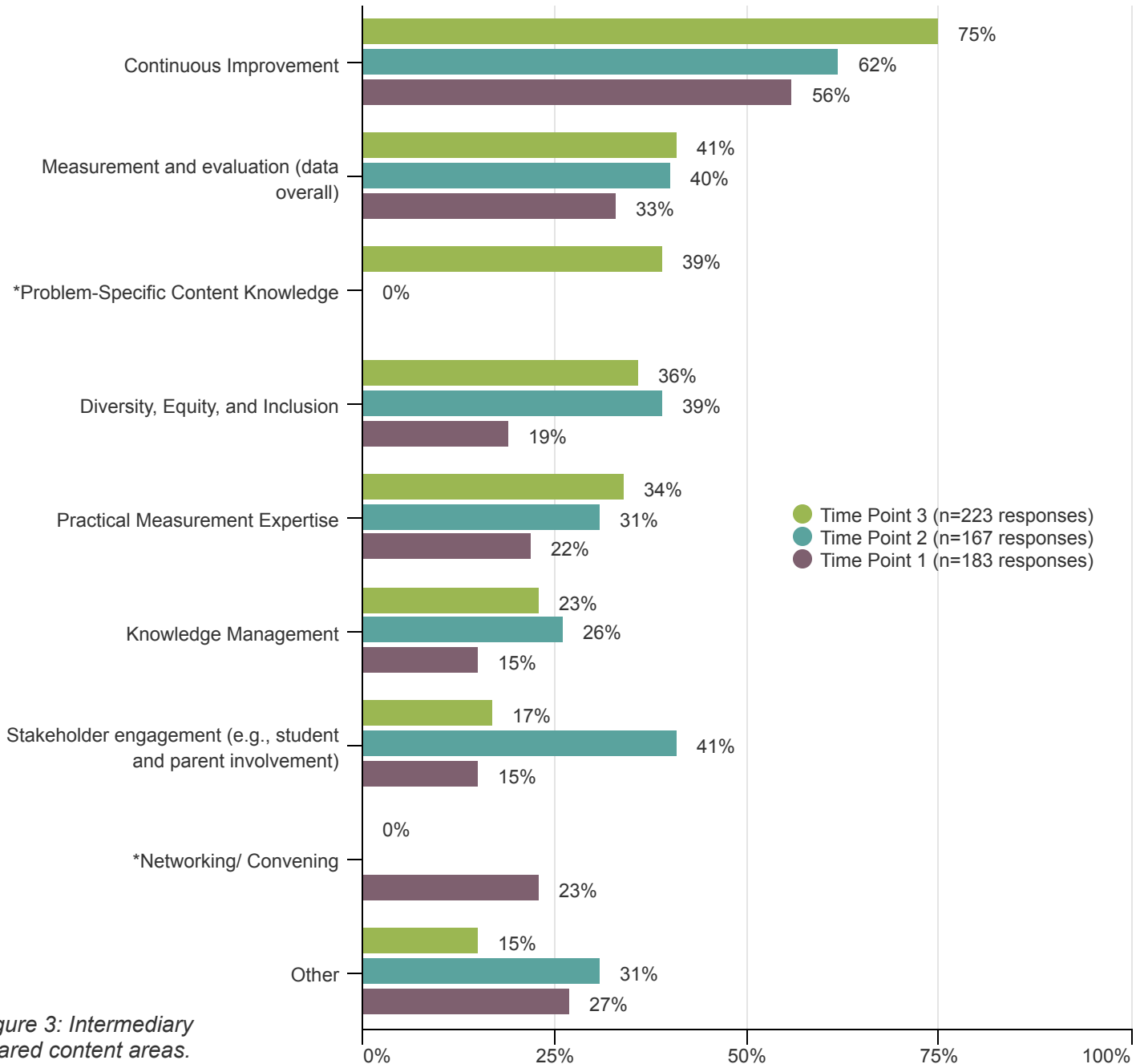


Figure 3: Intermediary shared content areas.

*Responses with an asterisk were not included in the survey for the different time points.

Leveraging Partnerships

The content expertise Intermediary partners are able to contribute to the NSI CoP also grew in some areas (continuous improvement, diversity, equity, and inclusion, and practical measurement) and declined slightly in some areas (measurement and evaluation and knowledge management). There was a more dramatic decrease (29%) in the amount of stakeholder engagement expertise contributed to the NSI CoP from Time Point 1 to Time Point 3. This could also account for the decrease in partnership activity in that content area from Time Point 2 to Time Point 3 (see Figure 4 below).

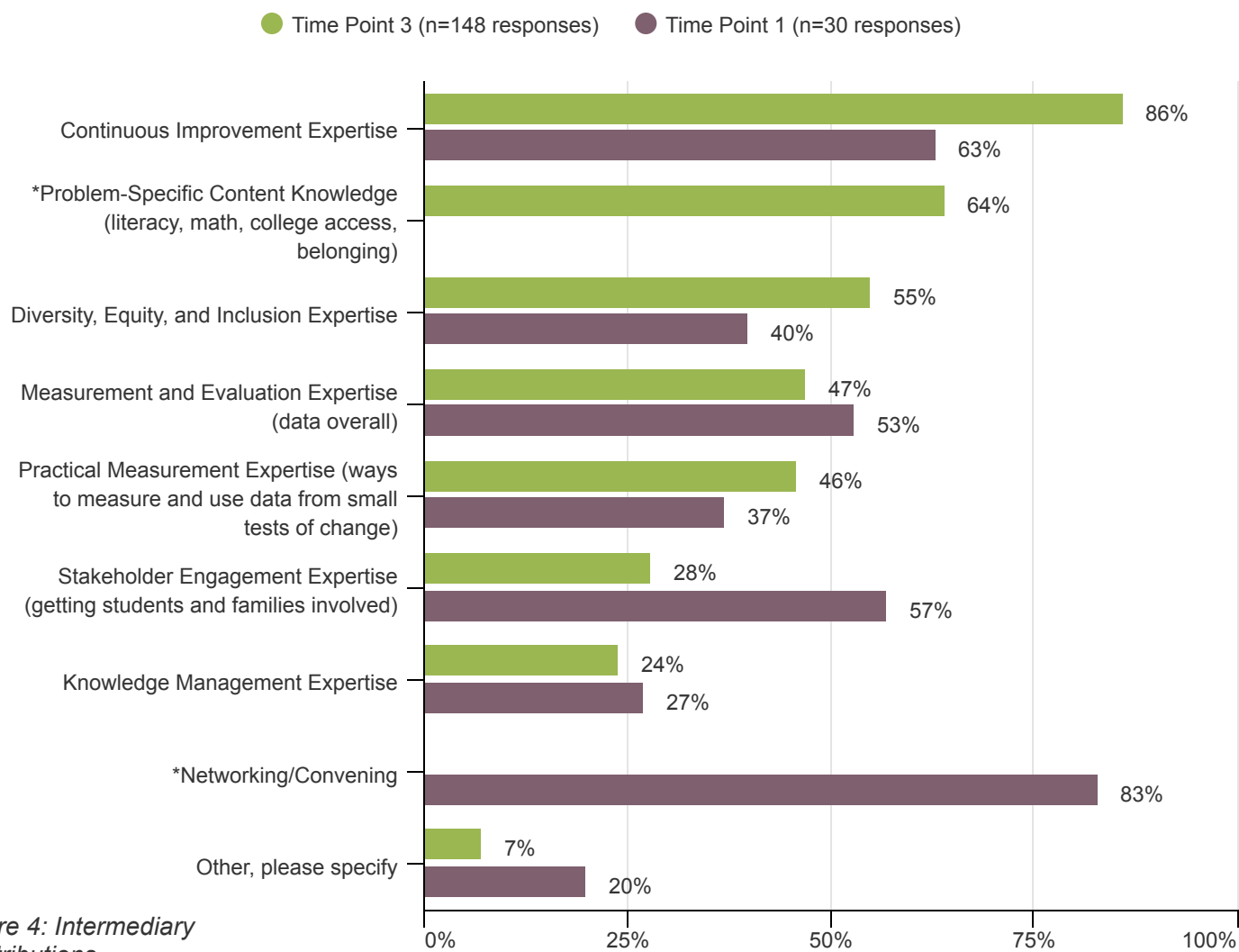


Figure 4: Intermediary Contributions

Since continuous improvement expertise continues to be the most important Intermediary contribution along with content most discussed between intermediaries, there could be a stronger emphasis on opportunities and capacity building in areas that are less represented, like knowledge management, stakeholder engagement, and diversity, equity, and inclusion. If there are ways to harness participant sharing and the application of what they learn, it will be easier to educate others and pass that information to their organizations and networks.

*Responses with an asterisk were not included in the survey for the different time points.

04

NSI CoP: Improving Over Time

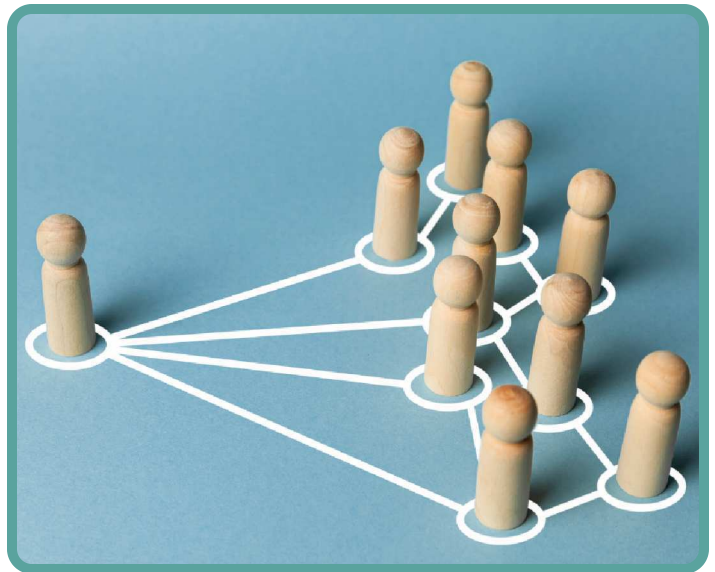
“The CoP seems to have gotten progressively more informative and engaging as they have opened opportunities for NSIs to more deeply share their work and engage others in thinking and talking about it.”

-Cohort 1a/3 Intermediary



NSI CoP: Improving Over Time

To facilitate the capacity building needed to help intermediaries with their school improvement work and/or network building activities, the Foundation organized a group of support partners to assist NSIs. These partners include DeliverEd, High Tech High, WestEd, CPRL, The Carnegie Foundation, Catalyst:Ed, and some others. These partners, along with the Foundation, have provided key support, technical assistance, and opportunities for intermediaries to collaborate. The data highlights the ways in which the NSI CoP has brought immense value to the individual Intermediary Organizations, the work they do, and the networks for school improvement they support.



Time Point 1

In 2019, respondents reported positive perceptions of success and benefits from participation in the NSI CoP. More than half of respondents stated their home organization developed or improved programs or services it delivers as a result of participation in the NSI CoP a fair amount (33%) or a great deal (27%). Over two thirds (70%) stated the NSI CoP had been either somewhat (57%) or very (13%) successful at building a peer-to-peer network that leverages the strengths and resources of its members for shared learning.

“Shared learning, resources, and connections. The CoP has provided a space for continuous support in this work, as it can be daunting. Our team always looks forward to the convenings, which provide a vast amount of opportunities to engage our team at all levels (School District, Intermediary, etc. (both management and front line)).” -Cohort 1a Intermediary

Time Point 2

In 2020, half of respondents picked sharing information and best practices as the greatest benefit to their organization by their connections to others at Virtual Offerings, followed by sharing resources and new tools (18%), new peer to peer connections (15%), and deeper dive into relevant pressing issues (12%) (see Figure 5 on page 28). When asked to what degree the NSI CoP helped their Intermediary build its own capacity to run a network for school improvement in their community, just under half of respondents selected a moderate amount (35%) or a great deal (11%).

“Learned a great deal from other partners around how to successfully convene school partners virtually - the CoP has been great with helping us identify tools, new activities and overall a different way of approaching how we convene our network.”

-Cohort 2 Intermediary

NSI CoP: Improving Over Time

As time and experience in the NSI CoP went on, participants increasingly leveraged the value and benefits of the CoP. In 2023, 77% of respondents indicated either a moderate amount (52%) or a great deal (25%) when asked how much their home organization has developed or improved programs or services it delivers as a result of participation in the NSI CoP. This is a 17% increase over the five years (see Figure 5 below).

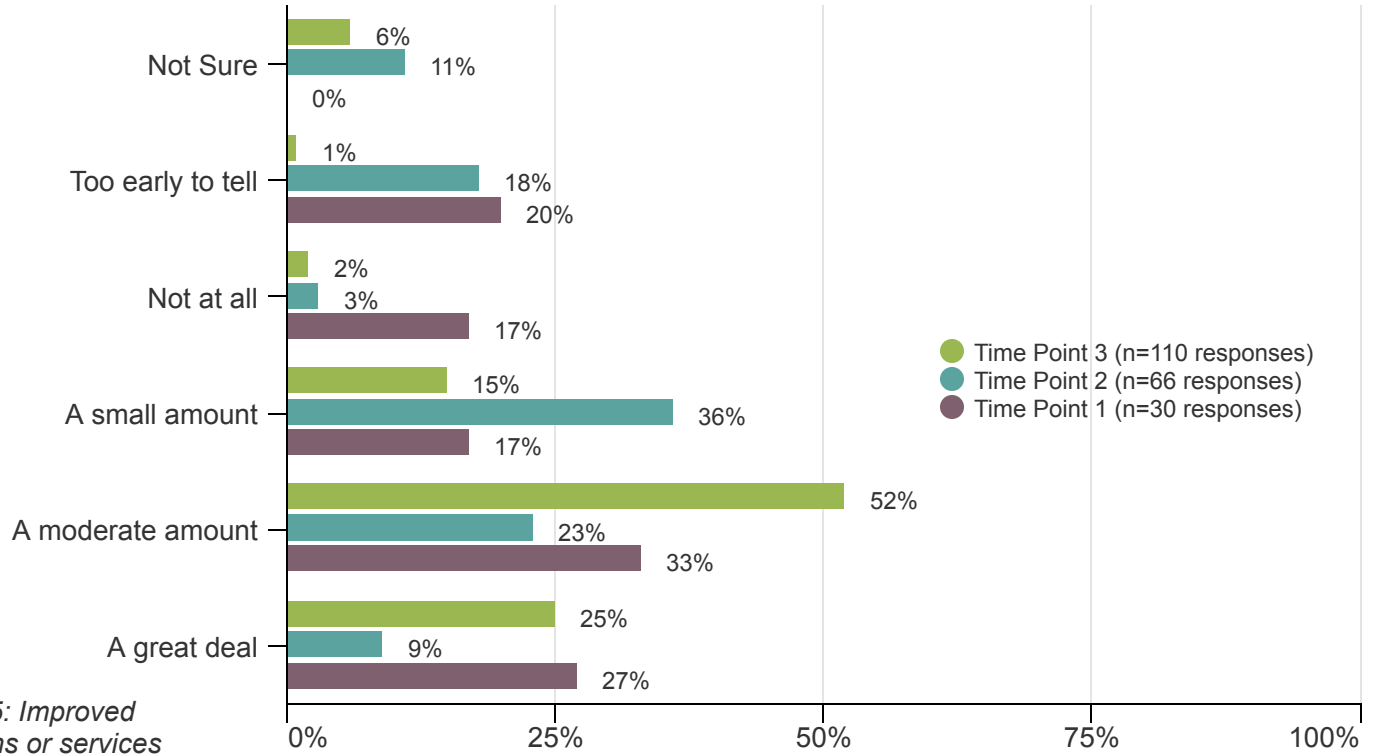


Figure 5: Improved programs or services

In 2023, 69% of respondents stated the NSI CoP helped their Intermediary build its own capacity to run a network for school improvement in their community a moderate amount (49%) or a great deal (20%). This is a 23% increase from 2020 (see Figure 6 below).

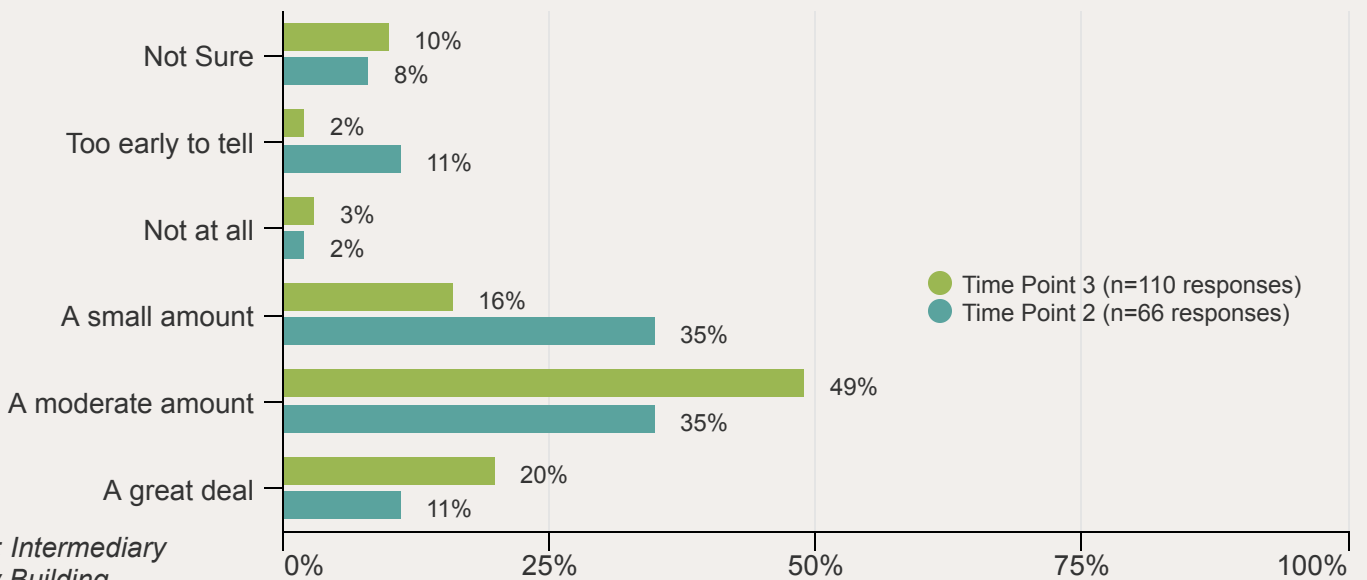


Figure 6: Intermediary Capacity Building

NSI CoP: Improving Over Time

Time Point 3

Over the course of the five years, participants maintained positive perceptions that the NSI CoP has been successful at building a peer-to-peer network that leverages the strengths and resources of its members for shared learning (see Figure 7 below).

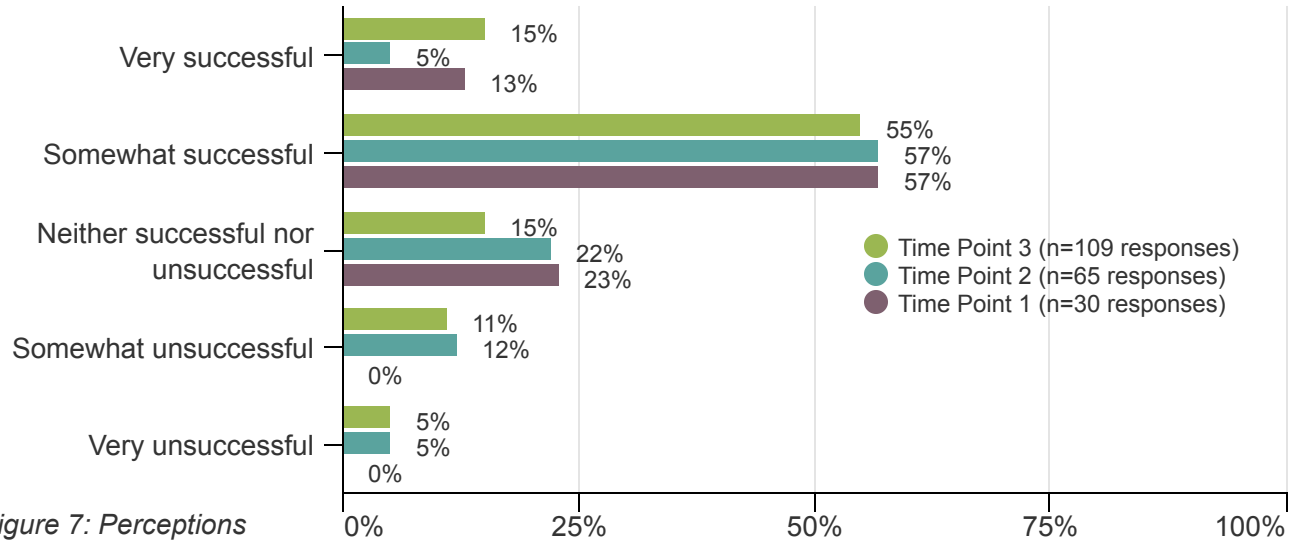


Figure 7: Perceptions of Success

Intermediary Organizations reported increased benefits from their network connections from 2020 to 2023. The most growth around benefits received occurred through training/consultation from new support partners (HTH, CPRL, Carnegie, WestEd) (77% growth), sharing resources and new tools (67% growth), new peer to peer connections (60% growth), training/consultation on evidence-based interventions (35% growth), deeper dive into relevant pressing issues (16% growth), and training/consultation on implementation of best practices (9% growth) (see Figure 8 on page 30).

“Partnering with WestEd throughout the past 3 years on math practical measures has furthered our work with TXNSI. We are able to point our TXNSI partners to the WestEd practical measures website with ready to use resources.”
-Cohort 1a/2 Intermediary

Specific examples of peer-to-peer connections or other ways the NSI CoP has helped you build your Intermediary’s capacity: “HTH root cause analysis, knowledge management, bright spots interviews, empathy interviews, CPRL knowledge management, Carnegie practical measures, measurement of students’ growth (MAP).” -Cohort 1a Intermediary

Over a third of respondents picked sharing information and best practices as the greatest benefit to their organization by their connections to others via the NSI CoP, followed by sharing resources and new tools (19%), new peer to peer connections (19%), and training/consultation from new support partners (HTH, CPRL, Carnegie, WestEd) (9%).

NSI CoP: Improving Over Time

- Time Point 3 Benefits (n=110 responses)
- Time Point 3 Greatest Benefit (n=106 responses)
- Time Point 2 Greatest Benefit (n=66 responses)

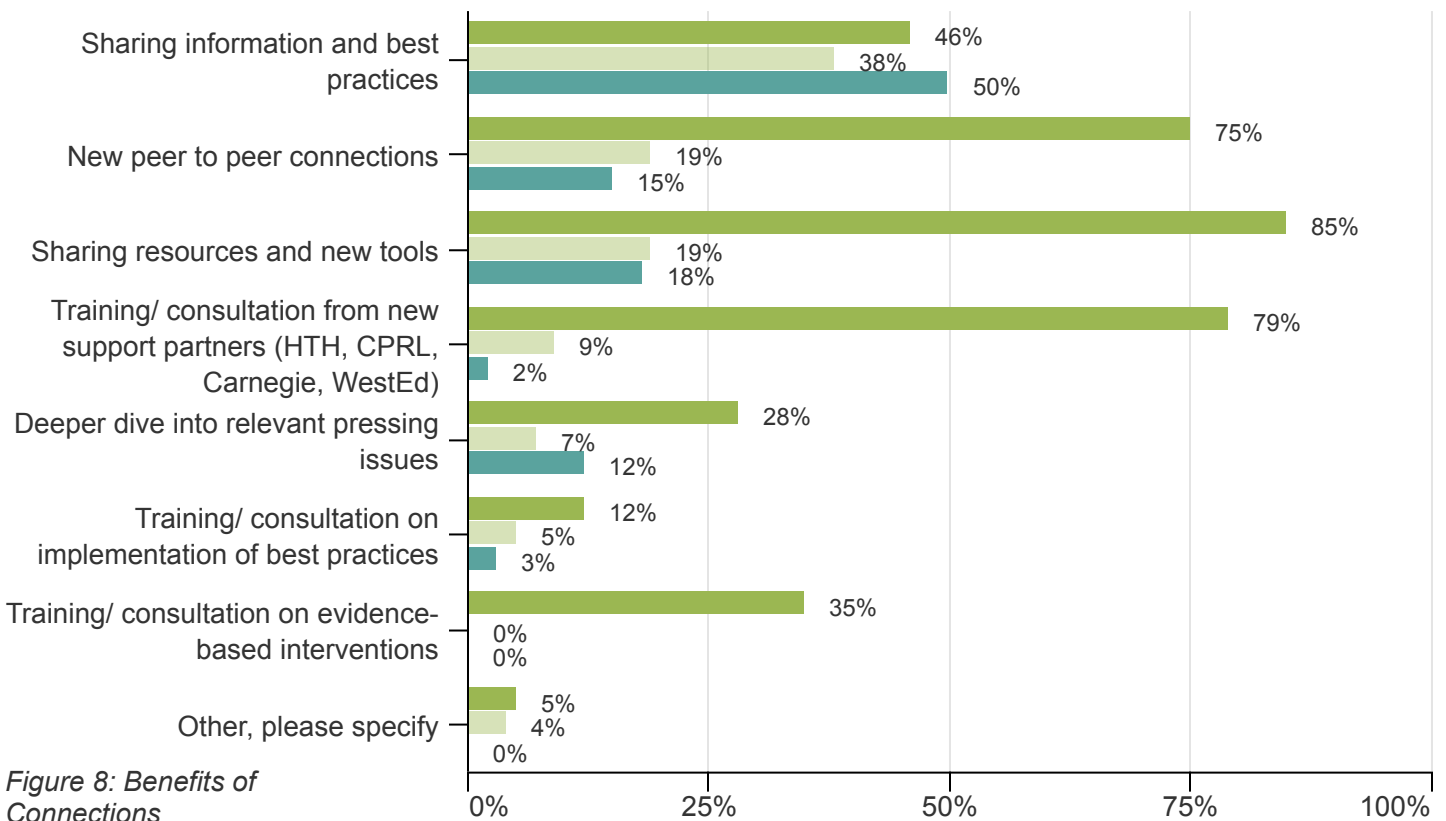


Figure 8: Benefits of Connections

Intermediaries have shown growth in their capacities and benefits from the network over time. **The degree in which organizations develop or improve programs or services as a result of participation in the NSI CoP has steadily increased over the three time points.** Respondents also reported that the NSI CoP is increasingly helping intermediaries build capacity to run a network for school improvement. In both Time Point 2 and Time Point 3 respondents selected sharing information and best practices as the greatest benefit of being connected to others via the NSI CoP. As the NSI CoP transitions, attention should be placed on maintaining the benefits Intermediaries have reported.

“Being able to engage with others doing similar work. Just the relationship building piece has been extremely beneficial for us to learn about work in different contexts across the country.”

-Cohort 1a/3 Intermediary



What's next for the CoP?

As the NSI CoP transitions to a new model with less direct involvement from the Foundation and more partner-led events (convenings and other capacity building opportunities events) organized by Intermediary Organizations, it will be important to know how Intermediary Organizations want to connect with one another. Over three-fourths of respondents want to connect with others who are working on the same content area (78%) or achieved results in a content area they are interested in (60%), whereas connecting in their region (38%) and with similarly sized Intermediary Organizations (19%) were less desired.

“We are in the process of determining the level of continuing support for our existing school partners with a lighter touch post grant funds.”

-Cohort 1a/3 Intermediary

In 2019, CoP participants demonstrated their interest in sustaining the network, illustrated by two-thirds of respondents stating they were either somewhat likely or very likely to stay engaged with their partners even without funding. In 2023, a quarter of respondents say their relationships are not dependent on the CoP while 41% say their relationships depend on another convener with funding. Almost half of respondents indicated their organization would need a moderate amount of support to sustain their engagement (43%), and over a third indicated they would need a little support to continue (36%).

“As an Intermediary, I feel like there needs to be a session on how to mourn the end of your network work in a district. I've worked with my teachers for five years and the separation sadness will be real. Not a super academic topic, but the human reaction to the end of a big project (especially one where we worked to build strong relationships), might be something people are interested in talking about.” -Cohort 1a Intermediary

Most respondents indicated they would be very likely or somewhat likely continue to build and strengthen their own Intermediary Organization (74%); improve and grow their networks (71%); connect and engage with other intermediaries (70%); and share knowledge, expertise, and content with other intermediaries (65%).

Participants were asked what additional structures, resources, or conditions they would need in their NSI to ensure that the mission will persist even if the work of the CoP ends. The main themes that emerge from the qualitative coding of the 53 responses are the need for ongoing convenings and networking opportunities for relationship building, sustaining funding and resources, ensuring process implementation around equity and continuous improvement continues, providing support for schools and organizations, maintaining a digital infrastructure for sharing, building leadership capacity, and facilitating collaboration and connection among Intermediaries. Some key takeaways include the importance of maintaining a community of practice beyond the CoP, securing funding for organizations' continuation in the work, supporting ongoing professional development and peer to peer learning, leveraging partnerships and resources exchanged, addressing equity issues, and ensuring that the structures and conditions are in place to sustain the mission even after the work of the CoP ends. Additionally, the need for additional staffing, logistical support, leadership training, coaching, and platforms for knowledge sharing and collaboration is emphasized. Collaborative partnerships and the establishment of a change package marketplace are also mentioned as potential solutions for sustaining the mission.

What's next for the CoP?

As participants continue to navigate the remainder of the 2022-2023 school year and prepare for the next school year (2023-2024), respondents were asked how the CoP could help support their Intermediary around those concerns. Qualitative coding of the 30 responses indicate that participants are most concerned about the following eight items:

- 1 Continuing Support and Onboarding**
Concerns revolve around determining the level of ongoing support for existing school partners, onboarding new schools, and the need for immediate support and learning opportunities.
- 2 Promoting Equity and District Support**
Focus around keeping equity front and center and a focus around district support for 9th grade success teams - those that receive less support may be less likely to engage in the network.
- 3 Networking and Collaboration**
The importance of networking and collaborating with other organizations and colleagues is highlighted for refining and supporting schools, sharing case studies, checking in regularly, and sharing experiences.
- 4 Professional Development and Resources**
The need for additional professional development resources, expert support, and resources on various topics such as improvement science, content coaching, and business development.
- 5 Challenges and Concerns**
Concerns include recovering from the pandemic's enrollment drop, supporting Black male student success, addressing classroom-context compatibility with continuous improvement, addressing changes to FAFSA, sustaining the work in LEAs, and keeping equity at the forefront.
- 6 Training, Communication, and Success Measurement**
Focus on sharing training within organizations, effective communication of successes and challenges, measuring implementation impact, and developing change packages.
- 7 Scaling, Sustainability, and Funding**
Concerns about scaling up the NSI, managing growth, sustainability of the work after the grant period, funding models, and consulting for the business aspects of the work.
- 8 Transition and Reflection**
Concerns about the end of networks and the need for support in mourning the end of a network, as well as capturing learning and changes made during the grant period.

Overall, the main challenges for the school year include ensuring adequate support and onboarding for schools, promoting equity and district support, fostering effective networking and collaboration, providing sufficient professional development and resources, addressing various challenges and concerns, improving training and communication, measuring success, scaling initiatives, securing sustainable funding, planning and implementing strategies, and facilitating a smooth transition while reflecting on past experiences.

Conclusion

The vision of the NSI portfolio has been centered around empowering and supporting the educators who know their students, creating a setting where organizations can collaborate with others doing similar work, and implementing innovative solutions to tackle challenges. The NSI CoP has been successful in doing just that and meeting the goals it set out to achieve.

The structure of the NSI CoP had to become resilient and adaptable in an ever-changing world. With the help of consistent Intermediary leaders within the CoP, as well as a group of support partners, the Foundation was able to quickly shift the way in which participants connected by creating more participant-led learning opportunities and adapting the topic areas covered to ensure the most pressing issues and challenges faced by NSIs were addressed. This is consistent with research showing that CoPs can support shared identity among members of a field and build opportunities for them to self-organize to share knowledge and skills (Bettioli & Sedita, 2011).

The NSI CoP is a network of intermediaries that fosters resource sharing, cross-pollination of ideas, and field-building. **There has been a consistent increase in how Intermediary Organizations are engaging with their partners, the content shared between partners, and the outcomes received from those partnerships.** Participants continue to apply and share what they learn from convenings, webinars, and other learning opportunities with colleagues in their organization.

With the investments in this portfolio by the Foundation over the past five years, the learnings and tools that come from these NSIs have been leveraged by their Intermediary Organizations to the broader community of practice, ensuring that others in the CoP are also benefiting from these new models and resources.

This investment has also led to the immense benefits that Intermediary Organizations, and by default the networks they support, are able to receive from being a participant in the NSI CoP. Network science shows that Intermediary actors have the ability to bring novel resources and information to the people and organizations with whom they connect (Granovetter, 1973). We are able to see their value in this case through their contributions to the CoP network.

As the CoP moves through a phase of transformation and renewal, it will be important to take into consideration the concerns expressed by respondents around sustainability and moving the work ahead as funding cycles end (Wenger et al., 2002). Participants indicated a continued interest in each other's expertise and in exploring specific topics. There is potential for ongoing, consistent interactions to build skills and address problems of practice together.

“The CoP has broadened our perspective on our work and been able to compare different organization's methods and uses of tools. We have learned new approaches to supporting our partner schools. We feel less alone – our problems are common to our peers in other contexts.” -Cohort 1a/3 Intermediary

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The social network analysis was conducted using [PARTNER CPRM](#) by Visible Network Labs. For more information about [Visible Network Labs](#) and the tools and resources available, please visit www.visiblenetworklabs.com.

