Professional learning approaches and programs do not drop from the sky fully formed. Yet often those who are expected to engage in them — teachers and other staff — have little information about how these approaches developed and the type of expertise that shaped them. What goes into creating them? What kind of knowledge do the developers of professional learning need — and do they currently have it?

A recent study by Northwestern University researchers Richard Paquin Morel and Cynthia Coburn examined one potentially important element: the system of support and resources to which professional learning developers have access. The researchers studied both “system” providers (such as schools, districts, and education policymakers) and “nonsystem” providers (such as textbook publishers, nonprofits, and commercial enterprises).

Both groups develop and influence professional learning, yet they have different types of knowledge and access to resources, which influences how they design and inform professional learning for educators. Those processes are important to understand, because as we emphasize in Learning Forward’s Standards for Professional Learning, the Learning Designs embedded in opportunities for educators matter, and are most effective when they have clear goals and incorporate the latest research and knowledge about teaching and learning.

The supports and conditions that facilitate effective professional learning are relevant to Learning Forward’s efforts to understand and promote the systemic conditions that enable and facilitate effective professional learning. Learning Forward’s Standards for Professional Learning explain that Resources — including human resources and knowledge — are necessary to support the individuals and organizations who are informing, designing, leading, and engaging in professional learning.

This study and its elucidation of social and professional networks, and the roles and relationships that are leveraged in professional learning systems, will be of great interest to individuals interested in expanding their own networks, acting as a liaison among learning professionals, or improving their own networking strategies and opportunities. Learning Communities, a powerful lever for learning and an element of the standards, rely on professional networks and information sharing. There are points in the study that shine a light on relationships — to whom we go for what information — that might provide new ideas for individuals to seek out for networks, partnerships, and resources.

**PARTICIPANTS:**

**Social capital ‘brokers’**

This study focused on the role of developers’ social networks and social capital — that is, the information and
resources people gain through their social ties. In the research literature about social capital, “brokers” are people who are particularly well-positioned to obtain and share information across a social network.

They can bridge gaps in professional settings and knowledge and are therefore highly influential. Because brokers have the potential to shape other professionals’ social capital, they were a particular focus of this study.

The researchers explored how brokers gather knowledge, how they activate or share that knowledge, and how they influence professional learning offerings. They drew on data from a larger study that used interviews and surveys to look at the range of math and science professional learning opportunities available to teachers in a large U.S. metropolitan area.

They defined professional learning providers broadly to include anyone involved in planning and leading teacher professional learning in the focus city and three surrounding counties. This study zeroed in on mathematics professional learning in particular.

**METHODOLOGY:**
**Mapping social networks**

The first step of the study was to determine the population of professional learning providers in the area. To do so, researchers asked interviewees to identify others they should interview.

In the next phase, researchers asked participants to identify which of those providers they went to for collaboration or advice. From this, they created a map of the providers’ networks, which they could analyze to see who influenced whom and how much. They found that the advice network of professional learning providers was “sparse,” meaning that there were limited ties among the providers.

Identifying brokers — people who connect two otherwise disconnected stakeholders — was the next step in the data analysis. Brokers were people who accessed information from many others and shared information with many others. They had the potential to be very influential, but were certain brokers more effective in actualizing that role? The study sought to answer that question.

The researchers grouped brokers by organization and sector (school district, nonprofit organization, government entity, etc.). Based on an established social networking framework, brokering activity was then divided into either
accessing activities related to obtaining or learning about information and resources or sharing activities related to transferring information and resources to others in their network.

The researchers also defined two categories of information that were received or shared: either substantive information about mathematics content, Common Core Standards, or best practice, or technical and logistical information related to the implementation of professional learning.

**FINDINGS:**

**Comparing district and external providers**

When the researchers analyzed the type and amount of brokering that occurred across sectors, they found that brokers’ organizational affiliations influenced how they engaged with others in the network.

Although they found brokers in every sector, the brokers used this position differently. Specifically, brokers who worked outside of school districts — such as for universities or nonprofits — were more likely to both access and share substantive information.

Those who worked for school districts did not take advantage of their positions in the same way nondistrict brokers did. They “more often sought or shared logistical information dealing with the technical details of planning and delivering PD — details like budgets, planning for teachers release days, and support navigating district bureaucracy” (p. 22).

The researchers report patterns in the data showing that district providers more frequently experience a disconnect between the information they gather and the information they share than providers from other sectors.

District brokers accessed information about both content and logistics, but tended to share more logistical information than content information, thus limiting their influence in shaping the content of professional learning. The researchers conclude that district brokers could do more to activate their social capital in order to influence and guide the content and substantive information that is shared via professional development.

The authors argue that this pattern means nondistrict brokers such as university faculty and nonprofit organizations have more of an influence over which ideas and understandings are shared, impacting the design and content of professional learning. That could affect how different types of providers address the Learning Designs standard for professional learning —

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and, therefore, what teachers are able to access and learn.

Yet, these differences across sectors are, in some respects, understandable. District-based professional learning providers are often responsible for coordinating and scheduling external providers, leading to a greater load in terms of logistical concerns such as budget and substitutes for teachers. Nondistrict providers are generally free of this kind of pressure, perhaps allowing them more time to focus on content.

It could also be argued that the researchers’ definition of logistical information was somewhat misleading. Topics included aligning professional learning with current initiatives such as technology or teacher leadership programs, which are actually quite substantive in terms of overall design of a school’s professional learning opportunities.

**QUALITATIVE DATA:**

**Providers in different roles**

To further understand the difference between district and nondistrict brokers, the researchers also examined qualitative interview data. The study contrasts quotations about district providers and external providers to illustrate the difference in the way each group accesses and shares knowledge.

For instance, a quote about a district provider indicates that someone in her network went to her for logistical information only, while another quote about a university-based provider showed that an educator received mainly content information and support from that provider.

The qualitative findings are less clearly divergent than the network analysis findings and, in some cases, could be open to a different interpretation. For instance, the quote that is supposed to indicate a lack of content also says, “She knows a lot about math, math education, PD, and I would say that mostly what I turn to her for is knowledge of our district, who’s who, who does what …” (p. 24).

The interview excerpts are valuable in part because they highlight as much about the intent or immediate need of the advice seeker (or even the setting of the interaction) as about the provider’s actions. For instance, the quote illustrating what a university-based provider shares seems to take place at a conference dedicated to Common Core math tasks and resources.

It would be interesting to be able to look at more of the qualitative interview data to get a deeper understanding of the contexts and settings. We can imagine logistical and practical information being shared, but only after an understanding of challenges related to content and pedagogy, which would not come through clearly in a short quotation.

Similarly, a focused interaction at a conference about a particular task would not include logistical content, although that would clearly be part of the next steps or implementation. It is important for providers to contextualize the information they share — for instance, being explicit about the foundation of knowledge on which a particular professional learning opportunity is based, even if the focus of the interaction is primarily logistical.

Such a strategy could broaden the content of interactions and potentially also grow a provider’s network, leading to increased influence.

**PUTTING THE FINDINGS INTO PRACTICE**

This study draws attention to the critical nature of decision-makers, professional learning providers, and brokers in implementing policies such as new content standards. It also raises important thought-provoking questions about the nature and expectations of different organizational settings in terms of who provides what expertise and content knowledge. The patterns found in the study have potential implications for how well providers from different sectors fulfill Learning Forward’s Standards for Professional Learning.

One of the main findings of this paper is that district-based brokers have less influence over the knowledge that teachers can access in professional development settings because of a focus on logistical issues. This speaks directly to Learning Forward’s Implementation standard, which emphasizes the need to ensure that well-designed professional learning opportunities are effectively reaching educators.

It suggests room for growth in terms of how district-based providers are sharing their own content expertise and what they are learning as they develop and design professional learning experiences.

This also highlights the need for more substantive conversations about implementation of policies and effective professional learning practices within the district professional learning network, as well as potential partnerships between internal and external providers.

There is a lot to unpack in this study and its findings. We would like to hear from the Learning Forward community about the ideas and methods. Have you used network analysis strategies in your work? How deliberately do you think about the content of your interactions as you move through your networks and share information in your partnerships? How can Learning Forward support you in this regard? ■